

THE PORTABLE MENTOR

EXPERT GUIDE TO A SUCCESSFUL
CAREER IN PSYCHOLOGY

THIRD
EDITION

EDITED BY
Mitchell J. Prinstein

THE PORTABLE MENTOR

Psychology is a popular subject to study, with thousands entering graduate school each year, but unlike med or pre-law, there is limited information available to help students learn about the field, how to successfully apply, and how to thrive while completing doctoral work. *The Portable Mentor* is a useful, must-have resource for all students interested in psychology. This third edition is updated and expanded, designed to address students' and trainees' need for open dialogue and mentorship. Throughout, it covers some of the common challenges graduates face and features discussions about how to celebrate your identity and find a rewarding, worthwhile career path. It comprises thirty chapters written by more than seventy of the field's top experts, successfully filling a void in professional development advice.

Mitchell J. Prinstein, PhD, ABPP, is the Chief Science Officer of the American Psychological Association and the John Van Seters Distinguished Professor of Psychology and Neuroscience at the University of North Carolina at Chapel Hill, USA. He has published over 180 peer-reviewed papers and nine books. His work has included serving as a journal editor, president of professional societies, and working extensively with the media.

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University of North Carolina at Chapel Hill



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*To teachers and trainees in psychology, to my amazing wife, Tina,
and to my kids, Samara and Max, who are helping me to learn
everything all over again.*

mjp

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Contributors

Editor's Note: Since the time chapters were submitted for this volume, two authors have passed away. This volume celebrates the memory and outstanding contributions offered by Dr. Paula Caplan and Amrita Ghaness to the discipline of psychology.

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Lieutenant Jared W. Bollinger, PhD was born in Geneva, Ohio and raised in Evans, Georgia. He decided early on in high school to pursue a career in psychology, inspired by talk show host Sue Johanson. He graduated cum laude from the University of Georgia in 2012 with a Bachelor of Science degree with a major in Psychology and minor in Sociology. He then went on to complete a two-year post-baccalaureate research fellowship at the National Institutes of Health in Lorenzo Leggio's lab section. He commissioned as an Ensign into the US Navy in 2014 in order to attend graduate school at the Uniformed Services University of the Health Sciences. In 2019, he completed his predoctoral internship at Naval Medical Center Portsmouth. He is a licensed clinical psychologist in the Commonwealth of Virginia and is a faculty member within Walter Reed National Military Medical Center's Navy Clinical Psychology Internship Program.

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Paula J. Caplan, PhD graduated from Radcliffe College of Harvard University in 1969; was kicked out of her Duke University PhD program in clinical psychology, but went on to become a clinical and research psychologist, Full Professor of Applied Psychology at the University of Toronto's Ontario Institute for Studies in Education, won top teaching awards there and later at Harvard, and became an activist and advocate exposing serious problems in both the traditional mental health system and psychological research, and wrote 11 books – most about feminist issues and various forms of oppression where they overlap with psychology, winning three top national awards for non-fiction. Her first play, CALL ME

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David R. Cox, PhD, ABPP started as a music major and has often played in a band comprised of psychologists and other doctors; he still spends some of his free time sharpening his songwriting talents as a member of the Nashville Songwriters Association International. He is Executive Officer of the American Board of Professional Psychology and is board-certified in Rehabilitation Psychology. He served on the staff and faculty of U.C. San Diego, Duke University, the University of North Carolina at Chapel Hill, and the University of Florida. He is a Fellow of the American Psychological Association Divisions 22, 31, 40, and 42; Fellow of the National Academy of Neuropsychology; recipient of the APA Heiser Award; and Lifetime Practice Excellence Award from APA Division 22. He was President of the Florida Psychological Association (FPA) and received numerous awards from FPA. His clinical work focused on rehabilitation of brain injury; he assisted the Department Veterans Affairs, Department of Defense, and Defense Health Board in developing guidance for the care of returning warriors with brain injury and PTSD. He served as the lead consultant to IBM in development of one of the first cognitive rehabilitation computer programs, the IBM THINKable System®. Dr. Cox is widely recognized in the areas of rehabilitation, neuropsychology, and competency in professional psychology.

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Daniel Dodgen, PhD knew nothing about psychology and public policy in grad school, but he now works as Senior Advisor for the Assistant Secretary for Preparedness and Response at the US Department of Health and Human Services (HHS). Dr. Dodgen also served as the Executive Director of the White House-directed national advisory group on disaster mental health and has overseen the behavioral health response to multiple natural disasters, public health emergencies, and mass violence incidents. Before joining HHS, Dr. Dodgen was

Senior Legislative & Federal Affairs Officer at the American Psychological Association (APA) following an AAAS Fellowship with the US House of Representatives. He received the American Psychological Association 2005 Early Career Award and currently serves on the APA Board for the Advancement of Psychology in the Public Interest. He is also on the Board of Directors of the International Association of Applied Psychology. In 2016, Dr. Dodgen was selected as a Harvard Kennedy School Senior Executive Fellow. He received his Bachelor's degrees in Spanish and Psychology at the University of Southern California and his MA and PhD in Clinical Psychology at the University of Houston. He is a licensed clinical psychologist in Washington, DC.

Nathan H. Field is a second-year graduate student in the Developmental Psychology PhD Program at the University of North Carolina, working in the Peer Relations Lab with Dr. Mitch Prinstein. He holds a Bachelor of Arts in Psychology and a Bachelor of Science in Cognitive Science from the University of Delaware. After graduation, he worked as a research associate in a developmental neuroscience laboratory at Penn State, in his hometown of State College, Pennsylvania. While his research interests span a wide variety of topics within adolescent development, his recent work has focused on how popularity, peer rejection, and peer influence susceptibility impact adolescents' development. He also has led several discussion sections among UNC undergraduates for a course on how technology and social media may influence the adolescent brain, which cemented his interest in teaching. In the future, Nathan hopes to be a professor of Developmental Psychology, with plans to conduct his own research on adolescent peer relationships.

Ellen E. Fitzsimmons-Craft, PhD is an assistant professor of psychiatry at Washington University School of Medicine and a licensed clinical psychologist with an extensive research background in eating disorders. She has established programmatic lines of research centering on the use of Internet and technology for eating disorder prevention and treatment, eating disorder screening, socio-cultural, etiological and maintenance factors for eating disorders, and eating disorder recovery. Ultimately her work aims to disseminate evidence-based interventions from research to practice as well as extend treatments in ways that will reach the large number of people in need of care for mental health problems but who are not receiving services. Dr. Fitzsimmons-Craft is a Fellow in the Academy for Eating Disorders and current recipient of a National Institute of Mental Health K08 Career Development Award. She is passionate about increasing access to scalable, evidence-based mental health services, particularly for vulnerable populations, collaborating with numerous non-profit organizations and state-wide groups in order to do so. Dr. Fitzsimmons-Craft is also a dedicated mentor and supervisor and particularly enjoys aiding trainees in becoming the next generation of future leaders in psychology.

Kara A. Fox is a graduate student in the Clinical Psychology PhD program at the University of North Carolina at Chapel Hill, working with Dr. Mitch Prinstein. She graduated from Duke University with a BA in psychology and visual media studies. Subsequently, as a research assistant under Dr. Anthony Spirito at Brown University, she worked on several studies examining mental health and treatment access among youth in the juvenile justice system. She is interested in the effects of social media use on development and health among adolescents and young adults. Her recent work in this area has investigated depression and suicide risk, emotional responses, sleep, friendship quality, and digital status-seeking behavior. In addition to research, Kara loves teaching, working with children and families, and writing, and is excited to be in a field that allows for it all.

B. Christopher Frueh, PhD is a professor in the Department of Psychology at the University of Hawai'i at Hilo where his research and teaching are focused on the treatment of post-traumatic stress disorder (PTSD). He is a member of the Talent War Group and a salvage consultant with Gray Ghost Solutions – a Houston-based group that provides private and government sector solutions to include medical and security concerns. He has 30 years of professional experience working with military veterans and active-duty personnel, and has conducted clinical trials, epidemiology, historical, and neuroscience research. Most of his recent work has been with the military special operations community and contract work related to national security.

Karen Gavin-Evans, PhD is the wife of a geriatric neuropsychologist (can't have too much psychology in a household) and a mother of two teenagers. After one psychology course in high school, she was determined to pursue a degree in psychology. She completed her bachelor's degree at Spelman College and her doctoral degree in clinical child psychology from the University of Miami, Coral Gables. Her dissertation research solidified an interest in community-based research, which laid the pathway for a community-based internship at Baylor College of Medicine, a psychology fellowship at the Harris County Department of Education in Houston, Texas, and a postdoctoral fellowship at Juniper Gardens Children's Project at The University of Kansas. Over the years, she has sampled various industries – academia, private sector, and government. She is currently leading the Extramural Policy Branch at the National Institute of Mental Health. Previously, she served as a Scientific Review Officer, where she organized scientific peer review meetings focused on services, treatment interventions, and prevention interventions. Before joining the government, Dr. Gavin-Evans was an Assistant Professor in the School Psychology Program at Indiana University, Bloomington. Later, she accepted a research position at a private health communications company in Maryland.

Amrita C. Ghaness was a project assistant for the Center for Workforce Studies at the American Psychological Association while working on contributions to a chapter in this edition. She earned her BA from Florida Atlantic University

and is in the process of earning her MEd in Mental Health Counseling. At APA, she assisted in research projects examining the psychology workforce and education pipeline. Additionally, she participated in the dissemination of the results of these research projects and enjoyed getting to work with a variety of data sources.

June Gruber, PhD is an associate professor of psychology and neuroscience at the University of Colorado and Director of the Positive Emotion and Psychopathology Laboratory. She received her PhD in clinical psychology and BA in psychology from the University of California Berkeley and was previously an assistant professor of psychology at Yale University. Dr. Gruber has published over 100 articles and chapters and has edited or co-edited the *Oxford Handbook of Positive Emotion and Psychopathology* and *Positive Emotion: Integrating the Light Sides and Dark Sides*. June was always interested in the human mind and loved philosophy as a student but never had any idea what academia looked like and made some stumbles along the way, and realizes that she would have benefited a lot from a resource like this book along the way!

Corey J. Habben, PsyD has been highly involved as a psychologist and advocate for the unique issues of early career psychologists. After getting his early start as a young, idealistic graduate student at the turn of the millennium, he has since written and presented extensively on early career psychologist and student issues and has represented new psychologists in several capacities within the American Psychological Association (APA). He initially led the task force that recommended the establishment of an APA committee for early career psychologists and previously served as one of APA's then-youngest former division presidents. He also co-edited the book *Life After Graduate School in Psychology: Insider's Advice From New Psychologists* with Robert Morgan and Tara Kuther. Dr. Habben is currently Deputy Service Chief of the Adult Outpatient Behavioral Health Clinic at Walter Reed National Military Medical Center in Bethesda, MD and has worked at Walter Reed since 2002.

Le Ondra Clark Harvey, PhD spent much of her childhood swearing she would never be a mental health professional. After realizing that this was her calling early in undergraduate school, she majored in psychology and would attain her PhD in Counseling Psychology from the University of Wisconsin, Madison. Her clinical work led her to discover her passion for working with disenfranchised clients and their families, and out of this work grew her desire to make change on a systems level. She found a place to advocate for those she used to serve when she stepped away from her position at UCLA to engage in an advocacy fellowship at the California State Capitol. This detour would lead her to a career in public policy after a six-year tenure at the Capitol. Today, she is the CEO of an advocacy organization that represents behavioral health agencies across the state of California. She sees this position as the perfect marriage of her clinical training coupled with her policy, political, and advocacy expertise. She encourages all

mentees to keep their minds open to how the fundamental skills they learn in training can be used in various arenas to affect change.

Steven C. Hayes is a Nevada Foundation Professor in the Behavior Analysis program at the Department of Psychology at the University of Nevada. An author of 46 books and nearly 650 scientific articles, he is the developer of Relational Frame Theory, an account of human higher cognition, and has guided its extension to Acceptance and Commitment Therapy, a popular evidence-based form of psychotherapy. Although according to Google Scholar he is among the 1100 most cited scholars in all areas of study in the world, he took three years to get into graduate school because the Chair of his undergraduate department decided that men with long hair were untrustworthy and said so in his recommendation, and the Chair of his first academic department as a faculty member told him that he was a delatant because of his broad interests, and would never amount to anything. He's spent the last 45 years advising students, including his now over 50 PhD candidates, how to succeed by staying true to their own vision.

Andrea Hussong, PhD tried out majors in communications, drama, and physics as a first-generation college student before falling in love with psychology. After four years in the desert under mentor extraordinaire, Laurie Chassin, she emerged with a passion for research and training. She is now a professor of psychology and neuroscience at the University of North Carolina. She counts her time with the predoctoral and postdoctoral trainees at the Carolina Consortium on Human Development (at the Center for Developmental Science) as precious and is grateful to every student she has mentored for all the lessons they have offered her.

Elissa Jelalian, PhD is Professor of Psychiatry and Human Behavior and Pediatrics at the Alpert Medical School of Brown University and Senior Research Scientist and Associate Director of The Miriam Hospital's Weight Control and Diabetes Research Center. Her federally funded research program has included a series of clinical trials examining novel interventions to enhance weight control outcomes for adolescents, including those with comorbid mental health concerns. Her recent work focuses on dissemination of evidenced-based weight control treatments to low-resource community settings as well as development of programming to prevent excess summer weight gain in children from low-income backgrounds. She is the recipient of both departmental and national mentoring awards. Elissa is currently the Director of the Clinical Psychology Postdoctoral Fellowship Training Program at Brown. Of note, she secured her own postdoctoral fellowship position when a slot opened up at the last minute, started her fellowship a month later, and has been at the same institution since.

Shawn C.T. Jones, PhD is currently an assistant professor of psychology in the counseling program at Virginia Commonwealth University (VCU). Prior to relocating to Richmond, Dr. Jones was a National Science Foundation SBE Postdoctoral Fellow at the University of Pennsylvania's Graduate School of

Education. He received his doctorate in Clinical Psychology with an emphasis on Children and Families from the University of North Carolina at Chapel Hill and was a child clinical psychology predoctoral intern at UCLA. He also holds a Master of Health Science in Mental Health from Johns Hopkins University Bloomberg School of Public Health (2010) and a Bachelor of Science in Psychology from Duke University (2008). Dr. Jones endeavors to impact the psychosocial well-being of Black youth and their families by: (a) exploring mechanisms undergirding culturally relevant protective and promotive factors; (b) translating basic research into interventions that harness the unique strengths of the Black experience; and (c) disseminating this research to be consumed, critiqued, and enhanced by the communities the work intends to serve. As a graduate student Shawn was a gentle boat-rocker in his department who never imagined that he would now be having graduate students of his own (life comes at you fast!).

Barbara Kamholz, PhD, ABPP, is Associate Professor of Psychiatry at Boston University School of Medicine, and is board-certified in Cognitive and Behavioral Psychology. She serves as Associate Director of Outpatient Mental Health Services at VA Boston, and as Director of Cognitive Behavioral Therapy Education for the Boston University Psychiatry Residency. Dr. Kamholz has served in multiple leadership positions in the Association for Behavioral and Cognitive Therapies (ABCT) and the Anxiety and Depression Association of America (ADAA), where she is currently Senior Advisor for Professional Education. In addition to these roles and her private clinical practice, Dr. Kamholz is a grassroots communications specialist, applying behavioral principles to enhance the messaging and mission of various organizations and advocacy groups. Dr. Kamholz's current academic work focuses on interprofessional CBT training and mentorship. Although the idea of working in so many different domains was previously extremely unappealing, this mix of interests and projects now feels exciting and engaging. It's also a great way to enhance flexibility and best integrate her multiple personal, professional, and social justice priorities. Dr. Kamholz lives near Boston with her husband, teenage daughter, and three rescue dogs.

Alan E. Kazdin, PhD, ABPP, is Sterling Professor of Psychology and Child Psychiatry (Emeritus) at Yale University. He has been Director of the Yale Parenting Center, Chairman of the Psychology Department, Director and Chairman of the Yale Child Study Center at the School of Medicine, and Director of Child Psychiatric Services at Yale–New Haven Hospital. Dr. Kazdin's research has focused primarily on the treatment of aggressive and antisocial behavior in children and adolescents. His 800+ publications include 50 books that focus on methodology and research design, interventions for children and adolescents, behavioral and cognitive-behavioral treatment, parenting and child rearing, and interpersonal violence. His work on parenting and childrearing has been featured on NPR, PBS, BBC, and CNN and he has appeared on the *Today Show*, *Good Morning America*, *ABC News*, *20/20*, and *Dr. Phil*. Dr. Kazdin

has received a number of awards including the Outstanding Research Contribution by an Individual Award and Lifetime Achievement Award (Association of Behavioral and Cognitive Therapies), Outstanding Lifetime Contributions to Psychology Award and Distinguished Scientific Award for the Applications of Psychology (American Psychological Association), the James McKeen Cattell Award (Association for Psychological Science), and the Gold Medal Award for Life Achievement in the Science of Psychology (American Psychological Foundation). In 2008, he was president of the American Psychological Association.

Muniya Khanna, PhD is a clinical psychologist specializing in CBT for anxiety disorders and OCD. She is Founder and Director of the OCD & Anxiety Institute in Pennsylvania and Research Scientist at the Children's Hospital of Philadelphia. Prior to this, Dr. Khanna held a faculty position at the University of Pennsylvania Department of Psychiatry. She is a pioneer in web-based mental health research having spent the last decade working towards improving access to evidence-based mental health services in underresourced populations by leveraging technology. Dr. Khanna would have ended up in medical school if she hadn't met Dr. Martin Seligman as an undergrad who inspired her to pursue a career in psychology. Since then, she was fortunate enough to have been involved in some of the most important research in the field of child anxiety in the last 15 years, including the Pediatric OCD Treatment Study (*JAMA*; Franklin et al., 2011), Family-based Treatment of Early Childhood OCD (*JAMA*; Freeman et al., 2014), and Child and Adolescent Anxiety Multimodal Treatment Study (*NEJM*; Walkup et al., 2008) trials.

Carl W. Lejuez, PhD is a professor in the department of psychological sciences and the provost at the University of Connecticut (UConn). He came to UConn from the University of Kansas (KU) where he previously served as interim provost as well as dean of the College of Liberal Arts and Sciences. Prior to KU, he was a professor and the director of clinical training in the clinical psychology program at the University of Maryland, where he also was the founding director of the Center for Addictions, Personality, and Emotion Research (CAPER). He began his academic career as a first-generation college student at Emory University and was a graduate student at West Virginia University, where he was way too intense and drank Diet Mountain Dew instead of coffee to stay awake. Dr. Lejuez's research is transdisciplinary in nature with a focus on common behavioral factors and treatment development spanning addiction, depression, and personality disorders. He has a strong interest in mentorship and professional development for students and has served as a mentor or co-mentor for over 20 National Institutes of Health (NIH) and National Science Foundation (NSF) individual training fellowships, and as the director of a NIH predoctoral training program at the intersection of neuroscience and addiction treatment development.

Luona Lin is a senior research officer at the American Psychological Association's Center for Workforce Studies. She holds a master's degree in public policy from the George Washington University and a dual bachelor's degree in urban studies and economics from Peking University. As an undergraduate student, she discovered her deep interests in data and decided to choose a career path working with data upon graduation. Through the use of internal surveys, administrative data, and federal data, she now provides key information about the education and the profession of psychology.

Kristen A. Lindquist, PhD is an associate professor of psychology and neuroscience in the School of Arts and Sciences and the Biomedical Research Imaging Center and the Neurobiology Curriculum in the School of Medicine at the University of North Carolina at Chapel Hill. After a disastrous experience with *Drosophila* in first-year genetics, she turned to psychology and neuroscience and never looked back. She received her AB in Psychology and English from Boston College in 2004 and received a PhD in Psychology from Boston College in 2010. She was a postdoctoral fellow at the Harvard University Mind/Brain/Behavior Institute from 2010 to 2012, where she was affiliated with the Department of Psychology in the College of Arts and Sciences, the Department of Neurology in the School of Medicine, and the Martinos Center for Biomedical Imaging/Massachusetts General Hospital. Dr. Lindquist's lab combines tools from social cognition, physiology, neuroimaging, and neuropsychology to investigate how the brain and body create emotional experiences and allow people to perceive emotions in others. She is the recipient of multiple early career awards such as being named a Rising Star by the Association for Psychological Science. She has also received multiple awards for teaching and mentorship through the University of North Carolina and is increasingly dedicated to making science a more diverse, equitable, and inclusive enterprise.

Elizabeth Lloyd-Richardson, PhD learned about Jane Elliott's well-known blue-eyes/brown-eyes race discrimination experiment and how it relates to current racial injustice in a high school psychology course. She was hooked. Psychology is just as relevant and timely as ever, and the field continues to help each of us understand more about ourselves, our interactions with others, and the society we live in. Elizabeth received her PhD in Clinical Psychology from Louisiana State University, and specialized in clinical health psychology while completing her internship, postdoctoral fellowship, and junior faculty years at a large academic medical center. Elizabeth is currently a professor of psychology at the University of Massachusetts Dartmouth, where she is able to mentor and work alongside her graduate students, continue with her international research collaborations, engage in meaningful volunteer work, and spend as much time as possible working outside!

Christopher L. Loftis, PhD is a licensed clinical psychologist with 20 years of policy, program management, and practice experience in non-profit, commercial, and

government sectors. He has extensive knowledge of health policy and the administration, financing, and regulatory oversight of private and public health services, including the DoD Military Health System and VA Healthcare services. Chris Loftis knew early in his graduate school training that he would pursue a non-traditional career path when he went to work for Senator Kennedy immediately after completing his internship and postdoc at Kennedy Krieger. He has also served as Director of State Policy and Practice Improvement at the National Council; Principal Policy Analyst at the National Health Policy Forum; and Business Manager/Senior Mental Health Consultant on DoD contracts providing program management support for interagency initiatives, development of health care policy and clinical best practices, and DoD, HHS, and VA governance activities. Chris Loftis is currently the National Director for VA/DoD Mental Health Collaboration within the Veterans Health Administration Office of Mental Health and Suicide Prevention.

Brett Major, PhD is a User Experience Researcher at Facebook. Brett works on the Community Integrity team whose mission is to minimize bad experiences for people on Facebook by conducting research on the definition and application of Facebook's community standards to build safe, inclusive experiences. Brett earned his MA in Psychology at Wake Forest University and his PhD in Social Psychology at the University of North Carolina at Chapel Hill. In graduate school, his research focused primarily on topics like: how positive emotions facilitate emotion regulation after negative experiences and how moments of positive social connection promote health and well-being.

Sarah Martin, PhD is an assistant professor in the Department of Anesthesiology & Perioperative Care in the University of California Irvine (UCI) School of Medicine and is on medical staff as a research collaborator in the Department of Emergency Medicine at the Children's Hospital of Orange County. After what Dr. Martin now considers lucky graduate school rejections, she was introduced to the field of Pediatric Psychology and never looked back. Dr. Martin was fortunate to join Dr. Lindsey Cohen's dynamic and supportive lab, and she received her PhD in clinical psychology from Georgia State University. She completed her clinical internship at Brown University Warren Alpert Medical School and post-doctoral fellowship in the Pediatric Pain and Palliative Care Program at the University of California, Los Angeles. Based in a biopsychosocial framework, Dr. Martin's research aims to identify behavioral, social-cultural, and psychophysiological factors that improve pediatric pain outcomes and reduce pain management disparities surrounding invasive procedures, chronic pain, and sickle cell disease. Dr. Martin also provides treatment for youth with chronic pain in the UCI Center for Comprehensive Pain Management.

Luis D. Medina, PhD is a first-generation college and advanced degree recipient born in Puerto Rico and raised in Connecticut. As a college student at Yale University, he explored numerous training options. He considered various

paths – e.g., psychiatry, cognitive science, developmental psychology – and sought out numerous opportunities to gain exposure to these disciplines. After deciding on clinical psychology, he completed post-baccalaureate training at the University of California, Los Angeles where he discovered both the specialty discipline of clinical neuropsychology and the rewarding experience he gets from working with older adult populations coping with neurodegenerative disease. He completed his PhD training at the San Diego State University/University of California, San Diego Joint Doctoral Program in Clinical Psychology with a focus on neuropsychology. Following his predoctoral internship at the West Los Angeles Veterans Affairs Medical Center and postdoctoral training at the University of Colorado Anschutz Medical Campus, he joined the Department of Psychology faculty at the University of Houston as an assistant professor. His research program examines culture and health disparities in cognitive aging.

Jane Mendle, PhD is an associate professor in the Department of Human Development at Cornell University. She received her PhD in clinical psychology from the University of Virginia and completed her predoctoral internship at Weill Cornell Medical College. She is the recipient of the Young Investigator Award from the Society of Research on Adolescence, the Thompson Award from the Behavior Genetics Association, the New Investigator Award from the Human Behavior and Evolution Society, and was named a “Rising Star” by the Association for Psychological Science. Her research has been profiled in numerous media outlets, including the BBC, *The Economist*, *The New York Times*, *The Washington Post*, *USA Today*, and *Newsweek*. She is a licensed clinical psychologist in the state of New York. She spent her graduate school years dabbling in novel writing as well as research. Last year, she sent her mentor a belated thank you note; it was only after becoming a faculty member that she realized how exceptional his patience had been.

Adam B. Miller, PhD was convinced that he would be a librarian when he was growing up. He is a first-generation college student. Now, Adam is a licensed clinical psychologist, Research Assistant Professor in the Department of Psychology and Neuroscience at the University of North Carolina at Chapel Hill, and a Research Clinical Psychologist at RTI International. His program of research focuses on youth suicide prevention, with an emphasis on psychological and biological mechanisms of suicide risk. He still loves libraries.

Kim I. Mills is senior director of strategic external communications and public affairs for the American Psychological Association, with responsibility for APA’s public messaging and media relations. She is also creator and host of APA’s award-winning flagship podcast, “Speaking of Psychology.” Mills has extensive media experience, including being interviewed by *The New York Times*, *The Washington Post*, the *Wall Street Journal* and other top-tier print media. She has appeared on CNN, *Good Morning America*, CSPAN, and the BBC, to name a few of her broadcast engagements. Before joining APA, Mills spent eight years as a top

executive and spokesperson for the Human Rights Campaign. As assistant vice president of the HRC Foundation, she led projects such as the National Coming Out Project, as well as programs seeking equality in the workplace, organized religion and the family. She was editor of *Equality* magazine and created the Equality Index, which rates workplaces based on policies regarding equality for LGBTQ employees and customers. Earlier in her career, Mills spent 14 years as a reporter and editor for The Associated Press, based first in New York and later in Washington, DC. She has also written for *The Washington Post*, *Fast Company*, the *American Journalism Review*, *The Dallas Morning News*, MSNBC.com, and the *Harvard Business Review*, among other publications. Mills holds a bachelor's degree in biology from Barnard College and a master's in journalism from New York University.

Antonio A. Morgan-López, PhD is a Fellow in Quantitative Psychology in RTI International's Community Health Research Division (CoHRD). As an undergraduate at Morgan State University in Baltimore, he dreamed of (a) developing prevention interventions for at-risk ethnic minority youth and (b) getting enough quantitative training in graduate school to not have to hire a biostatistician. As a doctoral candidate in clinical psychology at Arizona State University (ASU), he'd get headaches during core clinical courses and found treating patients way too daunting; for some reason, these headaches went away during his quantitative methods coursework. So he readmitted into the ASU quantitative psychology doctoral program in his third year of graduate school (while receiving an MA in clinical along the way). His current work melds elements of his clinical and quantitative training, centering around the development and application of advanced quantitative methodologies in the context of randomized and non-randomized behavioral health intervention trials. He has also served as Principal Investigator (PI) on five National Institutes of Health (NIH) grants between 2006 and 2021, with interests in differential symptom functioning across populations in estimating psychiatric disorder severity under advanced forms of factor analysis and Item Response Theory (IRT), propensity score weighting for mediation and moderation analysis and generalized non-linear mixed modeling with random treatment effects.

Elizabeth Henshaw Musewicz, MS, LPC had the good fortune to learn from Dr. Barnett's mistakes and from the writing of the first edition of this chapter and has successfully maintained a small independent practice outside of Philadelphia, PA since 2005. While her primary specialty centers around the prevention and treatment of child sexual abuse, her professional journey to independent practice lead her through multiple settings and client populations. These experiences awarded her the confidence and competence to also help others with grief and loss, complex PTSD, gender and sexual identity, and issues stemming from disrupted attachment. She is raising a lifelong unschooler and loves to learn by his side. She also enjoys cooking, running, and volunteering to support vulnerable children and families.

Matthew K. Nock, PhD was a first-generation college student who worked his way through Boston University (1995) as a cook, after which he moved to New York City to pursue his newfound career plans in psychology. Unfortunately, he could not find work in psychology given his complete lack of research experience, and so he spent several more years as a cook while pursuing various volunteer positions (e.g., runaway shelter, hotline, psychiatric research assistant). He was fortunate to be admitted to the PhD program at Yale University (2003). He went on to complete his internship at NYU-Bellevue and to be hired as an assistant professor of Psychology at Harvard (2003). Nock currently is the Edgar Pierce Professor of Psychology, a Harvard College Professor (2019–2024), and the Chair of the Department of Psychology at Harvard University. In his research, he uses a multidisciplinary methodological approach (e.g., epidemiologic surveys, laboratory-based experiments, and clinic-based studies) to better understand, predict, and prevent suicide and other forms of self-harm.

Amanda Parks graduated from the University of Pennsylvania with a bachelor's degree in psychology. After working for three years as a research assistant at the Children's Hospital of Philadelphia on two teams dedicated to community-based violence and aggression prevention research, she decided to apply to graduate school with hopes to conduct strengths-based, culturally empowering research with Black children and their families. After almost deferring her application to the following year's cycle as a result of low Graduate Record Examination (GRE) scores, she ultimately enrolled at Virginia Commonwealth University (VCU) in the clinical psychology doctoral program (concentration: child/adolescent), working with Dr. Heather Jones. Broadly, she researches how Black parenting and other racial-ethnic protective values can be utilized in the prevention and treatment of mental health concerns for Black youth. Further, she engages in research to develop and evaluate culturally sensitive and congruent interventions in pediatric primary care and outpatient settings to assist in equitable mental health access and treatment for Black children and their families. After graduation, she desires a career as a scholar activist wherein she can improve the mental wellness of Black children and families through the dissemination of culturally-congruent and empowering research via policy recommendations, community collaborations, and clinical practice.

Olivia H. Pollak is a clinical psychology graduate student at the University of North Carolina (UNC) at Chapel Hill. After graduating from Yale University in 2016 with degrees in psychology and history, Olivia worked in federal healthcare consulting in Washington, DC and almost enrolled in law school before returning to psychology research. Prior to UNC, she worked as a research assistant in Dr. Ian Gotlib's and Dr. Jutta Joormann's labs at Stanford and Yale Universities, and then as lab manager for Dr. Christine Cha at Teachers College, Columbia University. Broadly, Olivia is interested in cognitive, affective, and interpersonal processes associated with suicide and self-injury. Outside of the psychology lab, Olivia loves history and maintains that the undergraduate training

she received as a history major was invaluable to her current thinking about psychological science.

Kenneth S. Pope, PhD, ABPP is a licensed psychologist. A Fellow of the Association for Psychological Science (APS), he served as chair of the Ethics Committees of both the American Board of Professional Psychology and the American Psychological Association (APA). He received the APA Award for Distinguished Contributions to Public Service, the APA Division 12 Award for Distinguished Professional Contributions to Clinical Psychology, the Canadian Psychological Association's John C. Service Member of the Year Award, and the Ontario Psychological Association's Barbara Wand Award for significant contribution to excellence in professional ethics and standards.

Mitch Prinstein, PhD, ABPP wanted to be an actor, a teacher, or the ice cream man when he was growing up. Thanks to amazing mentors, he found psychological science and dedicated himself to the best field in the world. He now serves as the Chief Science Officer of the American Psychological Association and the John Van Seters Distinguished Professor of Psychology and Neuroscience at the University of North Carolina at Chapel Hill. For over 25 years, and with continuous funding from NIH, Mitch's research has examined interpersonal models of internalizing symptoms and health risk behaviors among adolescents, with a specific focus on the unique role of on- and offline peer relationships in the developmental psychopathology of depression and self-injury. He has published over 180 peer-reviewed papers and 9 books, including an undergraduate textbook in clinical psychology, graduate volumes on assessment and treatment in clinical child and adolescent psychology, a set of encyclopedias on adolescent development, and the acclaimed trade book, *Popular: Finding Happiness and Success in a World That Cares Too Much About the Wrong Kinds of Relationships*. He is a past Editor for the *Journal of Clinical Child and Adolescent Psychology*, a past president of the Society for the Science of Clinical Psychology and the Society of Clinical Child and Adolescent Psychology, and has served on the Board of Directors of the American Psychological Association. Mitch and his work have been featured in over 200 pieces internationally, in outlets such as *The New York Times*, *The Wall Street Journal*, *National Public Radio*, the *Los Angeles Times*, CNN, *U.S. News & World Report*, *Time* magazine, *New York* magazine, *Newsweek*, Reuters, *Family Circle*, *Real Simple*, All Things Considered, and in two *TEDx* talks.

William Rando, PhD began his scholarly life studying English Literature and dabbling in journalism and psychology at Boston College. He then did a master's degree at Northwestern in which he tried to reconcile the humanistic study of rhetoric with the social science approaches to persuasion, during which time he became fascinated with the study of learning and its counterpart, teaching. After two years of teaching full-time at Northeastern University and picking up additional classes at area colleges (to pay his bills), he decided to return to

Northwestern to explore teaching and learning in his PhD program, during which time he found that his true calling was as a translational scholar and action researcher: testing and refining his own understanding of teaching and learning by advancing skilled practices within his community of university teachers. In the past 30+ years, he has taught and led centers for teaching and learning at Northwestern University, Florida International University, Yale University, and the University of Chicago, where he continues his work today.

Elizabeth K. Reynolds, PhD is an associate professor in the Johns Hopkins School of Medicine, Department of Psychiatry and Behavioral Sciences, Division of Child and Adolescent Psychiatry. She serves as the Director of Acute Psychological Services within the Division of Child and Adolescent Psychiatry and co-director of the Pediatric Medical Psychology Program. Dr. Reynolds received her PhD in Clinical Psychology from the University of Maryland, College Park in 2011. She completed her predoctoral internship training at Alpert Medical School of Brown University Clinical Psychology Training Consortium. Research and clinical interests focus on (a) patient safety, quality, and behavioral programming within youth psychiatric acute care, and (b) social-contextual and self-regulatory factors associated with adolescent health risk behaviors. She has lead efforts to develop, implement, and disseminate Positive Behavioral Interventions and Supports (PBIS) to reduce the use of seclusion, restraint, and pro re nata (PRN) medication use in acute psychiatric care settings (i.e., inpatient and day hospital services). Through the twists and turns of graduate school and career development her north star has been to enhance behavioral health care for children and adolescents.

Monica Rivers, PhD had a desire for career flexibility at the top of her mind, even as an undergraduate. Informed by experiences in an NIH-funded biomedical research fellowship for undergraduates and an eye-opening summer research assistantship at the University of Miami, Monica chose to pursue a PhD in clinical psychology. The opportunity to engage in a combination of research, teaching, and clinical roles supported her varied interests and lifestyle choices. Although she could have never in her wildest dreams imagined how her career would unfold, she consistently sought to maximize the affordances of her degree through a range of professional opportunities, ultimately deciding to leverage her education and training in service of leadership and organization development. She has been living the dream as a consultant and executive coach for the past 10 years, working with leaders across sectors from all over the world. She is particularly proud of her engagement in efforts that have served to promote health equity and women's leadership. Monica considers it a privilege to partner with and walk alongside clients who are striving to realize their gifts and live into the fullness of their vocational calling.

Abigail Robbertz is a third-year clinical psychology graduate student at Georgia State University. She received a Bachelor of Science in Psychology with a minor in Neuroscience at The Ohio State University. She is co-mentored by Drs. Lindsey

Cohen and Lisa Armistead, and Ms. Robbertz conducts research examining the impact of chronic illnesses on pediatric populations within the family context. For example, Ms. Robbertz is examining the impact of the pandemic on adherence and well-being in youth with gastrointestinal disorders, and she is particularly interested in whether the parent–child relationship might buffer these relations. After earning her doctorate, Ms. Robbertz hopes to marry her interests in clinical work and research with a career in a pediatric medical center.

Katie Rosanbalm, PhD knew she wanted to use research to create real-world solutions to improve child outcomes as a graduate student in child clinical psychology—but she had no idea whether or where such jobs might exist! Happily, through her clinical internship at Duke, she found the Center for Child and Family Policy. Dr. Rosanbalm now serves as a Senior Research Scientist at this Duke center, developing and evaluating interventions that target self-regulation and trauma-informed care. Current projects include: (a) the North Carolina Resilience and Learning project, a trauma-informed schools model developed in collaboration with the Public School Forum of North Carolina; (b) the Infant–Toddler Trauma-Informed Care (ITTI Care) project, a multitiered intervention to bring trauma-informed care and workforce wellness to early education; and (c) evaluation of Benchmark’s Partnering for Excellence project, with proactive trauma-informed assessment and services for children and youth involved with child welfare. Dr. Rosanbalm has co-authored a series of papers and briefs on self-regulation and toxic stress, and she regularly provides training for educators from early childhood through college levels on the potential impacts of toxic stress and the many pathways to resilience and healing.

Leonid Rozenblit, JD, PhD’s undergraduate studies at SUNY Buffalo could be politely described as “eclectic” (and more bluntly as “what was he thinking?!”): Psychology and pre-med with concentrations in Computer Science, Economics, and English Literature. His teaching experience began as a tutor for the Princeton Review (a test prep company) and briefly continued as a high school Science teacher in the NYC Public Schools. Having long assumed that he would become some sort of professor, based largely on an inclination for professing things, Leonid went on to study Law at the Louisiana State University Paul M. Hebert International Law Center, where he refined his mentoring skills as a Senior Editor of the Louisiana Law Review. Discovering he was less interested in the minutia of legal practice than in the cognitive psychology of legal reasoning, he next pursued his intellectual interests by working on a PhD in psychology at Yale University, where he also served as a co-director of the Graduate Teaching Center. After completing his PhD, Leonid stayed at Yale to teach graduate and undergraduate statistics courses, while running a data management and consulting practice. That practice grew into Prometheus Research, a company that developed specialized data management systems (sometimes called “registries” or “data hubs”) for large-scale biomedical and behavioral research programs. Leonid led Prometheus to become a market leader in their niche and to a successful acquisition by the

world's largest Human Data Science company, IQVIA, Inc. Leonid continues to teach and mentor in a thought-leadership role, as the Head of the Registry Practice Center of Excellence and the Senior Director of Product and Strategy at IQVIA Healthcare, and he continues to be pleasantly surprised at how much teaching and mentoring is involved in his day-to-day work, even though it takes place outside a typical academic setting.

Amy Sato, PhD is an associate professor of Psychological Sciences and Director of the Pediatric Health and Stress Lab within the Department of Psychological Sciences at Kent State University. Dr. Sato's program of federally funded research focuses on obesity and weight management among adolescents from lower resource environments. This has included biobehavioral factors such as cortisol reactivity and stress-induced eating related to obesity risk among adolescents from lower-income backgrounds and, currently, a clinical trial examining mindfulness to enhance adolescent weight management. Mentoring graduate students is one of the great joys of her academic position; thus, Dr. Sato has been thrilled about her students' success, winning numerous national awards and landing prestigious postdoctoral positions. She did not know postdoctoral training existed when she entered graduate school, so she makes sure to mention this important part of the training process to her new graduate students.

Angela Scarpa, PhD, daughter of Italian immigrants, is a professor of psychology and Director of Clinical Training (DCT) at Virginia Tech. She is the Founder and Director of the Virginia Tech Autism Clinic & Center for Autism Research. Her general interest is in child and adolescent mental health, dissemination and implementation of evidence-based practices, and the study of developmental psychopathology. Currently, her work is focused on children, adolescents, and young adults with autism spectrum disorders. She completed her graduate education at the University of Southern California. Although she knew she wanted to be a clinical psychologist from a young age, she did not really know what was involved and feels fortunate it turned out to be something she loves!

Valerie A. Simon, PhD is a professor of psychology at Wayne State University with appointments in the Psychology Department and the Merrill Palmer Skillman Institute for Children and Families. Her federally funded research examines interpersonal development during adolescence, with a focus on the impact of childhood adversity and interpersonal violence exposure on romantic and sexual functioning. Dr. Simon is an active mentor for emerging scholars at all phases of professional development and has received awards for her mentoring. Her circuitous path to becoming a psychology professor started when she was a music therapist for special needs and psychiatrically hospitalized youth.

April R. Smith, PhD directs the Research on Eating Disorders and Suicidality (REDS) Laboratory at Auburn University. Dr. Smith decided to switch her major to psychology after getting a B in a poetry class and realizing she probably wasn't going to make a living off her creative writing. She received her BA in

Psychology and Plan II from the University of Texas at Austin. She then taught English in Japan for two years as part of the Japanese Exchange and Teaching Program. Dr. Smith received her PhD from Florida State University's Clinical Psychology Program in 2012 and completed her clinical residency at the University of California, San Diego. Dr. Smith was named a 2016 Rising Star by the Association for Psychological Science. Dr. Smith has received funding from the Department of Defense and National Institute of Mental Health (NIMH) to support her work.

Anthony Spirito, PhD is Professor of Psychiatry and Human Behavior at the Alpert Medical School of Brown University. After barely getting into graduate school, he completed his internship at Boston Children's Hospital (BCH). He did an unpaid postdoc at BCH (not recommended, by the way) so he could remain in the Boston area because his wife had a good job there. He took a position at Brown after an intern he was supervising at BCH said she was turning down a job at Rhode Island Hospital to accept another offer with a more established program. In other words, his early professional career was unplanned and totally random. In the early 1990s, he was one of the founders of postdoctoral training in Brown's Department of Psychiatry and Human Behavior. He has a long history of mentoring postdoctoral fellows in the Department. He has also served as the Director of the Clinical Psychology Training Program at Brown and as Principal Investigator on Brown's National Institute on Alcohol Abuse and Alcoholism (NIAAA) postdoctoral T32. He is currently Principal Investigator on Brown's National Institute of Mental Health (NIMH) postdoctoral T32 in Child Mental Health.

Leigh A. Spivey-Rita, PhD is a clinical associate in the Department of Psychiatry and Behavioral Sciences at Duke University Medical Center. Dr. Spivey-Rita earned her PhD in clinical psychology from the University of North Carolina at Chapel Hill in 2020. She completed her predoctoral internship in clinical psychology at Duke University Medical Center. Dr. Spivey-Rita developed a passion for studying gender diversity in children and adolescents when she was an undergraduate student. However, her path to this goal was long and winding throughout graduate school and she benefited immensely from taking detours and accepting successive approximations. She was fortunate to work with mentors who helped her to feel less adrift when the path forward was unclear. Dr. Spivey-Rita now provides outpatient therapy for gender diverse youth and their families and works in close collaboration with a multidisciplinary gender medicine team. She is passionate about advancing gender-affirmative, evidence-based mental health care for this population.

Karen E. Stamm, PhD is the Director of the Center for Workforce Studies at the American Psychological Association, where she oversees a team that conducts research on the psychology workforce and education pipeline. She is a quantitative psychologist and enjoys using data to tell compelling stories. Karen aims to inform career choices for psychology degree holders by showing

the value and versatility of psychology education at work. She earned her PhD and MA in psychology from the University of Rhode Island and her BA in psychology and English from Boston College. As an undergraduate student, she learned an informal framework for making career decisions: What are your talents and gifts? What brings you joy? Who needs you to do it? Karen uses this framework at every career crossroad and has periodically used it to change her career goals. These questions helped her stumble into experiences that developed her expertise in quantitative psychology.

Robert J. Sternberg, PhD is Professor of Human Development in the College of Human Ecology at Cornell University and Honorary Professor of Psychology at Heidelberg University, Germany. Previously, he was IBM Professor of Psychology and Education and Professor of Management at Yale and Director of the Yale Center for the Psychology of Abilities, Competencies, and Expertise. Sternberg is a Past President of the American Psychological Association and the Federation of Associations in Behavioral and Brain Sciences, the Eastern Psychological Association, and the International Association for Cognitive Education and Psychology. Sternberg also has been president of four divisions of the American Psychological Association and Treasurer of the Association of American Colleges and Universities. Sternberg's BA is from Yale University summa cum laude, Phi Beta Kappa, his PhD is from Stanford University, and he holds 13 honorary doctorates. Sternberg has won more than two dozen awards for his work, including the James McKeen Cattell Award and the William James Fellow Award from APS. He has won the E. Paul Torrance Award from the National Association for Gifted Children, 2006, and the Distinguished Scholar Award, also from the National Association for Gifted Children, 1985. He also is a past winner of the Grawemeyer Award in Psychology.

Steven Stone-Sabali, PhD is a visiting assistant professor in the Department of Educational Studies at The Ohio State University who passionately studies the psychological experiences of young adults of color as they navigate through educational and mental health settings, as well as cross-racial relationships and racial ally development. However, his research and professional interests were not always this clear to him. Instead, he actually received his undergraduate degree in the fields of Computer Science and Business, and even worked in the finance field before making a somewhat abrupt career change. Ultimately, he decided that it was better to follow his authentic interests in education and psychology, which led to him pursue a master's degree in Counseling Psychology so he could become a high school guidance counselor. However, while completing his master's degree he fell in love with reading about counseling and psychology, so to continue his studies he pursued a doctoral degree in Counseling Psychology. Altogether, he recognizes that career paths are rarely linear and graduate students often have more influence in creating their ideal careers than they realize. Thus, he encourages students to follow their interests!

Carol Williams-Nickelson, PsyD – have a career plan, work hard every step of the way, develop, nurture relationships, and be open to the opportunities that unfold before you even if they are not a part of your well-conceived plan. That’s what Dr. Williams-Nickelson did. Her original plan included seeing clients daily, teaching graduate courses, and leadership in psychology organizations. But that all changed when she became involved in APA, “caught the advocacy bug,” and began organizing graduate students to be involved in legislative advocacy and shape the profession they would inherit. Dr. Williams-Nickelson served as co-chair of the American Psychological Association of Graduate Students (APAGS) Advocacy Team and Chair of (APAGS). After internship at the University of Notre Dame, she had the choice to stay for a fellowship or accept APA’s offer as the first Associate Executive Director of APAGS. She chose APAGS and the rest is history. After APA, she became CEO of the American Medical Student Association and Foundation, then CEO of the National Council for Interior Design Qualification (developing/administering the profession’s competency and certification exam), and then Principle/Senior Consultant for HDev Consulting where she helped C-level Executives and Leadership Teams at Fortune 500 firms in Health, Finance, Pharmaceutical, Medical Device, Information Technology, Software/Platform, Retail, Hospitality and Government/Non-Profit sectors. She now leads a large, multilocation psychology practice in Virginia, where she provides clinical services, collaborates with eminent multidisciplinary health care practitioners, mentors/trains the next generation of health care providers and leaders, and continues to imagine and build innovative mental health programs that transform lives.

Erica H. Wise, PhD initially planned to major in Art History and French, but she is very glad to have found her way to Clinical Psychology because the work is so important and fulfilling. For 20 years she taught doctoral-level courses in the Clinical Psychology doctoral program at the University of North Carolina at Chapel Hill that focused on clinical supervision, clinical theory and practice, ethics, and diversity. She is currently a consultant, educator, and frequent workshop presenter on ethical issues in professional psychology. She was the recipient of the 2013 Annual APA Ethics Committee Award for Outstanding Contributions to Ethics Education and received a 2014 APA Presidential Citation for her work in social justice advocacy and self-care for psychologists. She is a Fellow of the Society of Clinical Psychology (Division 12) of APA, former chair of the APA Ethics Committee and the North Carolina Psychology Board, and she recently completed two terms on the APA Board Educational Affairs (BEA). She is a past-president of NCPA and current co-chair of the NCPA Ethics Committee. Her professional interests include professional education and training, multicultural supervision, continuing education for psychologists, and the integration of ethics, diversity, and self-care into academic and professional practice settings.

Philip G. Zimbardo is internationally recognized as the “voice and face of contemporary psychology” through his widely viewed PBS-TV series, *Discovering*

Psychology, his media appearances, best-selling trade books, and his classic research, The Stanford Prison Experiment (1971). Zimbardo is a Stanford University Emeritus professor of psychology. He has been awarded the Vaclav Havel Foundation Prize for his lifetime of research on the human condition. Zimbardo has been President of the American Psychological Association (2002) and Chair of the Council of Scientific Society Presidents (CSSP). Among his more than 600 professional publications, including 60 trade and textbooks, is the oldest current textbook in psychology, *Psychology and Life* (20 editions). When he was a graduate student teaching introductory psychology to a Yale freshman seminar of 20 students (1957), he imagined what it would be like to be lecturing in a large auditorium to hundreds of students at a time. During his career at Stanford, he taught as many as 1200 students in the Drama School auditorium, and he recently lectured live to an audience of over 10,000 professionals at an Evolutionary Psychology Conference. Excitingly challenging!

Preface

Another decade has passed, and accordingly, another new edition (the third!) of *The Portable Mentor* is here. I began working on this volume in my first few years as an assistant professor. At the time, a few of my colleagues told me not to work on this project. It would not earn me academic credit and it would take valuable time away from my empirical work, they explained. I thus vowed to work on this volume only on evenings and weekends (not recommended), and did so with the conviction that much of what we need to know to succeed – and to be happy in a psychology career – was not taught in graduate school. That may be for good reason; gaining broad exposure to an entire discipline, completing daunting milestone tasks (i.e., theses, comprehensive exams, and a dissertation), and becoming an expert in a particular area of scholarship takes a remarkable amount of time and investment from an entire program of dedicated training faculty. There just isn't time to cover everything.

But most students in graduate school have questions that extend well beyond the formal curriculum. How do I adjust to graduate school, learn to teach a class, present a paper, write a grant, get a postdoc, decide what career I want to pursue, or stay true to my own identity/values while managing the enormous challenges and peculiar culture of a doctoral program?

If we're lucky, we have a mentor who takes the time to help us answer these questions in the moments between their edits to our paper drafts, or between their classes. I was one of the lucky ones; I had an outstanding mentor during four years in graduate school, Dr. Annette La Greca, and an equally terrific mentor during my three years as a predoctoral intern and postdoctoral fellow, Dr. Tony Spirito. I also had amazing professional "aunts and uncles," including Drs. Audrey Zakriski, Michael Roberts, Wendy Silverman, and later Alan Kazdin, who each gave their time so selflessly to answer my questions, help me find resources, and constantly put their students' needs, including mine, above their own. It was their inspiration that led me to develop this resource and continue working on it for the past 20 years.

But many may not be so fortunate. Opportunities are not offered equally to everyone, and in many cases, learning opportunities are denied in systematic ways. This not only hurts students, but also weakens our field. Until everyone has an equal chance to succeed, and to be happy, we will continue to reify disparities, and deny our field the perspectives we need to truly understand all of human behavior. This volume was designed with these issues in mind. These chapters will not resolve systemic inequities, of course, but it is my hope that they will offer everyone outstanding professional and personal advice. I am forever indebted to the many contributors – now over 70 who have dedicated their own time and effort to selflessly share their wisdom with the next generation of psychology trainees. Together, they provide outstanding expert advice on a wide array of professional development topics. Each was selected based on their enormous expertise and generous commitment to professional development, serving as the “field’s mentor” for everyone.

As in prior editions of this book, the material here is indeed candid, honest, and practical in its use. This is advice to answer the questions that may be hard to ask your professors, but important for you to consider as you pursue your degree. Authors were asked to share the wisdom they would share with their own students, and do so in a way that is easy to read and helpful for generating discussion among your peers.

As the years have passed, the world has changed. So has this volume. Students still have many questions that are not answered in most graduate curricula and the need for additional professional development resources remains strong. But some of the inquiries have changed. Many students entering the field today still desire a traditional career in academia, contributing to the knowledge base that guides policy, practice, outreach, and science implementation. But many students yearn for greater impact than can be achieved by publishing only in journals. Today’s students have grown up in a world facing enormous problems they have inherited from prior generations, such as climate crises, discrimination and systemic inequities, violence, terror, health disparities, political strife and division, and a worldwide pandemic. These same students also have been raised in a culture with unprecedented opportunities, including the ability to communicate with a worldwide audience at the click of a button, hordes of data available on lifestyle devices in most humans’ pockets, unprecedented computing power, and watershed moments of reckoning that offer the potential for unity. Our discipline is unique in its ability to address all of these issues, leverage each of these advances, and make an impact through our science. Students today want their work to make that impact, and that means using their talents in a wide range of careers that can help translate science into action.

Thus, this edition of *The Portable Mentor* offers several new chapters to help students consider unique and exciting careers. In addition, every chapter has been substantially revised to consider how the competencies you will learn in graduate school can be used to make broad and meaningful change.

This edition also includes several new chapters to celebrate diversity in psychology, yet recognize that while the field increases representation of students from historically minoritized racial, ethnic, sexual, and gender groups, not all programs

have created a climate yet to allow those from underrepresented backgrounds to feel safe and valued. These are very real and potentially painful challenges that can add to the stress of graduate school. In this edition, a frank discussion of these issues is offered, along with practical advice to survive and thrive in our discipline.

New chapters also have been included to discuss the experiences of those who identify as female in psychology – now about 75 percent of all doctoral graduates in our field. Despite this enormous change in the gender distribution of the discipline over the past half-century, the field continues to reflect a climate created by men, and disparities experienced disproportionately by women. These chapters are meant to be of practical use to those who personally identify with the issues reviewed, and as a useful source for information for allies.

I hope this volume is useful to students considering graduate school, to those who are in the throes of graduate training, to those beginning a career when support is still needed, and to more senior mentors who also need support or are looking for lessons to assist their trainees. I also hope this book is a helpful resource to the growing number of professional development courses offered in graduate training programs within the US and abroad. I believe as mentors, it is our duty not only to train our students to understand psychology, but also how to use their strengths to enrich our discipline throughout their lives. Last, I hope this volume is a useful tool in fostering a psychology workforce that values happiness as a valid career goal. Psychological science offers so much to benefit the world around us, and we also can serve as an exemplar discipline that values wellness, encourages balance, and demonstrates equity, justice, diversity, and inclusion among its members. To do this, we need to train students not only to develop expertise in research skills, but also equip trainees with confidence to feel good about themselves, and the practical support to succeed through all of the unique challenges and opportunities a career in psychology can offer.

Good luck to everyone!

Acknowledgments

With a special debt of gratitude, I wish to acknowledge the hard work, cooperation, and generosity of the contributors to this volume, all of whom are devoted and deeply committed to the training of psychologists.

Most importantly, thanks to my mentors, Drs. Annette La Greca and Tony Spirito, whose dedicated and selfless mentorship throughout my training served as inspirational examples, and helped me earn the opportunity to share just a little of what I learned from them in this volume.

Thanks to my family and friends, always.

Mitch Prinstein

PART I

APPLYING TO GRADUATE SCHOOL

1

Before You Apply to Graduate Programs in Psychology: Knowing When You're Ready, and Gaining Post-Baccalaureate Experiences

Casey D. Calhoun & Mitchell J. Prinstein

Do you want to go to graduate school to study psychology? If so, when? These important decisions can be difficult to consider for undergraduate students who are interested in psychology as a potential focus for their career. Unfortunately, little information is available to guide students through this difficult decision, and even less seems to be available to help students navigate the time between the receipt of their undergraduate degree and the time they decide to apply (i.e., “the post-baccalaureate years”). This chapter focuses on the process of assessing one’s personal interests while maximizing post-baccalaureate learning experiences. First, we share factors to consider when determining whether to take “time off” from school before applying. Next, we provide recommendations for finding and successfully obtaining a “post-bacc” research job. Last, we discuss how students can use their post-bacc years most effectively to make grad school decisions and be successful in the application process. Note: this chapter is likely biased toward research-oriented options; however, most of the information may be relevant to students with more applied, clinical interests as well.

Of course, before addressing each of these questions in detail, it is important to remind the reader no single source of advice should be relied upon exclusively when making such difficult and personal decisions, including the advice in this chapter. Seek out information from people within your field of interest as well as from those who offer an outside perspective. Keep in mind during this process that opinions can sometimes be skewed and informants’ levels of enthusiasm and conviction could unjustly bias your predictions of personal happiness. Collect perspectives, compare them to your own, and make decisions with the acknowledgment of individual differences.

Given that the process of collecting perspectives and developing personal interests can take a substantial amount of time, it is recommended that students initiate the process early to make a well-informed decision about their choice of program and unnecessarily avoid taking multiple years off before applying to grad school.

1. Should I Take Time “Off”?

You may be “burnt out” after 17 years of schooling. Your parents may be worried that you are “delaying” your career path by taking time away. You may not know what will “look good” on your application. Indeed, many factors may influence your decision regarding the post-bacc years and whether to take time off from school before applying to doctoral programs in psychology.

1.1 Are You Ready Now?

Some students transition directly from undergraduate schooling to graduate programs and are pleased with their decision. These well-prepared students have usually spoken with many people, worked in and outside of school to establish their interests, and have a good idea of what to expect in graduate school before applying. In other words, they have worked hard during their time as an undergraduate to develop their résumé and determine which program best matches their interests. These students usually have identified an area of research that they are truly passionate about – something they could imagine spending every day thinking about for the next 40 years – and they are excited about the opportunity to get started now. They have a clear sense of possible careers options post-degree, and these options align with their goals.

On the other hand, there are also students who make the direct transition from undergraduate to graduate school, and realize that they are not as happy as they had hoped. They often report that they got “wrapped up” in the application process, followed the crowd (i.e., falling in with departmental trends or those of lab mates), or hastily guessed their interests instead of adequately evaluating them. They may have been pressured by parents or felt scared to enter the “real world.” For these students, graduate school isn’t quite what they expected and/or isn’t quite as enjoyable as they had hoped.

1.2 Should You Wait to Apply?

At many top graduate programs in psychology, a growing trend is evident. About 50 percent of short-listed applicants (a higher proportion each year, it seems) have taken a year or more “off” before applying to graduate school. Students who have taken time off to gain research experience are over-represented in the proportion of successful applicants who ultimately gain admission. Taking time off is not required, but it is becoming the norm. Why are so many students taking time off? There are at least three good reasons. First, many students take time off to learn more about the field. Most students find that as they gain more experience, they generate more questions about the field, their own capabilities, and their own interests. Students interested in applied areas of psychology, for instance, may wish to get more experience working with people within the age range, diagnostic group, or in the setting that appeals to them most.

Second, students take time off hoping to develop increased confidence that they will make the correct decision of graduate program. Taking time off won't necessarily guarantee that you will make the *correct* decision when applying to graduate school, but it can help you make a *better*, more well-informed decision if you use the time wisely. Third, and perhaps most common, many students take time off to help improve the strength of their application. Indeed, it may be good for students to take time off if their GPA or GRE score is considerably lower than posted averages, and/or if they are applying to research-oriented programs but do not have adequate research experience (and/or do not know their personal research interests). Gaining additional experience and improving one's qualifications can increase the odds that the financial investment made during the application process will result in a preferred outcome. In addition to these main reasons, many students simply take time off because they want to save money for graduate school, they are exhausted from their undergraduate studies, or they have another opportunity that seems too good to pass up (e.g., Teach for America, Peace Corps, etc.).

Ultimately, students should realize that their graduate school application can always be improved and that they may never fully gain all of the knowledge that they need before applying. To some extent, the decision to apply eventually will require a leap of faith that is informed by previous experiences and best guesses at what will be most fulfilling. The remainder of this chapter is dedicated toward a discussion of opportunities that are available during the "post-bacc" years for students who have decided to take time off before applying to graduate school and would like to use that time most wisely.

2. What Should I Do During My Time Off?

If you decide that you need to acquire more knowledge and skills, or further explore your personal interests, there are various opportunities that may help you accomplish these goals. Such opportunities include volunteering, working as a research assistant, and attending national psychology conferences. A brief discussion of each opportunity is offered below.

2.1 Volunteer Positions

There are various ways to volunteer in the field of psychology, and the opportunity that someone chooses should depend on their personal goals and intentions for graduate school. Volunteer positions broadly include assisting with psychological research, working with specific populations in the community (e.g., special needs children, at-risk individuals, etc.), or assisting clinicians in their practice (these are more rare). Students interested in pursuing a research-oriented program in graduate school should *primarily* focus on gaining experience in research labs. Doing so will provide opportunity to more thoroughly develop your knowledge of the scientific process and, more specifically, how it applies to psychology (see the Research Assistant section below for more details). Students interested in pursuing a more

“clinically oriented” program (i.e., programs that focus more on working directly with and/or treating a specific population in the absence of a research training emphasis), may wish to gain experience *primarily* in applied clinical settings. In such clinical positions, volunteers are not expected to become an expert in treating people with psychological difficulties. Instead, they are often asked to provide basic treatment services, serve as advocates, intervene in crisis situations, or simply spend time with individuals afflicted with mental illness. These positions offer an excellent opportunity for students to practice their rapport-building skills, begin to understand the life of a person with a mental illness, and develop passion for continuing to work in the field.

The term “primarily” was used above, when referring to the pursuit of research and clinical opportunities, because experience in each area (research and applied) offers invaluable information that supports the scientist-practitioner model of applied psychology. In other words, research-oriented students can become better researchers by gaining personal experience with the same populations that they plan to research, and clinically oriented students can become better clinicians by incorporating evidence-based methods of assessment and treatment into future practice. Admission committees do not always share this sentiment regarding the importance of acquiring both research and clinical volunteer experiences, but students generally find that each type of experience significantly contributes to the development of their interests and their eventual choice of graduate program.

The unique opportunities of volunteering are often overlooked, but in fact there are several aspects of volunteer positions that do not necessarily apply to paid positions. These include: availability of positions, time commitment, and evaluation without compensation.

Availability of Positions. The first benefit of volunteer positions is that they are more readily available than paid positions. Students can generally find advertisements for available volunteer positions posted on bulletin boards or listservs in the psychology department, or on the department’s website. Students may also contact local inpatient and outpatient treatment centers, crisis centers, mental health agencies, research centers, or individual researchers to inquire about volunteer positions. As students begin to narrow their interests, they often find that paid positions offering experience in the particular area of interest are rare and competitive. Additionally, those students who succeed in acquiring a paid position often have a great deal of volunteer experience and accompanying skill sets to reference during their interviews for the positions. In some situations, volunteer positions can even serve as preliminary screening for paid positions.

Time Commitment. Second, a student’s commitment to volunteer positions is more negotiable than time committed to paid positions. Unless you have made a commitment to work in a lab for a specified period of time, you can reassess your interests in the position after a pre-established period of time and choose to stay or move on to a different opportunity. Your commitment to the position should be clearly stated in the beginning so that if you decide to leave, you do so with early

notification and respect for your supervisor. If after a semester, or a few months, you decide that you would like to pursue a different area of psychology, it is recommended that you follow your interests. A semester spent in a position deemed uninteresting is a semester that you could have spent testing out a different potential interest. Given that the majority of students want to take off as little time as possible, this can prove to be a more efficient way of determining which area you want to pursue at the graduate level. Along these lines, don't make the mistake of guessing the topics that you will enjoy studying/researching in graduate school; pursue them fervently before applying.

Evaluation Without Compensation. A final benefit to volunteering is the substantial opportunity to stand out and make an impression. Supervisors and graduate school admissions committees are especially taken with someone who is excited and committed to working on a project when no direct compensation is offered. Similarly, the volunteer setting allows you to assess your own motivation about a particular area without the influence of a paycheck. To set yourself apart from other volunteers, it is important to demonstrate initiative and go beyond the basic duties of the position. Be sure to demonstrate your commitment to detail, reliability, and knowledge about the particular area of research or clinical work. This will ensure that your performance and enjoyment for the project is being assessed under optimal conditions. Also, be aggressive in your development of skills. Try to master the simple tasks quickly so that you can advance to the more sought-after skills that are often a bit more difficult to acquire. A supervisor will not always explicitly offer such opportunities so sometimes it is necessary for you to ask if more advanced training or tasks are available. In most cases, supervisors are eager to support their high-performing volunteers with advanced training opportunities and give them more responsibility in their lab. Additionally, keep in mind during your volunteer experience that you will most likely ask your supervisor to write a letter of recommendation for applications to other labs, jobs, and/or graduate school. The letter will be much more impressive if your supervisor can state that you excelled in your position and sought additional learning opportunities.

2.2 Research Assistant Positions

A post-baccalaureate research assistant (sometimes referred to as a post-bacc, RA, or PC) can refer to an employee or student who assists with one or multiple aspects of a research study. Note that some investigators may use these terms differently to refer to different roles within a similar project (sometimes a project coordinator is a post-doctoral fellow; sometimes an RA is an undergraduate assistant receiving course credit, etc.). Also note that different labs may have different constellations of RAs, project coordinators (PCs), post-baccs, etc. all working together, or in a hierarchical relationship among one another. For clarity in this chapter, we will refer to this kind of position as an RA.

Finding an RA Position. As implied in the section above, paid RA positions can be more difficult to find and secure. Unfortunately, it is rare that a study directly related to your area of interest will exist at your university (if so, then great!); it is even more rare that the study's principal investigator will be hiring RAs. Therefore, when looking for a paid position that will help you accomplish your career goals, it is often necessary to broaden your scope and search for positions in different cities and universities. Of course, not everyone is willing or able to move to a different location, and in this situation, you should seek out a local position that is most closely related to your interests. If a paid position is not available in an appealing lab, you could possibly volunteer in that lab and receive compensation from a different source, which is recommended for all of the reasons mentioned earlier.

There are several different methods for locating paid RA positions. Students with less well-defined interests, or those who are intent on staying in a particular geographic region, may want to begin by searching for RA positions on the human resources (HR) websites of universities and local research centers that they are willing to consider. Generally, HR websites will have a "Jobs" or "Employment" page that allows you to search for jobs specifically relating to research. Such a search is less likely to reveal positions that are a perfect match for a student's specific interests, but positions in any research lab provide opportunity to become familiar with the scientific process and the general framework of research. Keep in mind that each university may have this type of position "classified" under varied job titles (e.g., clinical research assistant; research cleric, etc.), and it may not be immediately obvious which types of jobs match the traditional RA position you are likely looking for.

Post-baccalaureate students with more well-defined interests, especially those who may be able and willing to relocate, would likely benefit most from conducting a much geographically broader yet more content-specific search that begins by determining which researchers are currently conducting research in their line of interest. A centralized repository was recently created to help connect undergraduates and recent graduates with open RA positions (<https://psychologyjobsinternships.wordpress.com/>). Also see <https://clinicalpsychgradschool.org/positions/>. You could also consider these additional strategies for finding open positions:

1. Enter your research interests as search parameters in PsycINFO. When reviewing the literature, note any researchers who appear multiple times in recent publications and those who have contributed to present theories relating to your area of interest. After generating a list of researchers whose work is a good match with your interests, search for their personal or lab websites; here, the researcher may have the most current information on their ongoing research projects. It is possible that the current projects listed on the researcher's website will remain related to your interests. On the other hand, it is also possible that the researcher is currently working on projects that are not as relevant to your interests. If the researcher does not have a website, or their website does not

- present information on current projects, it may be necessary to send a brief, professional email to gather more information about their current research.
2. To find investigators that likely have current funds available to hire an RA, search the NIH REPORTER website. This database will offer a list of active NIH-funded grants by area, name, or even university.
 3. Investigators often post job ads on listservs sponsored by the professional society or association most closely aligned to their area of interest. Ask your professors to recommend professional societies that may be important for you to join so that you may subscribe to their listserv, or ask someone who has access to forward you relevant postings from listservs they are on.
 4. Also, follow researchers on Academic Twitter, as this social media outlet is now commonly used to spread the word about open positions.

Professional Communication. When contacting professors, it is important that students convey professionalism and maturity at all times. Professors often form initial impressions by considering the manner in which a student approaches them, the content of what the student says or writes, the effort the student puts forward, and the student's excitement for working with them. They are much less likely to hire someone who sends an email with multiple spelling errors, grammatical mistakes, or obnoxious font or colors; this demonstrates a lack of effort, a lack of maturity, a lack of competence, or some combination of these factors (none of which are well-suited for the position). Similarly, professors will think less favorably of a student who is disrespectful or demanding in an email. It often works in your best interest to have someone read through a draft of your emails to ensure their professionalism before you send them to a potential employer.

It's important to acknowledge that professors receive many (sometimes hundreds) of emails daily and expect that the professor may not respond immediately. With this in mind, keep emails short and to the point. Introduce yourself, briefly express your interest in their research, and ask your question(s). In your self-introduction, state who you are (i.e., name and status) and your collegiate affiliation. It could also be helpful to mention your ties to previous faculty supervisors that the professor may know. If your previous supervisor has a collegial relationship with the professor you plan to email, you may ask him or her to send the professor a note prefacing your email; this may help to ensure that your email is acknowledged more quickly and that you are given consideration for available positions. Feel free to include your curriculum vitae (CV) or résumé as an attachment to the email but *do not* list all of your accomplishments within the body of your message; if the professor wants to review your accolades and previous experiences, they can always review the attachment. After expressing interest in the professor's research, politely ask if they could provide information on their current projects and/or if they may have any available paid RA positions. Avoid asking questions that are clearly answered on the professor's website, and follow any instructions that the professor has provided on their website (e.g., they may instruct you to email the lab manager inquiries about open positions).

Interviewing for RA Positions. Interviews for RA positions are a great opportunity for a student to practice their interviewing skills for potential grad school interviews. For the interviews, bring your CV or résumé and be prepared to answer questions about your previous experiences, why you want the position, and your career goals. Importantly, avoid the temptation to overstate your knowledge, and instead, confidently communicate your enthusiasm for the opportunity to learn.

Also, don't forget to assess the supervisor and the position. You could ask questions about the requirements of the position, additional opportunities to excel (see below), time commitments (both regarding weekly hours and start/stop dates for the position), lab culture and expectations, and compensation. Additionally, your intentions should be clearly stated upfront so that there is no confusion later; if you would like a position that offers advanced tasks (after mastering the more basic ones) or independent research projects, make sure that these opportunities exist and that the supervisor is aware of your determination to pursue them. At the conclusion of the interview, be sure to thank the supervisor for spending the time to consider you for the position; it is polite to send a follow-up email conveying your appreciation.

Duties of an RA. The duties of an RA vary greatly based on the requirements of a research study, the responsibility given to you by your supervisor, and your personal efforts to acquire knowledge and skills. RAs' duties could include: conducting literature reviews, drafting/submitting Institutional Review Board (IRB) applications (i.e., ensuring that your study meets the ethical requirements dictated by your school's IRB), administering therapies (i.e., drug or psychological), leading subjects/participants through an experimental or observational protocol, collecting data, managing data, coding data (i.e., transforming observed behaviors, written statements, and other interpretive constructs into quantitative variables), developing coding systems, conducting statistical analyses, and assisting with the dissemination of findings (in posters, presentations, or manuscripts). For research involving human participants, RAs may have the additional responsibilities of recruiting participants, scheduling lab visits, arranging participant compensation, or assisting with measure/survey development. Data collection in human-based research often involves administering surveys or measures, collecting physiological or observational data, or conducting clinical assessments. RAs in animal-based research may have the additional responsibilities of providing animal care and performing medical procedures necessary for their particular field of study. The RA duties mentioned here are certainly not an exhaustive list. The needs, goals, and protocols of every lab are variable and require RAs to perform different, and sometimes exceptionally unique, duties for each project.

While performing your duties as an RA, take note of any aspects of research that are particularly difficult for you. Once you have determined your problem areas, *confidently* seek out support. Self-assessment, paired with the ability to ask for help, will be important as you continue to progress in the field. Additionally, while some of the complexities of research are initially overwhelming, don't let this scare you away! You will find that most research processes follow a written or unwritten

(i.e., generally understood) set of guidelines. Once you learn these guidelines, the research process becomes less intimidating.

The same recommendations regarding work ethic and development of personal interests mentioned in the volunteer section apply to RA positions as well. In addition to those recommendations, RAs should work to build their CV/résumé, assess their general interest in psychological research, and refine their interests. Think about what you would like your CV/résumé (and/or application essays) to include at the end of your position and use this to set goals. For research-oriented students who are building their CV, it is recommended that students take part in the development, reporting, and presentation or publication of a research project. Presentations mostly include posters or papers presented at national or regional psychology conferences; the formats for these presentations vary by conference (see the “National/Regional Psychology Conferences” section below). You may have the fortunate opportunity to assist with the presentation or publication of another person’s research project, but you should ultimately strive to conduct your own independent research project. For a personal research project, you could analyze archival data (i.e., a pre-existing data set), insert measures into an ongoing research project, or design a study that is solely dedicated to answering their specific research questions. Admission committees of research-oriented graduate programs are especially impressed with students who have demonstrated the ability to undergo the full scientific process, from idea conception to the presentation of findings. In most cases, being involved with a presentation or publication is almost always a result of a student’s persistence in pursuing such options.

As an RA, students should ultimately determine if they would like to remain in the world of psychological research or pursue psychology from a different perspective (e.g., policy maker or clinician). If, at some point, you conclude that you have a passion for psychological research and want to pursue it further, the next step is to determine which area of research is most appealing to you. During the application process, your specific research interests and questions will most likely inform your decisions of where to apply and with whom you would like to work. Narrowing one’s interests can be difficult for some students as their interests may be multifaceted and broadly conceived. However, specific areas of interest can often be found by searching for common themes existing across all potential interests and identifying a general research question, or set of questions, that you would like to attempt to answer in your personal research. Importantly, as an RA, you should not feel obligated to find an interest that perfectly aligns with the goals of the lab that has employed you. In fact, you may realize after testing your interests in a lab that the research on a topic was not as interesting or rewarding as you had hoped. In this case, you should test out other interests and continue working to develop your interests.

3. National/Regional Psychology Conferences

In addition to the time you may spend engaged in volunteer or paid RA positions, another important opportunity during your time “off” is to attend conferences in psychology. The general purpose of psychology conferences is to keep researchers,

students, clinicians, and the public current with the field through continuing education, discussion/debate of current topics, and dissemination of recent advances in research. Conferences are recommended for *all* students planning to apply to graduate school as they provide information that is useful for both researchers and clinicians. Further, conferences can positively influence students' motivation and excitement for becoming an active member of the field. Although conferences focusing on special topics or populations are certainly available (you should ask researchers who specialize in your field of interest which ones they recommend), some excellent conferences that broadly focus on many areas of psychology include APA (American Psychological Association; www.apa.org/), and APS (Association for Psychological Science; www.psychologicalscience.org/).

Conferences offer several types of presentations. Poster sessions are generally housed in an auditorium or large room and are organized by topic; many people (30+) present posters during a single session. A poster includes a condensed summary of a research study that communicates the general purpose, results, and significance of the study. Symposia are slide-driven presentations that are given by a smaller group of researchers (typically 5–8) who are conducting research on a shared topic; these presentations are more selective and reserved for the presentation of more high-quality studies. Most labs will have examples of posters and symposium presentations that can be shared. Clinical round tables consist of a panel of experts who discuss/debate current issues relevant to a specific topic in psychology. There are other types of presentation formats (which you can view on the conference websites), but these are the ones that are generally the most informative for students.

Students are not necessarily required to be a presenter to attend some conferences; however, others are more restrictive and may only allow certain groups (e.g., members only) to attend. During all conference activities, your attire should be professional. Costs of attendance often include membership (sometimes not required), registration, flight, hotel (can be divided with colleagues/peers), ground transportation, poster printing, meals, and of course, souvenirs.

As with all learning opportunities, your experience at a conference can be much more valuable if you take advantage of everything it has to offer. Some of the opportunities offered by conferences are obvious, but others are more subtle. A few benefits are reviewed below.

Current Information. By attending conferences, students are granted access to the latest scientific and clinical breakthroughs. Studies presented are usually those that were conducted more recently and are intended for publication (or were just published). Often, the data presented at conferences precede publications, and as such, attendees sometimes receive a “sneak peek” at what will be published in upcoming journals. Equally informative, discussions of current topics give attendees more insight as to the current concerns and directions for clinical work, training programs, career development, legislature related to psychology, and the general information structure of the field (i.e., efficient methods for sharing information). This knowledge will be useful as students determine which area of psychology is the best fit with

their interests and preferences. With knowledge of the current trends in psychology, students will be better prepared to conduct innovative research, or implement more empirically based treatments with a clinical population while in graduate school. Note that many professional associations keep prior conference agendas on their website long after the conference has completed. If you missed a conference, you can still learn a great deal about the field, recent research, and active researchers by reviewing the old conference agendas.

Reputable Presenters. Conference presenters include researchers, clinicians, and/or political figures who have great influence and have significantly contributed to the field. When sitting in on their presentations, students can begin to appreciate the effort and dedication that these individuals have exerted during their time as an active member of the psychological community. Their opinions are often the result of continued (decades-long in some cases) discussions, debates, and personal efforts to improve the science and/or practice of psychology. As a result, attendees receive information that is intellectual and thoroughly contemplated. During the experts' presentations, pay close attention to their programmatic way of thinking about the information that they present. More often than not, success in psychological research is accomplished with studies that smoothly integrate pre-existing theories with novel ideas, or new perspectives.

Grad School Representatives. At conferences, potential graduate school applicants can observe, meet, and evaluate faculty and students from prospective universities. Upon registering for a conference, you will receive a conference program that includes the schedule of presentations and presenters. Look through the program and identify any faculty and students who can provide you with useful information about each university's psychology program. Try to attend their presentations so that you can get a feel for their current projects or general lines of interest.

For research-oriented students, who could possibly have one mentor during graduate school, presentations can be especially useful and give them a feel for their potential mentor's personality and enthusiasm for research, which could possibly foreshadow their life as a graduate student under their supervision. If you choose to interact with a potential mentor, be mindful of how you present yourself and what you choose to say. We recommend interacting with a prospective mentor if, and only if, you have something important to say, or ask, that is relevant to their presentation or line of research. This will be your first impression so you want to come across as knowledgeable, confident (not arrogant), and appropriate, both in content and in the timing of your interaction. Regarding the timing of your interaction, it is important to keep in mind that the person may have many people wanting to speak with them. Also, during your conversation, don't feel obligated to announce that you are planning to apply to work with him or her. In fact, you should avoid approaching a potential mentor with the sole intention of stating your plans to apply; instead, your intention should be to gather useful information about the person, their research, or their area of expertise. Announce your plans to apply only when, and if, the timing is appropriate (e.g., the conversation becomes directed

toward your interests/status in the field). In conversations with graduate students, it is more appropriate to ask questions about their respective graduate programs and discuss their overall levels of satisfaction. But, again, the primary focus should be to gain information about the grad student's research and the ongoing projects in their lab.

The Language of Science. Whether you are presenting your own research or discussing research with a presenter, you should attempt to develop your scientific language. This language is difficult to acquire and speak fluently so any opportunity to practice should be welcomed. Developing your scientific speaking abilities will increase your credibility both in future research discussions and in graduate school interviews. Importantly, there are several things to avoid when speaking the language of science. First, avoid sounding arrogant and overusing technical jargon. Strive to balance necessary scientific lingo with more common terminology so that you appear knowledgeable but also easily comprehensible. Second, don't overstate your knowledge. Instead, admit your lack of knowledge about a topic, remain confident, and at the same time communicate your enthusiasm for learning new information. Lastly, be positive and non-confrontational. Bad impressions can easily be made with snide remarks, harsh criticism, negative outlooks, or defensive reactions. Acknowledge the need for improvements in the field, but do so with respect for those who have dedicated their lives to the progression of psychology.

4. Final Remarks

Hopefully the information contained in this chapter will be useful as you determine your career path in the field of psychology. Please acknowledge that the content presented is intended to be more suggestive than directive as every individual's path could and should be unique. Examining your interests, seeking out multiple perspectives, and thoughtfully considering your preferences and abilities during this transitional phase will serve you well in choosing the most appropriate program to suit your interests and career aspirations. Good luck!

2

Deciding to Apply and Successfully Gaining Admission to Graduate Schools in Psychology¹

Mitchell J. Prinstein

1. Introduction

Psychology is the most popular major on many college campuses. Each year, thousands of students apply to graduate schools with hopes of pursuing a career in mental health science or practice. Yet, as compared to other types of graduate programs (e.g., law, medicine), remarkably little information is available to help students determine the career path that offers the best match to their interests. Specific practical advice on how to successfully navigate the application process also is lacking.

This brief chapter is designed to provide an overview of different types of possible career options in the mental health industry, as well as specific information about the application process for a common option: the clinical psychology doctoral (PhD) program. But before beginning, I should offer an important disclaimer here. The text below simply represents my opinions and impressions of the current state of the field, and of the application process for PhD programs. In no way should this informal advice be used to replace actual data or specific information provided by professional organizations in the mental health field, individual doctoral programs, or even advice from other professionals. I feel best prepared to comment on PhD programs in clinical psychology that subscribe to the scientist-practitioner or clinical science models of training. My experience exclusively is with the admissions processes and training goals of these types of programs, and I cannot speak directly to programs that have adopted distinctly different training models. However, because so little information is available to students interested in mental health careers, I have offered some general opinions and impressions below that I hope will be beneficial, if used in the proper context. In many places, I have offered some hyperlinks to websites that can provide more detailed information (Table 2.1).

¹ Excerpts of this chapter are reprinted from “Mitch’s Uncensored Advice for Applying to Graduate School in Clinical Psychology” with permission from Mitch Prinstein, PhD.

Table 2.1 *Sub-fields of psychology with a practice component*

Sub-Field	Degrees Offered	Brief Summary of Sub-Field	Major Organizations and Websites Associated with Sub-Field
Social Work	Master's (MSW), Doctorate (DSW or PhD)	Many roles and settings including casework, social policy and research, community organizing, administration and management, school and private practice	National Association of Social Workers (www.naswdc.org/ and www.helpstartshere.org/)
School Psychology	Master's, Doctorate (PhD or PsyD)	Help children and youth succeed in the school setting academically and emotionally	National Association of School Psychologists (www.nasponline.org/)
Counseling Psychology	Doctorate (PhD or PsyD)	Assess and treat a variety of populations with life stress and psychological disorders in private practice and counseling centers; less emphasis on severe disorders and research	American Psychological Association, Division 17 (www.div17.org/)
Psychiatry	Medical Doctorate (MD)	Assess and treat a variety of populations with psychological disorders, with emphasis on psychotropic medications and the medical model; little emphasis on research	American Psychiatric Association (www.psych.org/)
Clinical Psychology	Doctorate (PhD or PsyD)	Many roles and settings including assessments and therapy, research, and teaching of psychological disorders	American Psychological Association, Division 12 (www.div12.org/)
Industrial and Organizational Psychology	Master's, Doctorate (PhD)	Studies psychology as applied to the workplace, including optimal performance, management, and organizational development	American Psychological Association, Division 14 (www.siop.org/)

2. Do You Really Want to be a Psychologist?

When students ask me for professional development advice regarding graduate school, they usually have already determined that they would like to apply to doctoral programs in psychology. Very often, students are interested in clinical psychology. Indeed, applications to clinical psychology programs often outnumber applications to all other types of psychology doctoral programs combined. At many universities, clinical doctoral programs receive 100–600 applications (and accept less than 10). Far fewer apply to programs in developmental, social, cognitive, biological, and quantitative psychology programs, roughly in descending order of popularity. This apparent preference for clinical psychology often is based on students' general

desire to work as a therapist, perhaps in a private practice type of setting (e.g., a home office or group practice). Sometimes, students will state an interest in research. Other times, students might indicate that they are somewhat afraid of statistics and “turned off” by the idea of writing a dissertation.

I would say that this impression of the field of clinical psychology, and of the training activities included during graduate school, is somewhat accurate, but in some ways quite inaccurate. Yet, an accurate and thorough description of the field of clinical psychology is somewhat difficult to articulate because the field is changing quite dramatically and quickly. Nevertheless, it is important to briefly reconsider your career goals (or at least what you are *not* interested in) before talking about graduate applications and deciding on the type of doctoral program that is the best match. This portion of the chapter is divided into two sections: a discussion of careers that include the option for clinical practice, and a discussion of careers that do not involve work as a practitioner.

2.1 Careers with a Practice Option

Let’s assume that you know that you are intrigued by the mental health field. Actually, there are at least nine different mental health fields and three different graduate degrees available to you to pursue these interests. The differences between these fields and degrees are quite dramatic. Each involves somewhat different training expectations and opportunities as well as different types of career activities.

- Interested in research? Teaching? Practicing (e.g., offering therapy or conducting assessments)? Consulting? Mentoring students? Working with young children? Adolescents? Adults? The elderly?
- Do you want to work in a hospital? A university? A teaching college? An elementary or secondary school? A business corporation? The government? A VA? A non-profit?
- Who will your colleagues be? What kind of job stability do you want? What salary? A consistent salary or one based on billable hours?
- How many years are you willing to dedicate toward training? Are you willing to move, perhaps several times, in order to complete all aspects of training?

Not sure yet? Keep reading for more details about which options may be a good match. You also can look at www.apa.org/education-career/guide/psychology from the American Psychological Association, or a profile of psychology-related careers on my own site (www.mitch.web.unc.edu) profiling about 30 different ways that people used their psychology major (note: see their job titles by using the bookmarks tab within the document).

Below, I will offer some brief descriptions (and links) to discuss nine fields. I urge you not to just skip to the discussion of clinical psychology at the end. You may be surprised to learn where points of overlap and divergence exist between each of the fields below. This understanding also will be crucial for your successful application to any mental health profession. No matter the type of degree you pursue, it will

be important to articulate your interests, and how your chosen profession matches with what you hope to accomplish in your career.

One quick note before you begin reading about each of these nine areas, however, and that has to do with what's referred to as "evidence-based practice." This will be discussed in much more detail below, but for now it is important to note that there are many types of therapy – over 500 different approaches available to help ameliorate mental illness and promote psychological well-being. Some of these have been rigorously examined in scientific research, and some have not. This is very important for you, your career, and the health of all of your future patients. If the therapy you offer is based on a clear scientific understanding of the factors that promote or maintain mental illness, and specifically addresses these factors, there is a good chance that the therapy will work. Even more important, if the approach to therapy you use has been tested in randomized clinical trials, yielding proof that it causally predicts a drop in mental health symptoms, then we can say with great confidence that the therapy has a terrific chance of helping patients ease their suffering.

But if the therapy addresses something that we don't know has any relation to psychopathology at all, or if there is no evidence that the therapy reduces symptoms as compared to a placebo or a control, then you may be just wasting your and your patients' time. For instance, many students may have heard of "music therapy," or "art therapy," or even approaches to therapy that involve "energy waves," "rebirthing" experiences, the use of non-directed play to work through "unconscious psychological conflicts," or hundreds of other suspect techniques. Approaches like these may have fervent fan bases and even testimonials from patients who believed they were useful. They may even offer some short-term relief from a bad mood. But there is simply no consistent scientific evidence to suggest that they will help reduce the kinds of psychological symptoms we may see in the Diagnostic and Statistical Manual, and certainly these approaches will not be better than "evidence-based treatment." (See www.div12.org/psychological-treatments/ and www.effectivechildtherapy.org for more information on evidence-based treatments for adults and youth, respectively).

If you have chosen to dedicate your professional life to reduce the burden of mental illness, you are probably especially interested in a career that will be as helpful as it can be. Be sure to attend to the issue of evidence-based treatment as you consider the nine fields below.

In the few pages that follow within this section, I will review:

1. Social work (master's or doctorate)
2. Counseling (master's)
3. Marriage and family therapy (master's)
4. School psychology (master's or doctoral degree)
5. Master's in General Psychology
6. Counseling psychology (doctoral degree)
7. Psychiatry (medical degree)

8. Clinical psychology (including clinical child psychology, clinical adult psychology, and clinical health and pediatric psychology) (doctoral degree)

For doctoral degrees, I also will offer some comments on the choice between a PhD degree and a PsyD degree.

You should know that there is not an equal proportion of these different types of professionals in the United States. In fact, of all mental health professionals, about *three out of every four* are social workers, mental health counselors, or marriage and family therapists. Only 15 percent or so of mental health providers are psychologists.

2.2 Social Work

2.2.1 What do Social Workers do?

The Master's in Social Work (MSW) is a very versatile degree. Social workers can be involved in many different types of careers and in many different types of settings. I recommend a visit to the website of the National Association of Social Workers (www.socialworkers.org) for an excellent description of the field. As you will see on this website, some social workers become involved in advocacy or policy settings. Others become licensed clinical social workers and are able to provide therapy to clients in ways that can be remarkably similar to the practice of a doctoral-level psychologist. Clinically trained social workers may include: *Social Caseworkers* (case management, assessing needs and applying agency services and resources to address social, health, or economic problems); *Medical Social Workers* (working with the special needs of patients and families in hospitals, long-term care facilities, and other medical care facilities); *School Social Workers* (helping with emotional, social, and economic problems so students can focus on getting an education); *Clinical Social Workers* (found in private practice or in psychiatric and mental health care settings, or employee assistance programs within larger companies, where they provide psychotherapy and counseling); *Administration and Management* (overseeing the programs and systems that provide social, health, and public welfare services); *Community Organization* (working in cooperation with the community to identify needs and to develop or improve services and systems to meet those needs); *Social Policy and Research* (analyzing social problems, designing and conducting in-depth research studies and developing ways for social programs and systems to overcome those problems).

2.2.2 What is the Training Like?

Although you can obtain a doctorate in social work (DSW or PhD), it is completely possible to be an autonomous, practicing social worker with a master's degree. With only two years of schooling (plus an internship), it also can be a quick way to get into the workforce. Master's programs generally can accept a much higher proportion of applicants for admission than doctoral programs; thus, it is somewhat easier to gain admission if going this route. Many social work graduate programs offer some training in evidence-based practice, but this varies considerably from program to program. This is important to look into further when determining which social work programs you want to apply to.

2.3 Counseling

2.3.1 What do Counselors do?

Admittedly, I do not know much about the field of mental health counseling beyond what one can learn from professional websites, such as the site for the American Counseling Association (www.counseling.org). The distinction between mental health counseling and other mental health fields may be lost on the general public as well. Even a casual look at “Find a Therapist” directories on sites such as Psychology Today reveals many who identify themselves as mental health counselors, yet their education and effectiveness as mental health providers is relatively unknown, at least to me. The American Counseling Association indicates that counselors may have focused expertise in addictions, career counseling, clinical mental health or community agency counseling, marriage, couples and families, school counseling, student affairs and college counseling, gerontology, or counselor education and supervision.

2.3.2 What is the Training Like?

A counselor is eligible to practice after receiving a master’s degree, typically in about two years. There are many programs nationally to obtain this type of degree, and relatively few of them promote training in evidence-based practice. However, this may be changing.

2.4 Marriage and Family Therapy

2.4.1 What do Marriage and Family Therapists do?

Marriage and family therapists (MFTs) treat psychological disorders by considering the couple or the family as a system, or a unit that should be treated conjointly. The American Association for Marriage and Family Therapy (www.aamft.org) reports that most MFTs conduct brief therapy, usually under 20 sessions. Marriage and family therapy typically includes an approach to therapy that relies on family systems theory, which has some limited support as an evidence-based approach.

2.4.2 What is the Training Like?

One may obtain a master’s or a doctorate in marriage and family therapy, although the master’s is sufficient for independent practice. Given the nature of the discipline, training in evidence-based therapy delivered to individual patients is rarely available within marriage and family therapy graduate programs.

2.5 School Psychology

2.5.1 What do School Psychologists do?

The National Association of School Psychologists (NASP; www.nasponline.org/) has a great website to describe the field and the roles (and even salaries) of school psychologists. School psychologists generally are focused on helping children succeed in the school setting, both academically and emotionally. Most work in a school

setting. Their work can involve individual consultation with children and families, designing programs to assist teachers with specialized classroom instruction needs, and program development to help train basic skills like anger management and social skills. In these ways, school psychologists are kind of like the ambassadors of psychology in a school setting. When a child is experiencing difficulties, if there is a crisis in the school (e.g., trauma, death), if administrators are setting policy that will affect children's educational lives, school psychologists are there to ensure that psychological well-being is maintained and to help educate other professionals on children's psychological needs or limitations.

A major task for many school psychologists also is to conduct assessments of children's academic and social-emotional functioning. Every child who may be eligible for giftedness placement, or for learning disability (LD) services, needs to be evaluated using standardized assessments. School psychologists typically are the only professionals within the school setting with the training to administer and interpret these types of standardized assessments. LD evaluations in particular have important implications not only for children, but also for school policy and funding. Public law mandates that children receive the services they need to obtain an adequate education, and each child meeting LD criteria must have an individualized educational plan developed and evaluated periodically. School psychologists often serve the lead role in this endeavor.

2.5.2 What is the Training Like?

You may have heard that to practice as a "psychologist," you must have a doctoral degree. That is true for all fields except school psychology. School psychologists can be hired with only a master's degree (plus year-long internship). This may be, in part, because there is a tremendous shortage of school psychologists working in the US, and the field is reducing barriers to getting new, bright students into the profession! Keep in mind that master's-level school psychologists are not able to practice autonomously, however, but they can be hired and even tenured within a public school system (e.g., elementary, middle, or high school).

2.6 Master's in General Psychology

2.6.1 What is the Master's in General Psychology?

There are not too many terminal master's programs in psychology, but those that exist offer a nice option for students who wish to gain advanced experience in psychology before pursuing a doctoral degree. Each master's program varies in its training goals. However, many offer graduate coursework and require the completion of a master's thesis to obtain a degree. Programs typically last 1–2 years.

There are benefits and drawbacks to the terminal master's degree. The good news is that this is an opportunity for structured education in psychology. The coursework is taught at the graduate level and may even include some specialty work (e.g., training in clinical psychology specifically). The master's thesis also offers an opportunity to learn more about psychological research. Students who did not major in psychology

during their undergrad years, or who feel like their interests are not yet well-developed, may find this structured educational opportunity enormously helpful.

Unfortunately, the terminal master's degree in itself does not offer many career options. It should be noted that many doctoral programs in psychology offer a master's degree en route to the doctoral degree. Thus, within the 4–6 years of doctoral training, a master's thesis may be required, and the degree will be granted – somewhat marking the half-way point of doctoral training. The terminal master's degree is different. Many students in terminal master's programs go on to a doctoral program. Some of these doctoral programs will credit the time in the terminal master's program toward the doctoral training requirements (e.g., some courses or the need to write a new thesis may be waived). However, other doctoral programs will not waive requirements; thus, there is the potential for some repetition in training. A final drawback pertains to the cost of training. Many schools will charge tuition for terminal master's training. In contrast, most PhD doctoral programs in clinical psychology waive tuition and typically offer a stipend. Thus, for students who are certain that they are interested in doctoral training and can gain admission into a PhD program, the terminal master's may not always be a wise option. However, for other students, this can be a very valuable experience!

I typically recommend this option in two cases. First, for those who wish to eventually obtain a doctoral degree in psychology but have a low undergraduate GPA, a terminal master's program can offer an opportunity to demonstrate an applicant's ability to succeed in a graduate-level curriculum, and may “forgive” lower undergraduate grades in the eyes of the doctoral admissions committee. Second, those who wish to eventually get their doctoral degree but just can't narrow their areas of research interest may benefit from a master's program to get more extensive research experience. For all others – that is, those with adequate GPAs (at least 3.2) and reasonably focused research interests (i.e., an identified disorder, psychological process, or mental health risk/protective factor) – a terminal master's program is unlikely to help increase chances of eventual admission. Getting (paid or volunteer) additional research experience for a year or two after graduation is a far cheaper alternative that will bolster your doctoral application much more.

2.7 Counseling Psychology

2.7.1 What is Counseling Psychology?

“Counseling psychology” is not quite the same thing as being a “counselor.” The American Psychological Association's Division 17 (www.div17.org/) is specifically focused on Counseling Psychology and offers examples of the opportunities available within the field.

A long time ago, a clear distinction between clinical psychology and counseling psychology was offered. The field of clinical psychology was meant to address serious mental illness, such as any of the disorders that might be found in the DSM. In contrast, counseling psychology sometimes was referred to a field that addressed “normal people with normal problems,” often including vocational counseling.

This distinction remains somewhat true, but the boundaries between clinical and counseling psychology are certainly a bit more blurred. Both require a doctoral degree for independent work. Both are referred to among the public as “therapists” or “psychologists,” and few potential clients discriminate between the fields when selecting a therapist. A great many clinical psychologists primarily offer “counseling” to clients with no obvious DSM symptoms. Counseling psychologists also have substantial contact with individuals who meet criteria for some specific disorders (depression, anxiety, substance use, and eating disorders, for instance).

Counseling psychologists work in private practice and many work in counseling centers (e.g., College Student Mental Health Services; Community Clinics; Community Mental Health Centers). Some counseling psychologists also work in academia as professors or clinical supervisors in counseling psychology graduate programs. Counseling psychologists also can conduct and interpret assessments.

To a large extent, counseling psychologists, and counseling graduate training programs, are less heavily involved in research activities than are clinical psychologists. Counseling psychologists also are less likely to work as professors within university departments of psychology, or as instructors in undergraduate classes. As compared to clinical psychologists, counseling psychologists also are less likely to work with severe forms of mental illness, such as autism, schizophrenia, bipolar disorder, etc. See the web link (www.div17.org) above for more information on counseling psychology, its mission, and training emphases.

2.7.2 What is the Training Like?

Like clinical psychology, counseling psychology requires a doctoral degree. Doctoral programs typically require 4–6 years to complete in addition to a year-long internship. A dissertation is required, although the research expectations for this project sometimes are lower as compared to the clinical psychology dissertation. Counseling programs often involve more coursework and practica than in clinical psychology programs.

2.8 Psychiatry

As you may already be aware, the fields of psychiatry and psychology have some overlap in the types of patients or clients who are seen, the types of services offered, and the types of settings in which members of these professions may work. However, several prominent differences exist between child psychiatrists and clinical child psychologists; these are briefly outlined here.

First, psychiatry is a medical specialty requiring a medical degree (MD), an internship, and residency. In contrast, clinical child psychologists obtain a doctor of philosophy degree (PhD) in clinical psychology, complete an internship, and require an additional year of supervised clinical experience before obtaining licensure.

Second, psychiatry has traditionally focused on the use of psychotropic medications more than psychosocial treatments (e.g., therapy) to ameliorate mental health

symptoms, while the opposite is true for psychology. Many psychiatrists do conduct therapy, although often using a somewhat different approach – often not evidence-based – relying on a different theoretical discipline than is emphasized in psychology. Likewise, some US states now are allowing psychologists to obtain prescription authority. Within the next decade, many psychologists may live in regions that will allow them to prescribe medications to their clients. However, psychologists' training regarding medications surely differs in scope than the training offered within psychiatry programs.

Third, the majority of clinical psychology training programs adopt a scientist-practitioner or clinical science training model. These models emphasize education in both the science and practice of psychology, based on the premise that these educational experiences reciprocally inform one another and are conjointly needed to produce a qualified professional. In contrast, training models in psychiatry typically do not subscribe to scientist-practitioner models; few involve research training or activities.

2.9 Clinical Psychology

Many describe the clinical psychology PhD degree as one of the most versatile graduate degrees available. Clinical psychologists with a PhD degree are qualified to work as practicing clinicians, professors in academia conducting research or teaching, consultants, and supervisors to other mental health professionals.

However, there are different types of clinical psychology training philosophies, doctoral programs, and even two different doctoral degrees available to those who want to become practicing clinical psychologists. So, some further explanation is needed.

Clinical psychologists trained in “scientist-practitioner” (sometimes referred to as “Boulder Model”) or “clinical science” approaches to training have some unique advantages over most other mental health care providers. The scientist-practitioner and clinical science models suggest that all clinical psychologists should be trained *both* as researchers and practitioners, and should *integrate* science and practice skills in all that they do. In other words, in addition to the research expertise required to complete a master's thesis and dissertation, students' experiences include many “clinical hours” conducting assessments and therapy in a variety of structured, supervised clinical placements to develop practitioner skills. Moreover, by integrating all clinical and science activities, the *quality* of both research and clinical work is improved.

For instance, when conducting research, a clinical psychologist trained in the scientist-practitioner or clinical science model may reflect on their experiences with clients to help generate or test hypotheses about the factors that may prevent or ameliorate mental illness. When engaged in clinical practice, this same clinical psychologist should rely on scientific principles to understand psychopathology, use standardized methods to measure patients' diagnosis or progress, and – especially important – offer evidence-based treatment approaches to treat psychopathology.

If you have considered clinical psychology as a career, you may have already heard about one or both of these training models. In fact, you may have even heard that to get into a clinical PhD program, it is important to say you want to do research for the rest of your career. Is this true?

Not quite, but it's a common misconception. Another misconception is that those who want to be researchers should get a PhD degree, while those who want to do practice should get a PsyD degree.

That is also false.

It is true that doctoral PhD programs almost exclusively are located within university departments of psychology that employ clinical psychology professors who themselves are dedicated largely toward research and teaching endeavors. Thus, many clinical psychology PhD students feel that they receive excellent exposure to research experiences during graduate school, and perhaps even implicit pressure to pursue a career that includes some research activities following graduate studies. It's also true that many graduate programs specifically examine graduate applications for information confirming an interest in research. In fact, some programs are indeed explicit that they will hope for you to remain involved in research to some extent throughout your entire career and are not looking for applicants who are strictly interested in clinical practice.

But even at these heavily "research-oriented" programs, the majority of graduates pursue careers that involve at least some work as a practitioner. In fact, there are many students from most research-oriented programs that work exclusively in practice.

So what's the fuss about research all about then? Many believe that to be a successful clinical psychologist, it is critical to have a research *mindset*, or to be able to "think like a scientist." The emphasis on research in most clinical PhD programs is to help you develop that mindset.

An apt analogy may come from a description of graduate training in law. Many who have pursued a law degree state that the curriculum is not specifically designed to teach trial room strategies or jury selection techniques, etc., but rather graduate training is meant to help students learn "to think like a lawyer."

Doctoral PhD training often is based on the idea that students must learn to "think like a psychologist." This means that students must be extremely comfortable with the scientific method, including the generation of hypotheses, the development of standardized procedures that can be used to evaluate these hypotheses, and the ability to draw appropriate conclusions that may inform future hypotheses. These skills are necessary not only for research endeavors but also when interacting in a therapeutic context. Case conceptualization skills involve a similar set of procedures as described above, and it is this approach that necessitates dual training as a scientist-practitioner during graduate school in clinical psychology. Unlike law school, however, graduate school in clinical psychology involves direct application of coursework learning in real-world situations. Within a year of admission in most programs, clinical psychology graduate students will begin seeing clients, conducting assessments, and offering treatment (all with supervision, of course).

Thus, the reason why many PhD graduate programs emphasize, and even select, students who are interested in research is because it is believed that research training helps students develop the critical thinking skills needed in any activity as a clinical psychologist.

Having said this, it is important to note that research training is a major emphasis of the graduate curriculum (including a master's thesis, dissertation, etc.). Students who do not enjoy research or the research process will not be happy graduate students. Students who do not anticipate any openness to the possibility of conducting research in their careers, even if only as a small proportion of their job responsibilities, also may not be a good match for PhD training. It is important to be very honest with yourself at this stage in your professional development. The PhD application process is somewhat arduous, and graduate training can be demanding. It is very important to carefully determine whether this is a good match for you.

2.10 The “Clinical Science” Option in Clinical Psychology

Although most doctoral programs in clinical psychology have adopted the “Boulder Model” or “Scientist-Practitioner Model” of training, an increasing number of programs have adopted a philosophy that emphasizes scientific training above clinical practice. Specifically, these programs have a unified commitment emphasizing the promotion, training, and dissemination of clinical psychology as a scientific discipline. Clinical science programs therefore emphasize training in evidence-based treatments (i.e., those that have substantial evidence supporting their efficacy), and offer opportunities for students to gain exceptionally strong training in cutting-edge research methods. Many of the philosophies of the clinical science movement are reflected in the writings of Dr. Dick McFall, which can be found through the website of the Society for a Science of Clinical Psychology (SSCP), in the About the Society section (www.sscpweb.org/About). Clinical psychology programs that have successfully adopted a clinical science training perspective are members of the Academy of Psychological Clinical Science; a list of these programs can be found on the Members page of the Academy's website: www.acadpsychclinicalscience.org/for-faculty-members.html. The astute student may notice that Academy member programs also are among the most popular in the country, receiving perhaps more applications than non-Academy programs on average. Clinical science programs are believed to produce more graduates who pursue academic careers in clinical psychology and who are more likely to offer evidence-based treatment options to their clients in practice.

2.10.1 Research and Clinical Work in Clinical Psychology

Perhaps you still are unsure whether you are interested in research, or you would like to know more about different possibilities for research activity in clinical psychology. This section discusses three clinical psychology sub-fields that offer distinct opportunities for research and clinical work.

Most clinical psychology programs offer experiences that could be broadly categorized as fitting the sub-fields of Clinical Child/Adolescent, Clinical Adult, or Clinical Health Psychology (or combinations, such as Child Health Psychology, also called Pediatric Psychology). Some programs have specific “tracks” or “concentrations” in these sub-fields, and some offer more varied experiences across two or more of these areas in a more generalist training model. A brief description of each is included below.

Clinical Child/Adolescent Psychology. Clinical child/adolescent psychology generally is concerned with psychopathology among youth, such as the types of disorders that are discussed in the DSM. Note: although many refer to the field using the term “clinical child psychology,” research and clinical work usually involves exposure to youth at all developmental levels, including infants, toddlers, school-aged youth, and adolescents. Clinical child/adolescent psychologists may work as practitioners, work in academia as professors, or work in a variety of settings (e.g., universities, medical centers, counseling centers) in which research, teaching, and/or clinical work is possible.

Examples of Clinical Child/Adolescent Psychology Research and Clinical Work

Much of the work done by clinical child/adolescent psychologists can be organized into general themes of psychological symptoms:

- Externalizing Disorders (e.g., Conduct Disorder, Oppositional Defiant Disorder, ADHD)
- Internalizing Disorders (e.g., Anxiety, Depression)
- Mental Retardation and Pervasive Developmental Disorders (e.g., Autism)
- Serious Mental Illness (e.g., Childhood Schizophrenia, Bipolar Disorder)

For each disorder, there are bodies of literature that examine:

- a. Causes and consequences of symptoms, including (1) the study of individual biological, cognitive, and social factors that may be associated with symptoms; and (2) the study of family, peer, school, community, or cultural factors that may affect the onset, presentation, maintenance, or reduction of symptoms
- b. Efficacious and effective modes of treatment (i.e., different theoretical orientations), including factors that may modify treatment efficacy, or specific therapist and client behaviors that affect the outcome of therapy
- c. Prevention strategies
- d. Comorbidity

Increasingly, research in this area has integrated findings on biological, neurological, and genetic factors that may interact with psychosocial factors in the course of each disorder.

A good idea is to visit the website for *the Journal of Clinical Child and Adolescent Psychology* (www.tandfonline.com/journals/hcap20?gclid=Cj0KCQiAoNWOBhCwARIsAAiHnEg0kyauLVZ5AEirANQ9S5k49VncqLxZyCmlx3a6wzwpEvSqrIykYzsaAgIqEALw_wcB) or the *Journal of Abnormal Child Psychology* (www.springer.com/journal/10802) or to examine these journals using the PsycInfo tool at your university’s website. Read over the titles and

abstracts of some recent issues, and you will get a good sense of the kind of work that clinical child/adolescent psychologists do.

Clinical Adult Psychology. Much like clinical child/adolescent psychology, clinical adult psychology also generally is concerned with psychopathology; however, the population of interest typically is above 18 years of age. Psychologists interested in working with the elderly specifically may focus on *geropsychology*. Clinical adult psychologists represent the majority of all clinical psychologists, although interest in the three sub-fields of clinical psychology has been becoming more evenly distributed in recent years. Like clinical child/adolescent psychologists, clinical adult psychologists may work in a variety of settings (e.g., universities, medical centers, counseling centers) in which research, teaching, and/or clinical work is possible.

Examples of Clinical Adult Psychology Research and Clinical Work

Clinical adult psychologists' work also is often divided by disorder and diagnosis. Perhaps the most common themes of research and clinical work in clinical adult psychology include:

- Mood and Anxiety Disorders (e.g., OCD, phobias, depression)
- Axis II (Personality) Disorders (e.g., Borderline, Narcissism, Antisocial)
- Substance Use Disorders – sometimes included in Clinical Health Psychology
- Eating Disorders – sometimes included in Clinical Health Psychology
- Serious Mental Illness (e.g., Schizophrenia, Bipolar Disorder)

For each disorder, there are bodies of literature that examine:

- a. Causes and consequences of symptoms, including (1) the study of individual biological, cognitive, social factors that may be associated with symptoms; and (2) the study of family, community, or cultural factors that may affect the onset, presentation, maintenance, or reduction of symptoms
- b. Different modalities of treatment that may be useful for reducing symptoms in adults, such as individual, group, or couples treatment
- c. Efficacious and effective approaches of treatment (i.e., different theoretical orientations), including factors that may modify treatment efficacy, or specific therapist and client behaviors that affect the outcome of therapy
- d. Comorbidity

Increasingly, research in this area has integrated findings on biological, neurological, and genetic factors that may interact with psychosocial factors in the course of disorder.

A quick review of the table of contents in *Clinical Psychological Science* (www.psychologicalscience.org/publications/clinical), the *Journal of Psychopathology and Clinical Science* (www.apa.org/pubs/journals/abn/) or the *Journal of Consulting and Clinical Psychology* (www.apa.org/pubs/journals/ccp/index) will help to gain a greater sense of the types of research areas that are common in clinical adult

psychology. These journals also include articles on clinical child/adolescent psychology and clinical health psychology.

Clinical Health Psychology and Pediatric Psychology. Clinical health psychology also is concerned with psychopathology, but with a particular emphasis on symptoms or adjustment that is related to some aspect of physical health. Clinical health psychologists interested in working with youth are referred to as *pediatric psychologists*. Note: sometimes information about pediatric psychology programs will be found as part of a university's Health Psychology curriculum, while many more will discuss pediatric psychology within the clinical child curriculum. See the Society of Pediatric Psychology (<https://pedpsych.org/>) for more information. Clinical health and pediatric psychologists tend to work in general hospital settings more often than do other clinical psychologists. However, clinical health and pediatric psychologists also may open a private practice or work in academia as professors, and both options offer a wide range of areas for research and clinical work. Some examples are discussed below.

Examples of Clinical Health and Pediatric Psychology Research and Clinical Work

Much of the work done in clinical health and pediatric psychology is associated with one of the following questions:

1. Do individuals with a physical illness (e.g., cancer, HIV) or physiological irregularity (e.g., chromosomal abnormality) experience psychological adjustment difficulties?
2. Can psychological interventions be used to help increase individuals' adherence to medical regimens (e.g., for diabetes, asthma)?
3. Can psychological interventions be used to help reduce health symptoms (e.g., encopresis, pain associated with medical procedures)?
4. What factors are associated with individuals' engagement in health risk or injurious behaviors, such as substance use, sexual risk behaviors, and weight-related behaviors?
5. What is the association between psychological and physical health (e.g., stress, immunity)?

Be sure to check out *Health Psychology* (www.apa.org/pubs/journals/hea/) or the *Journal of Pediatric Psychology* (<https://academic.oup.com/jpepsy>) for some specific examples of work in this area.

2.10.2 The PhD or PsyD

A final issue to discuss pertains to two types of doctoral degrees that are available in clinical, counseling, and school psychology. All of the information above describing doctoral training has been focused specifically on the PhD degree. However, a separate option exists for doctoral training. Although not an expert on this type of degree, I have offered a general description of this option below.

The PsyD was developed as a new type of doctoral degree several decades ago in response to some opposition regarding the "Boulder Model" (i.e., scientist-practitioner). Specifically, it was argued by some that the training in science was

not necessary to become a practicing clinician, and a new training model largely emphasizing clinical work was developed.

Today, many PsyD programs are available. Like other doctoral degrees, PsyD programs typically take about 4–6 years to complete (plus an internship year). The vast majority of training experiences are clinical in nature, as well as some coursework. Some programs require a “dissertation” document; however, this usually is quite different in scope from what is expected in PhD programs.

Many students ask whether PsyD programs are less prestigious than PhD programs. Although it is difficult to comment on this specifically, there are some important differences between some of these programs that should be noted.

As mentioned above, PhD programs are almost exclusively located within university settings, which are not-for-profit institutions. Some PsyD programs, however, are located in for-profit institutions, such as freestanding “Professional Schools of Psychology,” or institutions with the word “university” in the title, but not offering a wide range of degrees like most universities do. While most PhD programs typically waive tuition costs for graduate students and offer assistantships that provide a modest annual stipend (typically between \$20,000 and \$27,000), many PsyD programs charge tuition to students, which can cost approximately \$20,000–\$40,000 annually.

Data comparing PhD to PsyD programs on several other metrics also reveal a number of differences. Compared to clinical PhD programs or PsyD programs in traditional universities, PsyD programs in large “professional schools,” or “universities” that exclusively offer psychology degrees tend to offer far less training in evidence-based practice. They also have much less desirable faculty to student ratios, with some students unable to see their mentors for months at a time. Data reveal (<https://mitch.web.unc.edu/wp-content/uploads/sites/4922/2013/10/MatchRates.pdf>) that the rate of obtaining an accredited predoctoral internship (required to become licensed for practice in many states) also is significantly lower within unaccredited PsyD programs (7 percent) and accredited PsyD programs (48 percent) as compared to accredited clinical PhD programs (81 percent). The rate of passing the national licensing exam (called the EPPP) also differs between PsyD and PhD programs. These data (<https://mitch.web.unc.edu/wp-content/uploads/sites/4922/2013/10/EPPP-scores-combined.pdf>) reveal that students from accredited PhD programs score significantly higher and are more likely to pass than those from PsyD programs. This is critical to consider – the last thing you want to do is to spend tens of thousands of dollars on graduate school, but end up unable to graduate or get a job!

Overall, the PsyD option can be a reasonable choice for students who are interested in obtaining a doctoral degree in psychology and have decided that they do not wish to be involved in research – either during graduate training or during one’s career. However, the PsyD option should be exercised cautiously. Some very high-quality programs are available (often those that are at not-for-profit institutions), and excellent training is certainly possible. However, applicants will need to

do their homework investigating the adequacy of training more thoroughly if pursuing this type of degree.

For more details regarding the qualities to examine in a clinical psychology doctoral program, see the undergraduate website for the Council of University Directors of Clinical Psychology (CUDCP; <https://clinicalpsychgradschool.org/>).

2.11 Careers Focusing Exclusively on Science, Without Practitioner Training

There are many possible graduate pursuits in psychology that do not involve work as a practitioner. Each of these sub-disciplines offers rich opportunities for careers in behavioral science, as well as policy, prevention, and education. Increasingly, these sub-disciplines of psychology have begun to have important influences on many professional fields outside of psychology.

Most undergraduate departments of psychology have one or more faculty who represent sub-disciplines within the field, such as social, biological, cognitive, developmental, experimental, quantitative, or community psychology. Each of these areas can be pursued for a graduate degree (although few community programs remain). Just a few examples of these types of options are offered below. See Table 2.2 for a list of the major scientific subfields of psychology.

What is the Training Like? For all of these programs discussed in this section, doctoral training is similar to clinical psychology doctoral training in many ways. All involve 4–6 years of training, coursework, a master’s thesis, and a dissertation. Doctoral training in developmental, social, cognitive, biological, and quantitative programs does not involve any clinical practicum work, and there is no clinical internship year.

2.11.1 Developmental Psychology

What is a Developmental Psychologist? Developmental psychology is a scientific discipline that is focused specifically on the study of changes in behavior and cognition across the life span. The majority of work done in developmental psychology is on infants, children, and adolescents, although there is some research on emerging adulthood, middle adulthood, and geriatric issues. Developmental psychologists are interested in understanding topics such as cognitive, language, motor, social, emotional, and moral development, focusing both on characterizing the abilities of individuals at different ages, as well as on factors that may influence developmental change. Moreover, the field is invested in understanding both intra-individual (i.e., even including neuroscience mechanisms) and inter-individual (i.e., parental, peer, school, community, and cultural) influences on development.

As a scientific field, developmental psychology does not involve clinical practice. However, many programs do have an emphasis on studies of prevention programs. If this is of interest, it is good to look out for programs emphasizing “applied developmental psychology” and information indicating research on prevention and

Table 2.2 *Sub-fields of psychology focusing exclusively on science (without a practice component)*

Sub-Field	Degrees Offered	Brief Summary of Sub-Field	Major Organizations and Websites Associated with Sub-Field
General Psychology	Master's	Offers advanced training in general psychology for students who wish to gain more experience prior to pursuing a doctoral degree	N/A – search for individual programs
Developmental Psychology	Doctorate (PhD)	Studies behavior as it changes across the life span (mostly in children and adolescents)	American Psychological Association, Division 7 (www.apa.org/about/division/div7)
Social Psychology	Doctorate (PhD)	Studies social and group influences on individual behavior	American Psychological Association, Division 8 (www.spsp.org/)
Behavioral Neuroscience	Doctorate (PhD)	Studies the biology of behavior, including the role of the brain in regulating behavior	American Psychological Association, Division 6 (www.apa.org/about/division/div6)
Experimental Psychology	Doctorate (PhD)	Studies many fields of psychology including sensation and perception, learning, conditioning, motivation, and emotion	American Psychological Association, Division 3 (www.apa.org/about/division/div3)
Quantitative Psychology	Doctorate (PhD)	Studies methods, research design, and statistics as applied to all areas of psychology	American Psychological Association, Division 5 (www.apa.org/about/division/div5)
Cognitive Psychology	Doctorate (PhD)	Studies internal mental processes including memory, reasoning, language, information processing, and decision making	Psychonomic Society: www.psychonomic.org/ Cognitive Neuroscience Society: www.cognitivesociety.org/

intervention strategies (e.g., Head Start, anti-bullying campaigns). Thus, a developmental psychologist can be involved in research on the development or effectiveness of interventions. However, developmental graduate programs do not offer training to individuals who want to be licensed as a clinician (i.e., who want to conduct clinical assessments or therapy). Thus, these programs are specifically geared toward students with an interest in pursuing a strictly research and/or teaching career, either in a research center or as a professor in an academic position. Developmental psychologists also may work in settings that can affect policy at local, state, or national levels.

Read the table of contents in *Child Development* (<https://srcd.online.library.wiley.com/journal/14678624>) or *Developmental Psychology* (www.apa.org/pubs/journals/dev/index.aspx) to learn more about this sub-discipline. More information can be found from Division 7 of the APA (www.apa.org/about/division/div7). The Society for Research on Child Development (www.srcd.org) also offers useful information.

2.11.2 Social Psychology

What is a Social Psychologist? Many students think that social psychology involves the study of interpersonal relationships; however, this is only part of the story. More accurately, social psychology focuses on the manner in which individuals behave in the context of group influences. This may involve work on peer group influences, prejudice, political messaging, social cognition, attitude formation, and persuasion, as well as many other related areas. Social psychologists may be interested in understanding emotion, educational reform, or training and employment issues. Consequently, social psychologists are found almost everywhere in the workforce. Most are in academia. Some are an integral part of corporate America, informing marketing and advertising fields, and structuring employment settings. Social psychologists play an important role in education policy and methods of instruction. The work of social psychologists also influences legal and political contexts. Their work usually involves highly controlled experiments with careful manipulations of study variables, making social psychologists highly valued methodologists as well.

Read the table of contents in the *Journal of Personality and Social Psychology* (www.apa.org/pubs/journals/psp/) to learn more about this sub-discipline. Also, see www.socialpsychology.org for more information on the field.

2.11.3 Quantitative Psychology

What is a Quantitative Psychologist? If you are interested in statistics, quantitative psychology is for you. As research hypotheses grow increasingly sophisticated, and research designs involve greater volumes of data, across multiple modes of observation, time points, or from multiple informants, new quantitative procedures are needed. Quantitative psychologists develop these new statistical approaches and help to apply existing statistical approaches to innovative problems. Many

quantitative psychologists have their own substantive area of interest – a topic that they study of specific interest to them. In addition to their work exploring these specific hypotheses, quantitative psychologists also design simulations and procedures that can be used more broadly, and help set the standard for how all other psychologists can test their hypotheses. There is a great need for quantitative psychologists in the field of psychology, as well as in many other disciplines who are often eager to hire quantitative psychologists in the corporate world, private industry, or government. As compared to the number of career opportunities available for quantitative psychologists, there are relatively few applicants pursuing this area of graduate study.

Read the table of contents in the *Psychological Methods* (www.apa.org/pubs/journals/met/index.aspx) to learn more about this sub-discipline. Also, see APA Division 5 (www.apa.org/about/division/div5).

2.11.4 Cognitive Psychology

What is a Cognitive Psychologist? Cognitive psychology is a field that addresses learning, perception, memory, language, and other areas of cognitive processing (e.g., organizing information; consolidating information from the senses). Cognitive psychologists often conduct highly controlled experiments to identify how cognitive functions are developed, maintained, and may atrophy as individuals become older or sustain traumatic injuries. Recently, work in cognitive psychology has become more integrated with work in neuroscience, allowing for more in-depth exploration of specific brain structures or processes that are implicated in specific cognitive tasks. Read the table of contents in the *Journal of Experimental Psychology* (www.apa.org/pubs/journals/xlm/index.aspx) or *Cognitive Psychology* (www.journals.elsevier.com/cognitive-psychology/) to learn more about this sub-discipline. Also, see the Psychonomic Society (www.psychonomic.org/) or Cognitive Neuroscience Society (www.cogneurosociety.org/) for more information.

2.11.5 Behavioral Neuroscience

What is a Behavioral Neuroscientist? Of course, most behavior can be explained by specific brain structures and neurological processes occurring within the brain. Often using animal models to study brain structures and functions, behavioral neuroscientists study behavior at the cellular level. Using controlled experiments, it is possible to understand many different types of behaviors (e.g., how drugs affect the brain; how individual learning, memory, and perception works; what biological substrates are associated with emotion, etc.). Recent work in behavioral neuroscience also takes advantage of imaging technology (e.g., fMRI) to advance this field. Behavioral neuroscience is a terrific area to become a part of – there is an opportunity for substantial integration with related fields, such as chemistry, biology, pharmacology, and psychiatry.

Read the table of contents in the *Journal of Neuroscience* (www.jneurosci.org/) or *Behavioral Neuroscience* (www.apa.org/pubs/journals/bne/index.aspx) to learn

more about this sub-discipline. Also, see the Society for Neuroscience (www.sfn.org) for more information.

2.12 Deciding Where to Apply

Hopefully, you have begun to gain some insight into the type of career you may wish to pursue, and you have considered various possible graduate programs that may be right for you. You may be wondering whether you can apply to more than one type of graduate program.

In short: Yes. Application to different types of graduate programs is somewhat frequent. For example, because admissions rates are extremely low for clinical psychology PhD programs, if this type of program is your first choice, it may be a good idea to apply to other types of programs in addition to clinical psychology. For example, you may want to do this if a clinical psychology PhD program is your first choice but your grades and scores are “borderline” according to the admissions statistics posted on program websites, or if you are not sure your research background is strong enough.

Another reason to do this might be that you have a specific research interest that fits into different types of programs. For example, a student who is interested in health risk behaviors among adolescents could consider programs in clinical child psychology, pediatric psychology, or developmental psychology (or public health).

If you are applying to different types of programs because you are still unsure of what your interests and/or career goals are, you may want to wait a year before launching into the graduate school application process. The process will be much more overwhelming if you begin it unsure of how much you are actually interested in attending the programs you are applying to. You should not apply until you have a sense of whether you are most interested in research or clinical work or both, until you have an idea of the research areas that interest you most, and until you are so excited about the programs you are applying to that you can't *wait* for the spring to arrive so you can interview and choose a program!

Last, a brief word about neuroscience (www.sfn.org). Although the discipline of psychology has long been interested in understanding the associations among our emotions, behavior, and our central and peripheral nervous systems, this work was conducted almost exclusively with animals for many decades. With the advent of new tools to make human brain imaging more affordable and accessible to non-medical professionals, there has been a surge in interest in neuroscience in ways that have affected all of the psychological sub-disciplines described above. Those interested in pursuing a career in psychology – whether clinical or not – should be at least somewhat comfortable talking about the brain, its lobes, sub-structures, and how we may conceptualize human behavior as relevant to the activity within and between brain regions. This rapid change in the field has been reflected in several ways, including the new priority within the National Institute of Mental Health (the federal agency that funds a remarkably high proportion of research done in clinical psychology) on

the neuroscience-heavy “Research Domain Criteria” (or RDoC) as well as the new name of many departments of psychology on university campuses worldwide, many of which now reference “brain” or “neuro” science.

3. Applying to Doctoral PhD Programs in Psychology

This next section offers specific suggestions for applying to doctoral PhD programs in psychology. A general overview of some common issues is included (e.g., obtaining research experience, writing a personal statement, etc.), followed by a section specifically on the interview process in Section 4. Last, I have included answers to “frequently asked questions” that have been sent to me over the years (see Section 5), and some terrific tools online that will help make the application process easier.

3.1 Obtaining “High-Quality” Research Experience

Perhaps the single most important thing you can do to improve your chances of graduate school admission is to obtain research experience. However, note that research experiences can vary considerably. As an undergraduate student, you may have opportunities to become involved in a faculty member’s lab to engage in a variety of possible tasks. It is quite common for undergraduate students to assist with data entry, library research, data coding, data collection – perhaps involving interactions with research participants, or other tasks that may be specific to the type of research you are interested in (e.g., computer programming; creation of study materials or stimuli, statistical analysis, etc.).

What is the best research experience to get? No single type of research experience is necessarily better than another (although some are admittedly tedious, perhaps). More important is that your research experience helps you to accomplish three goals. First, it is important for you to become exposed to the research process to determine whether you enjoy this type of work. You will undoubtedly observe that research is a very time-consuming, detail-oriented, meticulous endeavor that may take months or even years before achieving results. Research also can be remarkably invigorating, allowing you to examine ideas most important to you, rigorously test these ideas, and then disseminate your results to the international community of psychologists through conferences or manuscripts! Research is not for everyone, and this exposure may help you learn whether this is an activity that you can become thoroughly involved in for many years to come. If you do not find that you have a passion for at least one aspect of the research process, it may be challenging to retain the stamina needed to successfully complete independent research projects as a graduate student.

A second goal of your research experience is to learn about the type of research questions that interest you the most. Assistance on a study related to adolescent girls’ depression may help you to learn that you enjoy, or do not enjoy, working with adolescents, examining gender-related issues, or studying internalizing disorders, for

instance. Your work on a project examining therapy process variables that increase the efficacy of behavioral treatment of externalizing symptoms may help you appreciate applied research questions, or increase your desire to study precursors that predict the onset of oppositional behaviors. Importantly, when you apply to graduate programs, it will be necessary for you to have some focus regarding the type of research you would like to conduct. In clinical psychology, it is particularly important that this focus includes some general idea of (a) whether there is a specific disorder or process of interest; and (b) whether there is a specific age group you may be especially interested (or not interested) in.

Third, and perhaps most important, it is essential that your research experience allows you to become educated regarding the scientific questions under investigation. Too many graduate students gain research experience that helps to develop specific skills (which is certainly very important!), but not a broader understanding of what the research is about, or why it is being conducted.

Offering a scientific contribution to the research project can be difficult and intimidating, however. Some students feel reluctant to offer ideas and input during lab meetings that include mostly graduate students, postdocs, and faculty members. It also may feel somewhat challenging to schedule an individual meeting with your faculty mentor to discuss your ideas. I strongly recommend that you attempt to do so, however, to get the most of your research experience. A good start is to request some articles that will help you to read a bit about the area under investigation. Then, it is worth spending a few hours on PsychInfo looking for related articles that help you to understand how multiple investigators have thought about the issue you are studying. Try asking some questions, or offering some opinions and thoughts during a lab discussion. Your ideas do not need to be revolutionary, but will simply help you to understand more of what is going on. For instance, you may want to know, “Why are we measuring variable X this way?” “Is this related to theory Y that is discussed in this article I read?” “I wonder if examining Z would help us to understand the issue better?”

Your research experience should help you to “think like a scientist,” and even if you are simply entering data, you might be able to observe something that allows you to develop a question about the nature of whatever it is that you are studying (e.g., “Everyone responds with a ‘1’ to this item; perhaps we are not assessing this well”). Incidentally, demonstrating this ability to your faculty supervisor also will help them write you a letter of recommendation when you apply to graduate school.

As you may know, admission to psychology PhD programs is quite competitive. Successful applicants now typically have amassed considerable research experience before applying to doctoral programs. In addition to work in a research lab as a volunteer, or for a semester of course credit, other options include the completion of an honors thesis, or taking a full-time research assistant position for 1–2 years following the completion of the undergraduate degree. The honors thesis is a particularly excellent opportunity to gain research experience; the thesis helps you to develop and demonstrate independent research skills by developing and testing your own hypothesis. The thesis also helps you to gain

substantial exposure to a faculty member who can provide mentorship on your thesis and later write you a letter of recommendation. A full-time research assistant position also can be a terrific opportunity. In this role, you will develop advanced knowledge and skill in the detailed procedures required to conduct an investigation, to work closely with a faculty member, and often to supervise undergraduate research volunteers. While neither the honors thesis nor full-time position is *required* for entry into graduate school, a remarkably high proportion of successful applicants to top PhD programs do have one of these experiences.

3.2 Obtaining Clinical Experience

Many students ask whether they need to obtain clinical experience to gain entry into doctoral PhD programs. In my opinion, the short answer is: No.

Clinical experience offers the opportunity for you to gain exposure to populations of youth who are experiencing psychological symptoms. For this reason, it can be a good experience, and perhaps one that you should have before embarking on a clinical psychology career. This experience also will help you learn to develop rapport with children of different ages and in different settings. Some clinical experiences occur in excellent treatment facilities (or in treatment/research summer camps for youth with psychopathology), and these particularly can be excellent experiences.

However, because your role during this clinical placement will not be that of a true clinician, the skills you develop are not necessarily going to increase the attractiveness of your application significantly. In other words, you will learn all you need to know about clinical work during graduate school, so these experiences are not needed to demonstrate any specific expertise. If you believe this experience will help you determine your interests and career choice, then it is a terrific idea. If you have already decided to apply to clinical PhD programs and you have a choice between a research and clinical experience, then choose research, research, research.

3.3 How the Admissions Process Works

Admission into psychology doctoral PhD programs is perhaps more competitive than any other type of graduate program, including law, medicine, etc. For many clinical programs, for instance, approximately 2–10 percent of applicants (often about 3–8 out of 150–750) are admitted. Every graduate program differs in their evaluation and admissions procedures, but most programs use some type of multiple hurdle system that evaluates applicants in several stages based on different sets of criteria.

3.3.1 Educational Background

Typically, the evaluation of applications begins with a review of basic educational credentials. Sometimes this stage of the evaluation process is conducted by the

university's graduate school, or an administrative person, rather than a psychology faculty member. Thus, the review is fairly brief, blunt, and admittedly imperfect. Factors evaluated include the quality of the undergraduate institution, the undergraduate GPA, and the GRE scores.

At this stage, you have likely already selected, and perhaps are close to graduating from, your undergraduate institution. There's not much you can do about that now.

3.3.2 Which GPA?

Students often ask whether their overall GPA or their psychology (major) GPA will be evaluated. In my experience, the overall GPA is given far more weight than the psychology GPA. In many cases, however, undergraduate students began school with hopes of pursuing a pre-med curriculum. After several low grades, however, students switch career aspirations, and their overall GPA now suffers from these few low grades during freshman year. In this situation (particularly if this has been noted somewhere in the application; most appropriately by a referee), the evaluator may briefly glance at the transcript to see if a single outlier grade or two is contributing to a low overall GPA. But to be frank, I believe that even in this situation evaluators will focus only on the overall cumulative GPA. I believe it is extremely rare for students to be admitted to any PhD clinical child program with a GPA below 3.2. I believe the vast majority of admitted students have a GPA above 3.4 or 3.5. You can visit the website of almost any accredited PhD clinical program to obtain GPA averages and ranges on the last few classes of admitted students (look for links that indicate "performance and outcome data").

3.3.3 Specific Classes?

Students sometimes ask whether specific classes might increase or decrease the likelihood of admission. Beginning in 2019 or so, the short answer is: Maybe. Your graduate training may be significantly streamlined if you have taken courses that cover the following topics before matriculation into graduate school:

- Affect or emotions
- Biological psychology (or something like it broadly focusing on the brain, neurons, etc.)
- Cognitive psychology (or a course on learning and memory)
- Developmental psychology
- Social psychology
- History of psychology.

Beyond these courses, which electives you may have taken, or which classes you took outside of psychology, probably won't matter much at all. Because the psychology major typically includes a similar set of classes in most undergraduate institutions (e.g., Intro 101, Research Methods, Statistics, etc.), it often seems

unnecessary to examine the course choices of every applicant. You will not get into graduate school simply because you took one or two electives or difficult courses, and you will not be denied admission simply because you took Advanced Basketweaving as an elective.

3.3.4 What if I Didn't Major in Psychology?

The vast majority of admitted students have majored in psychology, but a significant minority have not. Applicants who have not majored in psychology likely need to have even more research experience, however, to demonstrate a familiarity with the field. I recommend that non-psychology majors try to take as many of the courses listed above as possible (in descending order of importance: Intro, Research Methods, Statistics, followed by the six courses bulleted above) and also the Psychology GRE subject test. But if it is not possible to take, your chances of getting in are not terribly lower than if you had a psych major.

3.3.5 The GRE

Before 2020, GRE scores also were used as an important marker of potential success in graduate school. As with GPA, the higher the score, the better. Two GRE exams were relevant: the General exam and the Psychology GRE. The General exam is quite similar to the SAT, and students on average score 100 points higher (for Verbal and Quantitative combined) on the GRE as compared to the SAT (thanks to a quality undergraduate education!). As with the SAT, several companies (e.g., Princeton Review, Stanley Kaplan) offer courses and books to help students study for the exam.

Percentile scores were often evaluated more closely than the standardized scores. The program websites mentioned above also include data regarding the averages and ranges of GRE scores for admitted students. Also, APA offers a book, *Graduate Study in Psychology* (50th edition), with information on every program, as well as data regarding admission criteria. In practice, I believe many students' verbal and quantitative scores exceed the 75th percentile; however, *significant deviation* in these scores was allowed when considering cultural and language limitations/biases of the GRE.

The Psychology GRE is not very important to most PhD programs. When I applied to graduate school approximately 300 years ago, I was told that the Psychology GRE score "will not get you in, and will not keep you out." I believe this is still true.

Since 2020, there have been substantial changes in the use of the GRE exams for graduate admissions in clinical psychology. This is for two reasons. First, in 2020, the COVID-19 pandemic made it practically difficult to administer the exam while applicants were following strict quarantine rules. Second, and more importantly, however, this change in 2020 allowed many universities to consider whether the GRE was creating a systemic barrier to the admission of diverse classes of doctoral students in the field.

Table 2.3 *Representation By Gender and Race/Ethnicity*

	Number of Degrees	PerCent of Degrees
Men	731	22
Women	2634	78
Grand Total	3365	100
American Indian/Alaska Native	10	0
Asian	198	7
Black/African American	259	9
Hispanic	454	15
Native Hawaiian/Pacific Islander	6	0
Two or more races	111	4
White	1972	66
Grand Total	3010	100

People with unknown gender and race/ethnicity were excluded from the table.

Issues regarding diversity in clinical psychology have been discussed for many decades. In 2019, about 3300 students graduated with a degree in an area of health service psychology (i.e., either clinical, counseling, or school psychology). Data from APA (www.apa.org/workforce/data-tools, and see below) reveal an under-representation of doctoral graduates from several racial and ethnic minority groups, suggesting that much work is needed to increase diversity in the field. Efforts to remove systemic barriers to admission are under way more concertedly now than ever before in the history of the field, but much work has to be done. For more information, a panel discussion regarding admission for BIPOC applicants is available on YouTube (www.youtube.com/watch?v=DcC9GrWeamk).

3.4 General Match to Program Values and Training Experiences

Students who make it past the first hurdle of application evaluation (anywhere between 20 and 50 percent of applicants do) next are evaluated to determine a general match to the overall program values and possible training experiences. I believe there are three main reasons why an application would not make it past this hurdle.

1. The student's career interests simply do not reflect the values of the program. Perhaps most commonly, an applicant applies to a program that emphasizes research training, yet expresses no interest in research and/or has no research experience. Or, conversely, it may be that a student with an exclusive interest in research applies to a program that emphasizes clinical training. Or, a student may express an interest in a specific theoretical orientation that is not emphasized by the graduate program (more on theoretical orientation below).
2. The student expresses an interest in an activity (e.g., studying schizophrenia) that simply is unavailable. This may be for one of four remarkably common reasons.

- a. First, it may be that this training experience has never been offered in the program, and the application appears to have been submitted merely due to the reputation or location of the program.
- b. Second, it may be that the activity was directed by a faculty member who has since retired or left the university. It is essential that you check the website regularly for each program to which you apply.
- c. Third, it may be that the faculty member providing this activity is still in residence, but will not be accepting a student this year.
- d. Fourth, the faculty member is in residence and accepting students, but has changed research interests recently.

Regarding points (c) and (d) above, please see information below regarding suggested strategies for contacting potential faculty mentors before the application process.

3. The application contains information that is widely inappropriate and unprofessional. Applicants who disclose their own psychopathology, for example, are often “screened out” at this stage.

3.5 Specific Match to a Mentor and Research Program

At this stage during the admissions process, each faculty mentor who is accepting students usually offers input regarding 5–20 applicants who have excellent educational credentials and are a general match to the program. At some programs this is referred to as the “short list.” The next stage of the admissions procedure becomes remarkably difficult for the faculty member and/or admissions committee. Quite frankly, there are many extremely well-qualified applicants, and by this stage of the process, it often is apparent that any one of the short-list members would do quite well in graduate school. Similarly, many faculty feel that they would likely be happy with any of these highly talented applicants.

Yet, decisions nevertheless need to be made, and the types of factors that go into admissions decisions at this point can be inconsistent or even unpredictable. In other words, students who make it to the short list and then the interviewing stage should not feel personally offended if later denied admission. This is truly a difficult process.

Despite some of the idiosyncrasies and serendipity involved in this stage of the process, there are some clear factors that still can make a difference in your fate, and some clear suggestions for improving your application. These are described below.

3.5.1 The Personal Statement

The vast majority of personal statements follow an identical format. First, a brief anecdote is offered describing a watershed moment in which the applicant fully realized their interest in clinical psychology. Next, a brief section describes the

applicants' enthusiasm in one or more psychology undergraduate courses. Research experiences then are described in succession. For each experience, the title and principal investigator of the project are listed, followed by a list of the applicant's responsibilities and tasks on the project. The statement often ends with a brief paragraph describing research interests, career interests, admiration of the graduate program, and perhaps the name of a specific potential mentor or two.

This type of personal statement is fine. It accomplishes many of the main objectives that the personal statement is meant to serve. It indeed is important to clearly state research experiences, to express enthusiasm for and a match to a specific aspect of the graduate program, and to articulate clear research and career goals. It also often is a good idea to identify a potential mentor.

Yet, this type of statement is not quite as effective as it may be, in part because so very many statements appear to be remarkably similar to one another. I believe that the statements that truly distinguish themselves are those that demonstrate evidence of the potential to become an independent investigator. As a graduate student, you will be expected to progressively develop research skills that will establish you as an independent scholar. To the extent that it is possible to convey this within the personal statement, you may be able to make your potential to excel as a graduate student very clear to the reader.

Listing research experiences, principal investigators, and project responsibilities can accomplish an important goal. Often, your experiences will reflect exposure to a project with goals that are particularly relevant to the potential mentor's own research, a large, impressive project, or an undergraduate mentor who is known for producing excellent training experience among their students. This can indeed be very helpful to your application in that it expresses a great foundation on which to build during graduate training. If your potential graduate mentor is familiar with your undergraduate mentor's work and reputation, you may benefit from positive assumptions and attributions made about you and your undergraduate work.

Conveying an account of your various responsibilities on research projects also can be useful to help describe your readiness to assist in ongoing projects in your graduate mentor's lab. You may even possess a particular skill that is lacking and needed in the lab; thus, you will be a particularly strong asset to your new environment.

Graduate mentors may differ in their selection criteria. Many are extremely excited to have an enthusiastic and experienced applicant join the lab. Others may be mostly concerned with your academic ability and interest in their research, knowing that they can train you to complete whatever tasks are needed in their lab. However, all graduate mentors are likely also invested in seeing you succeed as an independent scholar. Thus, I believe an applicant "can't go wrong" by going a step beyond this common format, and clearly conveying an aptitude for independent research.

Perhaps more important than a list of prior research experiences and responsibilities is a brief description of *what you learned* from each of these research experiences. This is the piece that separates a good research statement from a great one. Too often, the research statement reports prior research experience as

if checking off a box, seemingly indicating that with this requirement satisfied, the applicant should be granted admission. Thus, statements that go beyond simply confirming prior lab participation immediately stand out.

What was the project about? What were the hypotheses that interested you the most? Are you familiar with any of the literature that is related to the research project? How did your experience in this research project help shape your interests?

In other words, the personal statement does not need to simply restate your CV or résumé, but can help the admissions committee understand what is “between the lines” of your CV/résumé. A description of your responsibilities might indicate that you “coded and entered data using SPSS on a project examining autism.” But in addition to this information, you might also indicate that “the project was designed to examine the efficacy of IBT treatment,” and that you were “particularly excited by the opportunity to examine different treatment approaches in an applied research setting,” or that you “observed that children’s intellectual ability notably changed the presentation of PDD symptoms,” leading to your “strong interest in studying Asperger’s disorder.” Even better, it made you “wonder what factors may have made IBT [Intensive Behavioral Therapy] particularly effective for some in the study.” Anything that demonstrates that you are “knocking on the door of novel hypotheses” will work well. It doesn’t have to be a great or even especially novel hypothesis, but one or two that indicate you are thinking psychologically will do it.

As you can see, the inclusion of these statements is perhaps somewhat subtle. However, I believe it can be quite helpful for the admissions committee to “see how you think,” understand the motivations behind your research interests, and help convey your knowledge of the literature or theories involved in your past work. The applicants who do this successfully have personal statements that appear qualitatively different, and often they are more successful.

In 2020, the Academy of Psychological Clinical Science (www.acadpsychclinicalscience.org/), constituted of many research-oriented clinical programs, surveyed its membership to determine what factors may be most important to faculty when selecting students. Results suggested the following top 10 most sought-after qualities (see below, in descending order of importance). Note that many of these can be communicated within a personal statement by discussing how you pursued opportunities, what you gained from each opportunity, and how you thought about your experiences.

- **Scientific curiosity** – interested in many topics, ideas, and intrinsically rewarded by scientific inquiry
- **Critical thinking** – can recognize divergent/contradictory perspectives and challenge viewpoints/ideas
- **Good interpersonal skills** – encodes, interprets, and responds to social cues in a typical manner
- **Analytical thinking** – can recognize patterns, trends, summarize broader concepts from specific details, and demonstrates logic-guided thinking

- **Problem solving skill** – can identify problems, generate/recommend a variety of solutions
- **Open-minded** – is open to new perspectives and ideas
- **Independence and self-guided inquiry** – pursues additional knowledge, independent educational experiences beyond requirements
- **Works well within a team** – acknowledges others' contributions, cooperates, collaborates, assists others
- **Takes initiative** – volunteers to do more, take full advantage of opportunities to expand knowledge, skills, and abilities
- **Openness to supervision and personal insight** – can reflect upon and review prior learning, solicit feedback, and change behavior.

3.5.2 The Diversity Statement

Many schools have begun asking applicants to provide a diversity statement as part of their application materials. This may be a part of the personal statement or a second essay. This statement offers you an opportunity to discuss how you will incorporate multicultural awareness, knowledge, and skills into your work as a graduate student and how you think about diversity. Note that you are not asked to discuss your own diverse identity and should not in any way feel pressured to do so (you are welcome to if you wish, but do not feel compelled to). Note also that typically you are not asked to reiterate that you believe diversity is an important issue that requires further consideration in the field; this is implied in the fact that you have been asked to write a statement.

What should you write in this statement? Personally, I subscribe to the idea we are a product of many biological, cultural, and social forces that forever reciprocally transact to create (a) our actual experiences in the world and (b) the way we *think and feel* about our experiences in the world. No two people are alike, regardless of apparent demographic similarities, and thus we all possess a distinct cultural bias – a lens or filter that affects how we recall our memories, experience the present, and consider the future. It is that lens that may be useful to consider when writing this statement. What will you bring to the table as a graduate student, and eventually, as a psychologist? What perspectives can you offer that will enrich the work of psychologists, whether as a scientist, teacher, practitioner, or in any other role? The answer should make you think deeply, so expect plenty of drafts, and you should be ready to explain yourself in a way that may feel a tad personal (to the extent you feel comfortable doing so) and as someone who has a unique and crucial voice to offer professionally as well (even though you may not always feel that way yet). In short, many students are eligible to be admitted to grad school and some may even engage in the exact same activities as you if they took your place. What will you bring that is irreplaceable – that is only *you* – that makes you an applicant with an important perspective?

3.5.3 Should I List a Specific Mentor?

Short answer: Yes. But keep in mind that programs vary considerably on how graduate students are selected. Some programs allow each faculty member to make unilateral decisions regarding graduate admissions. Thus, your application is really meant to convince a single person to admit you, and your potential match with that person will be evaluated directly. Other programs make group-based decisions to varying degrees. It still may be important to express a match to a specific mentor, but your general match with the program and perhaps with other potential mentors also will be evaluated.

This reflects a general issue related to your decisions on how to select graduate programs. You are probably already aware that at the next stage of your career, your graduate school experience will be evaluated not simply on the reputation of your PhD program, but also on the reputation of your mentor and your productivity with that mentor during graduate school. This is different than the undergraduate application experience, which can be discussed in terms of various ranking systems of university reputations (e.g., US News and World Report). Remember, rankings are not generally considered to be very reliable for PhD psychology programs (at best, one might use existing graduate ranking systems to identify programs in the top quartile, second quartile, etc., but rankings more specific than that are somewhat false). PhD programs in clinical psychology are sometimes located within universities with excellent reputations for undergraduate training, but sometimes not. Similarly, the best possible mentor to study a particular area of research will sometimes be located at a graduate program generally regarded to be of high quality, but sometimes not. Thus, your application decisions may reflect an interest in a program, a mentor, or both – your personal statement should reflect these interests.

3.6 Contacting Potential Mentors: Sometimes a Good Idea

Students commonly write to potential mentors to inquire whether applicants would be accepted in their labs this year, and/or to generally express an interest in the graduate program. This is a terrific idea, and many mentors will be very appreciative of such emails.

However, it is important to remember that some mentors may receive a great many emails from applicants during high peak months of the application process. Therefore, it is important to be patient and forgiving when waiting for a response from faculty. It also is often a good idea to carefully review information available on the program or faculty member's website, as answers to some of your questions may be available online. Most faculty will be happy to answer your questions and correspond when possible. Be aware, however, that such correspondence is certainly not necessary and often plays little to no role in your admissions outcome.

In fact, sending an email without a true question (or with a question that could have been easily answered on the program or faculty member's website) can be the kiss of death. Similarly, questions that reflect a general unawareness that faculty may only have time for a brief response also may be seen as lacking in professional judgment.

4. I Just Got an Interview for a Psychology Doctoral Program. What Do I Do?

Congratulations! You just received an interview for the most competitive application process in the entire graduate education system within the United States! A smaller percentage of applicants gain admission to clinical psychology doctoral (PhD) programs, for instance, than to law school, medical school, or any other type of advanced graduate degree program, and your interview brings you one enormous step closer to gaining admission!

At most universities, about 3–6 applicants are invited for an interview for every one admissions slot available. Suddenly, the odds are looking pretty good for you! The 200–600 applications received by most doctoral-level clinical psychology graduate programs have been narrowed to just a few dozen, and for the lab you are most interested in, just a small handful of folks will be coming for an interview. However, referring to this next stage of the process as an “interview” incorrectly portrays the experience as a process by which faculty are exclusively selecting students. In reality, a large proportion of interview-invited applicants have more than one site to visit, which means that students are evaluating and selecting programs as much as vice versa. You have a lot of “power” in this situation, and a lot of information to gather to make one of the most important professional decisions of your life. Let’s get prepared for a very fun, and somewhat stressful, interview season!

4.1 Scheduling the Interviews

Sometime in December or January you will start receiving invitations to come for an interview!

Get ready to accrue some frequent flyer miles! Although occasionally a program may be able to help defray the costs of your interview travel, it is most likely that you will need to pay for all travel expenses on your own. Once you hear about an interview, you will probably get some details from the program about ways that they can help you make your travel as easy as possible. Many programs will have someone take you to/from the airport, and most will give you the opportunity to stay with a graduate student to eliminate hotel expenses. Helpful hint: flights are commonly delayed in winter, and luggage is lost frequently! Plan to wear a suit on your interview, and consider packing it in your overhead bag!

One of the first questions that arises when applicants begin hearing about interviews pertains to inevitable dilemmas in scheduling. Most interviews occur in the months of January and February (and occasionally March, although this process seems to be moving earlier and earlier each year). With just a few possible weekends to organize a day for applicant interviews, it is quite likely that you will experience a scheduling conflict between two schools that have extended invitations. Sadly, there is no easy solution to this dilemma. Some schools may offer multiple dates for you to visit; others will not. Sometimes you can arrange your own informal visit on a date that is convenient for you; however, the depth of information and number of people who

will meet you likely will be reduced as compared to the experience you would have on the formal “Interview Day.” In some cases, you may learn of an impending conflict between a site that has extended an interview vs. another site that has not yet, but might soon extend an invitation for the same date. It is perfectly OK to call a site and ask when their interview dates may be, but of course, be sure not to assume that you are getting an interview, or sound presumptuous in your request for info.

For these reasons, it is critical that you do not quickly accept the first interview invitation you get! Instead, take a quick look on the undergraduate website of the Council of University Directors of Clinical Psychology (CUDCP) – an association of most accredited clinical PhD programs – to review which other sites are interviewing in the same day as your invitation, and make sure you are scheduling your interviews according to your interests. You can find that calendar of interview dates at www.clinicalpsychgradschool.org, and if you are feeling particularly stressed about when you will hear, you will find that many sites list their interview invite notification dates there as well.

When dealing with such scheduling conflicts, please be extremely sensitive to the difficulties involved for the program in coordinating a large interview day for its applicants. A tremendous amount of planning and expense is dedicated to these days; be sure to request exceptions only with great care and consideration for how much work is involved among your hosts. Also, if wrestling with a scheduling conflict, make sure your communication with a program clearly expresses your interest level in the site accurately. If you must cancel, rearrange, or decline an interview invitation, be sure that the faculty understands whether this is a reflection of your interest in their program.

Thanks to modern technology, sometimes it is possible to be at two places at once. If you have the capability to communicate by Zoom or phone from one site to another, you may find that the day’s schedules are not altogether impossible to reconcile. For instance, if you request early morning interviews at one site, you may be able to schedule late afternoon interviews by another, and conduct one set over your laptop. Although this is certainly not a perfect solution and could require some flexibility and understanding among your sites, it may be a workable solution in today’s technology age that helps you resolve a conflict. If a site invited you for an interview, they know that you’re great, and they should not be surprised to learn that you have gotten other interview offers as well.

What if I am Applying During a Worldwide Pandemic? In 2021, in-person interviews were not possible. Many programs realized that there may be advantages to remote interviewing that may change how interviews are conducted over a longer-term basis. It is recommended that you interview remotely in much the same way you would have interviewed in person (see below). It makes sense to wear clothing much as you would for an in-person interview (or at least inasmuch as can be seen on camera), and that you attempt to find a quiet space for your interviews over Zoom. But faculty do know that this may be difficult for

some applicants and have explicitly discussed that a crowded or noisy room should not be used as a sign of your disinterest in any way whatsoever. In other words, in an effort to allow all an equal opportunity to succeed, faculty will be focusing on you and your responses to questions more than anything else. It is probably not worth too much stress over the location of your Zoom meeting as a result.

4.2 What Will Happen During These Interviews?

Most applicants return from interviews quite surprised at how little they were interviewed! In other words, most expect to be asked many questions, but in fact, find that they are doing most of the asking during these visits. This is an extremely important reality that will help you prepare for the interview in a way that's different from what you may have expected.

No faculty member will quiz you on statistics, the details of their recent publications, or the names of historical figures in psychology. Preparing for the interview should not feel like studying for a Psychology midterm. Rather, you should create a list of many, many questions that you would like to ask while on the interview. In my own opinion, I would suggest that you never run out of questions! Asking questions is a great way to get answers, but for interviewing purposes, it also is a terrific way to convey that you know what you are getting into, you understand what graduate training will involve, you are enthusiastic about this opportunity, and you are conscientious enough to have done your homework about the program and its training opportunities.

But how do you know what type of questions to ask? Unfortunately, almost all graduate programs in clinical psychology sound very similar on paper or on the web. It's hard to get a sense of the factors that programs vary on until you've seen a few. This will not be a problem when you arrive at your fourth interview, but how will you know what to ask on your initial interviews?

One recommendation is to download the clinical program handbook from two or three graduate programs; it does not matter if they are programs you applied to. Any handbooks will do. Skim through them, and you will start to notice differences. Some may mention multiple practicum opportunities; others will have a standardized training sequence. Some may give students many choices in coursework; some may provide more structure in students' schedules. Some programs offer TAs and RAs; others may offer fellowships too. Some have a Comps, a Quals, an Area Paper, or none! Some require students to complete a master's thesis, some don't. As you look through handbooks, you may notice a few factors that are especially important to you, and this will give you some ideas of what things to ask when meeting with folks.

I asked my current graduate students and a few faculty friends to send along some questions that they found helpful to ask different sites as they went through the admissions process. Here's what they suggested:

4.3 Questions to Ask Potential Advisors

- What is your mentoring style?
- How does one earn authorship in this lab?
- How do students select research topics for their own thesis/dissertation, and what role do you play in this process?
- What role do you see me having in this lab if I come here? Is there a grant on which I could work?
- Are there opportunities for summer funding?
- What opportunities are there to get involved in research collaborations with other labs?
- To what extent can my interests as a student be incorporated into the broader interests of your lab, vs. how much would I be expected to carry out an existing line of research?
- What supports exist in the department for students wishing to write their own grants?
- What are the current projects in this lab, and in what directions do you expect the lab research to go over the next five years?
- How many classes are typically offered to graduate students in (statistics, methods, therapeutic techniques, etc.) each semester/year?
- What practicum opportunities are offered?
- Do most students finish their dissertation before internship or during the internship year?
- What types of statistical consultation are available on campus?
- What type of collaboration (if any) occurs among the clinical faculty (or between the clinical and other faculty if a student has a strong interest in another area)?
- Is it possible and/or typical for students to work with more than one faculty member? How does this work?
- What are faculty/student relations like? What's the general climate of the clinical division and department? (A good question to ask other graduate students!)
- What type of internship placements do students get?
- What type of jobs have graduating students from the program received in the past few years?

4.4 Questions to Ask Graduate Students

- Is it possible to live comfortably on the stipend salary in this town?
- What areas are best for grad students to live?
- Timeline questions (What are the expectations and norms for completion of various program milestones – e.g., master's, comps, dissertation, etc.?).
- What is it like to work with the advisor that you are applying to work with (e.g., How often does your advisor meet with you? Do you feel like your advisor is either unavailable, or a micromanager?).

- If single and hoping to get into a relationship . . . What is life like here for single students? Is this an easy place to meet other people our age?
- If a member of an under-represented ethnic minority, or LGBTQ+, perhaps ask: What is the climate here for minority individuals? How supportive is the community?
- What kinds of resources/supports are available to minority students at this university/program?
- How competitive vs. cooperative are grad students in this program?
- To what extent does the training in this program focus on students' development as researchers vs. clinicians vs. teachers?
- What sorts of teaching opportunities exist here for graduate students? Is there training for new teachers as part of the program?
- Is funding guaranteed for the time I am here? For how long is it guaranteed?

4.5 Talking About Research

Perhaps most important, your “interviews” for clinical psychology PhD programs will include reciprocal discussions regarding mutual research interests. Because this is such an important part of the interview process, this section offers some special suggestions and tips.

First, do your homework. When you initially applied to graduate programs, you likely looked for faculty mentors with whom you shared some research interests. Admittedly, in many cases, your match with that faculty member may have been based on a fairly broad understanding of their work (i.e., from a sentence or two on their webpage) and a fairly large range of your own interests. Now that you have been selected for an interview, it is expected that your interests will have matured and narrowed a tad. Also, it is somewhat expected that your knowledge of this professor's work has become more thorough and informed. Luckily, there are some very easy tools available to help you do this.

You likely will begin your investigation into a faculty member's research interests by looking at their website and downloading recent abstracts and articles from PsychInfo. This remains a terrific approach for learning about the faculty member's work. In addition to reading about the most common themes in their work, as well as understanding the methods they typically use in research (e.g., observational studies, clinical trials, questionnaire-based data collection, etc.), be sure also to note whether faculty seem to be publishing at a reasonable rate (i.e., this can vary from 0 to 20 within a single year, with a range of 1–5 being quite common) and whether they are publishing with their students as co-authors (or even first authors). This may give you some insight as to whether there will be publication opportunities while you are working together, and whether you will be given a chance to collaborate on these publications.

Keep in mind, however, that PsychInfo and many faculty members' websites may give you somewhat “old” information. PsychInfo lists articles currently published online or in print, which means they were first drafted at least 1–2 years ago

about a study that may have started several years before then. If the faculty member does not keep their website current, the information listed here also may not reflect recent work.

One solution to help you learn about ongoing research is NIH Reporter (<https://reporter.nih.gov/>). If the faculty member has a current grant funded by NIH, you can find out all kinds of terrific information about their current work from this site! Just do a search by name, and you can read an abstract of their grant, read recent publications, and even get a sense of how much more time this grant will last. This will give you a great idea of exactly what the faculty member is working on, and what project you may be involved in should you attend this school. If the faculty member has a grant funded by a private foundation, you may be able to find similar information from the foundation's website.

If the faculty member listed any publications on his/her website or CV as being "in press" in a specific journal, you can also check that journal's website. Many journals post online pre-prints earlier than PsychInfo catalogs these (check ResearchGate too). This will give you an opportunity to read about research that has very recently been accepted for publication.

As you read through the faculty member's publications and descriptions of the lab's current projects, read "actively." Rather than thinking of this person as a "perfect" researcher who is studying exactly what you want to study, try to think about the ideas you might be able to bring to the lab, and take notes! Some faculty members will be interested during the interview in hearing *your* ideas for research (some may ask you to brainstorm on the spot), and most will be interested in seeing how you think about research. Importantly, any research ideas you propose during the interview should fit with the general research interests of the lab. (For example, if you are interviewing with a faculty member who specializes in ADHD among preadolescents, you might ask whether she has considered studying gender differences in ADHD; you would probably not want to discuss your interest in eating disorders in adolescent girls, unless the researcher has demonstrated a broad range of interests.)

Second, speak up! During your visit, you will receive an overwhelming amount of information about ongoing research. Every faculty member and current graduate student will have much to say about their current work and upcoming projects. To succeed during this interview process, make sure you talk about your own research experience and interests in detail – at least inasmuch as it helps you demonstrate how you are a match to this lab! Although some of this information was written in your personal statement, some folks may not have had access to this statement, or may not have read it very recently. In addition, you may be able to share more details in a manner that helps more thoroughly explain your experiences. This is important, particularly when considering what the interview process is like for the faculty member.

From the faculty perspective, the Interview Day can be quite confusing and difficult. I rarely have heard a faculty member describe their admissions decisions as easy. Rather, most of us agree that there are an overwhelming number of

outstanding students, that the students who arrive for any given Interview Day are all phenomenal and quite likely to be very successful, and that the decision of how to rank these uniformly excellent candidates is painstaking, frustrating, and even sometimes idiosyncratic. In short, faculty would like a student who (1) they generally get along with; someone who will be pleasant to interact with nearly every day for the next five years, and then quite frequently for the rest of their careers; (2) has initiative, who will be as passionate and committed to the research in the lab as they are, and who will be invested in the research outcomes you are working on together; and (3) is intellectually stimulating – who will bring great ideas to the table, expand the lab in creative and innovative directions, and augment the caliber of intellectual discussions within research meetings.

Sounds intimidating? It's not, really. Just speak up! Express your interests, your ideas, your enthusiasm, and your natural talents will shine through. If a faculty member describes research you've read about, share your opinions or ideas (e.g., "Have you ever thought of studying X within that framework?" "Why did you decide to use this/that approach?" "How do you think this connects with the X theory?" "I'm interested in seeing how that idea may work differently in X population"). It is common for applicants to feel like everyone else in the room is qualified to be there, but they secretly are the imposter who got invited to the interview due to some computer malfunction. Don't believe this! You have been invited because your experience is terrific, you have much to contribute, and several faculty members wrote glowing letters about your potential! Be sure to speak your mind, and you will help to show the faculty member and graduate students that you can be a terrific member of their lab.

Third, be specific – maybe. When discussing their approach to admissions, some faculty indicate that they prefer a "blank slate" (i.e., someone who can be taught from scratch and will be shaped mostly by their experiences in the graduate lab). More commonly, however, faculty are looking for someone who may arrive on campus with their own ideas, experiences, and emerging areas of expertise. This is a tricky balance that you will want to think about before you attend an interview. If you are open to literally anything the faculty member offers as a potential research topic, you may not seem "ready" for graduate school. Some may say that you are more interested in gaining admission than actually doing the work once you get there. On the other hand, if you seem overly fixed on a certain topic or method, despite what you hear during the Interview Day, then some may feel like you are not a match to the research lab, or that you are not interested in integrating old with new experiences.

This is a very personal issue, in that there is no "wrong" answer or approach to the interview process. If you indeed are universally interested in all experiences, then it is certainly preferable to be honest about that, rather than portray your interests inaccurately. Conversely, if you are strongly committed to a specific topic, then you should hold out for experiences that will help you grow in your desired direction. Keep in mind that a "balance" probably is a good approach to match with most potential faculty members. Before you attend an interview, therefore, consider what

research topics you are most interested in vs. which are less crucial for your graduate training. Think about what you are most strongly committed to, and how you will represent your research interests when asked. It is quite common for you to be asked what your future career goals may be, what you do or don't like about the research process, and what your research interests are (you may want to plan a 2–4 minute response for this one). Most important, think about the research that excites you the most, and use the Interview Day to determine whether you think you can get that research done, specifically at the place you are visiting.

I am often asked what separates great applicants from outstanding applicants on interview day. Here's my answer: Great applicants are socially skilled, energetic, enthusiastic, prepared, conscientious, understand what graduate school involves, and seem ready to make a commitment.

Outstanding applicants are all of that plus:

1. They can engage scientifically with their potential faculty mentor
In other words, they can hypothesize, interpret, or critique right there on the spot, and seem to enjoy doing so
2. They love to be trained
They can extract a positive lesson from every training experience, no matter how relevant or seemingly irrelevant, and apply these lessons elsewhere

4.6 Structured Interviews

As the field searches for ways to remove systemic barriers to graduate admission, new interview approaches have been discussed, and in some cases may be adopted with more frequency. Many of these structured interviews might involve fairly standard questions (see below) for which you may want to prepare responses. Note that it is very important that you do not rehearse verbatim responses to the questions below (those always come across stilted, unnatural, and boring), but rather that you remember a few talking points for each question and rehearse the gist of your responses to help you reduce your anxiety.

In addition to these items below, some labs may ask you to discuss some recent research, read an abstract, attend a lab meeting, or otherwise attempt to see how well you “think like a scientist.” Understandably, these types of interview activities may be scary (Huh? You want me to comment on this paper right here on the spot?!), but there are a few quick tips to help you do well on these types of questions as well.

4.7 Questions You May Be Asked

- Tell me about your research interests
- Tell me about a paper (i.e., study) you recently read and what you thought were its limitations
- Tell me what excited you the most about your prior research experiences

- What are you looking for in a graduate program?
- Tell me about a time when you struggled to succeed and how you handled it
- What might you like to do after you get your doctoral degree?
- What may be a study question you would be interested in examining if you were in this lab?
- Can you discuss a time when you had to work together in a group, and what approaches worked best?
- Tell me about yourself – what are your interests and hobbies outside of psychology?

First, remember that psychological science is about asking educated questions. When you are asked to share your impressions of research, your responses are likely to take the form of a question. For instance, you may want to know how a variable was measured, why the sample was selected to include/exclude certain potential participants either intentionally or inadvertently. You might ask whether other variables or theories had been considered, or perhaps consider alternate interpretations to the conclusions that were offered by the author. In some cases, your questions may be directed right back to you (i.e., “Good question – why do you ask? What do you think?”), so be prepared to speculate if you are asking a question.

Second, most scientists find that their ability to think scientifically is aided by (a) prior literature in psychological science; (b) prior literature in other areas of science or academic discourse (e.g., maybe your history or biology class!); and (c) their own intuition based on their own lived experiences. As researchers, we often take care to acknowledge that our own lived experiences may reflect our own personal biases and cultural lenses, so we don’t want to be overly reliant on them. However, these experiences most certainly can form the basis for hypotheses or for challenges to the conclusions made by others, especially those with substantially different lived experiences. Thus, it is totally acceptable to draw upon your own notions and impressions when responding to questions about prior research – doing so can be an excellent way to demonstrate how you think like a scientist.

Last, remember that indeed there are no “right” and “wrong” answers when we are asked to state our opinion about psychological science. And having no ideas may be worse than having a bad idea. So, it is important to speak up about what you are thinking, try and use evidence (something you remember learning, reading, or some way your experience may provide counterfactual evidence) to back up your points, and state your opinions in the form of testable hypotheses. No study is perfect, even those that have been published in the most prestigious journals, and literally every area of inquiry would benefit from new points of view. Your ability to express your point of view scientifically is exactly what is being assessed in exercises such as these.

4.8 Other Interviews

You will not be talking about research in all of your interview meetings. In fact, this may occur mostly with your potential mentor (i.e., the person you requested to work with), yet, there will be other interviews scheduled during the day with other faculty and

students. Some of these other folks may have research interests far from your own, and you are not necessarily expected to be knowledgeable about all of their work. So, what will you talk about?

Often, the purpose of these interviews is twofold. First, the program would like to get to know you better to determine whether you are a good match to the overall ideology and “vibe” of the program. Are you competitive or collaborative? Do you seem very research-oriented or clinically focused? Do you seem interested in this program?

Second, these interviews are meant to give you a chance to learn as much as you can about the program and your advisor. Be sure to ask lots of questions to help you learn exactly what it would be like to spend the next 4–6 years in this new environment. When meeting with students, be sure to ask very direct questions about your potential mentor, their availability, style, and expectations. Students will give you the most direct and helpful information. Make sure you use this opportunity to get information very well!

4.9 Other Factors

A few other issues to keep in mind during the Interview season:

1. Interviews can be exhausting. You may have a day of “chain” interviewing – i.e., each meeting may end with an introduction to your next interviewer, or you may have just a very brief break between each meeting. Be sure you give yourself a break, if needed. For most folks, it is difficult to be “on” for many hours in a row, and if you need to excuse yourself to use the restroom, take some notes, process the information you just heard, or eat a PowerBar on the run, it is perfectly OK to do so. You may want to plan for this in advance.
2. Bring along a nice leather folio of sorts that you can carry around with you during the interview day. This will give you something to do with your hands. Fill the folio with a few copies of your CV (occasionally, someone may ask for a copy), some notes on the faculty members’ research, and your list of many, many questions. It is perfectly appropriate to open your folder and remind yourself of a few questions in the middle of an interview. No one expects you to have everything memorized. It’s also OK to jot a note or two down while talking. As long as you are able to engage in a comfortable, socially skilled conversation while you do so, feel free to refer to this folder throughout the interview day if you think it will help you stay focused and sharp.
3. **Everyone you speak to is part of the admissions process.** The faculty, the students, the staff, all will be part of your graduate program environment and all have valuable information to share with the admissions committee. And they will!

4. If the Interview Day includes an informal time for students and faculty to mill about a room and talk, take the opportunity to talk with faculty members who may not have been on your schedule. Ideally, you will end up at a program where you have a good rapport with many faculty members including your primary advisor; these other faculty members will likely be your professors in classes, and you may collaborate with them on research projects. Additionally, many faculty members will have a say in your admissions decision, and if they remember you being a friendly, intelligent, and interesting person, it can help your chances!
5. At many graduate programs, applicants may be invited to an informal reception hosted by graduate students. Although it may look just like a party you attended in college, it is not. Grossly inappropriate behavior at this party would not be wise.
6. Most programs will offer the opportunity to stay with a graduate student during your visit to their site. This is a terrific way to get to learn about the program and get to know a student well, but it is not mandatory that you stay with a student. If you do stay with a student in their home, remember that anything you tell that student may be reported back to the admissions committee.
7. Thank you notes are a very nice gesture, but certainly not required, and it will make no difference if they are sent by email, snail mail, handwritten, typeset, etc. Most commonly, students send a thank you email to a few of the people they met with during the Interview Day to express gratitude for their visit and to express their level of interest in the site. Although it is not required, it is a good idea to send a thank you note of some sort to the faculty member you are applying to work with and to the student you stayed with (if applicable), reiterating how much you enjoyed your visit and how interested you are in the program.
8. Keep in mind that you are not only interviewing for a graduate school position, you also are creating a professional network. The faculty and students you meet on interview day are the experts in your area of research who will likely be your reviewers when you submit articles and grants, your colleagues and collaborators in future symposia or projects, your search committee when you apply for jobs or postdoc positions, and perhaps even your letter-writers when you are reviewed for promotion. This realization has several implications. First, of course, make sure you act as professionally and graciously as you can throughout the application process. Second, be considerate if you find yourself in a position of declining an offer or interview. In other words, don't "burn bridges." If writing a note to decline an opportunity, be sure you express your gratitude and continuing interest in their work more broadly. You may decide that this lab or person's research is not a match for your graduate training, but your paths may indeed cross again.
9. At some point in the process, perhaps even before you have completed your interviews, you will hopefully start to receive offers of admission. A few facts:

- a. You should never, ever feel pressured to make a final decision before April 15. No program or individual should tell you otherwise; CUDCP has a list of policies that help ensure the process is smooth and fair to all involved. Be sure you review these policies!
- b. Don't officially accept any offer until you have received the details of the offer in writing (by email or mail). There's no fine print to be worried about, but it is still important to be sure that your offer is guaranteed before you start declining other opportunities.
- c. If you do hold multiple offers, it is your responsibility to try and narrow your options as quickly as possible. In other words, try not to hold more than two offers at any one time. Someone out there who is just as nervous about this process as you were is still waiting on an offer, and cannot hear the good news until you have made your decision. If you can narrow your choices down to two, and release any additional offers you may be holding, it will help the system move smoothly for everyone else.

4.10 How to Make Your Decision

If you are really lucky, you may get an offer from more than one PhD program. Wow – congratulations! But while you celebrate, you need to make a tough decision. Here's some advice for how to do so wisely.

1. First and foremost – if clinical, counseling, or school psych – pick an APA- and/ or Psychological Clinical Science Accreditation System (PCSAS)-accredited institution! This must be a top priority.
2. If you want to do lots of research during your career, it is very important to keep in mind that the decision you are about to make will affect your CV forever. Your academic pedigree, including not only which school you attend but also your primary mentor, will have a great deal to do with where you get accepted for a predoctoral internship, where you get hired, and whether you get tenure. It will be how people talk about you and your career for decades (e.g., “Oh, she's a XX University student ... one of YY's mentees”). But that doesn't mean you should pick a well-known school or a “famous” mentor, necessarily. Far more important is that you pick a context that will allow and inspire you to do great work. Sometimes that means picking the rock star who is well-known, well-networked, and well-funded. But junior folks can often be the better bet. Remember – today's junior professor could be tomorrow's superstar, and if they are active, innovative, and on the rise, that could be better than the more senior investigator that is starting to slow down.
3. Pick someplace with a climate you love. Grad school is hard. Don't select a program that makes life harder for you! Your mentor should be supportive, approachable, attentive, and caring. Your program should be collegial,

- flexible, and invested in you. If you don't sense these qualities in your interactions with folks throughout the application process, think carefully about whether it is the right environment. Remember, even if your program is located in a big city with lots of other people and places to visit for the next 4–6 years, you will probably spend a remarkably high proportion of your life in the psychology department building, and your comfort and happiness among the people inside it is very important.
4. You may have a partner when you begin this process. There's a good chance that they will not be your partner by the time you get your PhD. Think carefully about how much that relationship should influence your decision. First-year graduate students break up with the partner they moved with way more than you may think.
 5. You may be excited to get started with clinical work, and you will notice that your sites vary in the types of clinical experiences available. But remember that your biggest gains in clinical competence actually will be on internship, during the year after you finish the rest of your graduate curriculum. That's because internship offers more intensive training (40–60 hours/week, rather than 10–20 hours/week), so the learning curve is a lot steeper and you will progress much faster. Don't select a graduate school just because it has a prac or two you like. But do consider whether the site you pick has a good rate placing students at accredited internships. See this handy chart (<https://mitch.web.unc.edu/files/2013/10/MatchRates.pdf>) to look up the internship match data on different programs and don't worry about differences of only 10–15 percentile points (those are only due to small *N*'s), but do attend to differences bigger than that.
 6. You're going to be poor in graduate school. Your nine-month stipend may be only \$17–27K, and you will joke (or weep) that you are living not much higher than the poverty level. Sure, a higher stipend is attractive. But it should not be the main basis for your decision. The difference of \$5K or so between School 1 and School 2 is not a good enough reason to make a life-long professional decision (see #2 above). By the way, if you take out student loans during graduate school (many do), be sure to keep the NIH Loan Repayment Program (www.lrp.nih.gov/) in mind after you graduate. Best. Thing. Ever.
 7. Perhaps most important, think about your potential mentor and consider the commitment you are about to make. That relationship will be one of the most significant partnerships you ever will experience, at least professionally. They will celebrate with you with each exciting accomplishment, they will support in your most anxious moments, and they will be there to catch you during your biggest disappointments. I don't just mean professionally either. Those same few years that you work in the same building may also be the period in your life when you experience a whole range of life events, and that mentor is going to be with you every step of the way. In many cases, they will be available to you as a mentor for the rest of your lives. If you have been extended an offer to work in someone's lab, this is the commitment they are ready to make to you. Pick the

person who think will help make your educational experience as fruitful and happy as can be.

Good luck to everyone!

5. Frequently Asked Questions

5.1 About the Field

1. What is the general salary range for researchers/clinicians in each of the fields?

No one is making a lot of money by being a clinical psychologist! But it is probably safe to say that clinical PhD psychologists do make more than social workers, and more than master's-level counselors or marriage and family therapists. In academia, psychologist salaries largely are determined by the type of university (public, private), geographic region, and years in rank. In 2017, most brand new assistant professor salaries at arts and sciences psychology departments ranged between \$70K and \$90K. But keep in mind this is a nine-month salary. In other words, you are paid to work during the school year (although usually the checks are separated into 12 payments so you do not have to live on Ramen noodles in June, July, and August). In a faculty position, you can increase your salary from 9 to 12 months by paying yourself off of a grant or by doing summer teaching. So, a 9-month salary of \$90K becomes a 12-month salary of \$120K. A paper by the APA offers more data on faculty salaries at psychology departments (www.apa.org/workforce/publications/15-cupa-hr/index).

Salaries for doctoral-level clinicians are more variable. Depending on whether clients pay out of pocket or by insurance, whether you get paid based on what you bill vs. what you collect, whether you are paid to work as in a private/group practice vs. a staff psychologist, and where in the USA you live, salaries can range from \$60K to \$100K as a starting practitioner. The days of converting your garage into a little private practice and raking in \$200/hour are mostly gone, unless you work with a very affluent clientele in a large metropolitan area. For more information, see the APA division on independent practice (<https://division42.org/>).

2. Is it possible to be both a researcher and a clinician at the same time?

Absolutely! Very few clinical PhDs do only one exclusively, in fact! When you went to college, you probably saw psychology professors who did mostly teaching and research. But only a minority of clinical PhDs go into this type of academic position. Psychiatry departments (e.g., hospitals, VAs) hire many psychologists. These jobs typically include some proportion of clinical vs. research work (20–80 percent, 50–50 percent, or 80–20 percent). Sometimes you can obtain a research grant to help “buy out” some of your clinical responsibilities. These days, many graduates will obtain first “jobs” rather than a first job, by getting a few piecemeal positions that help fill full-time responsibilities. For instance, you can teach a course somewhere as

an adjunct faculty member (maybe \$5–8K for a course one semester), see some private clients while obtaining your final licensure, help someone on their grant for some consulting money, and run some group therapy at the local inpatient unit. In many cases, there are jobs available that already have pieced many of these activities together.

3. After obtaining a doctoral degree in clinical psychology, is it possible to be a researcher for a few years, then become a clinician?

Sure, but it is more difficult to do the reverse. To maintain a successful research career, you typically have to stay active in the literature (as a reader and contributor). Also, remember that studies take a long time to propose, run, and write up (if you apply for a grant, collect longitudinal data, analyze the data, write it up, and then publish it, it could be as long as 5 years from start to finish!). So, it is hard to do research full time after a very long gap of inactivity.

Many researchers maintain active clinical work, however. A fairly sizeable proportion of your clinical psychology professors probably see clients one or two evenings or days a week. Most also supervise graduate students' clinical work.

4. What is the lifestyle of a clinical psychologist in academia or private practice?

My unbiased position is that it is the best career in the world! In academia, you are your own boss, you work on whatever is most interesting to you, you are paid to study and teach what excites you, you get to interact with enthusiastic students, travel a lot, and set your own hours.

Academia comes with pressures, however. You need to publish, get grants, and teach well to get tenure. These are difficult tasks, and your success in them is not totally based on your own merits (e.g., some is determined by the idiosyncratic review process). Most activities in academia come with very delayed gratification. As mentioned above, some projects take years. Lastly, it is important to be self-disciplined in academia. Having no boss means that there is only one person to fault if work does not get done – you!

Practitioners (especially if in private practice) also often can be their own boss, pick exactly which clients they would like to work with, set their own hours, etc. Private practice requires business savvy. You need to advertise and market the practice, hire staff, organize billing and insurance issues, and be aware of your liabilities in case of emergencies and crises. The rule of thumb is that every person you hire decreases your work load by 1, but increases your management load by 1. In other words, as a manager or employer, you may have to address employees' work habits, office politics, or personal issues.

Group practices and other practitioner jobs are perhaps more common than private practice. Some compromises include: shared management and business-person responsibilities, but less freedom in setting your own practice and work hours, etc. Clinicians sometimes experience the pressures of difficult clients and clinical crises, which can occur at any time.

5. What's the internship year about? Is it harder to get one as a PhD vs. PsyD?

All doctoral programs (clinical, counseling, school) require an internship experience, either full-time for one year, or part-time for two (more rare). This year involves almost exclusively clinical experiences. Although you also get clinical experiences on practicum during graduate school, this year is a more intensive training experience that allows you to immerse yourself in the role of a clinician. Consequently, your ability to learn clinical skills increases dramatically during this year. An apt analogy would be comparing the difference in Olympic training between doing a few laps one night a week for four years vs. 10 hours of training a day for one year. The former is important, but the latter will help you develop in a qualitatively different way.

The internship application process is a whole new fun experience to think about years from now. For now, just know that over 80 percent of applicants get an internship on their first attempt, and the vast majority of applicants get one of their top three choices. Some sites tend to prefer PhDs while others prefer PsyDs. Similarly, some sites prefer school or counseling psychologists over clinical psychologists. As long as you follow the advice of your program, you will be fine. For more data, see this document ([www.appic.org/Portals/0/downloads/APPIC Match Rates 2011-16 by Univ.pdf](http://www.appic.org/Portals/0/downloads/APPIC_Match_Rates_2011-16_by_Univ.pdf)).

6. What accounts for variability in the length of graduate training?

This has mostly to do with you, and some to do with the program. Some programs routinely have students apply for internship during their fourth year, others during their fifth or sixth year. This is good information to obtain when applying.

The speed at which you finish requirements is the other determinant. It's not a race! Sometimes an extra year of graduate school can help you take an extra class, practicum, collect better dissertation data, or get more publications – any of which might make you more qualified for your internship and future job placements.

7. What has been the effect of managed care on the practice of clinical psychology?

For a while, there was a very dramatic effect of managed care. Most notably, insurance companies began reimbursing a smaller hourly rate for individual psychotherapy (i.e., only \$65 or so), limiting the types of diagnoses that would allow for reimbursement, the types of therapy that qualified for reimbursement (i.e., CBT vs. other approaches), and limiting the number of sessions. Insurance companies also started requiring a greater amount of paperwork to get reimbursed, which can add up to a lot of time! These restrictions have since been relaxed a bit. However, this still remains an issue that affects how individuals in private practice conduct their business. If one is interested in private practice, it is important to be in an area that is in need of new psychologists. Given that some locations already are saturated with licensed psychologists, some newly licensed psychologists may find that they are unable to become listed on insurance panels (i.e., if a psychologist is not one of the “preferred providers” on an insurance panel, its members may have to pay a larger

fee out of their own pocket, and thus, it may be difficult to attract new clients). On the other hand, in some of these same locations, it may be easier to find people who are willing to pay “out of pocket” (i.e., not through insurance) for psychological services. Obviously, if all of your clients are paying out of pocket, insurance reimbursement rates have no effect on you at all. Alternatively, some psychologists will set a policy to not directly interact with insurance companies, but rather they will give clients a bill for services and ask clients to deal with all reimbursement issues directly.

8. What is the job outlook for clinical psychologists, both in research/academia and practice?

This is very hard to say, as it naturally depends on many factors, such as the economy, grant funding available, educational and health care policies, society’s acceptance of psychology as a field, and a host of other unpredictable factors. There are a few factors that may make it possible to offer some educated guesses, however.

As in many other industries, the Baby Boomer generation’s approaching retirement surely will have an effect on jobs available. In academia, there has been a notable increase in positions available (despite a recently restricted economy), perhaps due to the number of recent retirements. Not every retirement is replaced with a new position, however, and many institutions do not require retirement at a specific age. Thus, the effect of retirements on new positions available likely could be staggered and inconsistent. Nevertheless, when looking at multiple-decade trends, academic departments generally seem to be increasing in size. This means new positions, often at the entry level (i.e., Assistant Professor). This is good news. Especially for PhDs who are uniquely qualified for these positions.

Society’s increasing acceptance of psychology and psychological intervention suggests that more people will seek psychological services. The proportion of individuals in need who currently seek services is remarkably low; thus, there is great need for expansion here. Over the next few years, more states will adopt legislation offering prescription authority for specially trained psychologists, and this also may increase the market of people seeking services from psychologists. Clinical services may be offered by PhDs and PsyDs, as well as by counseling psychologists, school psychologists, and social workers. Clinical psychologists often are thought to be uniquely qualified for some assessment (especially diagnostic) services. If all youth in need of services sought treatment, there likely would be plenty of work for everyone. It is unclear whether the future will bring an increasing number of people to mental health providers for assessment and treatment.

Of course, many political factors may come into play when attempting to predict jobs in academia or practice. Educational policies soon will have to address the growing need for services that have been proven to have a strong effect on youth functioning (e.g., a prime example is the powerful effects of Intensive Behavioral Therapy on the prognosis for youth with autism), but these are very costly to school districts. This is an area in which child clinical psychology services are needed, and perhaps soon a system will be in place to hire many people to offer such services.

Political factors also strongly affect the budgets of the National Institutes of Health, National Science Foundation, and other organizations that fund child psychological research (e.g., Department of Education). As grant dollars increase, funds to support faculty salaries, graduate student tuition/stipends, etc. also increase. Researchers are not the only people funded off grants; often psychologists in practice can be hired to conduct treatments under investigation.

A final factor worth considering in our crystal ball may be trends in the number of new psychologists who are entering the market. If the number of new graduates increases but the number of positions do not, of course this will affect the job market. For several years, many graduate programs were increasing enrollment of new doctoral candidates. This means that new psychologists will enter the marketplace about 5–6 years later, who are licensed about a year after that. The marketplace is dramatically affected by PsyD programs as well; in some cases, PsyD programs admit 2–10 times the number of students that a single PhD program produces. This creates a large number of people who are eligible to provide clinical services.

The trend of increasing admissions has leveled off in recent years. At the website for APPIC, the organization that coordinates the internship match, you can get data on match statistics (www.appic.org/Internships/Match/About-The-APPIC-Match/Match-Statistics). You will find here that about 4000 students have sought an internship in each of the past seven years, with little variation in this number. This includes clinical (about 75 percent), counseling, and school psychologists. About 55 percent of these students are from PsyD programs; all others are from PhD programs.

To students considering application to graduate school in psychology, I would say that there is good reason for optimism for jobs in either academia or practice after you receive your degree. Keep in mind that many psychologists are actively involved in two of the three main activities of a psychologist (i.e., research, teaching, practice). Attending a program that will offer excellent training should offer you opportunities to pursue whatever career you would like, with maximal flexibility and opportunity. APA's Center for Workforce Studies (www.apa.org/workforce/) offers some information on employment in psychology, across clinical and non-clinical areas.

5.2 About the Application Process

1. What is your opinion of some of the top clinical PhD psychology graduate schools?

Ah, a tricky and delicate question that I will attempt to avoid answering directly! I believe excellent training comes in many forms and at many places. As mentioned above, I also believe that excellent training is equally the responsibility of the mentor as the program, so sometimes that status or cache of the program is not as important as working with one of the top researchers in the field. Having said this, I think there is some important information out there that applicants can use to help them get a sense of the quality of PhD programs.

1. At www.socialpsychology.org there are several different ranking systems available for clinical PhD programs. Most are outdated, and none are based on measures that the field has agreed upon as reliable sources for this type of information. This also is true for the US News and World Report Rankings of clinical psychology programs, which can be found under the Health Graduate Schools section. As stated above, I think these rankings are most useful for determining what programs are in the top, second, etc. quartile. However, I don't think the fine-grained distinctions within each quartile are all that accurate.
2. As for clinical child programs specifically, it is important to determine whether you are interested in a site that offers a specialty in clinical child (and/or pediatric) training, or whether you would like generalist training with some electives in child. To obtain an internship in child, it generally is thought that it is necessary to have specialized experience in child training throughout graduate school. The Society of Clinical Child and Adolescent psychology (www.clinicalchildpsychology.org) has a directory of graduate programs in child and pediatric training. For each program, you can view a list of the number of faculty, courses, and clinical practica available in child specifically. This information may help you with your decisions. Note that not all programs are listed on here, however.
3. Each program has detailed information regarding its admitted students on the program website. By looking at the average GRE scores and proportion of applicants accepted each year, you can get a rough estimate of the program's competitiveness.
4. A final index may have to do with information regarding the predominant theoretical orientation of the program. This is quite a controversial item; here's a brief summary. Clinical psychology currently is in the midst of a transition. This transition has been ongoing for well over a decade, and reflects a gap between science and practice that has been an issue in the field of clinical psychology for many decades prior. Many years ago, clinical psychology reflected the predominant theoretical emphasis of the time, which was psychodynamic (originally psychoanalytic – think Freud – then neo-psychoanalytic) in nature. Over the years, there have been several forces (e.g., scientific achievements, societal expectations, insurance reimbursement issues) that have necessitated practitioners to provide evidence demonstrating that therapy works. As this evidence accumulated, it became apparent that therapeutic approaches representing more modern theoretical orientations, specifically behavioral and cognitive-behavioral approaches, were especially effective.

Opponents of behavioral and cognitive-behavioral approaches suggested that this conclusion was premature and inaccurate for at least two or three reasons. First, most studies examining behavioral and cognitive-behavioral treatment have been based on university samples of pure (i.e., non-comorbid) cases, often with little ethnic diversity and highly specific procedures. Thus, it is unclear whether the efficacy of these approaches might translate into effectiveness in the real world

where such homogeneity among clients and therapeutic procedures is rare. Second, the lack of evidence supporting psychodynamic approaches may be due not to their ineffectiveness, but difficulty in operationalizing some of the constructs and indices of change that are relevant to psychodynamic theory (i.e., rather than measuring observable behaviors, antecedents, and consequences, as in behavioral and cognitive-behavioral approaches, psychodynamic approaches may require the measurement of “internal working models,” “libidinal energy,” or themes of “play therapy”). A third issue that arose pertained to a perceived risk among some practitioners that the therapeutic process would become overly “manualized” and rote, as many behavioral and cognitive-behavioral approaches involve a didactic component in addition to the “process” that typically characterizes “talk therapy.”

Today, there has been substantial work demonstrating that “empirically supported” (now more commonly referred to as “evidence-based”) treatments do not need to be highly manualized. In addition, evidence continues to emerge (although more work surely is needed) that demonstrates the generality of evidence-based treatments to increasingly diverse populations. The overwhelming majority of work also continues to provide support for the merits of behavioral and CBT approaches, particularly in work with children and adolescents (as compared to adults). Although some work now examined other theoretical orientations, support remains most promising for behavioral and cognitive-behavioral theoretical orientations.

How does this all relate to graduate school? Many believe that it is outdated and perhaps even irresponsible to train graduate students in therapeutic approaches based on theoretical orientations for which there are little to no supporting data. This remains a highly controversial issue, however. Advocates of psychodynamic theories strongly assert the utility of certain therapeutic procedures and assessment instruments (e.g., play therapy, the Rorschach, apperception tests) that advocates of the evidence-based approaches firmly believe are bogus and based on “pseudoscience.” This debate will likely continue for many years.

Nevertheless, a quick browse through the websites of many graduate programs confirms that behavioral and cognitive-behavioral treatments are the primary emphasis of the majority of PhD doctoral programs in clinical psychology.

2. What are the funding sources for graduate school (i.e., tuition waiver, teaching, etc.), and how should one consider the stipend with respect to the cost of living in particular areas?

Almost all PhD programs in clinical psychology will waive tuition, usually for all years of graduate training. Most also offer a stipend, again usually for all years of training. Stipends can come in one of three forms: (1) fellowship; (2) teaching assistantship (TA); (3) research assistantship (RA). A fellowship is awarded by the university or maybe an outside body for students with very impressive credentials.

Not all universities have fellowships to offer (or to offer every year), but if you are offered admission with a fellowship, it is a big honor!

TAs and RAs are fairly similar in that your stipend is in part a reimbursement for work that you provide. As a TA you are grading papers, serving as a discussion section leader, or perhaps even teaching a course on your own. As an RA, you are assisting with research. In both cases, you usually are expected to dedicate 10–15 hours/week toward these assistantship responsibilities. Because you are already likely involved in research as a graduate student, many prefer an RA position. If the RA position requires you to do work you would need to do anyway, then this can be a useful timesaver. Sometimes, the RA responsibilities are not as closely tied to your own research, however. TAs have some advantages too. Most notably, it is good to get at least some classroom experience while in graduate school if you are interested in academia at some point.

Stipends vary considerably based on the type of school (public, private), and geographic area. One thing is constant, however: it will not be a lot of money. Many students take out student loans to help with living and professional (i.e., conference travel, registration) expenses. I've heard of some graduate applicants making their acceptance decisions based on the amount of the stipend. Frankly, this seems somewhat silly to me. The value of education at a program (and with a mentor) that matches your interests is much more valuable and important to your career than an extra few thousand dollars per year in stipend. But this is just my opinion.

3. Can you explain the dissertation process and what is expected from a graduate student?

I wouldn't get too scared off by the dissertation. The intimidating height of this hurdle is based much more on psychological factors than the practical aspects of getting the project done. By the time you begin work on the dissertation, you will have written a master's thesis, so in some sense, you already have accomplished a similar task, and now just need to do it again a bit larger in scope.

A dissertation is a document that describes your original and independent research. In psychology, these are not the several-hundred-page tomes that you hear of in other fields. Typically, the document will be about 65–85 double-spaced pages of text, plus your references and appendices. More important, it describes one or two studies that together address a research question. It needs to be original, but not necessarily the most brilliant and innovative idea that has ever been developed in the history of the field. It needs to be independent, but you will be submitting and revising many drafts together with your mentor over the course of a year at least. There is much more to say about the dissertation, naturally – but the bottom line is that if your referees think you can handle a PhD program, then I bet you can. It's a lot of work, but you can do it!

4. Any comments about the curriculum vitae (a format for the CV; what not to put; how much detail to include; # of references; which references to put; any professional associations that one should join; undergraduate clubs that would be good for experience; etc.)?

Actually, most people don't include a CV in their graduate school applications. Some include a résumé, and others include nothing at all. Unlike a résumé that usually is less than two pages, a CV is comprehensive, accounting for your professional life. If you include one, you most definitely should list your educational institutions, dates of graduation, and any honors you received. Do not include grades for specific courses/assignments, but a GPA is OK if you must.

The CV is good for advanced applicants who have some presentations or publications to report. If you do list these, be sure to use APA style (<https://apastyle.apa.org/>)!

Applicants also sometimes list research experiences and clinical experiences on their CV. Specific extracurricular activities not related to psychology are frankly not very important in the overall evaluation of the application.

5. If I take more than one year off after undergraduate school, will that hurt my chances of getting into graduate school in clinical PhD programs?

Probably not, although it does depend somewhat on what you did during your time off. If you spent most of the time appearing on reality shows and traveling with the circus, you probably will have a harder time convincing the admissions committee of your serious intent to pursue graduate study. If your efforts were directed toward academic goals that demonstrate your commitment to psychology, that can work in your favor. Most importantly, it is great to show that you have gotten some research experience during this time out of school.

Sometimes people apply to graduate school as a career change. This is fine, and many applicants are successfully admitted a little later in life. A thorough and convincing rationale is needed in the personal statement in these cases to demonstrate that you understand what clinical psychology is all about, and why you want to change careers. This doesn't have to get too personal, of course, but it is important to make it clear that you have thought through this decision and are knowledgeable of the expectations for you as a graduate student.

6. How do I get a full-time research position after I graduate from undergraduate education?

Unfortunately, there is no standardized system or procedure for obtaining this type of position. There are two things you can do to be successful. First, tell all faculty you know that you are interested in a position. Faculty are inundated with listserv postings for these positions, and if they have you in mind, they can forward the ads to you. Second, do some homework on what kind of research you are interested in. Find out who is doing work in this area (you can ask faculty at your school for some help on who these people are), and then send them an email in late winter or early spring expressing your interest. Sometimes faculty know that they have a position available. Other times, they may be waiting to hear about a grant and will not be able to promise you

anything until months later. The more flexible you are on things like salary (most pay in the \$20–29K range), start date, etc. the better! It often is helpful to send a résumé with these email requests. Even better – if you know of a faculty member who can send along a quick informal note to the person you’d like to work with, that quick note can go a long way!

7. What are some good, insightful interview questions?

It’s always great to express enthusiasm in the interview site, and in working with the designated mentor. The mentor is probably concerned about whether you will accept an offer should the program extend one to you, so enthusiasm is good.

Otherwise, the best questions to ask are informed questions about the research you will be conducting with the mentor, or about the program. Both convey a maturity about the applicant and also a little bit about “how you think.”

Questions about research do not have to be highly specific, or simply reflect the fact that you read and memorized an article. Remember that any article you are reading was written at least two years ago by the faculty member, and their current work may no longer be reflected in that article. The faculty member may not even remember the specifics of any one specific paper!

However, questions that reflect your ability to think about research questions, and perhaps add something to the research team, are always good. Yikes – that sounds intimidating, I know! But as an interview invitation probably means that you have some past research experience, perhaps the best way to think about this is to draw upon your accumulated expertise to keep the interview going. For instance, you may say, “When I was running subjects on the treatment study with Dr. Someone, I noticed that most kids we recruited came from maltreatment backgrounds. Is that something you have explored in your work on depression?” Or, maybe you could say, “I have been very excited by the opportunities to work in a hospital setting this past year. Do your studies on cancer treatment ever involve recruitment of nurses?” Again, these kinds of questions help you demonstrate how you think a bit.

Coming up with a series of multiple questions to ask on interviews should not detract from the general mission of your visit, however: be yourself and learn about the program. This sounds trite, but remember – you will be working with this mentor on a daily basis for four years, and then perhaps some more after you move on to your next career step. Fundamentally, your interviewer wants to get to know you and your work style in a way that simply suggests that you will be a good fit for the program and the lab.

8. To how many schools should I apply?

I have heard that many people apply to about 12–20 clinical PhD programs these days. Obviously, this will vary based on what sites look like a match, what personal or geographic restrictions you have, and how competitive your application is. But this seems like a good ballpark number to work with, and if you get interviews at even half, you will be plenty broke and exhausted by the end of spring!

9. What if I don't get in the first time? Is it useful to reapply? Should I reapply to the same schools/mentors?

Yes, and yes – particularly if you have some more research experience! But don't only reapply to the same sites – pick some new ones as well. Also, you may be able to get some frank feedback from programs about how far your application was considered in the process. If you did not meet educational requirements, obviously it does not pay to reapply unless this changes dramatically. Programs often cannot give personalized feedback, so it may be best to only request this information at a single site, and then only if you have few other clues as to why you were not accepted.

PART II

BEGINNING YOUR CAREER

3

Your First Year of Graduate School

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You got into graduate school! Hooray! Before embarking on a multiyear journey, it's worth a moment of self-congratulation for this extraordinary achievement. It's the culmination of everything you have accomplished since, well, kindergarten. It's also worth recognizing that you did the hard work needed to survey your interests, discover your passions, and determine what field most deserves your talent and energy throughout your professional life. It's fine if you don't know what you'll do with your degree yet – that will come once you have had more experience over the next few years. For now, be excited that you chose psychology – a field that has the potential to understand and improve people's lives through a focus on literally every thought, feeling, and behavior for literally every minute of every day for every human on the planet. No other discipline can say that, and soon you will be an emerging expert in this most exciting field.

But back to celebration for a moment longer. It is harder to get into graduate school in psychology than most other areas of graduate study, at least in the US. Data are not available for every subdiscipline, but for doctoral programs in clinical psychology, for instance, only 8 percent of applicants get into US programs, and during the pandemic that proportion got a lot smaller as the number of applications nearly doubled. That means that your admission to graduate school may have been harder than getting into med school, law school, or even veterinary school, which means that you have some unusually advanced skills and experience that will most likely be sufficient to ensure you will thrive over the next few years. While admission into these programs is a uniting factor for successful applicants, each student comes in with varying levels of experience, presentations, and publications. You may be tempted to compare yourself to others on these metrics during your first week of classes. Don't. Each applicant was selected for admission based on their potential to excel in our field, and most of those metrics reflect the generosity of mentors more than students' potential anyway. Be assured that if you were admitted, you deserve to be in graduate school as much as everyone else. (See Chapter 5 on Imposter Syndrome to help you understand why it's normal if you sometimes doubt yourself.)

What should you expect during your first year of graduate school and how can you be successful and happy for the next 12 months? That's what this chapter will touch upon below, with a focus on graduate coursework, some thoughts about your general demeanor and sources of support now that you are on the path to a graduate degree, and some discussion on getting started with research.

1. Graduate Coursework

For many first-year students, graduate coursework may present a confusing paradox. On the one hand, succeeding in courses is kind of in your wheelhouse. It was probably your ability to complete reading assignments, write essays, study for exams, and get good grades that led you to get into a remarkably competitive graduate program. Most programs also contribute to the illusion that coursework is what graduate school is all about; it is common for many first years to take about three courses in each semester of their first year, which leads many people to determine that although this is a lighter courseload than you had as an undergrad, these are graduate courses and thus perhaps more advanced, requiring you to dedicate even more effort on them for your first year. Indeed, these classes can be time-consuming – they will soak up whatever time you allot to them.

Therein lies the paradox, because in actuality, most professors would agree that your coursework actually represents a relatively less important aspect of your graduate training. Of course, it's not that coursework is unimportant, and you certainly should not ignore your assignments. It's just not your main focus. That's for two reasons. First, it is completely expected that you will pass these courses. The graduate school selection process usually is successful in admitting high-achieving, scholastically inclined, and perhaps even perfectionistic (more on this later) students, each of whom has a long history of getting good grades. Assuming you apply a reasonable amount of effort and bring your well-established intellect and thoughtful inquisitiveness into each class, you will do fine. I would not lose sleep over a graduate-level class midterm or final (except perhaps in statistics), because these classes are not expected to yield great variance in students' performance, and it is widely assumed you will do fine just by being the student you have become in the last 17 years of formal schooling.

But note that there is also a second reason why graduate coursework should not be your main focus: no one will ever see your grades. No internship, postdoctoral fellowship, or eventual job application in academia, practice, or industry will ever ask for your GPA or graduate transcript. (Note: If you apply for a training grant from the National Institutes of Health, they may ask, however.) No one lists a graduate GPA on their CV, and no one will care what grades you got. In fact, some graduate schools don't even assign formal grades of A, B, C, etc. but rather list Pass vs. High Pass. Now, again – a quick caveat. You should not aim to fail these classes. In fact, most graduate schools will put you on probation if you get a "Low Pass" grade and will expel you for a "Fail." But under the assumption that this chapter is being read by a student with a long history of academic success, a strong work ethic, and a small

dose of perfectionistic tendencies, it is safe to say that you do not need to worry about your grades.

You may be wondering – what is the best orientation to have in graduate coursework, then? It may be worth thinking of your coursework as a context to get exposure to a wide array of theories, findings, approaches, and techniques to expand your thinking in psychology. Probably for that reason, graduate professors are known to offer far more reading assignments each week than any human could possibly complete thoroughly, and each class session is dedicated toward group discussion about these readings to expand your mind and debate the concepts referenced therein. Your understanding of the facts is important, of course, but your ability to engage with the material – question it, apply it, discuss it – is often emphasized more, with graduate training focused on seeing “how you think,” and helping you to become a questioning, informed scholar rather than a regurgitator of facts. It’s good to speak up in graduate school and it’s great to challenge concepts you’ve read about, and point out their limitations. It is NOT great to have your computer opened to surf social media during class, even if you got away with that as an undergrad. Remember, your goal is not to know enough material to get an A; it is to discuss and think about the material in a thoughtful way. Perhaps for those reasons, your assignments will be essays and term papers, and rather than discussing your grades at faculty meetings, your professors will discuss how well you explained and questioned concepts in your written work and during class.

With the exception of your statistics classes in your first year, there is not a lot of studying, per se, in graduate coursework, and truth be told, not all students have completed all readings before all classes (i.e., splitting up readings and trading outlines among classmates is a common practice). But there is a lot of information to digest. In many training programs, graduate training is conceptualized as helping you to progress through three levels, which can be conceptualized as a pyramid perhaps. Those levels are based on the concept that in graduate school your training is meant to help you gain exposure, experience, and expertise. You start at the bottom – the widest level – gaining broad exposure to tons of concepts and ideas (thus, many classes with an abundance of readings). By your second year, you are already taking only two classes a semester (with perhaps zero to one class each semester in your latter years of graduate school), but delving further into your research, teaching, and/or practice where you can apply the information you have been exposed to and gain practical experience. As the pyramid shape implies, you won’t get to experience everything you had exposure to, and there will be some areas of psychology (or some ideas within your area) that were foundational but never lead to applied experiences. That’s ok, and there’s no reason to worry that you are ill-prepared or missing out. Your exposure is supporting your future experiences and will inform your work for decades to come. Similarly, your expertise will represent only a thin sliver of all you were exposed to, or all you experienced. For most students, this expertise comes from your work on your dissertation – the topic of which may be the one area you will feel an expert in when you graduate. This truly is the pinnacle of your graduate school journey and note that it is not based on a class; it

is informed by the material you were exposed to in your coursework, and emerged from your experience, but reflects a narrower focus and specific question for which you are one of very few in the world that can claim to be an expert.

In other words, you don't have to stress out over your coursework as a first-year graduate student, and you are not expected to dedicate excessive energy toward becoming an expert in each class, or on each assignment during your first year. Graduate school is hard enough, and this year should be dedicated toward the enormous adjustment it takes to become a new kind of student. Save some energy to focus on those areas of adjustment below, and trust your well-honed academic skills to be sufficient when it comes to graduate classes.

2. Time Management, Combating Perfectionism, and Getting Support

If you are not hyper-focusing on graduate classes, then what are you doing during your first year of graduate school? Of course, your first year will include a start to your independent (yet, mentored) research career (more on that below), but it may be worth conceptualizing this year as an adjustment year, which includes a focus on skills that are not formally taught, but will be sorely needed for you to succeed in a career in psychology. It has been said that (ok, no it hasn't, but we are saying it now) that the greatest accomplishment in your first year of graduate school is to develop work habits that will guide you for decades to come.

Graduate school will ask more of you than anyone can achieve. This is not meant to inspire a challenge; this is a fact, and it is one that requires a substantial change in your approach to your graduate career, and perhaps your professional career for years after that. Put simply: you are intentionally being tempted to bite off more than you can chew so you can struggle a bit and learn a new way of chewing. During graduate school, you will learn that you cannot accept every opportunity, you will not do your best on every task, and you will experience critique and rejection. This is a good thing. If you did everything perfectly the day you got there, then you would get the PhD upon admission. You are supposed to fall on your face, get substantial revisions on most of your drafts, and have to redo your work, sometimes from scratch. In graduate school, you should have learning goals, not performance goals. If you strive to be perfect at everything in graduate school, then ironically you have failed in understanding the point of your education. Instead, strive to learn as much as you can in graduate school, and remember that we often learn the most after we stumble.

These challenges will not just come from your formal graduate training. Moving to a new city or state, as is often required, is strenuous on its own. For some, going to graduate school often necessitates leaving behind friends, family, and loved ones. For others, graduate school occurs during the same life stage when we are living truly independently for the first time (i.e., not in a dorm), when we form stable, enduring romantic relationships, or fully realize sexual and gender identities. We are managing a budget to live on (often coming from a small stipend), and beginning to accrue substantial student loan debts. It is the time when we have to keep an

apartment, develop a life outside of school that is not created for us by campus life administrators, and develop hobbies that help us find respite. These are the years when parents or grandparents may experience severe illnesses, our siblings may begin to have children, we may be exposed to significant life events, societal stressors, or face new forms of discrimination. It is also a life period when research suggests we may be susceptible to the onset of some types of psychological symptoms. It is a time psychological research refers to as emerging adulthood and all of this is layered on top of a rigorous, demanding, multiyear course of study.

Before we discuss the ways to handle the new work- and lifestyles that graduate school demands, the importance of keeping up with your physical and mental health cannot be overstated. Many graduate students seek psychological treatment to focus on emotional wellness. Your program (or more advanced students) might have recommendations for providers in your area. You will be much better positioned to deal with the demands of graduate school if you make a conscious effort to take care of your body with exercise, regular and healthy meals, and adequate sleep. It sounds simple, but with the potentially consuming nature of your new responsibilities, it's easier than you might expect to neglect these areas. It will take time to find balance, but you will be better off for it.

You have a lot to adjust to, and one piece of this is the experience of setting your own schedule, determining when and how you best work on graduate school tasks, and developing self-directed initiatives to take on many responsibilities, often without the structure of externally imposed deadlines. It's important to note that you are the one managing your own work; that is, you likely won't have a structured list of tasks laid out for you by somebody else. You also are responsible for setting your own agenda and holding yourself to it. That's a new experience for most people, which means that you are not expected to know how to do it on the first day of graduate school. In a given day during your first month of graduate school, you may have class readings to complete, lab meetings to attend, research ideas you would like to explore, perhaps grading or research responsibilities to finish to earn your stipend, as well as the need to start determining the topic of your master's thesis, and the daunting notion that there have been about four million articles published in APA's PsychInfo database, a few hundred of which you will eventually need to read, comprehend, and critique.

That list may make you feel overwhelmed just by reading it, but you can handle it! You may run into trouble, however, if you attempt to do it all at once, if you expect to do it all perfectly, or if you can't get started. Let's discuss each of those issues one at a time.

2.1 Time Management

No one takes a course in time management skills. We all kind of test out new ways to impose structure, deadlines, motivators, and reminders into our chaotic lives and we find our flow when we discover which techniques work best for our own workstyle. As a first-year graduate student, you have a system or habit that got you

into graduate school . . . but it may or may not work for you now. Your first year is a time for experimentation, and you should expect that it may take that entire time (or longer) until you have figured out what works for you. Some people use project management software to set deadlines and compile notes they need to keep tasks moving forward. Some have elaborate systems of post-it notes stuck to their computer monitor. Others set daily, weekly, or monthly goals, with reinforcements (hello, frozen yogurt!) for completing tasks along the way. Ask around. Talk with your mentor. Try a system or two to see what works for you. Some graduate students set up writing blocks, and drive to a nearby coffee shop to work so they don't get distracted. Others prefer to stay up late at night when emails slow down to get some focused time. Some like to plan to draft a paragraph a day and others like to binge-write until an entire paper draft is completed. Just as you are not expected to know how to grade papers, write manuscripts, or run new types of statistical analyses yet, you are not expected to know the best approach to use to accomplish these tasks. It may be a good idea to let your mentor know that you are experimenting so they can support your approach and maybe even offer tips. It will also be a good way to communicate that you are adjusting well to the new demands of graduate school and learning about your workstyle. As your workload increases in later years, you may need to adapt or altogether change your system. But this "meta-understanding" of how you work, and what works for you, is a process that helps you be productive and learn about yourself in a way that will let you understand your strengths, challenges, and when you need to ask for help.

2.2 Combating Perfectionism

As you work through this process of managing your time, you are also collecting data informally on how much time it takes for you to complete tasks. This is a very important piece of your first year of graduate school because it will provide the information you need to help combat perfectionism. As noted above, you simply can't do all that is asked of you, and you can't do it all at your best. Reread the prior sentence a few times until it really sinks in, please, because this may be the hardest lesson you learn. You have been positively reinforced for doing your best since the day you were born. But you can't do your best at every task now that you have reached this level of training. The plain truth is that you're going to have to half-ass a few things on your list, knowing that *your* half-ass is probably still an A-level of quality in the grand scheme of things.

Imagine you carve out a day to write an abstract for a poster presentation submission. Could you spend an entire 8 hours working on this task? Sure! Could you spend 3 days on this task? Absolutely. Will there ever be a point when you will look at your draft and say, "This is perfection! Beyond reproach! Every word is gold!" Nope. The fact is that at some point your work has exceeded the bar necessary for the task (i.e., in the case of an abstract for a poster submission, note that over 75 percent are usually accepted at most national conferences) and extra time you

spend on it is either unnecessary, or it is suffering from diminishing returns. In other words, you are improving the work less and less with each passing hour.

The same goes for planning a class lecture, grading papers, reading for class, and so on. Some of these are tasks you want to apply your full perfectionistic tendencies toward. But you can't do so for all of them and one of the best things you can learn during your first year is an understanding of how long it takes you to do a good (maybe even great), but not *perfect* job on each kind of task. If it takes you about 5 hours to write a poster abstract, schedule 5.5 hours to get it done. Even if you have all day, don't let yourself obsess over it. Finish and move on. By the end of your first year, you might start learning more about your rhythm and you will have amassed a few cognitive-behavioral "exposure" exercises demonstrating to you that when you turned in your "good" or merely "great" work, the world did not collapse. This may sound easy, but after a lifetime of praise (including at the start of this chapter) for doing excellent work, it may feel quite uncomfortable for some to go to sleep knowing that you did not complete the days' tasks as completely and perfectly as you are used to. But getting used to that feeling is in some ways what graduate school requires.

Some students feel fine about "good enough" work on lower priority tasks, but get particularly anxious when they must share their work, for fear that it (or they) may be evaluated negatively. This means that perfectionism kicks in when work will be seen by an instructor, a clinical supervisor, or perhaps especially by a mentor. While all teachers, supervisors, and mentors are different, it is probably safe to say that they will be most impressed by growth, rather than perfection right out of the gate. In other words, it is "safe" to show your mentor work that does not represent your best, especially if you communicate where you think improvement is needed, what you are learning and struggling with, and request support as you strive to improve. Mentors prefer to review imperfect work and help students learn new skills than to see students paralyzed or delayed by unnecessary self-imposed expectations. In fact, the discussions about the struggles to make progress or the areas of growth that are needed are often the most rewarding aspects of mentoring for many who chose this as a profession.

An especially productive conversation during one's first year of graduate school is to talk explicitly about the concepts articulated in this chapter, so you can get candid input from your advisor about their own tips for surviving their first year of graduate school. How did they learn to balance multiple tasks? What do they feel is worth your highest (and next highest, and so on) priority, and what do they feel will offer the most benefit to your education? How long do they spend completing specific tasks, and where do they feel that moderate effort is sufficient to get the job done and turn to higher priority activities? You may learn a lot about your mentor's workstyle from a conversation like this, and your mentor may appreciate that you are thinking so deeply about the processes required for successful graduate life.

Conversations like these with your mentor will aid one of the most important parts of your first year – you and your mentor getting to know each other and how you work together. This is the start of a years-long, and hopefully lifelong, working

relationship. Many first-year students may initially regard their professors as unapproachable experts and often feel funny about calling them by their first name (as is customary in graduate school). Yet unlike an undergraduate professor, your mentor is there to support you through the entire experience of graduate school, which includes not only the struggles with perfectionism and time management discussed above, but also someone to help you find resources and make your life easier when inevitable stressors emerge. Mentors hopefully will not be pushy, or pry into your personal life, of course, but they may share some information about their own lives in an effort to model natural struggles in academia, and to demonstrate coping skills. Talking with other graduate students is a great way to learn about a mentor's workstyle and mentoring style, and like all relationships, an open channel of communication will allow you to be more efficient, productive, and satisfied with your mentor. This also includes an honest conversation about the boundaries that allow you to feel most comfortable in this relationship.

2.3 Addressing Procrastination

How long was it from the moment you were accepted to graduate school until the moment you first thought: "Holy crap, I have to write a whole dissertation!?" Or did that moment happen just now when reading the preceding sentence? Most students realize the graduate school is a big deal and in addition to the dissertation, there are several important hurdles that each may feel like a big deal (i.e., your master's, your first presentation in front of the faculty, your qualifying exams, your first patient) – so much so, that it may be hard to get started. This happens to many smart and accomplished people, and it does not reflect weakness or disorganization; it is a sign of respect that you have for the heft of the task before you and your desire to do well. If that pause before working is helpful and allows you to organize your thoughts before working, then all is okay. But if it starts to interfere with the ability to work at all, then it has officially become procrastination.

A note on procrastination and coursework: it can be tempting to use graduate coursework as a way of procrastinating or avoiding one's own research. This may be a deceptive form of procrastination, as you are still working on something you need to do, but prioritizing coursework before research can be a way of avoiding the more difficult (and, arguably, more important) task of working on one's own research. Further, students may take comfort in coursework because grades provide semesterly feedback, and validation for students' efforts, something that may be sparse in other aspects of graduate school. While coursework may feel more manageable, straightforward, or familiar, setting aside protected research time is critical. For instance, some students may find it helpful to dedicate specific days to coursework and others to research, or to set time limits on course assignments.

There should be no "all-nighters" in graduate school, or other last-minute strategies to complete your work, because this is not sustainable for your career. As noted above, this is a time to develop habits that will last you a lifetime. You may have never completed tasks like those assigned to you in graduate school; thus, you

won't necessarily know how much time you need to complete each one. Large tasks can be easily chunked into smaller bits, colloquial drafts can be polished later, and voice memos in your phone can be transcribed later to help you turn what you may find easy to talk about into written prose later, without the experience of a blank screen staring at you judgmentally (note: writing "private drafts" to express what you are really thinking before you start writing the version you will turn in also is a remarkably effective strategy to get started when one is "over-thinking" their work). Procrastination also can be driven by exhaustion or burnout; taking regular breaks is critical. Stepping away from work is important not only for one's mental health, but also for productivity and for idea generation. Students who have never procrastinated before may find strategies like these helpful when they encounter their first "block" or resistance to working in graduate school. If this happens to you, take it as a good sign. Your strategies in secondary school and in college should not work for you here. This is graduate school and it is not the same type of "school" at all. It should feel different; you should be challenged in new ways; your drafts should have so many track changes from your mentor that the page looks like it is bleeding; and you should feel like you could easily become overwhelmed with opportunities and projects to complete. That's how we grow in graduate school.

3. Getting Support

Graduate school is not quite like medical or law school, and is very different from a full-time job that one may get in the business world, or at a local commercial establishment. It may be hard to find support because it often takes so long to explain to people what exactly your life is like now. Your fellow graduate student peers may be an outstanding resource for you as you begin.

Graduate school represents a period of unprecedented change and growth for many of us, and having others to commiserate and empathize may be a social necessity. If you have entered your program with other first-year students, this cohort represents a group of individuals who will most likely have similar interests, ambitions, and prior experiences. As discussed earlier, first-year graduate students are thrust into a brand new social environment, often without the comfort of their close friends nearby. Luckily, most others in your class also likely have recently vacant social lives, providing a mutually beneficial opportunity for friendship. These individuals can uniquely relate to the trials and tribulations that may arise during the first year of graduate school. Additionally, growing close with your fellow graduate students may confer unique academic opportunities. Having a small group of individuals to share ideas related to coursework or research is enormously beneficial. Fellow first years also can provide expertise in their specific niches, and thus are valuable resources for fresh perspectives and collaboration across a variety of diverse topics. Indeed, brainstorming creative ways to intertwine your own research interests with those of your peers can lead to exciting projects which may intersect multiple subfields of psychology. But of course, beware – these interactions with your peers are also fertile ground for social comparisons, particularly if your friend

asks you if you're planning on applying for some fancy grant you've never heard of, or mentions they are pulling together a symposium for a conference while you're working on your first poster. Try to turn these moments of intimidation or insecurity into inspiration. Everyone learns and reaches milestones at different rates and it will be all the more sweet when you can motivate and celebrate each other. Anecdotally, it is more common than not that the student you were in awe of as a first year will tell you years later that it was you that seemed intimidating to them.

4. Starting Your Research

You talked about research in your graduate school applications, you discussed it in your interviews, you have tried to explain it to your family and friends a zillion times (“No, it is not just searching for things on Google”) and now you are here, and everyone says you are supposed to get started doing research.

Umm . . . do what, exactly? How do I start doing this, and why does everyone talk to me like I understand what 'research' is already?

If you are a first-year student who has had this thought, know that you are not alone. Many first-year students have had experience assisting graduate students or faculty with their own work, but many have never been an “independent” or principal investigator on their own. So you may feel ready to “run subjects,” supervise undergrads, or search PsychInfo, but you may not feel like you are clear on the steps needed to start your own research program. This makes the first year of graduate school potentially challenging and anxiety-provoking.

Let's start at the very beginning. As a first-year student, “doing research” could mean a million (well, ok, actually about a dozen) different things, including reading articles on topics that interest you, learning about available data sets in your advisor's lab, reading the study protocol from recent studies done by your peers and advisors, reading the human subjects or grant applications that support your lab's work, watching videos of prior subject “runs,” running some simple descriptive statistics (e.g., means, correlations) on available data sets, watching conference presentations online, or just sitting around and thinking of hypotheses that could be interesting to test. As a first-year graduate student, all of this “counts” as research, and it is probably useful to establish a foundation of knowledge about prior work in the field, extant resources, and a self-assessment of what excited you the most. Particularly essential – ask tons of questions of your peers and mentor about their recent research: what did they study, why, how did they think about prior work in the field, how is their work unique, where do they think the field is going, what were their initial ideas and what pitfalls did they experience, what have they recently discussed in the lab, what other investigators do they follow, and so on, and so on. You find yourself now in an exceptionally rich intellectual environment, surrounded by faculty and students. Use the people around you as resources. In addition to learning from their answers to these questions, you can and should explore collaboration possibilities, ask for help,

ask them if they have access to the software you need, bounce ideas off each other, share skills, or just enjoy their friendship and social support. If the first year of graduate school is meant to develop your ability to “think” like a researcher, then these conversations will be enormously helpful to achieve that goal. Don’t worry about bothering people, because enjoying these types of discussions is likely a large part of why they are in academia to begin with.

Based on your lab, and how data are collected, analyzed, and prepared for presentation/publication, you may have an opportunity (or requirement) to begin coming up with your own research questions. See the sections above in this chapter about the best way to get started with this task, without becoming plagued by time management challenges, paralyzing perfectionism, or procrastination. It is helpful to develop a system for keeping track of ideas, whether in a notebook, spreadsheet, or other format. You may also consider saving relevant research articles or identifying and following researchers whose publications interest you. In fact, if you feel comfortable thinking of research ideas early in your first year, or by the beginning of your second year, you may want to even consider applying for a graduate fellowship. This is briefly discussed below. Lastly, the research idea phase can seem daunting, undefined, and limitless; it may be that starting a project (e.g., a fellowship application, publication) even before you have finalized your research focus is necessary in order to move forward. Often research ideas are developed in the writing process, and beginning a project can help when the brainstorming phase begins to feel stagnant.

Once you begin writing, you may notice an interesting quandary: most scientific writing in our field has an authoritative and didactic tone, often using statements that seem to capture an entire field or trend with decades of knowledge behind it (e.g., “For a scientific discipline focusing on the study of behavior, it is ironic that so few investigators have examined the behaviors that best predict scientific productivity”). Yet, first-year students almost never have the experience to encapsulate an entire body of literature with statements such as these, making it hard to write in the manner that academic scholarship may require.

This is one reason why it is so common for even fantastic writers to go through many, many drafts when they begin writing scientific presentations and publications in graduate school. Each draft leads the writer back to the literature to learn more, which helps inform both changes in the content and writing style of the next draft, and so on. Nevertheless, first-year students can rely on two tips to help them accelerate the development of their scientific writing acumen. First, a terrific and recent review paper (especially in a high-impact journal) is worth its weight in gold. If done correctly, a paper that has well summarized the extant literature and listed areas of repetition vs. gaps has given you most of what you need to begin writing in an authoritative voice. Beware of the literature review that is not very high in quality, or in a highly respected outlet. Of course, you also need to do exhaustive searches of the literature yourself. But a great literature review can help you feel more confident that your conclusions are supported by other experts who may have been in the field for longer than you, and you can probably find many terrific papers to read by searching for the papers in this literature review first.

A second tip will send you back to your mentor's office, and that's a good thing. Mentors often have thought deeply about the field and the topic you are writing about, so it is great to simply interview them for their perceptions of the "current state of the literature." Assuming that your mentor will likely be an author on whatever you are writing in your first year, it is acceptable to include their own perspective in your writing, and even to use their words in your writing (i.e., after all, they are an author too). Some labs may offer you an informal chance to hear your mentor's perspective on the literature as you discuss recent, relevant papers. If not, then asking your mentor to talk about their opinions, their impressions of other scholars' work, and why they think your research will make an important contribution is a great way to get started. Mentors think of this as a "scaffolding" approach, to borrow a term from the parenting literature in developmental science. The mentor will give you as much structure as you need to help you stand on your own, and will slowly remove that structure or tangible support to keep you working just beyond your current skill level. Data suggest that is the way that you will keep growing, but never feel like you will fall flat on your face. Let's acknowledge, however, that this approach has two potentially negative consequences: (1) you may rarely feel fully competent while in graduate school; and (2) you may feel frustrated that your mentor is constantly raising the bar of expectations as the years progress. If this seems true for you, it is always ok to ask your mentor if you are progressing well "based on your current level of training," to help you gain your footing and know that although you are still growing, you are on track.

4.1 NSF Graduate Research Fellowship

The National Science Foundation (NSF) offers research fellowships to hundreds of young scholars, including those involved in the study of psychological science. These fellowships require only a few pages of essays (i.e., one is similar to a personal statement, the other is a research proposal). Applicants can apply either (a) before attending graduate school; and/or (b) in the first or second years of graduate school. Applicants may apply once per eligibility window; in other words, a student may apply before graduate school and, if unsuccessful, may apply once more in the first two years of graduate school. Applicants who receive an honorable mention are not eligible to reapply, and additional eligibility criteria exclude students with a master's or other professional degree (see the NSF GRFP website for more information on eligibility).

NSF applicants are evaluated differently based on how many years of experience they have at the time of applying. Applications are reviewed by 2–3 scholars with relevant areas of experience broadly (i.e., within all of developmental or cognitive psychology, for instance). An honorable mention is a prestigious honor that can be proudly listed on one's CV. Fellowship winners get three years of funding (that need not be consecutive) with a stipend significantly higher than most graduate assistantships and access to other potential resources of ancillary experiences afforded to fellowship winners. More information is available at www.nsfgrfp.org/.

Many students in psychology apply for the NSF graduate research fellowship, and it is quite competitive. So is the NIH National Research Service Award (F31 grant) that is available to graduate students when they are planning dissertation-level research. Because the preparation of the application for the NSF has become very common among students in research-oriented doctoral programs, a few tips are offered here.

First, as noted above, applicants are evaluated based on their level of training, and those with above average accomplishments are naturally likely to stand out from their peers. Often, this is evaluated by the number of presentations at national conferences or publications in high-impact peer-reviewed journals. Applicants applying as an undergraduate or post-baccalaureate typically have zero publications; thus, authorship on two may gain favorable notice. This would seem less unusual for a research-oriented student applying at the start of their second year. Applicants with impressive academic pedigrees (i.e., from top-ranked undergraduate institutions, those with very high GPAs) tend to receive more favorable scores in the NSF grant review process (a database of all recipients is available on the NSF website), although an emphasis on diversity and first-generation students in recent years may have helped reviewers move toward more inclusive academic indicators that more equitably reflect achievement across all promising young scholars.

Perhaps most important is that applicants show a lifelong commitment to science, and a strong capacity to develop rigorous and unique scientific questions. The two required essays for the NSF Graduate Research Fellowship, a personal statement and a research proposal statement, offer opportunities for applicants to demonstrate each.

Using one's personal statement from graduate school admission for the NSF application is not always advisable, whereas using one's NSF personal statement in a graduate school application can work well. That's because unlike the typical graduate school statement that begins discussing undergraduate coursework and research experiences and a specific set of refined research questions to match a specific research lab, the successful NSF personal statement essay is far grander. The narrative often starts earlier, with a discussion of a love for science that may have begun very early, a discussion of extracurricular and volunteer activities that demonstrate a penchant for science, and/or a drive to change a major societal issue or injustice through investigation and dissemination of psychological science. NSF reviewers may prefer an applicant who thinks big and has been unusually committed to a cause or an opportunity for change since relatively early in life. Successful applicants weren't only president of their local Psi Chi chapter, or recognized a variable missing from prior work on a topic; they are more likely to have developed a new student association in high school to address societal issues (e.g., world hunger, disparate access to education, discrimination, etc.), founded or led efforts for a charity, or worked across disciplines to develop innovative new directions for science. Don't worry – a Nobel prize is not a requirement for the NSF fellowship, but a more typical essay about loving psychology after Psych 101 class, or

participating in a lab before you graduated, may not always cut it. While the personal essay should primarily tell a personal narrative, it is wise to draw connections between your prior experiences and the specific research interests or aims articulated in your research proposal essay. For example, if your proposal focuses on mechanisms of emotion regulation, a strong personal statement would include discussion of prior experiences through which an interest in emotion, emotion regulation, or related constructs developed.

NSF reviewers also would like to see the potential for rigorous and innovative scientific questions within the research proposal statement, the second essay of the application. This is a peculiar essay to write because the successful applicant is not necessarily expected to actually conduct the research proposed in the application (i.e., funds are not provided to conduct a large-scale study, and as many applicants don't know where they will go to graduate school, it is unknown whether subject populations or necessary resources will be available to conduct the proposed research). Yet the application requests a specific research proposal that might represent the best possible study (not a fantasy study, but an actual, potentially feasible one) that could be done assuming reasonable research resources. Further, the research proposal should avoid an explicitly clinical focus. This is a particular challenge for clinical psychology graduate students, whose research interests, prior research experiences, and graduate coursework largely center around psychopathology and related topics in clinical psychology. However, an NSF application should adopt a more "basic science" approach and avoid focusing on clinical outcomes. This does not mean you need to write a research proposal statement that deviates radically from your research interests; instead, the NSF application may require recasting your interests into a different, though related, research question. It may be helpful to think of constructs that are relevant to clinical psychology (e.g., emotion, development) but that do not necessarily involve psychopathological outcomes. Keep in mind that you will need to select a subdiscipline within psychology under which to submit your research proposal statement (e.g., social, cognitive, developmental, affective, etc.), and that this category can help guide the angle you take in your research proposal.

NSF reviewers have plenty of experience reviewing grants, so you can expect lots of specific comments on small details in the proposed research that could substantially lower one's score. Most students work on these essays with their mentors, naturally. Mentors don't write the application, of course, but the process of discussing the proposed research is a learning experience in itself, with applicants finding the balance between their interests and real-world limitations. As with all applications for funding, it is always best to read as many successful and unsuccessful applications as possible when beginning, and to have as many readers of drafts as possible before submitting. The deadline for the NSF fellowship is typically in late October, so this can make for an active jump start to graduate school for those who apply in their first year.

5. Summary

Getting into graduate school is a huge achievement, and the start to an educational pathway that is quite different from the many years of schooling preceding matriculation. You are not expected to know what you are doing when you arrive, and your first year is likely best spent adjusting to a new university, with new colleagues, peers, mentors, and expectations. The first year of graduate school is a great time to establish habits that you can benefit from for decades to come, including the recognition that our field will ask more of you than any human could ever deliver. So it's essential that you learn how to pace yourself, set expectations that are reasonable, and find ways to be kind to yourself. You will never be less busy from this point forward, but in this year, you can learn to be someone who will keep work stimulating, find ways to be productive, yet also recognize that life is more than your career in psychology.

If the average applied psychology student is asked confidentially why they are pursuing a career in their field, the most likely answer is “to help people.” Although this answer is such a cliché that it sometimes causes graduate admissions committee members to wrinkle their noses, in fact it is perfectly appropriate. The ultimate purpose of applied psychology is to alleviate human suffering and promote human health and happiness. Unfortunately, good will does not necessarily imply good outcomes. If mere intentionality were enough, there would never have been a reason for psychology in the first place, because human beings have always desired a happy life and shown compassion for others. It is not enough for psychology students to *want* to help: one must also know *how* to help.

In most areas of human skill and competence, “know-how” comes in two forms, and psychology is no exception. Sometimes knowledge is acquired by actually doing a task, perhaps with guidance and shaping from others, and with a great deal of trial and error. This approach is especially helpful when the outcomes of action are immediate, clear, and limited to a specific range of events. Motor skills such as walking or shooting a basketball are actions of that kind. The baby trying to learn to walk stands and then falls hundreds of times before the skill of walking is acquired. The basketball goes through the hoop or it does not, providing just the feedback needed – even experienced players will shoot hundreds of times a day to keep this skill sharp. In areas such as these, “practice makes perfect,” or at least adequate.

Sometimes, however, knowledge is best acquired in part through verbal rules. This approach is especially helpful when a task is complex and the outcomes are probabilistic, delayed, subtle, and multifaceted. You could never learn to send a rocket to the moon or to build a skyscraper through direct experience. For rule-based learning to be effective, however, the rules themselves have to be carefully tested and systematized. One of the greatest inventions of human beings the last 2000 years has been the development of the scientific method as a means of generating and testing rules that work. Human “know-how” has advanced most quickly in areas that are most directly touched by science, as a glance around almost any modern living room will confirm.

The problem faced by students of applied psychology is that the desire to be of help immediately pushes in the direction of “learning by doing” even though often the situations applied psychologists face do not produce outcomes that are immediate, clear, or occur within a known range of options. Consider parents who want to know how to raise their children. There are times that poor advice can seem to produce good immediate outcomes at the expense of long-term success. For example, telling children they are doing wonderfully, no matter what, may feel good initially but the children may grow up with a sense of entitlement and a poor understanding of how hard work is needed to succeed. Similarly, a clinician in psychotherapy can do an infinite number of things. The immediate results are a weak guide to the acquisition of real clinical know-how because effects can be delayed, probabilistic, subtle, and multifaceted.

All of this would be admitted by everyone were it not for two things. First, some aspects of the clinical situation *are* and *need to be* responsive to directed shaping and trial and error learning. Experience alone may teach clinicians how to behave in the role of a helper, for example. As the role is acquired, the confidence of clinicians will almost always increase, because the clinician “knows what to do.” Some of this kind of learning is truly important, such as learning to relate to another person in a genuine way, but trial and error does not necessarily lead to an increase in the ability to actually produce desired clinical outcomes. That brings us to the second feature of the situation that can mistakenly capture the actions of students in professional psychology. Clients change for many reasons and what practitioners cannot see, without specific attempts to do so, is what would have happened if the practitioner had done something different. Many medical practices (e.g., blood-letting; mud packs) survived for centuries due to the judgmental bias produced by this process. Many problems wax and wane regardless of intervention, and some features of professional interventions are reassuring and helpful almost regardless of the specifics. Thus, with experience, most practitioners feel not only confident, but also competent, because in general it appears that good outcomes are being achieved. It is natural in these circumstances for the practitioner to respond based on their “clinical experience.”

That is a mistake. Over more than half a century in virtually every area in which clinical judgment is pitted against statistical prediction, statistical prediction does a better job (Grove & Lloyd, 2006). Yet even when faced with clear clinical failures, practitioners are most likely to rely on clinical judgment rather than objective data to determine what to do next (Stewart & Chambless, 2008). This suggests that it can be psychologically difficult to integrate the rules that emerge from research with one actual history of ongoing effort to be of help to others.

Part of the problem is that science can suggest courses of action that are not personally preferred, which takes considerable psychological flexibility to overcome. Consider the use of exposure methods in anxiety disorders, which arguably have stronger scientific support than any other form of psychological intervention for any mental health problem (Abramowitz et al., 2019). Despite overwhelming empirical support, few clients receive this treatment, and when they do, often it is not delivered

properly (Farrell et al., 2013). Dissemination research has helped explain this distressing fact. Meta-analyses show that training in exposure increases knowledge about it, but not its use (Trivasse et al., 2020). Instead, what most determines use of exposure is the psychological posture of clinicians themselves. When practitioners are unwilling to feel their own discomfort over causing discomfort in someone else, even if it will help them, they avoid using exposure methods or detune their delivery (Scherr et al., 2015). Problems of this kind abound in evidence-based care. As another example, drug and alcohol counselors need to learn to sit with their discomfort over “using drugs to treat the use of drugs” to encourage the use of methadone for clients addicted to heroin (Varra et al., 2008). Rules alone do not ensure use of evidence-based practices: practitioners themselves need to be open to the psychological difficulties of that scientific journey and scientists need to think of practitioners more as people than as mere tools for dissemination (Hayes & Hofmann, 2018a).

In one sense, scientist-practitioners are those who have deliberately stepped into the ambiguity that lies between the two kinds of “know-how.” They are willing to live with the conflict between the urgency of helping others and the sometimes slow pace of scientific knowledge. Fortunately, due to the past efforts of others, in most areas of applied psychology this is a road that fits with provider values: this openness to discomfort is for a larger purpose. There is considerable evidence that the use of empirically supported procedures increases positive outcomes (Hayes & Hofmann, 2018b). When agencies convert to the use of such methods, client outcomes are better, especially if practitioners are encouraged to fit specific methods to specific client needs (Weisz et al., 2012). Improvements tend to be longer-lasting (Cukrowicz et al., 2011), and staff turnover is reduced (Aarons et al., 2009).

But in other ways, this is a road with difficulties. Most patients given psychosocial treatment do not receive evidence-based care (Wolitzky-Taylor et al., 2015). There are some understandable reasons. Adherence to treatment manuals does not alone guarantee good outcomes (Shadish et al., 2000) and the important work of learning how to use scientifically supported methods in more flexible ways to fit individual needs is still in its infancy (Fisher & Boswell, 2016; Hayes, Hofmann, & Stanton, 2020). It is important to know the specific processes of change that account for the effects of these methods, but that is often not clear (Hayes, Hofmann, & Ciarrochi, 2020; La Greca et al., 2009). While there is considerable evidence that relationship factors are key to many clinical outcomes (Norcross & Wampold, 2011), there remains limited evidence of the specific variables that alter these factors while maintaining positive outcomes (Creed & Kendall, 2005; Hayes, Hofmann, & Ciarrochi, 2020).

What often drives the research of an applied scientist is the possibility of doing a greater amount of good by reaching a larger number of people than could be reached directly. Ultimately the idea that scientifically filtered processes and procedures will help more people more efficiently and effectively is the dream of applied science. Unfortunately, this dream is surprisingly hard to realize. It is difficult to produce research that will be consumed by others and that will make a difference in

applied work. For the practitioner, a reliance on scientifically based procedures will not fully remove the tension between clinical experience and scientific forms of knowing, because virtually no technologies exist that are fully curative, and only a fraction of clients will respond fully and adequately based on what is now known.

This chapter is for students who are considering taking “the scientific path” in their applied careers. We will discuss how to be effective within the scientist-practitioner model, whether in the clinic or in the research laboratory. We will briefly examine its history, and then consider how to produce and consume research in a way that makes a difference.

1. History of the Scientist-Practitioner Model

From the early inceptions of applied psychology, science and practice were thought of by many as inseparable. This is exemplified by Lightner Witmer’s claim that:

The pure and the applied sciences advance in a single front. What retards the progress of one, retards the progress of the other; what fosters one, fosters the other. But in the final analysis the progress of psychology, as of every other science, will be determined by the value and amount of its contributions to the advancement of the human race. (Witmer, 1907/1996, p. 249.)

This vision began to be formalized in 1947 (Shakow et al., 1947) when the American Psychological Association adopted as standard policy the idea that professional psychology graduate students would be trained both as scientists and as practitioners. In August of 1948 a collection of professionals representing the spectrum of behavioral health care providers met in Boulder, Colorado with the intent of defining the content of graduate training in clinical psychology. One important outcome of this two-week long conference was the unanimous recommendation for the adoption of the scientist-practitioner model of training. At the onset of the conference, not all attendees were in agreement on this issue. Some doubted that a true realization of this model was even possible. Nevertheless, there were at least five general reasons for the unanimous decision.

The first reason was the understanding that specialization in one area versus the other tended to produce a narrowness of thinking, thus necessitating the need for training programs that promoted flexibility in thinking and action. It was believed that such flexibility could be established when “persons within the same general field specialize in different aspects, as inevitably happens, cross-fertilization and breadth of approach are likely to characterize such a profession” (Raimy, 1950, p. 81).

The second reason for the unanimous decision was the belief that training in both practice and research could begin to circumvent the lack of useful scientific information regarding effective practice that was then available. It was hoped that research conducted by those interested in practice would yield information useful in the guidance of applied decisions.

The third reason for the adoption of the scientist-practitioner model was the generally held belief that there would be no problem finding students capable of

fulfilling the prescribed training. The final two reasons why the model was ultimately adopted is the cooperative potential for the merger of these two roles. It was believed that a scientist who held at hand many clinical questions would be able to set forth a research agenda adequate for answering these questions, and could expect economic support for research agendas that could be funded by clinical endeavors.

Despite the vision from the Boulder Conference, its earnest implementation was still very much in question. The sentiment was exemplified by Raimy (1950):

Too often, however, clinical psychologists have been trained in rigorous thinking about nonclinical subject matter and clinical problems have been dismissed as lacking in “scientific respectability.” As a result, many clinicians have been unable to bridge the gap between their formal training and scientific thinking on the one hand, and the demands of practice on the other. As time passes and their skills become more satisfying to themselves and to others, the task of thinking systematically and impartially becomes more difficult. (p. 86)

The scientist-practitioner model was revisited in conference form quite frequently in the years that followed. While these conferences tended to reaffirm the belief in the strength of the model, they also revealed an undercurrent of dissatisfaction and disillusionment with the model as it was applied in practice. The scientist-practitioner split feared by the original participants in the Boulder Conference gradually became more and more of a reality. In 1961, a report published by the Joint Commission on Mental Health voiced concerns regarding this split. In 1965 a conference was held in Chicago where the participants displayed open disgruntlement about the process of adopting and applying the model (Hoch et al., 1966).

The late 1960s and 1970s brought a profound change in the degree of support for the scientist-practitioner model. Professional schools were created, at first within the university setting and then in free-standing form (Peterson, 1968, 1976). The Vail Conference went far beyond previous conferences in explicitly endorsing the creation of doctor of psychology degrees and downplaying the scientist-practitioner model as the appropriate model for professional training in psychology (Korman, 1976). The federal government, however, began to fund well-controlled and large-scale psychosocial research studies, providing a growing impetus for the creation of a research base relevant to practice.

The 1980s and 1990s saw contradictory trends. The split of the American Psychological Society (now the Association for Psychological Science) from the American Psychological Association, a process largely led by scientist-practitioners, reflected the growing discontent of scientist-practitioners in professional psychology disconnected from science (Hayes, 1987). Professional schools, few of which adopted a scientist-practitioner model, proliferated but began to run into economic problems as the managed care revolution undermined the dominance of psychology as a form of independent practice (Hayes et al., 1995). The federal government began to actively promote evidence-based practice, through a wide variety of funded initiatives in dissemination, diffusion, and research/practice collaboration. Research-based clinical practice guidelines began to appear (Hayes &

Gregg, 2001), and the field of psychology began to launch formal efforts to summarize a maturing clinical research literature, such as the Division 12 initiative in developing a list of empirically supported treatments (Chambless et al., 1996). An outgrowth of APS, the Academy of Psychological Clinical Science (APCS), began with a 1994 conference on “Psychological Science in the 21st Century.” In 1995, the APCS was formally established and began recognizing doctoral and internship programs that advocated science-based clinical training.

In the 2000s, the movement toward “evidence-based practice” began to take hold in psychology (Goodheart, 2011), but the definition of “evidence” was considerably broadened to give equal weight to the personal experiences of the clinician and to scientific evidence. The penetration of formal scientific evidence into psychological practice continued to be slow (Stewart & Chambless, 2007), which began to receive national publicity. For example, *Newsweek* ran a story under the title “Ignoring the Evidence: Why do psychologists reject science?” (Begley, 2009). Practical concerns also began to be raised about the dominance of the individual psychotherapy model in comparison to web- and phone-based interventions, self-help approaches, and media-based methods (Kazdin & Blasé, 2011). Treatment guidelines (e.g., Hayes et al., 1995) began to be embraced even by leaders of mainstream psychology (Goodheart, 2011). Finally, more science-based organizations took stronger steps to accredit training programs that emphasize a “clinical scientist” model, and to advocate for these values in the public arena. In 2007 the APCS formally launched the Psychological Clinical Science Accreditation System; in 2011 there were about a dozen doctoral programs accredited by this process; a decade later there are over 60 accredited programs and 12 internships.

The last decade has been what looks like a retrenchment in many ways, but really it is more of a revitalization and reformation of the scientist-practitioner model. A substantial body of evidence about what practices work best is now available, but the systems for disseminating that evidence are faltering. For example, the *National Registry of Evidence-Based Programs and Practices* maintained by the Substance Abuse and Mental Health Services Administration in the United States Department of Health and Human Services (www.nrepp.samhsa.gov/) has been shut down by the United States government, and the list of evidence-based intervention methods maintained by the Clinical Psychology Division of the American Psychological Association is being updated only irregularly. At the same time, professional training programs that eschew the importance of science to day-to-day professional practice continue to grow.

With the publication of the fifth edition of the *Diagnostic and Statistical Manual* of the American Psychiatric Association, the funders of research in mental illness appear to have abandoned hope that research focused on syndromes will ever lead to a deep understanding of mental health problems. In part in response to criticisms of the DSM-5, the National Institute on Mental Health (NIMH) established the Research Domain Criteria (RDoC) program that aims to classify mental disorders based on processes of change linked to developmental neurobiological changes (Insel et al., 2010).

Meanwhile, psychology is turning in a more process-based direction as well (Hayes & Hofmann, 2018b), with a greater emphasis on theory-based, dynamic, progressive, contextually bound, modifiable, and multilevel changes or mechanisms that occur in predictable, empirically established sequences oriented toward desirable outcomes (Hofmann & Hayes, 2019). If this transition continues, trademarked protocols linked to syndromes will receive less attention in the future as a model of evidence-based therapy, and comprehensive models of evidence-based processes of change, linked to evidence-based intervention kernels that move these processes, and that help a specific client achieve their desired goals, will receive more attention.

The student of applied psychology needs to think through these issues and consider their implications for professional values. Professionals of tomorrow will face considerable pressures to adopt evidence-based practices. We would argue that this can be a good thing, if psychological professionals embrace their role in the future world of scientifically based professional psychology. Doing so requires learning how to do research that will inform practice, how to assimilate the research evidence as it emerges, and how to incorporate empiricism into practice itself. It is to those topics that we now turn.

2. Doing Research That Makes a Difference

The vast majority of psychological research makes little impact. The modal number of citations for published psychological research between 2005 and 2010 was only two (Kurilla, 2017) and most psychology faculty and researchers are little known outside of their immediate circle of students and colleagues. From this situation we can conclude the following: If a psychology student does what usually comes to mind in psychological research based on the typical research models, he or she will make only a limited impact, because that is precisely what others have done who have come to that end. A more unusual approach is needed to do research that makes a difference.

Making a difference in psychological research can be facilitated by clarity about (a) the nature of science, and (b) the information needs of practitioners.

2.1 The Nature of Science

Science is a rule-generating enterprise that has as its goal the development of increasingly organized statements of relations among events that allow analytic goals to be met with precision, scope, and depth, and based on verifiable experience. There are two key aspects to this definition. First, the product of science is verbal rules based on experiences that can be shared with others. Agreements about scientific method within particular research paradigms tell us how and when certain things can be said: for example, conclusions can be reached when adequate controls are in place, or when adequate statistical analyses have been done. A great deal of emphasis is placed on these issues in psychology education (e.g., issues of “internal validity” and “scientific method”) and we have little additional to offer in this chapter on those topics.

Second, these rules have five specific properties of importance: organization, analytic utility, precision, scope, and depth. Scientific products can be useful even when they are not organized (e.g., when a specific fact is discovered that is of considerable importance), but the ultimate goal is to organize these verbal products over time. That is why theories and models are so central to mature sciences.

The verbal products of science are meant to be useful in accomplishing analytic ends. These ends vary from domain to domain and from paradigm to paradigm. In applied psychology, however, the most important analytic ends are implied by the practical goal of the field itself – namely, the prediction and influence of psychological events of practical importance. Not all research practices are equal in producing particular analytic ends. For example, understanding or prediction are of little utility in actually *influencing* target phenomena if the important components of the theory cannot be manipulated directly. For that reason, it helps to start with the end goal and work backward to the scientific practices that could reach that goal. We will do so shortly by considering the research needs of practitioners.

Finally, we want theories that apply in highly specified ways to given phenomena (i.e., they are precise); apply to a broad range of phenomena (i.e., they have scope); and are coherent across different levels of analysis in science, such as across biology and psychology (i.e., they have depth). Of these, the easiest to achieve is precision, and perhaps for this reason the most emphasis in the early days of clinical science was on the development of manuals and technical descriptions that are precise and replicable. Perhaps the hardest dimension to achieve, however, is scope, and, as we will argue in a moment, that is the property most missing in our current approaches to applied psychology.

2.2 The Knowledge Needed by Practitioners

Over 50 years ago, Gordon Paul eloquently summarized the empirical question that arises for the practitioner: “what treatment, by whom, is most effective for this individual with that specific problem, and under which set of circumstances does that come about” (Paul, 1969). Clients have unique needs, and unique problems. For that reason, practitioners need scientific knowledge that tells them what to do to be effective with the specific people with whom they work. It must explain how to change things that are accessible to the practitioner so that better outcomes are obtained. Practitioners also need scientifically established know-how that is broadly applicable to the practical situation and can be learned and flexibly applied with a reasonable amount of effort and in a fashion that is respectful of their professional role.

Clinical manuals have been a major step forward in developing scientific knowledge that can focus on things the clinician can manipulate directly in the practical situation, but not enough work has gone into how to develop manuals that are easy to master and capable of being flexibly applied to clients with unique combinations of needs (Kendall & Beidas, 2007). With the proliferation of empirically supported manuals, more needs to be done to come up with processes that can allow the field to

synthesize and distill down the essence of disparate technologies, and combine essential features of various technologies into coherent treatment plans for individuals with mixed needs.

That is a major reason that a focus on processes of change has grown. In essence, Paul's question is being reformulated to this one: "What core biopsychosocial processes should be targeted with this client given this goal in this situation, and how can they most efficiently and effectively be changed?" (Hofmann & Hayes, 2019, p. 38.)

The only way that question can be answered is through models and theories that apply to the individual case. It is often said that practitioners avoid theory and philosophy in favor of actual clinical techniques, but an examination of popular psychology books read by practitioners shows that this is false. Practitioners need knowledge with scope, because they often face novel situations with unusual combinations of features. Popular books take advantage of this need by presenting fairly simplified models, often ones that can be expressed in a few acronyms, that claim to have broad applicability.

Broad models and theories are needed in the practice environment because they provide a basis for the use of knowledge when confronted with a new problem or situation, and suggest how to develop new kinds of practical techniques. In addition, because teaching based purely on techniques can become disorganized and incoherent as techniques proliferate, theory and models make scientific knowledge more teachable.

Book publishers, workshop organizers, and others in a position to know how practitioners usually react often cringe if researchers try to get too theoretical, but this makes sense given the kind of theories often promulgated by researchers, which are typically complicated, narrow, limited, and arcane. Worse, many theories do not tell clinicians what to do because they do not focus primarily on how to change external variables. Clinical theory is not an end in itself, and thus should not be concerned primarily about "understanding" separated from prediction and influence, nor primarily with the unobservable or unmanipulable.

To be practically useful, psychological theories and models must also be progressive, meaning that they evolve over time to raise new, interesting, and empirically productive questions that generate coherent data. It is especially useful if the model can be developed and modified to fit a variety of applied and basic issues. They also need to be as simple as possible, both in the sense that they are easy to learn and in the sense that they simplify complexity where that can be done.

Finally, to be truly useful, applied research must fit the practical and personal realities of the practice environment. It does no good to create technologies that no one will pay for, that are too complicated for systems of care to adopt, that do not connect with the personal experiences of practitioners, that are focused on methods of delivery that cannot be mounted, or that focus on targets of change that are not of importance. For that reason, applied psychology researchers must be intimately aware of what is happening in the world of practice (e.g., what is managed care?; how are practitioners paid?; what problems are most costly to systems of care?; and so on). The

growth of websites, apps, bibliotherapy, peer support, and other ways of delivering psychological help indirectly is exploding. The expansion of psychology from mental health to physical and behavioral health, as well as social health in areas such as prejudice and stigma, is obvious.

2.3 Research of Importance

Putting all of these factors together, applied research programs that make a difference tend to *reach the practitioner with a combination both of a technology and an underlying theory or model that illuminates how processes of change apply to the individual case and that is progressive, simplifying, fits with the practical realities of applied work, and is learnable, flexible, appealing, effective, broadly applicable, and important*. This is a challenging formula, because it demands a wide range of skills from psychological researchers who hope to make an applied impact. Anyone can create a treatment and try to test it. Anyone can develop a narrow “model” and examine a few empirical implications. What is more difficult is figuring out how to develop broadly applicable models that are conceptually simple and interesting and that have clear and unexpected technological implications. Doing so requires living in both worlds: science and practice. The need for this breadth of focus also helps make sense of the need for broad knowledge of psychological science that is often pursued in more scientifically based clinical programs.

3. The Practical Role of the Scientist-Practitioner

In the practical environment, the scientist-practitioner is an individual who performs three primary roles. First, the scientist-practitioner is a consumer of research, able to identify, acquire, and apply empirically supported treatments and assessments to those in need. This requires well-developed practical skills, but it also requires substantial empirical skills. The purpose of this consumption is to put empirically based procedures into actual practice.

Second, the scientist-practitioner evaluates his or her own program and practices. The modern day scientist-practitioner “must not only be a superb clinician capable of supervising interventions, and intervening directly on difficult cases, but must also be intimately familiar with the process of evaluating the effectiveness of interventions . . . and must adapt the scientific method to practical settings” (Hayes et al., 1999, p. 1). This requires knowledge of time series or “single case” research designs, clinical replications series, effectiveness research approaches, and idiographic analysis of change processes viewed as complex networks, among others. Additive model group research methods, which use existing programs as a kind of baseline and thus raise far fewer ethical issues than group research protocols with no treatment control groups, are also gaining in popularity in applied settings.

Third, the scientist-practitioner reports advances to applied and scientific communities, contributing both to greater understanding of applied problems and to the

evolution of effective systems of care. In today's landscape, a wide variety of contributions are possible from practical sites.

For example, clinical replications series and open effectiveness trials in applied settings are highly valued in the empirical clinical literature (e.g., Persons et al., 1999; Watkins et al., 2011). Clinical replication series are large collections of single case experimental designs and empirical case studies using well-defined treatment approaches and intensive measurement. Their purpose is to determine rates of successes and failures, and factors that contribute to these outcomes, in a defined patient group.

These kinds of contributions are essential to the overall goal of developing scientific know-how that will help alleviate human suffering. Clinical replication series provide an excellent example. For clinical research to be useful to practitioners, it must be known what kinds of client are most likely to respond to what kinds of treatments in the real-world setting. Indeed, sometimes methods that succeed in highly controlled efficacy trials fail in effectiveness trials when real-world issues are factored in (e.g., Hallfors et al., 2006). This question cannot be adequately answered purely based on data from major research centers because the number and variety of clients needed to address such questions are much too large. Only practitioners have the client flow and practical interest that formal clinical replication series demand.

As processes of change have come to the fore, the role of idiographic research has also been increasingly emphasized (Hayes et al., 2019). That is true for several reasons, but a profound one is that behavioral science is realizing what the physical sciences concluded 90 years ago: processes of change based on analysis of collections of individual units will apply to those individual units only if they are "ergodic," that is, if they are identical and unchanging (Molenaar & Campbell, 2009). That means that psychology will not be able to understand how change processes work unless they begin with idiographic findings, and only the practice base has adequate access to the numbers of cases needed, one at a time.

3.1 The Scientist-Practitioner in Organized Healthcare Delivery Systems

The combination of roles embraced by scientist-practitioners give them a special place in the healthcare marketplace as organized systems of care become more dominant. No one else is better prepared to help triage clients into efficient methods of intervention, to train and supervise others in the delivery of cost effective and empirically based approaches, to deliver these approaches themselves, to work with complicated or unresponsive cases to learn how to innovate new approaches, and to evaluate these delivery systems.

4. Looking Ahead

The history of science suggests that, in the long run, society will ultimately embrace scientific knowing over know-how that emerges from trial and error whenever substantial scientific evidence exists. That has happened in architectural and

structural design, public health, physical medicine, food safety, and myriad other areas, presumably because scientific know-how is a better guide to effective practices. The same shift is beginning to occur in mental health and substance abuse areas. But while progress has been made in the identification of techniques that are effective with specific problems or in promoting specific goals, it is clear that we still have a long way to go. Today's students will help decide how fast the transition to an empirically based profession will be.

If the trends seen in other fields are a good guide, ultimately applied psychology will be required to adopt an evidence-based model. In the present day, however, professional trends continue to pull the field in both directions. Some in the practice leadership have argued against embracing the movement toward empirically supported treatments, preferring instead the adoption of new forms of professional training (e.g., pharmacotherapy training).

Meanwhile, changes in the field itself make the scientist-practitioner model more viable than ever. For example, the skills needed to add value to organized behavioral healthcare delivery systems are precisely those emphasized by the scientist-practitioner model. Idiographic analysis of processes of change requires a vast network of evidence-based practitioners. Expansion from mental health to behavioral health and a positive social goal will require careful empirical thinking. The scientist-practitioner model may yet provide the common ground upon which psychology as a discipline can become more relevant to human society.

Students of professional psychology will have a large role in determining how these struggles for identity will ultimately work themselves out. The scientific path is not an easy one for applied psychology students to take, but for the sake of humanity, it seems to be the one worth taking.

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1. Introduction

Congratulations for either beginning or continuing your journey as a psychology graduate student! From an outsider's perspective, attending graduate school can be viewed as a very exciting accomplishment. As such, family and friends likely shower you with supportive comments such as, "You're so smart!", "We had no doubt you'd get in!", "We always knew you'd be successful!" While you may certainly share in this excitement, you may also find yourself thinking: "Wow. I really got accepted into graduate school? This had to be a mistake!", "I doubt that I'm actually qualified.", "It's only a matter of time until everyone realizes I'm not as smart as they think."

If this internal dialogue sounds familiar it's likely that you've experienced (or are currently experiencing) what is formally known as the impostor syndrome, also referred to as the impostor phenomenon. However, don't worry, because all is not lost. You are indeed qualified, and you certainly do belong in your graduate program. Furthermore, you are not alone in experiencing impostor syndrome. On the contrary, the impostor syndrome is a common (yet seldom discussed) experience that is particularly salient in graduate school. Thus, the purpose of this chapter is to provide an overview of impostor syndrome, factors that may influence the intensity of impostor cognitions, and ways that graduate students can adaptively navigate these unhelpful ways of thinking.

2. What is Impostor Syndrome?

The impostor syndrome represents a maladaptive set of cognitions that impedes individuals' ability to internalize their own success and take pride in their accomplishments. Specifically, the impostor syndrome refers to internal beliefs of intellectual incompetence among high-achieving individuals that are typically accompanied by difficulties internalizing success and chronic fears of being discovered as a "fraud." Despite objective evidence of professional and/or academic success, individuals who endorse high levels of impostor syndrome often question how they

have obtained a particular position or status (“How did I get into this graduate program?”), believe that they have somehow deceived those around them (“My acceptance into this program was due to some kind of error”), and worry that one day their self-perceived sense of fraudulence will be confirmed by others (“Someone will figure out that I don’t belong”).

While initially coined to capture the experiences expressed by high-achieving women (Clance & Imes, 1978), the impostor syndrome is a nearly ubiquitous experience. In fact, one study estimates that up to 70 percent of people in the United States (Matthews & Clance, 1985) will experience impostor syndrome at some point in their lifetime. To this end, scholars have established the relevance of impostor syndrome among both males and females in a range of different contexts including adolescents (Bernard & Neblett, 2018), high school students (Cromwell et al., 1990), undergraduate and graduate students (Cowie et al., 2018; Stone et al., 2018), faculty and professors (Hutchins, 2015; Hutchins et al., 2018), and medical professionals (Mattie et al., 2008; Villwock et al., 2016). In fact, even high-profile figures who have reached the pinnacle of success in their respective professions such as Maya Angelou, Michelle Obama, Tom Hanks, Ryan Reynolds, and Serena Williams (just to name a few) have spoken about their own experiences of impostor syndrome.

Despite its prevalence, impostor syndrome “represents a private, internal, emotional experience” (Lane, 2015, p. 117), which may prevent individuals from acknowledging or speaking about their feelings of intellectual incompetence, especially within highly competitive and evaluative contexts such as graduate school. Thus, while it is almost certain that you will encounter conversations about impostor syndrome with peers (and maybe even professors), don’t be surprised if folks are hesitant to have in-depth conversations about the origins or severity of their impostor-related thoughts and feelings. With that being said, it is important to recognize that there may be variation in impostor experiences. For some, impostor syndrome is fleeting and manifests within acute instances of stress that may not cause any marked issues over time. However, for others, impostor syndrome represents a more chronic set of thoughts and feelings that can make their already difficult graduate school journey all the more stressful.

Chronic experiences of impostor syndrome are stressful and taxing, and erroneous self-perceptions of fraudulence (i.e., impostor syndrome thoughts) have even been linked to increased anxiety and depressive symptoms (Austin et al., 2009; Bernard et al., 2017; Cokley et al., 2017). Furthermore, individuals who experience impostor syndrome may also set extremely high standards of perfection; typically as a strategy to reduce the chances that they will somehow be “discovered” as a fraud (Clance & Imes, 1978; Clance & O’Toole, 1987). While these perfectionistic standards may manage the impressions of others, they may also cause individuals to become overly focused on negative evaluations, mistakes, and instances of falling short of their very high standards (i.e., perfection). For instance, although criticism, feedback, and failure represent normative experiences associated with graduate school (e.g., receiving extensive feedback on a research paper, having findings questioned at a research conference, not winning a competitive fellowship),

individuals who experience impostor syndrome may be more likely to internalize and misinterpret a lack of success as confirmatory evidence of their perceived lack of ability. As a result, they may experience increased anxiety about future academic-related evaluations. Thus, it follows that individuals with higher levels of impostor syndrome have also been found to report lower levels of self-esteem and lower levels of general and academic self-concept (Cokley et al., 2015; Schubert & Bowker, 2019). In light of this evidence, it is perhaps not surprising that the literature has connected impostor syndrome to symptoms of mental fatigue, exhaustion, and burnout among students pursuing advanced degrees (Legassie et al., 2008; Villwock et al., 2016).

3. Distinguishing Impostor Syndrome

The impostor syndrome has many similarities with other constructs relating to self-perceptions of competence, yet it represents a conceptually valid and distinct construct (Cozzarelli & Major, 1990; Kolligian Jr. & Sternberg, 1991). To avoid confusion, it is important to highlight the defining and differentiating characteristics of impostor syndrome from other conceptually similar constructs before moving forward. For example, impostor syndrome and self-efficacy, or an individual's beliefs regarding their abilities, appear to be similar in nature. However, at a conceptual level, an individual with low self-efficacy might feel and perform poorly on tasks, whereas an individual experiencing impostor syndrome may feel incompetent *in spite of* objective evidence of competence, such as a strong performance on an exam (Lane, 2015; Leary et al., 2000). Thus, while self-efficacy may accurately map onto an individual's performance on a particular task, feelings of impostor syndrome *are inconsistent and in conflict* with their high levels of objective success.

Social anxiety and its associated symptoms also bear strong resemblance to impostor syndrome (Leary et al., 2000). However, social anxiety is marked by significant fears of scrutiny from *others*, which causes considerable impairment in social, academic, or vocational contexts (American Psychiatric Association, 2013). In contrast, individuals endorsing high levels of impostor syndrome are high-achieving and excel (Kumar & Jagacinski, 2006), despite disparaging *internal* beliefs of intellectual inferiority (Ross & Krukowski, 2003). As posited by Chrisman and colleagues (1995), impostor cognitions of intellectual incompetence may undergird desires to be perceived by others in a positive light, and as such serve as the impetus for social anxiety.

Finally, it is also important to distinguish impostor syndrome from stereotype threat – the threat of confirming a negative social stereotype about one's own group (Steele & Aronson, 1995). Although similar, research suggests that stereotype threat operates to impair performance when activated within specific evaluative settings and situations (Spencer et al., 2016). Conversely, impostor syndrome has been conceptualized to permeate beyond any one particular setting (Chrisman et al., 1995). As noted by McClain et al. (2016), “the nature of impostor syndrome as an emergent identity might allow impostor cognitions to be present across contexts and,

thus, may affect various domains” (p. 103). Therefore, the impostor syndrome may represent a chronic experience that is unbound to a specific context, thereby distinguishing it from the relatively situationally activated nature of stereotype threat.

4. Impostor Syndrome in Graduate School

The academic context is among the most fertile grounds for impostor syndrome to thrive, especially among graduate students. Why might this be? Pursuing a graduate degree is a major commitment that commonly uproots students, placing them within unfamiliar environments that sometimes are a considerable distance from friends and family. This major life transition can feel isolating, particularly at the onset of graduate school, as students are attempting to learn the ropes of a new academic institution. For some students, this transition may feel like a true “fish out of the water” moment, as they begin to learn the expectations and demands of being in graduate school (“You want *me* to see patients?!”). This is only compounded by the inevitable social comparisons made with cohort members and other graduate students. Indeed, although there is no “right way” to get into graduate school, it is easy to make assumptions about the intellect and capabilities of fellow cohort members who came straight from their undergraduate degree, who had impressive jobs before coming to graduate school, or who come into graduate school with other advanced degrees, at the expense of our own laurels. These comparisons only continue as students matriculate through their program as individuals begin publishing manuscripts, applying for competitive awards or fellowships, and defending theses and dissertations.

From its onset, pursuing a psychology graduate degree can be a particularly stressful time that is characterized by a constant state of evaluation by course professors (e.g., class performance), mentors (e.g., semester evaluations), research reviewers (peer review process), and even clinical patients, which may feel particularly anxiety-provoking and overwhelming. And although the pursuit of a psychology graduate degree comes with milestones worthy of celebration (e.g., having manuscripts published, presenting at conferences), these high points are infrequent and often overshadowed by the more mundane and stressful realities of pursuing a graduate degree (e.g., rejected manuscripts, competing responsibilities, personal demands) that can lead to the development of impostor syndrome.

5. The Impostor Cycle in Graduate School

Although graduate students may readily identify with impostor syndrome, it may be more challenging to provide a first-person account of the precipitating or sequential events that caused impostor cognitions. To this end, the “impostor cycle” represents one possible sequence of events and behavioral patterns that are typical of impostor syndrome and the manifestation of impostor cognitions (Sakulku & Alexander, 2011). As depicted in Figure 5.1, the impostor cycle begins with an academic- or graduate school-related task (e.g., an exam; teaching

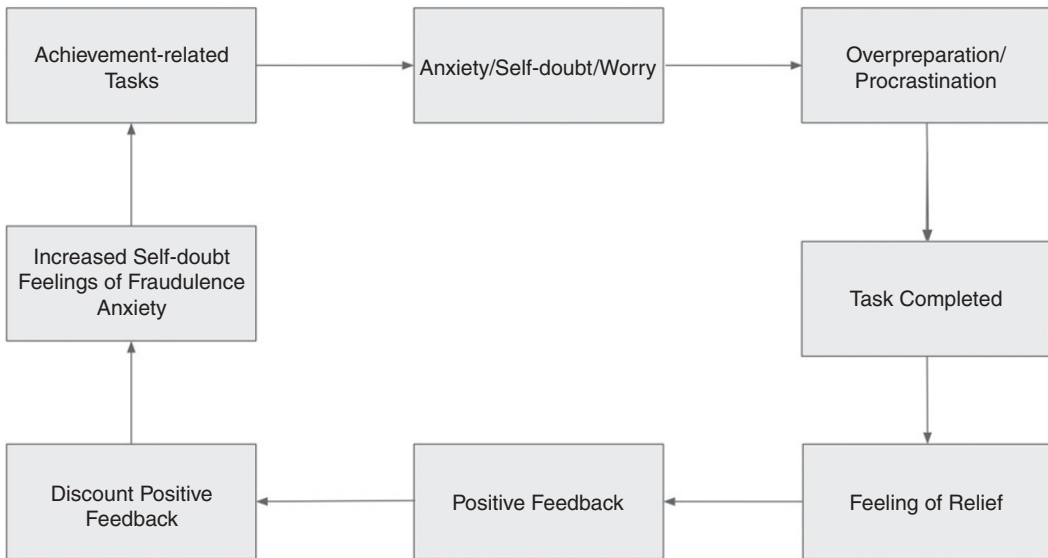


Figure 5.1 Impostor cycle (adapted from Sakulku & Alexander, 2011).

a lecture for the first time) in which one's performance will be evaluated or observed by others. Graduate students with higher baselines of anxieties stemming from fears of negative evaluation may attempt to alleviate these concerns by over-preparing (e.g., excessive studying; overworking to prepare for a client) or self-handicapping behaviors (e.g., procrastination) followed by frantic last-minute preparation. When the task is completed, individuals may experience a brief, yet temporary, sense of relief, which is often followed by positive feedback on performance or praise on successful completion of the initial task. Rather than interpreting positive feedback and objective success as evidence of their own intellectual ability, individuals experiencing impostor syndrome may minimize their accomplishments and instead attribute their success to over-preparation or luck, dependent upon how they approached the initial task. Previous research notes that individuals who experience impostor syndrome hold fixed beliefs about the mechanics of success, and as a result do not equate over-preparation or hard work as a sign of true intellectual ability (Clance, 1985). Thus, when faced with the next task, fears of negative evaluation or failure may only be heightened as impostor cognitions lead individuals to believe that their previous success was erroneous and outside of their control, therefore reinforcing tendencies to over-prepare.

While the impostor cycle represents a general pattern of beliefs and behaviors that may occur throughout graduate school, it is important to acknowledge that this cycle may look different as students matriculate through their program. As an example of these differences, we contrast the experiences of hypothetical first-year and fifth-year students.

5.1 First-Year Student

Serena is a first-year graduate student attending a prominent graduate school in clinical psychology. Serena did not take a gap year after receiving her undergraduate degree and transitioned immediately to her graduate program. As Serena begins her program, she is surprised to find that many of her cohort members are older, have more research and clinical experience than she does, and seem to be more comfortable and familiar with course content than she is. When faced with her first graduate research paper as a part of a psychological neuroscience course, Serena experiences significant anxiety and worry that she may fail, and fears that if she fails, others in her program will find out that she is not qualified to be in graduate school. In efforts to combat this anxiety, Serena spends the next two months leading up to writing the paper conducting extensive literature reviews that extend well-beyond the scope of the research paper, frequently at the expense of other academic, professional, and personal responsibilities. Following completion of this paper, Serena experiences an initial sense of relief when she receives a high score on her assignment and positive praise from her professor, but is disheartened when she overhears her peer mention that she received a higher passing score and that her assignment was written only a day before the due date. Upon hearing this, Serena begins to question the grade, and positive feedback, thinking to herself “I only received this grade because of the excessive amount of work I put into this paper. How am I going to keep this up?” This internal dialogue increases feelings of self-doubt, causing this impostor cycle to continue as she is faced with her next exam.

5.2 Fifth-Year Student

Robert, a fifth-year graduate student in clinical psychology, is working to complete his dissertation. Although a highly successful student, Robert is feeling overwhelmed with his growing “to-do” list and finds himself worrying and doubting that he will ever be able to complete his project. Although knowing that a draft of the introduction chapter of his dissertation is due to his advisor next week, Robert remains focused on other negligible tasks such as references and figures that prevent him from working on the content of the introduction. “I’ll cross that bridge when I get to it,” he thinks to himself, until the day before it is due, which leads to Robert frantically working on a draft of his introduction well into the night. In finishing a draft of his introduction chapter, Robert experiences a short-lived bout of relief, until he receives an email with his advisor’s feedback. Initially panicked, Robert is surprised to see that the feedback he received is overwhelmingly positive. However, realizing that he has several more sections of the paper to write, Robert feels that he may have “pulled one over” on his advisor, and thinks to himself “I got lucky on writing this one. How many more times can I keep doing this before my advisor figures me out?” This external attribution of success to uncontrollable factors such as luck or good fortune makes Robert feel especially anxious, knowing that his advisor will be reading additional chapters that are increasingly complex to write. As such,

Robert may become apprehensive of writing more demanding chapters in fear that he will not be able to replicate the same quality of work, thus causing the impostor cycle to repeat itself.

While these vignettes are just two examples of what the impostor cycle may look like, they serve to exemplify similar impostor-related patterns in very different situations. To be sure, there is no “right way” to experience impostor syndrome, and you may find yourself resonating more with one vignette over the other, a combination of both, or neither. Further, while the examples provided above explain the basic pattern of the impostor cycle, they in no way capture the complexity of the ways in which this cycle may manifest. Indeed, a myriad of factors at the individual and contextual level can individually and conjointly impact the saliency of impostor syndrome. Accordingly, we provide below an abbreviated review of some of the empirical correlates of impostor syndrome.

6. Correlates of Impostor Syndrome

As mentioned earlier, the graduate school setting is a prime environment for impostor experiences to surface and thrive. Thus, it is important to be aware of where impostor syndrome comes from and what makes it worse. Despite its inception more than 30 years ago, there is little consensus as to where impostor syndrome originates. Several studies have hypothesized various origin points, with some suggesting familial messages (Clance & Imes, 1978), others suggesting self-presentational concerns (Leary et al., 2000), and others suggesting that it may be societal messages and experiences (Bernard & Neblett, 2018; Stone et al., 2018). While we may not be able to precisely locate where experiences of impostor syndrome stem from, there is an abundance of research that may shed light onto what makes impostor syndrome worse.

A general consensus in the literature is that impostor syndrome does not exist in a vacuum. Rather, the prevalence, salience, and impact of impostor syndrome within graduate school can be considerably influenced by several individual and contextual factors. To this end, a brief review of these factors is warranted, as some (or many) may resonate with experiences you have had to navigate as you have prepared to begin your graduate degree in psychology, or as you have matriculated through your program. However, as a caveat, the overview presented below represents a brief review of individual and contextual factors related to impostor syndrome and by no means is exhaustive. A more detailed analysis of these factors can be seen in other papers (Bernard & Neblett, 2018; Bravata et al., 2019; Peteet et al., 2015a; Sakulku & Alexander, 2011; Stone et al., 2018).

6.1 Individual-Level Factors

Existing research has documented a wide range of individual characteristics relevant to graduate students that may set the stage for and ultimately perpetuate impostor syndrome. For example, at its core, impostor syndrome reflects a wide set of

psychologically disparaging cognitions that stem from an internalized fear of negative evaluation (Vergauwe et al., 2014). Furthermore, several studies have documented an inverse association between self-esteem and impostor syndrome (Chrisman et al., 1995; Kolligian Jr. & Sternberg, 1991; Neureiter & Traut-Mattausch, 2016; Topping & Kimmel, 1985). As such, some have argued that impostor syndrome actually represents an underlying self-esteem issue, especially among graduate students (Schubert & Bowker, 2019).

Several personality traits that are associated with higher baselines of anxiety, worry, and interpersonal concern have also been shown to be positively associated with impostor syndrome. More specifically, neuroticism has been found to be a particularly robust predictor of impostor syndrome (Ross et al., 2001). As discussed in previous research, higher levels of neuroticism may increase risk for internal distress, self-doubt, and poor self-evaluations (Bernard et al., 2002), which may be especially prominent within evaluative contexts (e.g., graduate school) in which criticism and failure is possible (Chae et al., 1995). In addition to neuroticism, personality traits characterized by exceptionally high-performance standards and/or concerns (i.e., perfectionism) have been recurrently implicated as predictors of impostor syndrome (Cokley et al., 2018). Altogether, perfectionism can be viewed as a double-edged sword for psychology graduate students that may inadvertently lead high-achieving students to experience impostor syndrome.

To further illustrate how individual factors may contribute to impostor syndrome, let's revisit the vignette of Serena. Serena considers herself to be particularly attuned to how others may view her, and also considers herself to be a bit neurotic at times. By going above and beyond in her studies to perfect her academic and research projects, Serena has developed an impressive CV that has also come with the admiration of her peers. However, Serena is also aware that the excessive amount of time and energy invested into each of these projects may have been in excess to the actual project requirements. As such, Serena finds that these high self-imposed standards have made her develop the habit of comparing herself to others, focusing on her perceived inadequacies more than strengths, and internalizing and overgeneralizing instances where high standards are unable to be met (e.g., equating not earning the highest grade in the class to failing as a graduate student).

6.2 Contextual-Level Factors

At the contextual level, the challenges and demands of graduate school can generate feelings of alienation that may further amplify risk for impostor cognitions (Peteet et al., 2015a). For some, the internalized belief of intellectual incompetence may stem from being the first in their family to attend college or to pursue an advanced degree, which has been shown to intensify impostor syndrome within competitive academic environments (Canning et al., 2020; Craddock et al., 2011). Scholars suggest that the unique challenges reported by first-generation college students (e.g., parental unfamiliarity with college, familial pressures to excel, lack of financial resources, competing personal and academic obligations, limited mentorship;

Pascarella et al., 2004) are also relevant among first-generation graduate school students (Cunningham & Brown, 2014). Thus, first-generation students may feel less prepared and equipped to excel in psychology graduate school programs with few mentors or opportunities to dispel these beliefs, especially when compared to non-first-generation peers who may have a greater array of financial, professional, and academic resources at their disposal. To be sure, this does not mean that individuals who are not the first in their families to attend graduate school do not experience similar stressors; however, first-generation students may be more at risk to report such challenges, and in turn may also be at an increased risk for impostor cognitions.

Apart from first-generation status, an extensive body of literature has also documented the intersection of impostor syndrome with unique cultural issues associated with one's race and ethnicity. More specifically, research indicates that undergraduate and graduate students of color are at a heightened risk for impostor syndrome, in large part, due to the salience and impact of stressors associated with one's racial minority status (e.g., racial discrimination, negative stereotypes), which may compound stress related to general academic demands (Cokley et al., 2013; Peteet et al., 2015a). It has been argued that experiences of race-based mistreatment among students of color can be perceived as confirmatory evidence of one's already internalized sense of intellectual incompetence (Bernard et al., 2017), thereby increasing fears of negative evaluation from peers and professors. Interestingly, qualitative studies have also found that when students of color discuss factors that may shape impostor cognitions, the awareness of underrepresentation within the academy is frequently referenced (Craddock et al., 2011; Stone et al., 2018). Thus, it is perhaps not surprising that recent research has found students of color to report higher rates of impostor syndrome within academic contexts that are less diverse (i.e., predominantly White institutions), relative to those who attend predominately non-White institutions (i.e., historically Black colleges/universities; Bernard et al., 2020). With students of color being considerably under-represented within psychology programs and in the field of psychology as whole, it follows that some have made the case that graduate students of color may be particularly susceptible and vulnerable to the noxious effects of impostor syndrome (Bernard et al., 2018; Cokley et al., 2017; Peteet et al., 2015b).

As an applied example of the impact of contextual factors on impostor syndrome, let's revisit the above vignette of Robert, who is completing his dissertation. During his entire five-year graduate tenure, he noticed that he was the only African American person (student or professor) in the graduate program. This racial underrepresentation (i.e., a contextual feature of the academic environment) may engender impostor cognitions and cause Robert to question his belongingness in the academic space ("No one else in the graduate program looks like me. Maybe I don't belong here?"); thoughts that are akin to embedded themes in impostor cognitions (i.e., questioning one's intellectual competence and belongingness). In addition, Robert may have had to also contend with discriminatory treatment and negative stereotypes that suggest African Americans are anti-intellectual or only

gained entry into academic programs because of affirmative action initiatives, both of which can worsen the impostor syndrome over time (Cokley, 2015; Ogunyemi et al., 2020).

7. Navigating Impostor Syndrome

If you find yourself resonating with the content of this chapter, you may be thinking “That’s great, but what do we do if we have impostor cognitions? How do we treat it?” With respect to these questions, there is good news and there is okay news. The good news is that conversations about impostor syndrome have ballooned in recent years, with some discussions taking center stage at national conferences (Jaremka et al., 2020), making it easier to share experiences and find others who are going through the same thing. The okay news is that only a handful of research has investigated interventions for impostor syndrome. Although limited, this extant research provides valuable insights as to strategies or approaches that can systematically address impostor syndrome.

So, what can be done to alleviate the effects of impostor syndrome? First, if impostor syndrome is disrupting your day-to-day functioning in key areas (school, work, relationships, sleep) then you should consider seeking help from a mental health professional. One great source for help are the university counseling centers, which often support students who experience academic stress, which often includes impostor syndrome. Although impostor syndrome is not formally listed in the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders* (DSM), mental health practitioners are typically aware of impostor syndrome and its associations with anxiety and depression. Indeed, several studies have discussed the utility of cognitive-behavioral interventions that are frequently used by mental health professionals (e.g., cognitive-behavioral therapy) to manage anxious and depressive symptoms, such as uncontrollable worry or decreased motivation, and target distorted or maladaptive cognitions that are related to impostor syndrome (Bernard et al., 2017, 2018). In addition, mental health professionals may know of other resources for managing impostor feelings, such as counseling support groups for graduate students.

Beyond seeking help from a mental health professional, two scientific studies offer more insight as to how to overcome impostor feelings. In the first study, Zanchetta and colleagues (2020) sought to assess how well a coaching intervention reduced impostor feelings. The researchers randomly assigned participants to a coaching intervention (treatment) or training intervention (control). Topics in each group included, but were not limited to, creating measurable goals, taking inventory of their abilities, and then completing an activity that helped participants internalize their identified abilities. Although the coaching and training interventions involved nearly identical activities, participants in the coaching intervention received one-on-one coaching to process the activities, whereas individuals in the training condition processed the activities in a small-group format. In all, the coaching intervention was more effective in reducing levels of impostorism. However,

what's really important to note is that each intervention involved *learning* about and *discussing* the fear of negative evaluations and the value of not hiding mistakes from others. This is particularly noteworthy given the key role that fears of negative evaluations play in manifestations of impostor syndrome (Clance, 1985; Clance & Imes, 1978). Moreover, the researchers found that acknowledging and discussing fears of evaluation, via the coaching intervention, was the only statistically significant component of the intervention that reduced impostor thoughts and feelings. Thus, above all else, talking about your impostor-related thoughts and feelings to others (e.g., peers, mentors) may be among the more effective ways to reduce the salience of impostor syndrome.

In the second study, researcher Jonathan Cisco (2020) tested the effectiveness of an academic skills training intervention that was specifically designed to reduce impostor feelings in graduate students. This group format intervention aimed to increase students' comfort with reading and synthesizing academic articles, a common task for graduate students. Four 90-minute interventions were used to (1) introduce and discuss impostor syndrome experiences; (2) normalize the commonness of cultivating scientific literary skills while in graduate school, as opposed to developing those skills prior to graduate school; (3) develop and practice skills for reading academic journals; and (4) develop and practice skills for writing literature reviews. Altogether, the study provided evidence that the academic skills training intervention significantly reduced levels of impostor syndrome for graduate students in the treatment groups relative to students in the control group, and the intervention decreased impostor cognitions across the duration of the intervention (pre-test and post-test levels). Thus, taking steps to discuss and normalize that novel skill acquisition continues well into graduate school may be useful in reducing social comparisons, which may in turn reduce internal perfectionistic pressures that underlie impostor cognitions.

Altogether, the above discussion and available empirical evidence for reducing impostor cognitions can be summarized into four takeaways that may help with managing impostor syndrome. The four takeaways are as follows:

1. Seek professional help if you experience distress that impacts your functioning.
2. Actively resist the temptation to hide your perceived flaws and mistakes.
3. Possibly alone or with a professional, use deep reflection to examine fear of being negatively evaluated.
4. Recognize that skills needed in graduate school are often developed during graduate school (not prior to), and that those skills can improve through support and training.

Beyond the existing empirical evidence, there may be additional strategies one can employ to help prevent or mitigate impostor cognitions and the related stress, anxiety, and depressive symptoms. To this end, five research-informed strategies are presented next. First, it is important to be able to identify *if* and *when* you are experiencing the impostor syndrome. Paying close attention to the vignettes presented in this chapter, reading about other's experiences of impostor syndrome in

books or pop culture writings, or accessing educational resources (e.g., TED Talks, empirical papers, conference workshops) may increase your ability to recognize common signs and situations that are related to the impostor syndrome. These strategies may be useful in helping individuals to identify and label internal thoughts of impostorism that may have otherwise gone unnoticed (e.g., “My research paper probably only received high marks because Dr. Mulki is such a nice person”).

Second, individuals who experience impostor syndrome may feel a need to hide “deficient” or imperfect parts of themselves from others, which aligns with empirical evidence that suggests shame and the impostor syndrome are positively correlated (Cowman & Ferrari, 2002). However, hiding one’s suffering and distress may cause an individual to become more isolated and disconnected from crucial social supports that can normalize the impostor experiences and offer positive support. In fact, research suggests that social support is negatively related to impostor syndrome (Bravata et al., 2019). Therefore, it may be especially important to remain connected to social supports during distressful impostor syndrome experiences. As detailed above, sharing impostor experiences with others can be therapeutic and may actually help to normalize (and even challenge) distorted self-perceptions and beliefs regarding one’s own intellectual ability.

With recent research alluding to the fact that impostor syndrome may diminish in intensity as individuals become more acclimated and experienced with a particular context or task (Rudenga & Gravett, 2019), a third strategy is to adopt a growth mindset to manage impostor cognitions. Put forth by psychologist Carol Dweck and colleagues, a growth mindset suggests an individual’s abilities can grow over time, versus remaining fixed and unchangeable (Dweck & Yeager, 2019; Yeager & Dweck, 2012). In other words, your skills and abilities as psychology graduate students, such as scientific writing or analyzing statistical data, are not fixed but instead can be improved over time. In fact, Zanchetta and colleagues’ (2020) above impostor syndrome empirical intervention uses Dweck’s mindset framework to conceptualize how a growth mindset could prevent or reduce the impact of impostor cognitions. Specifically, the authors suggest that a fixed mindset can cause individuals to be fearful and avoid constructive feedback that is important for their professional development. Conversely, embracing a growth mindset allows one to recognize that their skills and abilities are malleable, which can be furthered by feedback.

The fourth strategy targets the context of impostor syndrome. As mentioned previously, impostor syndrome does not happen in a vacuum. It is not fully explained by a lone individual characteristic, but instead is likely influenced or exacerbated by the surrounding context. Given that recent research points to a mental health crisis among graduate students, especially for marginalized students (Evans et al., 2018), graduate programs and faculty mentors should continue to create healthier graduate environments. For instance, a systemic approach to preventing or alleviating impostor syndrome distress may be to craft policies that promote self-care and school–life balance. Graduate student associations and committees can also advocate for and put forward possible systemic solutions. At the least, these efforts could require

academic programs and graduate schools to widely acknowledge and validate the existence of impostor syndrome in graduate school. Ideally, acknowledgment of this type could give individual graduate students permission to acknowledge their own distress and resultantly seek support.

8. Conclusion

As you prepare or continue to embark on your graduate journey, we hope that this discussion has provided some insight into impostor syndrome, which represents a common experience that will more than likely rear its head on more than one occasion! Despite what this internal dialogue of being an impostor may lead you to believe, questioning your own competence does not reflect an internal fatal flaw, but rather a normative experience that is particularly prevalent within graduate school. Accordingly, it is important to remember that you do belong in graduate school, you are competent, and that many skills are expected to be developed during graduate school, and not prior. As such, we hope this discussion about impostor syndrome adds structure to your current or upcoming graduate school experience and equips you with the knowledge and resources that will help you recognize and challenge thoughts and feelings that question the validity of your own intellectual ability.

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6 Cultural Humility in Psychology

Maysa Akbar

In a day and age when racism, xenophobia, and bigotry are at an all-time high, cultural competency, cultural humility, and multicultural growth are of the utmost importance in our field. As a psychologist, it is inevitable that you will work with people who are different from you – not just in race, ethnicity, sexual orientation, gender identity, or ability status, but in ideology, values, and beliefs. The world we live in is ever evolving, changing, and advancing, as is our understanding of individual differences and intersectional identities. As a professional you must know how to be responsive to those that you work with, be aware of what may be offensive, and be conscious of your own biases as they may manifest. As a graduate student, you have an outstanding opportunity to grow in your understanding and application of multiculturalism and cross-cultural psychology. But be aware that to engage in this process, and to do so successfully, there likely will be moments when you feel uncomfortable, you confront biases or stereotypes you did not realize you had, and you discover “blind spots” revealing your ignorance on topics or issues well outside of your own lived experience. That’s okay. These moments of discomfort, shame, or even embarrassment can be where growth most occurs. So, come prepared with an open mind and an eagerness to learn. Challenge yourself to embrace cultural competency and implement new skills that will enhance your ability to promote equity, diversity, and inclusion. It is not only a great way to ensure that your work as a psychological scientist, teacher, or practitioner is best able to benefit all people in society; it is a social responsibility and an ethical duty to treat all people with respect. This chapter includes a brief description of key terms used to discuss your own personal journey related to cultural humility and offers advice for how you can make necessary strides in your graduate school experience.

1. Cultural Competency

As a graduate student, you may receive training in “diversity” that will provide you with greater awareness, new knowledge, and develop skills that are a core part of your professional and personal development. All psychologists interact with people: as

students, mentees, research participants, or as patients. Thus, deepening your learning toward cultural competence is essential for all graduate students in order to succeed in your career, and to ensure the broadest impact of your work as a psychologist in the world around you. Cultural competence has been defined as the ability to understand and interact with people from cultures or belief systems different from one's own (DeAngelis, 2015). This theory has been a key aspect of psychological practice and scholarship for many years; however, implementation of this concept to create equitable and inclusive places has trailed behind. Many psychologists that are involved in social justice work view cultural competence as an important element in combating systemic racism and socioeconomic disparities in health and mental health care. It is the understanding that different cultural beliefs positively impact the quality of care and interventions used in treatment.

Within health service psychology (i.e., clinical, counseling, and school psychology sub-disciplines), training in cultural competence has become an integral part of graduate curricula. Recently, the American Psychological Association (APA) made it a requirement for accredited programs in these areas to specify and implement a plan for integrating diversity into both didactic and experiential training. These requirements are not mandated to graduate training in other areas of psychology; however, more work is needed to ensure that all psychology students receive this type of instruction during graduate school.

The majority of the cultural competence training emphasizes learning the patterns of thoughts and belief systems in other cultures, thereby reminding you to constantly reflect on your own thoughts and actions, and work on adapting theories, concepts, and interventions to meet the expectations of other cultures (Chui & Hung, 2005). In the health service psychology areas, research thus far has shown that 85 percent of graduate students report their graduate school provided multiple courses in diversity and 83 percent report supervised clinical experience with diverse populations. This is a drastic improvement from past decades where graduate students felt ill-equipped in their knowledge of cultural competency.

2. Multiculturalism

Another concept to be aware of is multiculturalism. Multiculturalism promotes the value of diversity as a core principle and insists that all cultural groups should be treated with respect and as equals (Fowers & Richardson, 1996). It highlights humanity, tolerance, human rights, and authenticity. A huge part of multiculturalism is observed in culture and pays particular attention to honoring differences and amplifying diversity. Central to multiculturalism is the promotion of cultural equity within psychology.

Multiculturalism deserves special attention within our field. Reports suggest that only 5 percent of psychologists in the APA identify as Asian and Hispanic, 4 percent identify as Black/African American, and 1 percent identify as biracial/multiracial (Freeman, 2019). In addition to low representation, for many decades there has been a lack of urgency for a multiculturalist perspective in psychology (see

“Even the Rat Was White” by Robert Guthrie, 2004). However, this has begun to change. Active learning about multiculturalism is required for healthy and helpful interactions with diverse populations, facilitating broader impacts in research, teaching, and practice. Adopting the principles of multiculturalism also promotes a stable, cohesive environment for both you and the population you’re working with. Imagine how belongingness is enhanced when someone understands your cultural values and does not find them offensive, odd, or unacceptable.

3. Cultural Humility and Multicultural Growth

Although the terms “cultural competence” and “multiculturalism” have been used frequently within psychology, a more recent construct preferred in discussions regarding diversity is “cultural humility.” Cultural humility reflects the process of gaining cultural competence and multicultural awareness, knowledge, and skills, but also reflects a recognition that one is forever striving to learn, to address areas of ignorance, and to be consistently open about what one doesn’t know. Cultural humility also reflects the fact that due to countless possible forms of intersectionality (i.e., possessing many different identities simultaneously), it is always necessary to value lived experiences and differences more than to assume a comprehensive understanding of others’ experience. A focus on cultural humility will teach you to embrace the process of reflection and make it a priority during your years of studying and work in psychology. Cultural humility also can be conceptualized as the development and implementation of diversity competence as a psychologist. It is the awareness of the impact of one’s culture and diverse experiences that shapes an individual’s experiences and perspectives. This includes the impact of power, privilege, and oppression (Fisher-Borne et al., 2015) and can be developed when scientists, teachers, and practitioners understand their own culture, privilege, and bias. These dynamics can impact one’s interactions with others (Fisher-Borne et al., 2015). Because we each have a lived experience, we see the world around us based on that worldview.

In certain instances, when biases are created, whether implicit or explicit, it can affect the way we encode, interpret, and respond to stimuli around us. Biases are the attitudes or stereotypes that affect people’s understanding, actions, and decisions. This includes both negative and positive perspectives and thoughts that occur at times without full awareness. Biases can limit the capacity to relate to another person. At times biases also lead to marginalizing or diminishing another person’s experience. Unchecked biases limit our tolerance and acceptance of differences. So while it may initially feel uncomfortable to explore your biases, judgments, and perspectives, it’s critical to the process of gaining cultural humility.

The process of cultural humility teaches us to recognize these biases, reflect upon them, and recognize that we must understand one another’s “truth” without imposing our own biases to undermine, or rewrite, that truth. Indeed, it is in the acknowledgment of one’s own cultural biases, stereotypes, and prejudices where the true work of gaining cultural humility begins.

For some, the process of developing cultural competency, the awareness, knowledge, and skills of multiculturalism, and introspective experience reflecting cultural humility began long before graduate school. For others, the journey is just beginning. Either way, graduate school training should include a goal to make great strides in these areas. Because diversity is ever changing and evolving, so must be your understanding. Research from the US Department of Health and Human Services indicates that progress in these domains improves relationships between people from diverse identities and backgrounds (Substance Abuse and Mental Health Services Administration, 2014). Research also suggests that many foreign countries do not see Americans as harnessing cultural sensitivity and acceptance (Murray-García & Tervalon, 2014), suggesting that there is room for continuous improvement in relationships with people from other cultures characterized by respect, consideration, and open-mindedness.

As you begin your graduate school journey, ask yourself:

1. How were you raised to treat someone of a different race?
2. What comes to mind when you meet someone of a different background than you?
3. What are your identities with regard to each area of diversity (gender identity, gender expression, race, ethnicity, religion, sexual attraction, sexual behavior, sexual identity, social class/socioeconomic status, physical ability, geographic upbringing, neurodiversity) and how might your identities allow you to experience the world differently than someone with different identities?
4. What limitations do you have in understanding others given your own unique experiences?

4. Graduate School is a Growth Opportunity

You will develop a greater appreciation for cultural humility in graduate school, and increase your own cultural competence and multicultural awareness, knowledge, and skills as well. But it's not easy. A few tips are below. Overall, remember that cultural humility is a process, not a destination. During your time in graduate school, take every opportunity to grow in multiculturalism. Be mindful of the attitude and perspective that you have during this time. Be open and accepting of biases that you will discover in the books and theories that you will learn. Explore the inequities inherent in psychology and question why they persist. Challenge the status quo. Are you ready to look inward?

1. *Developing cultural humility requires introspection.* You will be surprised to learn how much your own ideas, assumptions, and automatic beliefs about what seems true may not be true for everyone. In other words, you will begin to recognize the important role of lived experience in shaping our perceptions, beliefs, and behaviors and creating multiple truths. It is important to recognize that these are all equally valid and important perspectives that can coexist. Thus,

what may seem “obvious” or “peculiar” or “confusing” to you may be remarkably ambiguous, profound, or certain to someone else. Your job when discovering these moments of unique points of view is not to determine who is “correct,” but rather to realize that all perspectives are valid, informative, and allow for greater dialogue to occur. In short, your job is to listen and to better understand what you don’t know, and could not have known before.

2. *Cultural humility is relevant for everyone, even those who have been historically marginalized.* Of course, the process required to develop cultural humility is relevant not only for those with limited experience interacting with others from historically marginalized backgrounds, but also for those who themselves represent diverse identities. This work is relevant to everyone, which means first that all individuals have areas of cultural competence to develop, and second, approaching others who may appear to represent a historically marginalized identity under the assumption that they possess advanced expertise places an unfair burden on people who are engaged in advancing diversity work. Rather, it is essential for everyone to respect that we are all working toward cultural humility and simultaneously experiencing challenges and epiphanies.
3. *Determine when you may be most open-minded towards growth.* People are most likely to grow when they are not under stress or feeling overwhelmed. So it may be important to recognize your natural tendencies to be defensive or dismissive when challenged. Your attitude can either become a roadblock and hindrance to your growth or it can thrust you into a new level of understanding. Avoiding, ignoring, and blocking out are common forms of resistance, especially if it is different from your worldview. There will be moments where difficult conversations with peers or mentors may be needed, and it is understandable if fears and anxieties arise. Use those moments to further develop ways that you can commit to learning skills that will allow the needs of historically marginalized and minoritized populations to be addressed meaningfully. Take this work with you outside the classroom. Of course, your commitment to cultural competence, multiculturalism, and cultural humility can extend well beyond the classroom or your graduate curriculum. You can think critically about your research and teaching activities. Follow thought leaders on social media who represent novel viewpoints, and attend lectures that allow you to hear about diverse perspectives. There are dozens of fantastic books and podcasts that allow people to move through the journey of cultural humility, and you can establish safe forums for discussion and growth among peers at your department or university.
4. *Enlist the support of a mentor.* Finding a mentor is also key. The most effective mentors provide discussions and processing time to further help foster the development of cultural intelligence (Murray-Garcia et al., 2014). Mentors can also help benchmark your personal growth, and give you an objective perspective on your progress. Mentors will also help you with perseverance when you are struggling due to inevitable stumbles.
5. *Apply your work, everywhere.* Outside of your own personal experience and the acquired knowledge you will attain from graduate school, pay attention to the

systems that exist within society that further complicate or inhibit diversity and/ or inclusion due to systemic racism. Challenging yourself will help you to overcome emotional hurdles, hindrances, and roadblocks that may come later during your work as a psychologist. During this time of learning and understanding, make time for self-reflection. Try to evaluate the impact of your personal power, privilege, or marginalization. Try to go outside of your social circle to expand the diversity of your peer group.

6. *Elicit peer support.* Psychology graduate school is often regarded as a marathon, not a sprint, and it is important that you establish strong support systems to help you succeed. Creating a positive village that is inclusive of relationships with your peers and cohort is essential. Having others keep you accountable, sharing ideas and resources, enhances your development and training. For people who themselves represent historically marginalized identities, the village may include people who can help provide support when you are burdened and feeling pressured to represent not only your own emerging identity, but also the reputation of the group you may represent. In addition, as a diverse graduate student, you may feel compelled to respond to questions, provide explanations, or confront incorrect assumptions that can lead to exhaustion and frustration; moreover, the pressure to avoid reifying negative stereotypes while doing so is extraordinarily challenging. Peer support will be essential to allow you the space to be yourself and cope with these remarkable challenges.
7. *Take action.* As you embark on your journey toward cultural humility and recognize the systemic inequities that have existed, and have been passively maintained for centuries in some cases, you may become angry, frustrated, and feel helpless. Turn that into meaningful, tangible, impactful action. These feelings are a good sign that you are becoming an ally, and your allyship is most valuable when you elevate the words of others, use your power to create change, and push for action where others may be less able, perhaps because their power has been taken away through systems that they were born into. As future psychologists you have the capability to be strong and influential agents of change. You can proactively call out systems of racism, power imbalances, and social injustice. As an exemplar of cultural humility, you can create and advocate for psychological science that will reduce structural forces and institutional inequalities (Fisher-Borne et al., 2015). Your very actions, ideas, research, and guidance regarding equitable and inclusive practices can challenge and begin to build a better world for us all (Fisher-Borne et al., 2015).

So what have you learned thus far? Cultural competence, multiculturalism, and cultural humility are more than just terms you will likely learn during your time in graduate school. They are action words that require you to rethink psychology, and perhaps your own life today. As future and current psychologists, the possibility for real change is limitless. Make a conscious decision to intentionally address issues of diversity and inclusion, from the start of your graduate school journey. Explore diversity training within your doctoral psychology program and during your studies.

Create platforms for new cultural experiences so that you can be exposed to people with alternative values, beliefs, and ideologies. By approaching psychology with cultural humility you advance multicultural growth, cultural competency, and real change.

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7

Graduate Training for Students of Color: Belonging Required; Fitting In, Not Recommended

Keyona Allen, Amanda Parks, & Shawn C.T. Jones

Graduate training in psychology is both an exciting and a challenging time for all students. However, there are both historical and contemporary elements that can make training in graduate programs in psychology particularly unique for students of color. The purpose of this chapter is to provide an overview of the realities but also the possibilities for graduate trainees of color in psychology. This chapter defines students/trainees of color using the US Bureau of the Census definition of color: African/American/Black, American Indian, Alaskan Native, Asian-American/Pacific Islander and Hispanic/Latino(a)/x. We also utilize the term Black Indigenous and People of Color (BIPOC) when referring to these trainees of color.

Who Are We?

Positionality concerns the description of one's social location, privilege, and areas of marginalization. We feel that it is imperative to outline who the writers of this chapter are, as it informs why we decided to agree to pen this critical chapter. Notably, we are three current and former graduate trainees of color. We have all been trained at a bevy of Predominantly White Institutions (PWIs), which we note have provided both immense challenge and opportunity for us as Black psychologists. One of us (S. Jones) also now has the distinct privilege of training graduate students, both White and BIPOC, which has provided a full circle experience.

Who is the Intended Audience of This Chapter?

If there were only one demographic that were to read this chapter, it is our hope that BIPOC graduate trainees will find the contents herein useful. From that perspective, this chapter could be viewed as a FUBU (For Us By Us) offering, an homage to the 1990s Black-owned clothing line, or Solange's (2016) R&B track of the same name from her award-winning album *A Seat at the Table*. However, we also believe that the experiences highlighted in this chapter and navigated by many BIPOC graduate trainees may serve as fruitful multicultural understanding for

non-BIPOC graduate students in psychology who count themselves as allies or accomplices of BIPOC trainees of color. According to Ayvazian (1995), allyship is “intentional, overt, consistent activity that challenges prevailing patterns of oppression, makes privileges that are so often invisible visible, and facilitates the empowerment of persons targeted by oppression” (p. 6). Being an accomplice (or co-conspirator) has been described as a developmental step forward in allyship, one that has been described as connoting more risk-taking on the part of the accomplice (Suyemoto et al., 2021). Simply put, we would implore White graduate trainees to not shy away from this content, as it could aid you in having some context for understanding and supporting your fellow cohort-, class-, or lab-mate.¹ Whether accomplice, ally, or BIPOC trainee, it is our hope that this chapter will be edifying.

Chapter Outline

In the sections that follow, we take up three principal aims. The first aim is “explaining the terrain.” In the immediate following section, we will provide a coarse overview of the most recent data on the representation and experiences of graduate trainees of color in psychology programs, with an emphasis on U.S.-based data. The second part of this section centers on briefly defining key challenges that have been identified as impacting the quality of life of graduate trainees of color. In addition to presenting these definitions, we also, where possible, provide examples of the manifestation of these challenges. Our second aim is devoted to “equipping the toolkit.” In this section, we focus on navigating the terrain of graduate school using culturally relevant relationally centered strategies, as a means of making sense of and maximizing one’s time in graduate school. We see our third aim as “embracing the thriving.” In this section, we consider how to embrace “small wins,” eschew feelings of impostor, and proverbially live your “best life” while in graduate training.

1. Explaining the Terrain

We see the sun. We feel the warmth. We see so much sand and we imagine the ocean. This painful wretched truth can wake us up to recognize that the warmth and sand surrounding our “semi-peaceful” existence does not mean that we are relaxing at the beach, but that we are parched and dehydrated horizontal and face-down in the desert.

Dr. Howard Stevenson

We chose to begin this section with this quote from Black psychologist Howard Stevenson (Stevenson & Jones, 2015). Stevenson’s words were initially applied to the realities of parents of Black children in predominately White schools, but we find them equally apt here. You have applied to, interviewed at, and been accepted to the program of your dreams. You excitedly find a place to live in your new city and show

¹ We would only recommend the use of *dynamic sizing* defined by Stanley Sue (2006) as a flexibly generalized approach to culturally specific knowledge.

up to your graduate student orientation full of excitement and promise. We remember this excitement. Moreover, unfortunately, we each remember a moment when the place to which we had arrived began to look and feel a bit different than we had imagined. While this moment looked different for each of us, and will also look different for you, it is nevertheless important to “explain the terrain”: some of the *potential* realities for BIPOC trainees. Notably, many of these realities are not specific to graduate training in psychology per se, although they are nonetheless relevant. In the subsections that follow we outline the numerical (*by the numbers*) and narrative (*beyond the numbers*) experiences of graduate trainees of color in psychology programs.

1.1 Behind the Numbers: Graduate Trainees’ Representation in Psychology Programs

The numerical representation of BIPOC students in graduate training in psychology in the United States is a tale of “low and grow.” This is perhaps not surprising, as it mirrors the field at each stage of the pipeline. For example, the most recent American Community Survey reported that about 84 percent of the active psychology workforce was White, an over-representation given that only 76 percent of the nation is White (APA Center for Workforce Studies, 2018). The American Psychological Association’s (APA) Center for Workforce Studies (CWS) also provides annual information on graduate degrees awarded in the field by race/ethnicity. According to these data, across the 2010s (2010–2019), 72 percent of doctoral degrees were awarded to White trainees, meaning 27 percent of doctoral degrees were awarded to groups defined as trainees of color (American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latinx, Native Hawaiian/Pacific Islander, Bi- and multiracial; www.apa.org/workforce). Notably, the most recent available data (2019) suggest a slight improvement, with only 66 percent of degrees being awarded to White trainees. These racial/ethnic data are similar at the master’s level, with 66 percent of degrees awarded to White students from 2010 to 2019 (61 percent in 2019). While it is clear that the number of BIPOC trainees getting doctorates has been *low*, the data also suggest *growth* in representation for these groups collectively, as well as for most at the subgroup level. Overall, BIPOC trainees’ awarded doctoral degrees increased by 64 percent over this time frame. Moreover, with the exception of American Indian/Alaska Native trainees, a group that has frequently vacillated year over year, each racial/ethnic minoritized group saw at least a 20 percent increase in degree obtainment.

Continuing down the pipeline, it is important to understand the data for *current* graduate trainees of color. According to the most recent demographics from the APA’s Graduate Study in Psychology, 63 percent of doctoral and 59 percent of master’s students were White (per academic year 2019). Based on these data, there is a slightly higher number of BIPOC trainees in programs than those who ultimately receive degrees. However, much like the degree data, recent trends suggest that the representation of most racial/ethnic subgroups is growing: Compared to 2014–2015

data, there appear to be increases for every BIPOC trainee group. A final important quantitative marker, particularly as we consider the qualitative, lived experience of BIPOC trainees, concerns attrition. Although these data are not as robustly kept as those on degree earning and enrollment, a December 2017 report on diversity in health service psychology doctoral programs (i.e., clinical, counseling, school) indicated an attrition rate for BIPOC students of 3 percent in 2015 (noted as a decrease of 2 percent from 2012 data; Page et al., 2017). The White student attrition was noted to hold steady at 2 percent across these time points (Page et al., 2017). In addition to these numerical data, a 2012 study by Proctor and Truscott specifically assessed the attrition experiences of seven Black school psychology trainees. Of note, these students identified a number of contributing factors, including those ideological in nature (e.g., misalignment with career goals), but also, importantly those that were relational (e.g., relatedness with peers and faculty). Notably, with regard to the latter, racial aspects of connection with faculty and peers emerged from the data. These experiences, and others, are elevated in our next section.

1.2 Beyond the Numbers: Qualitative Experiences of Graduate Trainees of Color

One of the racialized elements that trainees in the Proctor and Truscott (2012) study alluded to concerns a result of the aforementioned data we presented: the issue of being a numerical minority. Indeed, while the growth of BIPOC trainees in psychology programs is notable, these data are at the national level. In any given program, BIPOC students as a collective may represent a small number of students, with the representation of any one racial/ethnic group even smaller. To illustrate this, the most recent available data from the Graduate Study in Psychology database (academia year 2019) suggested that the median number of Asian graduate students was two, with the median number of Black and Latinx graduate trainees at one, and all other groups too infrequent to provide meaningful measures of central tendency. Feeling like “one of the only” in a given program may lead you as a BIPOC student to wonder if tokenism is at play. Tokenism has been defined as psychological experience among persons from demographic groups that are rare within a setting, in this case, graduate school (Niemann, 2003). Of importance for the experience of graduate school for BIPOC trainees, a tokenism experience may leave one: feeling a sense of isolation and loneliness; feeling overly visible or distinctive; feeling like the “poster child” (representativeness) or trapped to engage in a limited manner (role encapsulation); exposed to stereotypes and racism; and being uncertain how to maneuver to interpret certain interpersonal interactions (attributional ambiguity) (Niemann, 2003, 2011, 2016). Moreover, these experiences may lead BIPOC trainees to contribute disproportionately to any diversity, equity, and inclusion efforts in their program, department, or even university. Although a more extensive discussion of the effects of tokenism is beyond the purpose of this chapter, we recommend the work of Yolanda Flores Niemann to unpack these experiences.

Underlying a number of the tokenized experiences noted above are the realities of racism and microaggressions that, unfortunately, are present in the institutional and interpersonal dynamics of some graduate departments and/or programs. Briefly, racism is defined as a system propped up by the belief in the superiority of one's race combined with the power to act out that believed superiority, either at the individual, institutional, or cultural level (Jones, 1997). Microaggressions are defined as covert (or at least not overt) insults, assaults, and slights experienced by BIPOC individuals (Sue et al., 2007). Lest we respond too defensively within our field about the presence of these systems, structures, and in-vivo and vicarious experiences, it is worth noting the first guideline related to the APA's most recent Guidelines for Race and Ethnicity notes: *Psychologists strive to recognize and engage the influence of race and ethnicity in all aspects of professional activities as an ongoing process* (APA, 2019, p. 10). Moreover, the APA's Graduate Student Guide for Ethnic Minority Graduate Students (www.apa.org/apags/resources/ethnic-minority-guide.pdf) devotes an entire section to these two topics, replete with real-life examples. BIPOC trainees have indicated that these racist experiences can emerge in research, clinical, and teaching aspects of their graduate school experience (e.g., Jernigan et al., 2010).

Although not unique to BIPOC trainees, a third phenomenon that may impact the graduate training experience is feelings of Imposterism. Initially conceptualized for White women in corporate America (Clance & Imes, 1978), Impostor Phenomenon has been defined as an internalization of unhelpful thoughts related to one's intellectual competence and has been outlined as perhaps a particularly relevant experience for BIPOC emerging adults (e.g., Cokley et al., 2013). Of note, Cokley and colleagues (2013) have highlighted that such cognitions may be present among BIPOC individuals as they move through many of the aforementioned experiences in the academic environment, including racial discrimination and several of the sequelae associated with tokenism (e.g., isolation, marginalization, stereotyped exchanges). It manifests as feelings of being "out of place" or seeing our achievements as due to "luck" rather than ability. Germane to this chapter's title, it is feeling that one neither belongs nor fits in. Our dear colleague Dr. Donte Bernard has an entire chapter in this volume devoted to this topic, which we see as required reading for understanding the psychological outcomes of feelings of impostorism more fully.

In a recent investigation, Bernard, Jones, and Volpe (2020) elucidated that one way in which BIPOC trainees may attempt to cope with feelings of Impostorism is through the use of high-effort coping strategies such as John Henryism Active Coping (JHAC). Named after the Black American folk hero and "steel driving man" who famously bested a drilling machine in building a railroad only to die of exhaustion, JHAC has been defined as "efficacious mental and physical vigor; a strong commitment to hard work; and a single-minded determination to succeed" (Bennett et al., 2004, p. 371). Breaking down this definition in lay terms, we would define John Henryism as "going above and beyond" or "doing the most" as a means of navigating a difficult environment that does not seem inviting. Interestingly, the

research on JHAC has been mixed: in the short term, some research has suggested that this type of coping can be effective; however, other research has suggested that over time JHAC contributes to negative physical health outcomes and potentially worsened psychological well-being (Bronder et al., 2014; Volpe et al., 2020). From our perspective, this high-effort coping is harmful over time; another contributor to what is an added burden that can befall many BIPOC trainees. This burden has been referred to as an “emotional tax”: experiences that threaten the health, well-being, and thriving of these trainees (Travis et al., 2016). This tax, we would argue, can make graduate training in psychology an “expensive” proposition, and one that may leave BIPOC trainees counting the costs and benefits.

2. Equipping the (Relational) Toolkit

The combination of the factors we have discussed (i.e., tokenism, racism, microaggressions, impostor syndrome) have the potential to individually and synergistically leave BIPOC trainees feeling a long way from the proverbial day at the beach. At times, in fact, these stressors may resemble the desert experience we highlighted in the previous section, with even occasional wins feeling like a mirage. That said, we find it critical to note that graduate school does not inherently have to be an arid journey. In fact, even if some graduate programs may be more desert than beach for BIPOC trainees, we believe in the ability to find the oasis: a fertile, lush, hydrating place, even in the midst of the desert. In this section, our goal is to identify tangible tools that you can use to navigate the terrain of graduate school, creating a veritable culturally informed relational toolkit. In particular, we focus on the importance of *relationships*, which we feel is generally congruent with the communalistic cultural orientation of many BIPOC trainees.

2.1 Relationship Building 101: How Can / Get Myself Through Graduate School?

As BIPOC graduate students and early career faculty, we have learned firsthand that relationship building and maintenance is the key to our success and happiness in graduate school. We realize that there are many ways to approach relationships in graduate school, and we include a few that have worked for us along our journeys to the PhD.

First, determine your non-negotiables. Dr. Hailey tweeted, “Passing along some good advice: When entering grad school, a friend told me to write down the non-negotiable things that sustained my well-being and joy. She said no matter how difficult and hard things get, never negotiate on your list. That list kept me going all six years” (Hailey, 2021). Importantly, she added that this list can be crafted at any point in your journey as a psychologist (i.e., applying to graduate school, during graduate school, post-doctoral fellowship, or in your early or mid-career) and should be frequently assessed, reflected upon, and amended (Hailey, 2021). This advice can be applied to all parts of your life, even outside of school. For example, our therapist colleagues and I (A. Parks)

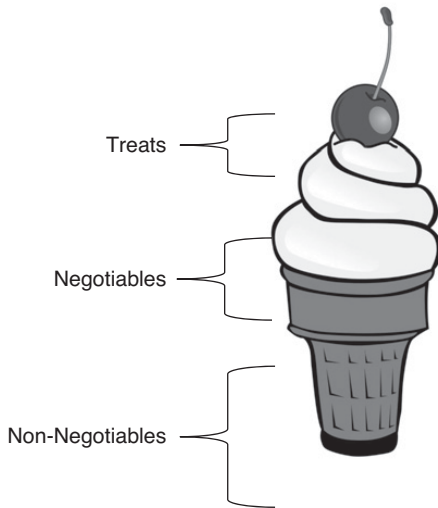


Figure 7.1 Activity for assessing priorities and values.

often utilize values exploration and identification activities in our sessions with our own clients, who may be struggling with boundary setting or experiencing distress in their interpersonal relationships or with choosing a career path. There are several ways to approach creating this list. Figure 7.1 outlines one activity that my colleagues and I have found to be successful in our own priority setting in graduate school.

Figure 7.1 depicts an ice-cream cone. There are three pieces highlighted: the cone, the ice cream, and the cherry. The cone represents your non-negotiables; these are values, activities, categories, or items that *you* believe to be essential to your success as a person and a graduate student. The ice cream cone represents your negotiables; these are important to your success and happiness, but you are willing to compromise the frequency or intensity in which they exist in your life. Lastly, the cherry (or your favorite topping) represents the activities, items, or categories that you consider to be a treat. They are not required for your daily success and happiness, but when present, they add a little more joy or pleasure to your life. Importantly, these non-negotiables may look very different from what your colleagues or your institution may deem essential. The work in academia does not stop; however, that does not mean you should not take time to slow down or even go at your own pace. Our “embracing the thriving” section will further describe the importance of authenticity and how, through trial and error, to quiet the outside noise and learn to distinguish your own values from the values of others.

Keeping our ice cream cones in mind, relationships are a non-negotiable that will be vital to your success in graduate school as a BIPOC student. As people of color, traditionally, our communities sustain us. Communalism, familismo, and filial piety are similar yet unique values of BIPOC communities that reflect a shared collectivistic nature, harmony, and appreciation of interconnectedness among people (Boykin et al.,

1997; Kim et al., 2001; Rivera et al., 2008). Extant research has demonstrated that academia and many institutions were not designed for BIPOC students and currently perpetuate oppressive practices and inequities for students (and faculty, staff) of color. Many of us will serve as activists and advocates during our graduate school journey and try to dismantle a number of those oppressive practices and systems. However, we must first focus our energy and time on our humanity. There may be nothing more human than our ability to feel, empathize, and relate with others. Given this, we describe how to nurture your relationships, including the one with self, and to find your people, your family, your community, or your tribe while in graduate school.

2.2 Nourish Your Relationship with Yourself

In order to endure the oft traumatic experience of graduate school as a BIPOC student, you must first advocate for and prioritize your wellness. As a result of having to cope with discrimination, systemic racism, and racism-related stress, BIPOC folks often develop many chronic health conditions and mental health concerns. If your graduate school and/or department does not include health insurance with your funding, and you have the emotional and mental energy, try to advocate with other students and faculty for them to provide it. Unfortunately, this may take several years. In the interim, as much as possible, prioritize your own therapy and other medical appointments. Ironically, graduate students training to be therapists often neglect their own mental health while supporting the mental health of so many others. One hour a week or every other week is vital to your self-preservation as a person of color and should not be compromised. If possible, place these appointments in your schedule before scheduling your other commitments. We must always remind ourselves that we are humans, not machines. Our bodies and minds are to be treasured, nourished, and treated with respect and kindness.

Additionally, nourish your relationship with yourself, by paying yourself first! I (A. Parks) received this advice in my fifth year, and it has slowly improved how I navigate my graduate program. At the beginning of every year, semester, month, and day, pay yourself first. Outline what you need to complete your milestones and goals in the program and your personal life, and work on those items *first* every morning. In your physical or electronic calendar, schedule a recurring time for your own work and writing, as you would a class or a meeting with your advisor. Days fly by and tasks pile up; often we do not get to our work until very late in the evening, when all of our energy has been depleted. Paying yourself first is one way you can practice radical self-care, and it will guarantee that by the time you graduate, you will be as excited and hopeful as you are now reading this chapter. Our “embracing the thriving” section will expand upon the definition of radical self-care and additional strategies for its prioritization.

2.3 Maintain Relationships that Began Before Graduate School

Community is central to the successful transition to graduate school for BIPOC students. However, too often the focus is placed on the *new* community you will

encounter. It is important to also pour into the people and relationships that contributed to your journey and helped to make you the person you are today. In graduate school, it can become very easy to unintentionally neglect your friends and family. There is no course on how to balance work and our personal relationships while in graduate school. We must fight the urge to succumb to the outside pressure to devote all our time to our graduate work. The more we engage our communal nature, and attempt to reject individualism and its friendly associate, competitiveness, the more we will succeed.

Some suggestions for engaging your community that were present before graduate school include to first communicate, frequently and intensely, with them. Share your wins with them as much as possible! You may begin to unintentionally neglect your friends and family because of the outside pressure to devote all of your time to your school work. Upon reflecting on my time in graduate school, I realized I habitually avoided talking about my school work with my friends and family. I quickly shut down questions about important projects that took up most of my energy on a weekly basis. I began to realize this as a symptom of being disconnected from my purpose. When I began to open up more about my wins and smaller accomplishments with my tribe, my creativity and motivation was reignited. Our close friends and family know us well and can serve as important reminders for our purpose when we begin to use avoidant coping, feel numb, or have thoughts of giving up altogether. They can provide insight into problems and barriers we have experienced with our clients and research ideas and can help us to avoid retreating to the ivory tower. They can also assist us with accountability and can help reinforce us when we notice that our cup is rapidly draining. Disengaging with our tribe can lead to isolation, increased anxiety, burdensomeness, depression, and maybe the most underemphasized, inauthenticity.

Questions you may consider asking yourself to assess your maintenance of “pre-graduate school” relationships: How often do you check in with your loved ones? When you talk to them, do you find yourself asking them more questions about their lives? Do you find yourself avoiding bringing up your graduate school projects? If so, why do you think that may be? Are you worried they won’t understand? Are you worried that they may judge or criticize your progress? Do you find yourself growing disinterested in your own work?

If you answered “no” to most of these, then great job! You seem to be navigating your “pre-graduate school” relationships with harmony and reciprocity. If you answered “yes” to most of these, then we gon’ figure it out together! Our first recommendation would be to begin to reflect on why you may be more disconnected from these relationships. This reflection can also occur in collaboration *with* your support system. Additionally, it may be helpful to begin weaving your pre-graduate school relationships into your graduate life, in moderation of course, as many find that keeping school and personal life separate serves them best. One way to involve your pre-graduate school folks in your accountability could be to schedule half-hour check-ins, biweekly or monthly, where the time is spent solely on explaining your research to them and receiving feedback on its accessibility. Many BIPOC students feel encouraged by inviting their pre-graduate school folks to their thesis and

dissertation proposals and defenses or introducing them to their graduate school mentor and friends. Regardless of what works best for you, the crucial piece is to ensure you are utilizing your community in a way that feels authentic to you, as you cannot make it through graduate school alone.

2.4 Find and Build Relationships Within Your Graduate Community

Finally, we cannot forget the relationships that we will create while on our journey to the PhD. These relationships are diverse and can include other doctoral students in your program, psychology department, your university institution, and even on a national scale (e.g., APAGS, APA division special interest groups, or social media). For example, @blackwomenphds on Twitter features Black women graduate students and PhDs and hosts space for reflection and writing. Ideally, your program or department may have a student-led initiative with an aim for peer mentoring and event curation, which may more easily allow you to meet and get to know your cohort on a personal level. For BIPOC students, finding your people will be essential to thriving in graduate school. These people may or may not always share your racial and ethnic identities, but must share your values and priorities. One way that BIPOC graduate students in our program helped to create community was through hosting parties or kickbacks where the new BIPOC students could meet current students and learn more about the culture of the department. Further, graduate students created a GroupMe, titled Black Girls Matter, to sustain our relationships, discuss our gripes with the program, process microaggressive interactions, or most importantly, to laugh with each other about the latest viral thread on Twitter or plan outings together to focus on our wellness. Below, we have included additional concrete tips for sustaining your relationships with your graduate school tribe. These can also be applied to all relationships you develop along the way.

Tips for Sustaining Relationships

- *Engaging each other for accountability and support.* Start a weekly writing group with other BIPOC students where you can prioritize *your* work and provide feedback to each other throughout the writing process. Expand upon this weekly time by considering attending or creating writing retreats with each other for a weekend or two throughout the semester.
 - Working on fellowship, scholarship, and internship applications together.
 - Taking trips out of the city and developing boundaries about school. For example, only discussing school for 15 minutes and ensuring the remainder of the trip is a school-free zone.
- *Using our strengths to help each other.* For example, if you are very disciplined when it comes to sleep, but you have a friend who struggles with insomnia, consider developing an accountability plan wherein you text the friend every night an hour before bed and remind them to wind down and check in on them in the morning.

- *Sharing cultural celebrations and traditions with each other.* Family dinners, book clubs, watch parties, and group chats, or celebrating cultural holidays together.
- *Celebrating and promoting each other.* Attending proposals and defenses, nominating each other for appropriate scholarships or awards, and sharing research and fellowship opportunities with each other. Finding a weekly time to celebrate all wins with each other.

Outside of the people you meet in graduate school, who are also pursuing a graduate degree, you will also find community in the people of the city or town of your graduate institution. Recalling our activity in Figure 7.1, where you elect to spend your time, and subsequently build your relationships, will be dependent on your values. For example, you may hold existing spiritual or religious identities you want to feed, and you may find home and support in local churches, temples, synagogues, or other religious organizations. The people you meet at these places will undoubtedly connect you with additional supports and organizations or areas of the city that may further align or expand upon your interests. Additionally, for BIPOC students, engaging with cultural organizations may help you to feel at home, away from home, and nourish your cultural values even further. One way to find cultural organizations and events will be to follow local social media accounts and connect with university student-led cultural organizations or university centers. These organizations or centers will be more knowledgeable about how to get involved in your racial/ethnic community, outside of or within the institution. At the end of your graduate journey, when you walk across the stage and your degree is conferred, these relationships will be what you remember, what will persist, and what will matter.

2.5 A Brief Word on Jegnaship

As we close out our section on the toolkit, we would be remiss if we did not briefly discuss a relational approach to mentorship that we find is critical. We did not provide an exhaustive discussion of mentorship, advising, and sponsorship because we feel that the aforementioned APAGS Resource Guide provides a fantastic overview of these vital relationships. Nevertheless, there is a form of advisement rooted in Afrocentric perspectives which we feel has benefited each of us, and is worthy of excavation: *jegnaship*. Black psychologist Wade Nobles (2002) describes the jegna as one who has shown determination and courage in protecting their peoples, land, and culture; produced an exceptionally high quality of work; and dedicated themselves to the protection, defense, nurturance, and development of future generations. The Association of Black Psychologists has long recognized the importance of jegnaship as a transformative experience that goes beyond what is typically considered in a mentor/mentee relationship. It invokes community, family, village, many of the elements we have described before. Although jegnaship is considered a pillar of Black psychology and thus highly applicable to Black trainees in psychology, we would encourage you all to find your version of a Jegna, someone who will pour into you holistically, providing the nourishment needed to traverse the sands of graduate school.

3. Embrace the Thriving

In our first two sections, we have made the case for understanding what the landscape may be for BIPOC graduate trainees in psychology and have provided some tools for such a journey, centered on the critical role of meaningful self- and other-relationships. However, despite our extended desert/beach metaphor, and the realities that graduate school can be an exhausting experience for BIPOC students, we reject that graduate school for BIPOC students should merely be a time of *surviving* (mere existence). Rather, we proclaim and affirm that your experience can be a time of *thriving* (growth and flourishing). This is the focus of our final section.

3.1 Rise and Thrive: Using Healing Justice to Thrive and Resist Oppression

Attention BIPOC trainees: we absolutely *can* live our best lives during graduate school and enjoy the ample experiences and lessons along the way. We can and we deserve to flourish and enjoy the unique opportunities to grow personally and professionally and to develop meaningful and lasting connections with colleagues, mentors, and friends. More importantly, we each can contribute to changing the racially oppressive culture that remains rampant within psychology graduate programs. Our thriving and resistance can pave the way for more supportive and equitable experiences for BIPOC graduate students to come. One critical strategy towards promoting our thriving and resistance against oppression in academic settings is adopting an ethic and practice of healing justice. Pyles (2018) defines healing justice as “a framework that identifies how we can holistically respond to and intervene on generational trauma and violence and bring collective practices that can impact and transform the consequences of oppression on our bodies, hearts and minds” (pp. xviii–xix). The principle of healing justice offers a pathway toward addressing and mitigating the traumas and stressors uniquely imposed upon racially and/or ethnically marginalized communities in higher education. Prioritizing your healing and wellness not only contributes to individual and collective emotional, cognitive, and physical preservation, but also serves as a form of resistance against the racially oppressive impositions of “grind culture,” inauthenticity, and perfectionism that have historically plagued BIPOC graduate students. Healing justice can provide us with an opportunity to partake in the facilitation of systemic change. When you care for yourself, you care for others, especially those with whom you share common identities. Similarly, when you care for yourself, you challenge racist ideals that render BIPOC students undeserving of grace, compassion, rest, and pleasure. Furthermore, we believe that we can maintain a culture of healing justice in graduate school by (1) embracing mediocrity; (2) showing up as our authentic selves; and (3) celebrating your achievements and promoting yourself.

3.2 Embracing Mediocrity

“You have to work twice as hard to get half as far” – sound familiar? I (K. Allen), like most BIPOC students, grew up hearing and living by this expression. I believed that

I needed to be excellent at every step of my academic journey to reach the spaces and positions I desired. I thought that achieving consistent perfection would give me a sense of vindication and liberation in white-dominated academic settings; however, graduate school taught me otherwise. By my third year, I had begun to seriously question whether I had enough energy to make it through the remainder of my doctoral program. My relentless pursuit of excellence and perfection had propelled me onto a fast track to burnout. I realized that I would likely not make it through to the finish line if I were to continue to overextend myself. This prompted my interrogation of my and other BIPOC students' tendencies to "do the most" for every single assignment, task, and role. Oftentimes, BIPOC graduate students feel pressured to demonstrate effort, intellect, and creativity that exceed well beyond that of White students, just to be considered for "equal" opportunities and recognition. To be clear, this pressure is not derived from mere perception. It is true that White people are rewarded more opportunities and accolades than racially marginalized people for the same or lesser effort, and they receive less penalization for mistakes and shortcomings. This is just one of many ways institutional racism manifests in academia. However, succumbing to this expectation often leads BIPOC to overwork to the point of near exhaustion. Furthermore, many of us find ourselves spiraling into a perpetual struggle with perfectionism.

Graduate school will be one of the most challenging and demanding life experiences that you will likely encounter. Psychology graduate programs, in particular, will stretch you to inconceivable lengths. Your schedule will be jam-packed with research projects, assistantship tasks, clinical work, preliminary exams, dissertation writing, class attendance and assignments, and a host of other responsibilities. In addition, as a BIPOC student, you will likely expend much time, as well as emotional and mental energy, processing and battling incidences of racial discrimination within your department and beyond. Given the demands on your time, energy, and effort, it is inevitable that you will have to aim for *completion*, rather than perfection, at times. It is impossible to read every article and book chapter, submit an "A"-quality paper each time, attend every club meeting, take on every available leadership position, and so forth, while sustaining sound physical and emotional wellness. Your work will need to be mediocre, at times. This is not just okay, but *necessary* for self-preservation. Embracing mediocrity can be especially difficult for BIPOC students to accept and practice, as we have long used perfectionism and overexertion to cope with discrimination and bias. However, these coping mechanisms are not sustainable, especially within psychology graduate programs. To thrive and resist academic racism, you must grant yourself the grace and compassion to be imperfect. Reclaim the energy you might otherwise expend in pursuit of perfection and invest that into yourself. Not every task requires your best effort and thought. Observe and learn what tasks truly require your best work, and limit the time and energy you expend on the rest. Your weekly reflection papers for courses do not need to contain your most profound questions and commentary. You need not thoroughly read every assigned book chapter. Furthermore, we have discovered that more often than

not, our “mediocre” performance was actually far better than we give ourselves credit. Our grades did not change when we committed ourselves to unlearning the habit of overworking, but our overall happiness and well-being most certainly did.

When we embrace mediocrity, we reject the racist ideologies that have denigrated the intellectual capabilities and value of BIPOC in the field of psychology and elsewhere. We transcend, rather than accept, the White supremacist falsehood that the value of our work, skills, and effort is lessened by our racial identities. Remember, you do not have to prove your worthiness of existing in a psychology graduate school program. You are already excellent and deserving as you are. Be mediocre when you need to. Reinvest your energy into yourself and your community. This simple yet profound act of resistance and radical self-compassion can contribute to genuine, meaningful transformation of psychology training programs.

3.3 Authenticity

Self-altering is an age-old coping mechanism that many BIPOC have adopted to navigate racially hostile terrain within collegiate settings. We may “put our heads down and get through,” a strategy that is sometimes even advised by well-meaning BIPOC faculty for whom this approach was adaptive during graduate training. Thus, each day, we negotiate which parts of ourselves we will leave at home and which parts we will bring with us into our academic spaces. We may silence our voices, suppress our valid and real emotional responses to racism, alter our hair and clothing, and even change our voices and dialect to meet the Eurocentric standards that are deemed acceptable in the academy. Truthfully, suppressing your authentic self will not protect you from experiencing racism, but it will almost certainly drain your spirit. Indeed, behaving in manners incongruent with your values, beliefs, and genuine interests can negatively impact your overall well-being (Harter, 2012). On the other hand, embracing authenticity can reduce your risk of burnout, contingent self-esteem, and psychological distress.

Challenge whitewashed standards of “professionalism” that have historically been used to denigrate, exclude, and silence BIPOC students and faculty. Showing up authentically will not only support our overall well-being, but in doing so, we can shift the racist tradition of professionalism in graduate school. The following are some ways in which you can persist as your authentic self in graduate programs:

- Speak in your native language(s) and dialect. Do not feel pressured to “code switch.”
- Dress in a way that is congruent with your personal and cultural identity, especially during presentations and conferences.
- Wear your hair in its natural state.
- Integrate your genuine values and customs into your research and clinical practice.

3.4 Self-Promoting and Celebrating

Many BIPOC trainees come from collectivist cultures. As we stated earlier, many of these cultures emphasize the community over the individual. Although we all have a healthy appreciation for this perspective, we nevertheless want to highlight the importance of effective self-promotion. At a minimum, this includes having and distributing business cards. However, beyond this traditional tool, we also advocate for creating blogsites, websites, and social media profiles as relevant as a means of networking and sharing your research and accomplishments. If your program or department has some sort of newsletter or blast for recognizing graduate student awards, consider letting the proper administrative personnel know. If this feels too misaligned with your values, this may be a great ask of your mentors or jengnas, or even your fellow colleagues.

Closely related to the notion of self-promotion is celebrating. Perhaps also eschewed by some cultures represented among BIPOC trainees, we feel that it is impossible to thrive in graduate school without frequent celebration and joy. Researchers have found that some of the greatest minds have been able to endure because they took stock to identify “small wins,” and then, upon recognizing that a small win, some progress toward a more protracted goal had arrived, they took time to celebrate (Amabile & Kramer, 2011). In the same way that we reject the lies of hyper-productivity and inauthenticity, we similarly rail against notions that the only moments in graduate school worth celebrating are “major” milestones. Yes, please celebrate passing your thesis, comprehensive or qualifying examinations, and dissertations. But also: finally figured out that stats syntax? Celebrate! Submitted that fellowship application? Celebrate! Got through year one of your program as whole as possible? Celebrate! Got an e-mail from a student sharing how much your help as a Teaching Assistant helped them figure out their major? Celebrate! I (S. Jones) personally encourage you to craft a celebration playlist that you have queued up for just such an auspicious occasion. Perhaps it’s *Cake By the Ocean* or *Vamos a La Playa* or *Soak Up the Sun* or *Beach Chair* (are you catching our beach theme here?). Celebrating sustains us; the joy it produces is the nectar of BIPOC thriving in graduate school.

4. Conclusion

As we close out this chapter, we wish to draw attention back to the post-colon portion of our title. This supplication is a play on the words of Brene Brown. In her book, *The Gifts of Imperfection*, Brown (2010) distinguishes “fitting in” versus “belonging” in the following light: whereas fitting in is described as “becoming who you need to be to be accepted,” belonging simply requires us to “be who we are.” This is our hope for every BIPOC trainee at every program in the country. As you understand the terrain that is your school and unit, take up core strategies for traversing, and embrace a spirit of thriving rather than simply surviving, we trust that it will lead you to a feeling that you belong at your program as your authentic

self, without needing to conform, transform, or assimilate. Indeed, whether the sand between your toes is beach or desert, you belong at your graduate school program.

Nevertheless, in the immortal words of Levar Burton on Reading Rainbow “don’t just take [our] word for it.” We invite you to read the following list of affirmations provided by trainees of color (Table 7.1).

Table 7.1 *Affirmations from current trainees of color in psychology programs*

Change is the only consistent thing in life. Be yourself and you are enough. You have your own timeline and journey; no need to compare yourself to others. Your time will come. It’s a marathon, not a sprint. Take care of yourself first before others. You’re not going to do everything and that’s okay.

Finding a community that can help you thrive is essential.

I advise you to take deep breaths when you feel frustrated or discouraged and recite that internal phrase that motivates you or has motivated you to get to that program. I always think of the people that have inspired and supported me. Celebrate every little victory because that makes the slow process of a PhD feel like there has been progression. Finally, remember that self-care helps get you through your program because that is what re-energizes you and growing in self-care along with your PhD knowledge makes you a more whole person (in my opinion).

Just because others do not understand your ideas or consistently criticize your reasoning for studying a particular topic, does not mean that your work is not important. Sometimes, just showing up is enough! Your presence is enough!

Please know that rest is important. If you are lacking this as a graduate student, you won’t magically get it as a faculty member or professional.

Protect your magic. I would pass that on to students of color generally. You are a hot commodity in these spaces. Don’t let everyone take your energy.

Remember that you deserve to be where you are. A lot of people feel like impostor syndrome can be endearing but that mindset can be detrimental to developing the confidence and competence you need to be successful in these settings.

Some of your greatest sources of support in the difficult times will be your family, friends, and colleagues that affirm the challenges associated with the journey you are embarking on. Lean on this support and hold fast to it when things get overwhelming. In the moments where you get lost in the difficulty these are the individuals that remind you of who you are and give you the support and encouragement to press on.

Take care of yourself physically and mentally. Say no and stick with it. You don’t need to deal with the academia trauma.

You are much smarter and more capable than you give yourself credit for! I promise, you wrote enough (for that assignment)!

You are human. You are more than a student. There will always be work. Please rest. Please call your family and friends. Your future self says thank you.

You are worthy. Those who have come before you will guide you, just as you will be there to guide those who come after you. Your voice matters, even in spaces that are invalidating or seemingly inhospitable. There’s a community out there for everyone – find one that values you for YOU!

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Navigating Graduate School in Psychology as a Sexual and/or Gender Minority (LGBTQ+) Student

Leigh A. Spivey-Rita & Ilana S. Berman

Why are we writing a chapter in the *Portable Mentor* for sexual and gender minority (SGM) graduate students in psychology? Recent data from Gallup indicates that the number of individuals openly identifying as lesbian, gay, bisexual, transgender, or queer (LGBTQ) in the US is rising and that the largest increases are happening among individuals between the ages of 18 and 36 (Newport, 2018). As our community becomes increasingly visible – particularly among young adults – the field of psychology needs to talk more directly about how to provide mentorship for sexual and gender minority trainees to meet their unique needs. We intentionally use the term “sexual and gender minority” as a broad umbrella term to be inclusive of the wide range of identities and lived experiences of individuals within the LGBTQ community.

Why is the fact that you are a member of the SGM community relevant to your graduate experience? There are many universal graduate student experiences (e.g., professional skill development, research milestones) that you will face alongside your cisgender and heterosexual peers. However, as an SGM graduate student, you will need to navigate unique circumstances related to your identity. Due to both the successes and challenges we have had, we recognize how important it is for SGM graduate students in psychology to have access to identity-specific mentorship. Given that it can be hard to find an SGM-identifying mentor in your field – which can be further complicated if your SGM identities are invisible – we hope this chapter will serve as a supplemental mentor to guide you through personal and professional issues unique to SGM students.

Although this chapter is first and foremost written for the benefit of SGM students, we hope it can be helpful for allies at any level of training in psychology to learn more about the unique considerations for SGM students. For example, the information here may be beneficial for peer allies seeking guidance on how to support SGM colleagues, or for faculty mentors to learn how to effectively mentor SGM students.

We have structured this chapter chronologically to follow your trajectory through the early stages of a career in psychology, as we know that professional considerations related to an SGM identity will evolve as you advance through your

Table 8.1 *Resources for SGM graduate students in psychology*

Resource	Website	Description
APA Proud and Prepared	www.apa.org/apags/resources/lgbt-guide	A guide for LGBT students navigating graduate training
APA Resources for Graduate Students of LGBT Psychology	www.apa.org/pi/lgbt/resources/graduate-students	Funding opportunities, research resources, guides, etc.
APAGS-CLGBTC Climate Guide	www.apa.org/apags/resources/clgbt-climate-guide.pdf	Guide for evaluating the inclusivity of graduate programs
A Guide for Supporting Trans and Gender Diverse Students	www.apa.org/apags/governance/subcommittees/supporting-diverse-students.pdf	APAGS resource for supporting trans and gender diverse students in graduate school
Consortium of Higher Education LGBT Resource Professionals	www.LGBTcampus.org	Provides a map of campus LGBT centers with at least one paid employee. <i>Note:</i> Other community (non-campus affiliated) centers and/or unfunded campus groups may exist but are not listed here
Transgender Law & Policy Institute	www.transgenderlaw.org/	A list of colleges and universities with LGBT protections
Guidelines for Psychological Practice With Transgender and Gender Nonconforming People	www.apa.org/practice/guidelines/transgender.pdf	Guidelines for culturally competent, gender-affirmative psychological care for gender diverse clients

training. Specifically, we will discuss common concerns and opportunities experienced by SGM students before, during, and after graduate school.

This chapter is informed by our experiences as queer, cisgender women who navigated personal and professional issues in graduate school related to our identities and research interests in SGM populations. We recognize that we cannot speak for the lived experiences of all individuals within the SGM community; thus, this chapter is not intended to be a comprehensive guide for all SGM graduate students. There are several other published resources available for SGM graduate students in psychology, which we hope you will explore in addition to this chapter (see Table 8.1), including a resource from the American Psychological Association of Graduate Students (APAGS; “Proud and Prepared”) that highlights voices and experiences from a range of SGM students. Ultimately, we hope that this chapter can support you as you seek out personalized mentorship and as you navigate your own professional development as an SGM psychologist.

1. Before Graduate School: The Application and Interview Process

So, you have decided to pursue a graduate degree in psychology – great! The process of applying to and interviewing with potential graduate programs carries both

opportunities and challenges related to your identity as an SGM individual. We will provide recommendations specific to SGM applicants that may help you through the process of identifying and narrowing your list of prospective mentors and programs. Similarly, this section will guide you through unique considerations relevant to the application and interview process that will help you to succeed as a prospective SGM graduate student.

1.1 Personal Considerations

There are a number of factors about your personal journey as an SGM individual that may influence how you navigate this stage of your professional career in psychology. At a fundamental level, it is important to self-reflect: To what extent are you “out” or open about your identities? How comfortable are you discussing your identities with others? How relevant or central are your personal identities to your professional identity? How important is it to you to share these aspects of your identities within your professional spheres? To what extent do your personal identities overlap with your professional interests? The answers to these questions will shape how you approach various aspects of graduate school training and your career in psychology.

It is important to emphasize the autonomy and control you have in deciding how, if at all, your personal identities intersect with your professional development. Whether and to what extent you choose to incorporate your SGM identities into your professional life is ultimately a question related to your values. Regardless of whether you choose to be “out” and vocal about your identities, or whether you prefer to maintain privacy and not discuss your identities in professional settings, your choice is valid. We recognize that not all sexual and gender minority students wish to be visible. Your comfort level with visibility may vary relative to other people, and may even change over time during the course of your graduate training.

1.2 Identifying a Research Mentor

One important lesson we learned in graduate school is that *mentorship* is one factor that helps already exceptional students to develop successful careers in psychology. There is no doubt that most, if not all, students enter graduate school with the inherent capacity to succeed. And yet, the ability to identify and utilize good mentorship can make a world of difference within a field that relies heavily on professional connections and learning from others’ experience.

The first step in applying to graduate school in psychology is deciding what you are interested in studying, including which broad area of psychology (e.g., social, developmental, clinical) and a general sense of a specific topic within that field. This is important because one of the primary components of the application process is identifying a compatible research mentor, given the field generally operates on a mentor model. If you have the ability to relocate, you may be considering programs across a wide geographic area. The process of developing a list and narrowing down potential programs and mentors can quickly become overwhelming!

You will want to identify a primary research mentor who can provide mentorship on your research interests, and with whom you also feel comfortable on a personal level. Evaluate for yourself what you are looking for in a mentor (e.g., area of expertise, their personal identities). For instance, some prospective SGM students may wish to work with a mentor who openly identifies as an SGM professional – although it may be difficult to find a mentor who shares both your research interests and SGM identities. Regardless of how your prospective mentor identifies, it is important that they seem able to effectively guide you toward resources to navigate professional issues as an SGM individual. Consider how important it is to you that your primary *research* mentor is involved in this aspect of your career development, as you can also seek out additional mentorship outside of this relationship.

1.2.1 Students with SGM Research/Clinical Interests

Some SGM students also have research or clinical interest in working with SGM populations. However, particularly in the small field of SGM psychology, it can be difficult to find a mentor that studies exactly what you are interested in. Therefore, you may find yourself in a position of having to compromise on some aspects of your research interests in the service of finding a good research mentor fit. The question is, do you prioritize working with a mentor who has expertise with SGM communities, or do you prioritize expertise in the specific phenomenon you wish to study? There are pros and cons to either approach that warrant consideration if you are not able to find a mentor whose interests perfectly align with yours.

Mentors with Content Expertise. If you want to study SGM populations, there are implications of prioritizing working with a mentor who *only* has expertise in your desired content area. The extent to which challenges arise in this mentoring scenario may depend on the specific content area and how relevant it is to the population. For example, if you wanted to study depression and/or suicide in SGM populations, you may be able to find a mentor who has expertise in depression or suicide but who has not studied it in SGM populations.

If you select a mentor without knowledge of working with SGM populations, some mentors may be willing to delve into the research area with you. However, your mentor may rely on you to provide the expertise on SGM-specific topics. In this scenario, consider how comfortable and capable you are of providing expertise on SGM issues from a research standpoint. A note of caution when evaluating your own competencies: Generally speaking, it is not uncommon for individuals early in their training to overestimate their knowledge or abilities. It can be particularly challenging when we have a lived experience to recognize that our viewpoint is not representative of the diverse range of SGM experiences, nor does it necessarily equate to knowledge of the empirical literature on the broader population. It is important that you accurately and objectively assess your competencies, and to identify when you need further guidance and support, whether you have to seek it independently or with assistance. Ideally, your mentor could help facilitate consultation and collaboration with colleagues who have expertise working with SGM populations.

You may encounter challenges related to data collection when working with a mentor who does not usually study SGM populations. Typically, engaging in research with new populations, especially under-represented minorities such as SGM communities, requires collaborating with a network of community agencies and partners (e.g., community advisory boards). If there is no existing infrastructure within your lab to establish community partnerships, it may slow down your productivity and could even interfere with your ability to complete program milestones (e.g., collecting a dissertation sample). If you have the option to analyze pre-existing samples or data sets, it is possible that your variables of interest may not have been collected comprehensively or there may not be a large enough sample size of the particular group you are hoping to study. These challenges are not insurmountable, but you should think carefully about how they may impact your training experiences before committing to joining a lab.

Mentors with SGM Expertise. If you prioritize finding a potential mentor who has expertise working with SGM populations, but they focus on a different content area from what you hope to study long term, you can benefit from learning about the unique concerns that impact SGM communities. Many faculty members will indicate they are open to incorporating students' interests into their work, and it is very likely that their interest is genuine, yet the feasibility of doing so is variable. This could be a unique opportunity for you to begin developing your own research program early in your training, which could place you in the role of a valued junior colleague to your mentor. On the flip side, adding a new arm to your mentor's research program may be difficult to implement, especially if their existing areas of interest are already well-developed (and/or funded). Again, a note of caution to not overestimate your abilities to manage large responsibilities independently.

1.3 The Application

It is understandable that as an SGM individual, you may have concerns about disclosing your SGM identities in your applications to graduate programs, whether related to fear of discrimination or uncertainty about how to navigate identity disclosures in a professional manner. Graduate programs will vary in what demographic information they collect on their application. Regardless of what information graduate programs proactively ask for, you will also have the opportunity to consider identity disclosure in your cover letters or essays.

As a person with lived experience with a minority identity, it makes sense that you may have concerns about discrimination. However, given the current socio-political climate of the field, having your application rejected on the basis of sexual or gender minority status would be an unlikely outcome (and generally illegal!). It is more likely that a program would value the unique perspective you may bring to the program or department. Some individuals opt to share elements of their SGM identity when it is professionally relevant in their application materials (e.g., "As an SGM researcher, I valued your program's stated commitment to diversity").

Gender minority students may face several specific concerns when it comes to navigating personal identity disclosures in the application process. Students whose name differs from their legal name, or whose gender differs from their legally recognized sex, may quickly encounter situations that necessitate identity disclosure when applying to graduate school or other training positions if those applications involve a formal background check. It may be helpful for you to plan ahead for these situations so that you can decide how to navigate it in a way that feels right for you. For example, you could choose to proactively reach out to human resources to have a direct conversation about any discrepancies that may arise on personnel paperwork. Be sure to familiarize yourself with the institution's non-discrimination policies so that you know your rights.

1.4 Interviewing

Congratulations! You've identified mentors to apply to, and have now been invited to attend interviews at some wonderful programs. Remember, interviews are just as much an opportunity for you to interview the graduate program as it is a chance for them to get to know you. You may have the opportunity to interview in person or may be offered interviews via phone or video conferencing. There are pros and cons to each interview format when it comes to eliciting information relevant to the program's climate for SGM students. Here, we will offer a few thoughts on what you may want to consider at this stage.

1.5 Identifying an Inclusive Environment

Finding a supportive and inclusive environment for graduate school is crucial for your well-being as a graduate student. The overarching culture and recognition of diversity within a department can make a big difference in your day-to-day activities in graduate school. It will likely impact how you feel in the classroom, conducting your research, and interacting with colleagues and students.

The weight of a non-inclusive environment can be very heavy to carry with you every day for four to six years, depending on the length of your program. The empirical literature on the health and well-being of SGM individuals indicates that minority stress experiences – proximal and distal stressors such as internalized stigma, expectations of rejection, discrimination, harassment – have a significant negative impact on physical and mental health (Meyer, 2003). An inclusive culture within your graduate program fosters growth, as you will likely be more fully engaged in your training when you do not have to worry about acceptance. Moreover, an inclusive environment allows you to dedicate more of your emotional, mental, and physical resources to focus on the essential academic tasks at hand.

As you evaluate potential programs, there are several things you can look for to identify an inclusive environment before you ever step foot on campus. Look at the department website – is there a statement about inclusivity? Do they mention a departmental and/or program-specific diversity committee? When you receive

email correspondence from faculty, staff, or students in the program, do they include their pronouns in their email signature? Another great source of information is the program handbook, which is often publicly available on the program's website. Read about the program's training on diversity and multiculturalism. Some programs may offer stand-alone courses, whereas others may build in a multiculturalism training sequence that spans across graduate training years. Are these training experiences optional or required? These descriptions may give you a sense of the program's commitment to incorporating multicultural training into students' coursework.

It may be helpful to examine the university's non-discrimination policies prior to your interview, in case you have any questions. The United States Supreme Court ruled in June 2020 that Title VII of the Civil Rights Act of 1964 prohibits firing of employees on the basis of their sexual orientation or gender identity (*Bostock v. Clayton County*, 2020). Nevertheless, it is important that you know your rights as an SGM *student*, and potentially employee (e.g., teaching assistantships), at any institution you are considering for your graduate education.

1.5.1 Practical Considerations

Bathroom access is an essential, but perhaps uncomfortable, topic to address. For some SGM students, bathrooms may not feel like a safe space. As you prepare to go on in-person interviews, or at the beginning of the interview day, it may be helpful to find out where the closest gender non-specific or single-occupancy bathroom is located by asking the program coordinator or a current graduate student in the program. While this question is most directly relevant to your experience during the interview day – the day will be stressful enough without having to worry about where you can relieve yourself – it is also going to be relevant on a daily basis when you start your graduate program. What would you do if the department does not have a bathroom that feels safe and affirming to you in their building? You may be able to manage for a single interview day, but remember that your graduate training will span several years.

As you gather information, you may want to investigate beyond your department's specific building to learn what the broader campus community offers in terms of gender non-specific or single-occupancy restrooms. As a graduate student, you may find yourself moving around campus throughout the day (e.g., serving as a TA, attending seminars), which could offer opportunities to find safe restrooms even if one is not located in your building. If you are not interviewing in person (e.g., telephone or video-based conferencing), it will be important for you to identify someone to whom you feel comfortable asking these questions so you can make a fully informed decision.

Another practical consideration for in-person interviews is navigating housing accommodations if offered, given programs sometimes attempt to match prospective and graduate students by gender. If you think this will be a concern for you, consider reaching out to the program coordinator in advance to learn about your options and advocate for your needs.

1.5.2 During the Interview

Interviews are your chance to obtain information about a program that may be difficult to find in any published medium (e.g., handbooks, websites). Thus, conversations during interviews may offer unique opportunities to ask about the program's climate on diversity and inclusion, as well as to get a sense of your personal fit with potential mentors and student colleagues.

Speaking with members of the department community and physically being in the department's space (for in-person interviews) offers you a wealth of information about the inclusivity of the environment for SGM students. As you are walking around the psychology building, notice the visibility of inclusive messages (e.g., posters, pride flags, "Safe Zone" training signs). When you are talking with students or faculty in the program, pay attention to their verbal and non-verbal responses when you discuss topics related to inclusion and diversity (if you choose to bring up those topics!). Do they seem comfortable, or do you notice a tendency to minimize or over-generalize concerns related to diversity and inclusion? Importantly, gather data from multiple people and across interactions (e.g., staff, students, faculty) to see the *patterns* in responses that might be indicative of the program's culture, rather than focusing on isolated interactions.

We have included a list of sample questions that you could consider asking while interviewing (Table 8.2). Keep in mind that during interviews, faculty and graduate students in the program *cannot* ask you questions that may relate to employment discrimination (e.g., national origin, disability status, sexual orientation, gender identity; Parent et al., 2015). Despite these guidelines, you may still encounter individuals who ask inappropriate personal questions on interviews; depending on the setting, there may be avenues for reporting this type of misconduct.

Although representatives of the graduate program cannot ask you about the topics above, *you* are not prohibited from bringing up personal topics if you feel it would be helpful to discuss. Be mindful of your rationale for disclosing personal information on interviews, as the context and tone can impact how you are perceived by the interviewer. For instance, you may want to disclose your personal identities so you can learn about the job market in the community for your same-sex spouse. This type of question would be professionally relevant as it communicates your realistic interest in moving to the area.

In contrast, saying, "My partner really doesn't want to move here given all the conservative religious people in this town – I don't know if we could live around those kinds of people," would likely *not* be received well. This type of statement communicates a low level of interest in the program as well as personal biases, both of which are likely to hurt your chance of receiving an admission offer from the program. Instead, the same concern could still be expressed in a more professional manner, such as, "I understand there is a prominent religious community in this area. How accepting is this community with regard to diversity?"

Table 8.2 *Sample questions for SGM students to ask on interviews for graduate school*

	Sample questions
To ask a potential mentor or other faculty members	<ul style="list-style-type: none"> ● What resources are available to support students of minority statuses? ● How does your lab typically assess sexual orientation, gender identity, and gender expression in your research? ● (<i>Research with SGM populations</i>) I am excited about your research on Topic A, and I am especially interested in how SGM individuals are impacted by it. Do you routinely collect data on participants' sexual orientation, gender identity, and gender expression? ● How does the department acknowledge and address issues related to multiculturalism and diversity? (Within classes, research, clinical-settings, student well-being) ● Are there training opportunities specifically related to sexual and gender diversity? ● Are there other researchers in the department that study topics related to SGM communities who may be open to collaboration?
To ask graduate students	<ul style="list-style-type: none"> ● How are multiculturalism and diversity incorporated in the training curriculum? ● How do you and/or other students in the program feel about the quality of multiculturalism training? ● (<i>If comfortable disclosing your identities</i>) What diversity and inclusion and/or LGBTQ+ specific student groups exist on campus? In the community? ● (<i>If applicable</i>) What are the options for gender non-specific or single-occupancy restrooms on campus? ● How does program faculty solicit graduate student feedback? What student-initiated changes have been made since you entered the program? ● (<i>Clinical/counseling</i>) What populations are served in the various practicum sites you train in? Have you been able to obtain clinical experience with underserved populations? What are your experiences with SGM clients? ● What do students in the program do for fun outside of graduate school or the department?

Note: If you feel comfortable disclosing your identity statuses, you may want to tailor your questions more specifically.

1.5.3 Assessing the Broader University and Community Culture

One aspect to consider about the broader university is whether there is a sexual and gender diversity center or student-run organization on campus. If so, do they provide programming for graduate/professional students? We recommend searching online and, if you feel comfortable, asking faculty or current graduate students about these

offerings. An active campus sexual and gender diversity program is a great way to find and build community after starting graduate school.

Universities exist within a broader community that has a culture of its own. Similar to how you assessed the department culture, keep an eye out for indicators of the community's culture during the interview process. If you have the luxury of staying over the night before or after in-person interviews, try to take a walk or ride around town. If you are able to visit a local establishment, notice how their bathrooms are labeled. What types of events are advertised on community bulletin boards? It is also helpful to ask current graduate students about their experiences in the community.

Regardless of your ability to explore the area in person, you may want to investigate local offerings with regard to community centers, non-profit organizations, or utilize social media to explore social events and activities geared toward SGM young adults or professionals. Many graduate students center their social network within the program or department, yet it may still be helpful to know what else is available. If you identify with a religious denomination, you may want to explore the religious institutions in the area surrounding campus to determine if there is a spiritual community that espouses inclusivity.

2. During Graduate School: Navigating Life as an SGM Graduate Student

You've made it! You successfully entered a graduate program in your chosen area of psychology, hopefully with a research mentor that provides a good fit for your interests and needs. Ideally, you enrolled in a graduate program that provides an inclusive environment for SGM students, although you may still recognize areas for potential improvement. So, now what? In this section, we discuss considerations for SGM students as you navigate your day-to-day life in graduate school.

For some SGM students, especially if you moved to a new city and are developing new social circles, starting graduate school in psychology may offer a wonderful opportunity to introduce yourself as you wish. Particularly for transgender and non-binary students, whether you have been using your affirmed name and pronouns for a long time or you are at the beginning stages of transitioning, starting graduate school affords you the opportunity to present yourself however you wish to be recognized in professional spheres.

2.1 Personal Support and Self-Care

We intentionally discuss personal support and self-care at the beginning of the section on life as a graduate student as we strongly believe that prioritizing your own well-being is the key to success in graduate school. In addition to professional mentorship from your primary advisor, it is crucial that you also seek out social support. This advice applies to all graduate students, but is particularly relevant for SGM students who may face additional stressors as a function of being a member of a minority group(s). Find peers who can support you both personally and professionally either within or outside of your graduate program. This may mean seeking out opportunities

for social connection or support outside of your program (e.g., joining community sports teams, interest groups, volunteer programs, SGM-specific cultural centers). Similarly, self-care is an essential component of professional development during graduate school, although this is not always addressed directly during training. Be proactive in exploring methods of self-care to determine what works best for you during this stage of your career, and be sure to set personal boundaries to develop a work–life balance. In the event you need additional mental health support, seek out options for individual therapy that may be available for graduate students. We have also included a brief list of SGM-specific mental health resources (Table 8.3).

2.2 Navigating Relationships

If you have not already, you may come to learn that the answer to most questions in the field of psychology is, “It depends.” That will be entirely true for this next section as the way in which you navigate relationships will depend on your interpersonal style and preferences. We will present some of the situations and choice points you may navigate during your graduate training, but how you manage the situations is a very personal choice that varies across settings.

2.2.1 Primary Research Mentor

An offer of admission is an invitation from the faculty member to join their lab as a junior collaborator and they accept responsibility to be your professional mentor.

Table 8.3 *Mental health resources for SGM individuals*

Resource	Website and phone number	Description
Fenway Health	http://fenwayhealth.org/care/wellness-resources/help-lines/ 888-340-4528 for ages 25+ 800-399-PEER for ages 25 and under	SGM-focused health center helpline and peer listening line
LGBT National Hotline	www.glbthotline.org/national-hotline.html 888-843-4564	Anonymous and confidential hotline for SGM individuals to discuss SGM-related and other issues
Trans Lifeline	www.translifeline.org/ (877)-565-8860	Trans Lifeline is a trans-led organization that connects trans people to the community, support, and resources they need to survive and thrive Spanish-speaking extension available
The Trevor Project	www.thetrevorproject.org/get-help-now/ (866)-488-7386	Phone, chat, and texting support for SGM individuals up to age 25 in crisis

By accepting their offer, your relationship will develop based on this mutual interest and agreement. The mentoring relationship offers a unique opportunity to form a close relationship with someone invested in you who chose to support you; mentors often have an intrinsic and extrinsic desire for you to succeed. For some SGM students, this may be in contrast to previous experiences within your family or community of origin. We encourage you to explore and take advantage of this unique setting where someone understands and supports your specific career interests and can support you as a flourishing early-stage professional. Although mentor changes can and do occur on occasion, you are working to develop a *professional partnership* that you cultivate with this person for the next several years and will hopefully last throughout your career.

Now that you have entered graduate school, you and your mentor have the opportunity to learn more about each other beyond what you shared in essays and a brief interview. Most mentors will check in with their students about how they are adjusting to the transition to graduate school, with coursework, and potentially with their move to a new area. This may invite a natural and more appropriate opportunity to disclose more personal information than you initially shared during the interview process (if you so choose). Some people prefer to be more reserved with sharing personal information initially and may disclose more as trust is built in the relationship. Occasionally, discussing aspects of a trainee's personal life may help the mentor provide better overall support for the student's well-being. Like any relationship, your comfort level with your mentor will hopefully grow over time as you begin to learn each other's interpersonal and professional styles.

Often in an effort to learn more about you and connect, some eager research mentors may unintentionally ask you questions that feel inappropriately personal. Remember that you are not obligated to share information about your personal life but can if you feel comfortable doing so. Your relationship with your mentor may feel like a personal relationship, but the framework still exists in a professional setting. It is okay to keep your professional relationships professional.

Faculty members and mentors will remain important to your career before, during, and after graduate school. We cannot understate the importance of interpersonal relationships as a method of enhancing, or potentially impeding, your career trajectory via evaluations of your performance, letters of recommendation, and their willingness to provide networking opportunities and professional connections within the field, including job prospects and publishing opportunities.

2.2.2 Other Faculty Members

It is unrealistic to expect that one mentor can meet all of your needs in graduate school. Many graduate students in psychology develop mentorship relationships with other faculty in the department. Beyond classroom instruction, mentorship

relationships with faculty can develop via individual meetings for office hours, research collaboration, or general professional mentorship. Explore and take advantage of opportunities to work with faculty who you admire and who seem invested in fostering student growth. This will help build and round out your professional network.

By developing a broad network of faculty mentors, you will have more support as you navigate challenges during graduate school. In particular, if you were to face discrimination as an SGM graduate student in psychology, you can rely on these faculty mentors for support and consultation. Most programs have specific guidelines, often included in the department handbook, that outline the steps of who to contact to address an instance of discrimination or harassment. These procedures often instruct students to begin by addressing the topic directly with the individual, if possible, and/or speaking with your mentor, then working up the chain of command within the department before filing a formal grievance or complaint with the university at large.

2.2.3 Seeking SGM-Specific Mentorship

Some SGM trainees find it useful to find a mentor who can provide guidance on professional development related to their SGM identity. If you choose to do so, you can learn from professionals in the field who have navigated similar challenges and can connect you to relevant resources or networks of other individuals. The reality is that most psychology departments have a small group of faculty members. Given that only 4.5 percent of the US adult population identifies as SGM (Newport, 2018), the odds of having one or more queer-identifying (and out) faculty are low. You will most likely need to use creativity to find SGM mentors to help you navigate concerns of presenting your identities in the academic world. For instance, you may be able to identify SGM faculty in other departments at your home institution.

For SGM mentorship specifically within the field of psychology, you may also consider curating a network of psychologists outside of your university. Throughout the interview process for graduate school, you may identify faculty members with whom you felt comfortable but the overall fit of the program for your graduate training was not optimal. Consider that you can maintain connections with anyone you meet along your journey and continue to network with them as you enter graduate school at another institution if they are open to it. From personal experience, most SGM faculty members are willing and eager to provide mentorship to other SGM individuals. Several professional organizations now have specialty groups for members who identify as SGM or for psychologists studying or working with individuals in SGM communities (Table 8.4). You can form individual connections, utilize professional listservs, and access relevant resources by joining these specialized organizations.

Table 8.4 Professional groups and networking for SGM graduate students in psychology

Resource	Website	Description
APA Committee on Sexual Orientation and Gender Diversity	www.apa.org/pi/lgbt/committee/index	APA-wide committee
APA Society for the Psychological Study of LGBT Issues (Division 44)	www.apadivision44.org/	APA division for research on SGM issues
APAGS Committee on Sexual Orientation and Gender Diversity	www.apa.org/apags/governance/subcommittees/csogd	Graduate student committee
APA LGBT Graduate Student Mentoring Program	www.apa.org/apags/governance/subcommittees/clgbtc-mentoring-program	Mentoring program for LGBTQ+ students (year-long commitment)
APAGS Individual Peer Support	www.apa.org/apags/governance/subcommittees/lgbt-peer-support	Individual peer support program coordinated by APAGS Committee on Sexual Orientation and Gender Diversity
ABCT Sexual and Gender Minority SIG	www.abctsgmsig.com/	Clinically focused special interest group

2.2.4 Peer Colleagues

Being part of a small psychology graduate program is a unique gift. Training alongside a small group of peers often results in quickly establishing close bonds. Because fellow graduate students often include peers of similar ages and life stages, you are likely to develop friendships with these colleagues as many graduate students spend time socializing together outside of the department. A unique aspect of these peer relationships is that these colleagues will also become professionals in the field after graduation with whom you may continue to interact (e.g., at conferences, collaborations, networking opportunities). Consider if the potential for these to be career-long connections may alter how you choose to interact socially or professionally.

2.2.5 Lab Members

Within most research labs you will interact with a range of other lab members, potentially including other graduate students, undergraduate research assistants, post-baccalaureate research assistants, and postdoctoral fellows. Working closely with other lab members on mutual projects offers the opportunity to develop meaningful professional and/or personal relationships. You may find that you develop friendships with lab members outside of work. It is possible that, as an SGM student, it may be more complicated for you to navigate the gray space between the personal and the professional. Be proactive in thinking through how you wish to navigate disclosures about your personal life so that you can maintain the type of professional presence that you hope to develop.

As a graduate student, you may take the lead on research projects within the lab or may be acting in a supervisory role for others. You may even have the wonderful opportunity to serve as an unofficial mentor to more junior students (e.g., graduate students earlier in their training, undergraduate students). Being an SGM graduate student also places you in a unique position to serve as a mentor and role model to more junior SGM students. In the same way that it may have been difficult for you as an SGM graduate student to find a faculty mentor, more junior SGM students may also be seeking guidance from another SGM person with lived experience in the field of psychology. Keep in mind as you are developing relationships with lab members and potential mentees that hierarchies and power dynamics exist even within research labs, which may impact the appropriateness of social relationships.

When interacting with research participants (e.g., undergraduate students, community members), we recommend following the same professional guidelines as outlined above with regard to disclosing aspects of your personal identities. In experimental psychology, even if your research is completely unrelated to your identities, personal characteristics may become relevant factors as studies commonly consider experimenter-level factors. Therefore, you may find yourself in a situation where you are expected to disclose some aspects of your identity (e.g., gender identity). For non-binary and transgender students, this may be a time to lean on those trusted relationships you have been working hard to establish to navigate this situation (for specific guidance on empowering non-binary trainees, see Matsuno et al., 2020).

2.2.6 Undergraduate Students and Teaching

The relationships you develop with undergraduate students you teach in the context of being a TA (e.g., grading assignments, leading lab sections), guest lecturer, or graduate instructor (i.e., teaching courses) may be different from the relationships you have with undergraduate students in your lab. As a graduate instructor, you have unique opportunities to shape the learning experiences of undergraduate students. Although you may have access to previous materials for syllabi, slides, and classroom activities when creating your own course, you also have opportunities to customize the content. For instance, you may choose to promote equity by including a diversity statement in your syllabus and highlighting research from scholars in underrepresented minorities. Oftentimes, the culture around diversity and inclusion in a graduate program may differ substantially from that of the undergraduate population. If you choose to include an emphasis on diversity and inclusion in your courses, you may be offering undergraduate students their first exposure to these topics and ideas. This is a wonderful opportunity, but may also raise challenges if students react negatively. When contemplating how to include potentially thought-provoking or controversial material (e.g., topics related to SGM communities), you may want to seek consultation from faculty or teaching mentors.

Some instructors with SGM identities may fear judgment or scrutiny from their students related to their own identities or their choice to incorporate diversity-related material into their course. As an SGM graduate student, this is another

important topic to seek out mentorship from trusted faculty. During the early stages of your teaching career, it may be helpful to develop your own evaluations to seek feedback from your students to understand their perceptions of your course material and the emotional safety of your classroom. Collecting informal feedback forms throughout the year may help your students feel heard and respected, and can help you tailor course content for the next time you teach it.

2.2.7 Clinical Settings

For SGM graduate students in clinical, counseling, or school psychology, you will have the opportunity to work with a diverse range of clientele. Graduate training programs approach self-disclosure (e.g., of identities or values) differently, yet, as always, you are in control of how much personal information you share. When considering self-disclosures, it is often advisable to discuss the purpose or rationale for sharing personal information with your clinical supervisor(s) in advance. Clinical supervisors typically provide safe spaces to discuss navigating your own identities as they relate to clinical work, as well as broader conversations about diversity and inclusion. These conversations can help you feel more prepared and comfortable when SGM-related topics arise in clinical interactions.

In the event that you find yourself uncomfortable in the context of your supervisory relationship (e.g., experiencing microaggressions against you or a client), you may want to reach out to another supervisor or training director to seek guidance about how to approach the difficult topic with your clinical supervisor. Learning to work with a variety of supervisors may itself be a growth opportunity, which often requires seeking external support along the way.

There is legal precedent that trainees may not refuse to provide clinical services to clients based on their belief systems (Wise et al., 2015), which is great for our field's commitment to anti-discrimination policies and inclusion! However, this means that as an SGM trainee you may also encounter clients who hold views or values that oppose your own (e.g., discriminatory beliefs). First and foremost, it is important to prioritize your physical safety by clearly communicating potential concerns with your clinical supervisors. With regard to providing client care, we must similarly separate our beliefs and value systems from our clinical practice. It may be difficult to respond effectively when faced with discriminatory comments! This is another area in which consulting with your supervisor can help you manage your internal emotional reactions and external responses to facilitate appropriate and effective client care.

Conversely, you may also find yourself working with SGM clients, which offers an opportunity to provide an affirming environment for the client. It would not be uncommon, however, for these clients to be affiliated with local SGM-related communities that you may also be embedded in. In these circumstances, it would be wise to consult with your clinical supervisor(s) with regard to upholding APA Ethical Principles of Psychologists and Code of Conduct (2017) related to multiple relationships and conflicts of interest. You may be able to navigate these overlaps if they do not interfere with objectivity, or occasionally clients may be reassigned as needed.

2.2.8 Social Media

All graduate students and many other young professionals face the challenge of how much personal information to share publicly via social media. As an SGM student, your decision about what to share about your identities on social media stems from your values. Most importantly, we want you to be in control and aware of *who* is able to access *what* information about you in a way that is consistent with your personal comfort level. For example, if you are out to your friends, but do not feel comfortable being out to your professional colleagues, think carefully about your privacy settings. When in doubt, err on the side of caution, particularly related to potentially explicit content. This applies to photos, videos, descriptive posts about your day or life, political statements, relationship status and tags, and comments in a group or on friends' pages. Colleagues, students, clients, prospective employers may all search for you on social media platforms or potentially be in similar networks or groups. Meanwhile, some forms of social media are becoming increasingly important as a professional platform to share your work so consider the intersection between your personal and professional social media presence.

Graduate school often overlaps with important life stages, such as engaging in romantic or sexual partnerships (casual and long-term) or even building a family. This can be a wonderful time in your life to be pursuing these aspects of personal development! As with broader considerations about social media, be cautious and intentional when it comes to utilizing virtual dating platforms (e.g., apps, websites, dating services). Think about how you can protect your privacy if there are aspects of your personal life you are not comfortable sharing with your professional colleagues. For example, although maintaining an active profile on a popular dating app may be fully consistent with your values and in alignment with you and your partner's open relationship agreement, consider how you would handle a situation in which an undergraduate in your lab stumbled across your profile and rumors began to spread. You may be perfectly capable of navigating complicated circumstances such as this example with grace and professionalism, but a bit of advance thought and planning may help you avoid them altogether.

2.9 SGM Identity-Specific Considerations

2.9.1 Affirmed Name

When you begin publishing (if that is part of your career aspirations), your name will be the way others in the field recognize your work, which can pose challenges for students navigating name changes during graduate school. Some SGM students may feel comfortable using their affirmed name from the outset. On the other hand, if you end up changing your name after you have started publishing, know that many others have done so before you and that it is not a problem from a professional perspective. Some transgender researchers have changed their name but kept their initials consistent, beginning with only initials for publication

purposes. One option if your publication record reflects different names is to include your former initials as a second line on your CV under your current name or as a note in the publications section. This can help rectify confusion, but, of course, may prominently highlight your gender history.

2.9.2 Tokenism

Although there are certainly some stressful aspects of being an openly SGM graduate student in a psychology department, there are also many wonderful opportunities. First, people in your program may look to you for information or resources on topics related to SGM identities – oftentimes with positive intentions! Faculty and peers may be able to recognize their own biases and gaps in knowledge and may genuinely be interested in learning. This means that you may have ample opportunities to educate others on issues related to SGM communities, should you be interested in doing so.

On the other hand, some people may be afraid or hesitant to ask questions about SGM topics due to fears of “messing up.” This is especially true in social circles or professional settings where people have an awareness of the impact of their words (i.e., psychologists!). This concern can lead to silence from members of the majority groups, who may intentionally or unintentionally rely on minority individuals to provide education for others. Whether or not others recognize your important perspective as a member of an SGM minority group, you are under no obligation to carry the burden of educating others.

Regardless of your decision to engage in these conversations, be as prepared as you can be to be put on the spot. If you receive an unwelcome question in a class or lab meeting, it can be helpful to take a pause before responding. If you wish, you can take these opportunities to share your experience and/or expertise on the subject, and use the situation as a teaching opportunity to note how that person could more effectively approach the topic in the future. If you decide you do not feel comfortable answering, you could offer a gentle redirection, “You know, I am not actually familiar with the literature on that topic. Does anyone else know the answer to that question?” Alternatively, you could be direct, “I don’t feel comfortable answering that question or speaking on behalf of a large and diverse community.” Be patient with yourself as you learn how to professionally navigate these situations in a way that feels authentic to you. You will likely have numerous occasions to practice and refine your preferred response style.

2.9.3 Advocacy to Address Concerns

As someone with one or more minority identities, you are likely very aware of how systems of power and privilege impact your life. Understanding the systems of power and privilege at play in graduate school will benefit you as an individual who will be navigating those systems. Your experience in the microcosm of a psychology department might be different in some ways but will likely still broadly reflect society at large. In the best-case scenarios, we can hope the psychology faculty consists of introspective individuals who are keenly aware of their role in

the department, personal status and privileges, and consider the impact of their behavior on others, regardless of intention. The reality is that psychologists are humans too. Being surrounded by psychologists, unfortunately, does not mean everyone you encounter has overcome their personal biases, nor will you be free from systemic injustices.

It is certainly reasonable to expect that within professional settings such as a graduate program in psychology, you will not witness or experience acts of overt discrimination against SGM individuals. However, it may be more common to notice nuanced microaggressions – subtle moments that assert or defend cisgender and/or heterosexual values as normative, or unintentionally express an internalized stigma or implicit bias against SGM identities. This may present as discrete oversights or exclusions (e.g., forms noting only binary gender choices or “other,” describing family structures using exclusively heterosexual models), or through assumptions about your personal life made in informal interactions. Most often, advocacy efforts can occur in these micro-moments amidst everyday interactions. Although it takes a substantial amount of courage, challenge authorities and peers when you witness microaggressions. Even in your position as a graduate student, faculty may appreciate you drawing attention to issues of diversity and inclusion, given that you are uniquely suited to do so. For students with intersecting minority identities, such as SGM students of color, there may be further barriers to being vocal; however, diplomacy may assist in getting the message across in an effective manner. If or when you find yourself navigating these types of challenging situations, it is critical that you seek out others who can support you in advocating for yourself or further advocate on your behalf. Learning how to be assertive and advocate for yourself and your values may feel difficult or intimidating at the beginning of your graduate training, but will likely get easier with practice.

Consider and respect your own boundaries with regard to the emotional labor of advocacy work. It is important to balance your desire to advocate for changes aligned with your values with the real need to care for yourself and avoid emotional or physical burnout. If you are undertaking advocacy work, assess the status of your personal, emotional, and psychological resources and acknowledge what it might take emotionally and literally (e.g., time, investment) before jumping into a larger initiative. As a graduate student and human, there is no shame in taking moments for self-protection. Consider for yourself: What could I lose by speaking up? What is at risk if I do not speak up? Is now the best time for me to invest my resources? For example, if your master’s thesis is due next week, maybe wait – especially if a faculty member you are hoping to engage in a difficult discussion is on your committee. Is this the best platform for my voice to be heard? Choose your battles wisely but fight fiercely when you do.

2.9.4 Proactively Fostering a More Inclusive Environment

As a graduate student in a psychology program, you have the ability to foster an inclusive environment through your own actions. At a personal level, you will have to navigate your own personal relationships to develop an affirming environment for

yourself. If you have the desire and drive to do more to benefit others, there are steps you can take to advance the inclusivity of the broader department. As a minority student, there is not an expectation that *you* have to advocate for changes, although you may be in an advantageous position with the lived experience to do so.

If it is consistent with your values and goals to take action, here are a few ways that you can foster further inclusivity within your psychology department and program. First, as a graduate student, you will be part of the recruitment process for incoming students. This gives you a voice in shaping the department's culture of inclusivity as you will be able to advocate for prospective students who may contribute to a diverse scholarly environment. Additionally, you can voice the importance of talking about diversity and inclusion during the recruitment process so prospective students can be fully informed about your department's culture.

Second, critically examine your department or program to evaluate what is missing when it comes to diversity and inclusion. Is there a diversity committee? If no, can you form one? You may have identified areas for improvement in the program when you were going through the interview process or after starting the program. Now that you are an established student, think about how you can act on those areas to improve the climate for yourself and other students.

Third, be bold and speak out when you see a need for change. For instance, if you notice demographic forms that are not inclusive in clinical or research settings, talk with your team about how changes can be made to improve the forms. As you recognize areas for improvement, identify people who can help you make changes. If you are not in a position of power, finding someone within the hierarchy who has more power, or who can help you advocate to those who do have power, to make the change can improve your chance of succeeding. Talking with your peers about diversity and inclusion is a very powerful way to make change, as you have a great deal of influence on one another during the formative growth that happens during graduate school.

3. Leaving Graduate School: Early Career Considerations

We wrote this chapter as we were completing our predoctoral internship in clinical psychology and began our postdoctoral fellowships, so we want to acknowledge that our lived experience of early career considerations for SGM trainees is just beginning! Nevertheless, we hope to leave you with a few thoughts regarding the transition from graduate school into your early career in psychology.

3.1 The Next Stage

The process of applying for an internship, post-doctoral fellowship, or faculty position carries many of the same considerations that you navigated when you applied to graduate school. As before, you will likely want to evaluate whether your next professional setting will be an inclusive environment. You will likely navigate many similar decision points about whether and how to disclose your own identity

statuses. What is different at this stage is that, due to your substantial growth over the course of your graduate training, you will be more comfortable and confident in your professional identity. You may find that you have further clarified your personal values and that your approach to navigating interactions where your personal and professional identities intersect has evolved. Seek consultation and advice from your trusted mentors and peers as you go through the process of applying, interviewing, and negotiating for your first job so that your compensation and benefits accurately reflect your worth and expertise.

As an early career psychologist in a new setting, continue to keep your advocacy eyes open. What sort of training is available and/or mandated for new staff and faculty regarding issues related to diversity and inclusion? Are you satisfied with the approach taken? Recently, there has been more attention and training in diversity and inclusion for current graduate student trainees; do your senior colleagues have similar exposure to such training (e.g., “Safe Zone”/ally workshops, ongoing discussions)? If you work on a multidisciplinary team, what can you offer as an informed psychologist to advance inclusivity across all team members?

3.2 Becoming a Mentor

Eventually, the day will come when you are on the other side of graduate school. Regardless of your professional path, there will be opportunities for you to step into the role of being a mentor or leader. Entering these roles with lived experience as an SGM professional in the field gives you a unique and valuable perspective on how to support trainees. Undoubtedly, the successes and challenges you faced related to your identities will inform how you mentor students in the future.

As a mentor, there are many steps you can take to support students regardless of their identities. First and foremost, you have the opportunity to create safe and affirming environments in your relationships with your mentees as well as in your lab culture. Communicating respect and inclusivity in your everyday interactions goes a long way in fostering an affirming environment, particularly for SGM students. If you have the opportunity to mentor an SGM student, focus on helping connect your mentee to resources that may be beneficial to their training and professional development. This may mean finding written resources (see Table 8.1) that both you and your mentee can review, or helping to establish professional connections between your mentee and other professionals in the field who can provide additional mentorship (Table 8.4).

Finally, be willing to have direct conversations with your trainee about what they would find helpful. It is important to be mindful of your trainee’s privacy and boundaries around discussing their personal identities. However, if your trainee brings up topics related to their identity as an SGM student, enter the conversation with cultural humility – a genuine professional curiosity, openness to learning, and appreciation for their willingness to share. Following your conversation, you may want to do an independent search for more information based on what your mentee shared rather than relying on them to provide your full education on the topic.

Perhaps you will want to learn more surrounding unfamiliar terminology or an issue you did not realize affected SGM students. Being able to further your learning and return to future conversations can lead to a mutually beneficial mentoring relationship.

4. Closing Thoughts

Reading this chapter was a great place to start, and you are likely well on your way to developing a successful career as an SGM psychologist. There are many paths to success, and only you know what will be right for your career. Your perspective as an SGM psychologist will likely change over time, both due to your developmental stage and broader societal processes. For instance, we witnessed substantial socio-political changes regarding SGM communities in our time in graduate school (e.g., federal recognition of marriage equality). Your professional development as an SGM psychologist will be a dynamic process that will benefit from revisiting the topics in this chapter throughout your early career stages and beyond.

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Considerations for First-Generation Students in Graduate School

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Many graduate programs are sincerely invested in fostering diversity and increasing the number of students from under-represented backgrounds who will contribute to our discipline. But increasing representation is only one step needed to address inequities, disparities, and injustices. Helping all students thrive and have an equal opportunity to achieve their educational goals requires the creation of “safe spaces” in which demographic differences are understood, appreciated, and considered in larger educational systems.

A frequently overlooked identity characteristic that can significantly impact the graduate school experience is being a first-generation (first-gen) college student. First-gen status can present unique challenges that not only affect students’ performance and graduate training experiences, but also their identity development and relationships with loved ones. As such, first-gen status is an important aspect of students’ identity that warrants consideration and tailored support. In this chapter, we (a) define first-gen status; (b) note the common strengths of first-gen students; (c) elaborate on challenges first-gen students may face; and (d) share examples of how first-gen status may intersect with other aspects of one’s multicultural identity. Following this discussion, we provide specific recommendations for first-gen psychology graduate students navigating academia.

We would like to acknowledge up front that the discussion that follows is not intended to equate the experiences of first-gen status with the litany of challenges faced by students belonging to minority groups (e.g., students of racial/ethnic minority, international, or LGBTQ status). Rather, we are noting that first-gen students have unique experiences, compared to continuing-generation students, and these experiences may be particularly relevant and impactful for minority students.

This chapter is adapted from “Considering first-generation status among clinical psychology doctoral students” (Calhoun et al., 2021) published in *the Behavior Therapist*.

1. A Note About the Authors

All authors were once first-gen, doctoral graduate students in clinical psychology programs, with graduation dates ranging from 1993 to 2019. Currently, the authors are of different professional statuses, ranging from postdoctoral fellow to tenured faculty. In this chapter, we present shared themes that characterized our, and others', collective experiences as first-gen graduate students. Throughout, we provide personal anecdotes to illustrate how being of first-gen status impacted our personal and professional lives as graduate students.

1.1 First-Generation Status

First-gen students are typically defined as individuals whose parents or legal guardians did not receive a degree (associate, bachelor, master's, doctoral) from an institute of higher education. That is, they are typically the first in their immediate family to attend college. According to the Center for First-Generation Student Success 2015–16 National Postsecondary Student Aid Study, approximately 59 percent of US undergraduates are first-gen college students. Approximately 76 percent of first-gen undergraduates decide not to pursue graduate education (Mullen et al., 2003), and those who do are more likely to drop out of graduate programs before obtaining their terminal degree (Kniffin, 2007; Nevill & Chen, 2007). Unfortunately, data on the representation of first-gen students in psychology graduate programs are lacking, and as such, little is known about experiences that may be unique to first-gen graduate students in these programs. Admittedly, the authors of this chapter all received a doctoral degree in psychology and may not adequately represent those students who did not matriculate. However, we provide our perspectives here to help elucidate factors that may contribute to attrition and resiliency among first-gen students in psychology graduate programs. Although the discussion that follows is centered on the experiences of first-gen doctoral students in psychology, much of the content may also be relevant for first-gen graduate students pursuing a master's degree in psychology and/or specializing in an allied field.

1.2 The Strength To Be First

First-gen students offer a number of unique strengths within academia, at least anecdotally. They often have reputations for being resourceful, persistent, independent, and self-reliant students who have been able to figure out how to successfully gain admission to highly competitive graduate programs despite having few, if any, exemplars to guide their path. These students may also possess unique insight into the underserved patient populations that many psychologists hope to serve – able to communicate with, and relate to, those who come from a diverse range of backgrounds and experiences. Similarly, many first-gen students report a strong personal focus or connection to their work, with challenges faced by themselves and their families often motivating various aspects of their professional goals

(research, clinical work, etc.). In many cases, these assumptions likely are true: many first-gen students have worked tirelessly to overcome a wide array of barriers and demonstrate grit, perspective, and commitment that helps them thrive in our field, and as such often possess expertise in factors that inform resiliency. Such considerations may hold particularly true for first-gen students with marginalized or under-represented multicultural identities, which present a litany of additional challenges (e.g., racial discrimination, acculturative stress) that may cause the journey to, and through, graduate school to be particularly stressful (described in greater detail below). The determination and perseverance needed to overcome these pervasive and stressful life experiences speak to the exceptional strength and resiliency of many first-gen students (Roksa et al., 2018), which may inform their preparation and approach to the rigorous training requirements of a psychology program.

1.3 The Challenges of Being First

Despite their strengths, first-gen students may have faced, and continue to face, substantial personal and logistical challenges by deciding to pursue a unique occupational path. These challenges can greatly influence first-gen students' ability to achieve their academic goals (Seay et al., 2008).

What follows is a list, by no means exhaustive, of various challenges typically encountered by first-gen students in psychology.

1.3.1 A Lack of Role Models

First-gen students are disadvantaged from the time that they initially decide to pursue higher education (Cunningham & Brown, 2014). As they apply for and enroll in college, they are in immediate need of support outside of their immediate family, given that their family often cannot provide informed advice about a student's many "new" experiences. Although there are academic counselors to assist when needed, these relationships often feel impersonal, short-lived, and are primarily focused on a specific area of need (e.g., 30-minute meeting to assist with course enrollment). For first-gen students, there is no singular form of support that can offer a comprehensive perspective on how to maximize success during and after college; this is true for continuing-generation students as well, but these students may require much less frequent extra-familial support. While academic mentors are highly valuable and desperately needed to "fill the gaps," they often do not have the shared experiences to understand the nuances of first-gen students' backgrounds and intersecting identities, and even if they do, they aren't able to offer the level of support that an emotionally and financially invested parent may provide. Further compounding the issue, a lack of diversity in program leadership (i.e., mentors, supervisors, training directors) often results in first-gen students having limited access to faculty who can offer general advice and recommendations about navigating first-gen challenges, including those intertwined with other aspects of diversity (e.g., race, ethnicity, country of origin, language). Many of us learned that some grad school colleagues had parents who helped them find

post-baccalaureate research assistant positions, reviewed grad school/internship/postdoc applications, proofread theses and dissertations (and later, even scientific articles), practice for internship/postdoc interviews, and so on. One of us had a labmate in graduate school whose father was a successful academic who not only co-authored a paper with his child, but also informally mentored his child in how to prepare manuscripts, conduct peer reviews, and seek external funding. Without easy-to-access familial supports who pursued higher education, first-gen students may become conditioned to rely on themselves to a greater degree, and in the end, feel more isolated in their academic pursuits.

1.3.2 Navigating Without a Map

Many first-gen students “don’t know what they don’t know” and are often behind in learning about various academic processes and opportunities. They frequently learn by trial and error, sometimes making unwise decisions or missing out on experiences that could boost their competitiveness for graduate programs or later career opportunities (Lunceford, 2011). For instance, one of us didn’t know about the undergraduate honors thesis until it was too late to apply for the program, and after entry into graduate school, it seemed that those who had completed an undergraduate honors thesis were better prepared to conduct research, particularly the first grad school milestone project (the master’s thesis). Moreover, some of us had continuing-generation peers that had entire mentorship teams developed well before they entered graduate school to help them identify funding mechanisms, research awards, and training opportunities to best prepare them for a career in psychology. First-gen students who “learn as they go” often have fewer such support systems to keep them on the right path, and this deficit could have both emotional and financial repercussions.

1.3.3 Financial Challenges

First-gen students most commonly come from low-income families that are not able to provide financial assistance (Gardner & Holley, 2011). As such, these students may accrue significant student debt to cover tuition and living expenses while completing their undergraduate education (several of us had loans in excess of \$100K upon receiving our undergraduate degree). With these loans looming, first-gen students may be hesitant to pursue an advanced degree. Despite the availability of funding mechanisms that may cover tuition and provide a modest stipend for students in psychology graduate programs (e.g., research and teaching assistantships, NIH training awards), these funding opportunities are not guaranteed and can be quite competitive. Even if a student is able to obtain a stipend or funding award, extraneous costs can be difficult to cover and may require part-time employment or additional student loans. For instance, conference travel is a major expense for first-gen students that they must often pay for out of pocket. Attending and presenting at conferences has become a necessary component of success in the pursuit of an advanced degree in psychology, as it is one of the most accessible opportunities to gain visibility in the field during earlier stages of training. Restricted access to

conferences reduces the likelihood that undergraduate, post-baccalaureate, and junior graduate students will have the “currency” needed to stand out among other well-qualified candidates as they continue to pursue opportunities and awards in psychology. Unfortunately, access to this form of currency can be especially restricted for low-income, first-gen students.

Low-income first-gen students often face challenging financial decisions that their families do not understand. From the start, some of us were strongly encouraged to forego a career in psychology and told instead to pursue a career that would generate a higher income, such as law, business, or medicine. Indeed, one of us has a father who said, “I’ve worked 7 days a week for 30 years so that I could send you to medical school. If you don’t want to become a surgeon, can’t you at least try to become a psychiatrist?!” Additionally, some families may rely on young family members to provide financial assistance, and hold on to the notion that one day their child will earn large sums of money that will alleviate their financial stress. In these situations, first-gen students may feel selfish for being a “professional student” who plans to remain in school well into their thirties, only to make a relatively modest income upon receiving their terminal degree in psychology. Choosing a career that aligns with one’s passion but produces a more modest salary can understandably lead families of origin to worry about their child’s long-term financial comfort, as well as their own. These concerns are, of course, amplified as the student accrues more and more student loan debt, which can make the decision to attend graduate school seem financially irresponsible.

1.3.4 Lack of Family Understanding of Chosen Schooling/Career Path

Because first-gen students’ families lack firsthand knowledge of the graduate school experience and the training goals specific to psychology, they often “don’t get it” and have inaccurate assumptions about what their family member does on a daily basis (Gardner & Holley, 2011). Parents might not understand the nature of what it takes to get an advanced degree, and assume that their child is simply taking *a lot* of classes for five (or more) years. Many of us have been asked “What do you do all day?” and when trying to explain how reading, writing, running analyses, teaching, and clinical work can be taxing and stressful, the idea of being exhausted from “thinking all day” doesn’t quite connect. And, we have all found it challenging to explain academic milestones such as comprehensive/qualifying exams, the dissertation process, and internship (“Wait, you have to move again? And you get paid *how much* as an intern?”). Following graduation, the pursuit of an academic job or postdoctoral position only extends the confusion that much longer (“You’re moving *again*?!?! When is this going to stop? Can’t you find a job closer to home and settle down?”).

For many of us, whether we are recent graduates or 20 years into our careers, our families still don’t quite understand what we do for a living. Often their perspectives are influenced by the stigma associated with mental illness, and our careers are described with comments like “My daughter treats crazy people for a living” or “He does research, whatever that means.” The complexities of clinical work are reduced to “So you just talk to people about their problems?”, and attempts to

explain the difference in talk therapy and modern, empirically supported treatments is often met with a blank stare or resistance (“I would never talk to a stranger about my problems”). As researchers, the scientific process also is easily lost on our families (“Research? Like on Google?”), especially when attempting to articulate our study of abstract, intangible (and according to our relatives, potentially non-existent) psychological concepts. And, of course, we’ve all been angered by the familiar saying about teaching (“Those who can’t . . .”). With these perspectives fueling conversations with family, first-gen psychology students naturally begin to question the value of their careers (“If my family doesn’t even understand or appreciate what I do, then is it really all that meaningful?”), leaving them feeling confused and unfulfilled. Such ambivalence may lead first-gen students to minimize or ultimately avoid speaking with their families about the significance and meaning of their research, clinical work, and teaching, despite these tasks being the main focus of their day-to-day life.

1.3.5 Family Values Conflicts

First-gen students often feel as if they have abandoned their families, and have become odd, unfamiliar, or no longer relatable (Gardner & Holley, 2011). In many cases, including several of our own, the decision to pursue graduate education is perceived by parents as a rejection of the family’s core values or identity, which creates distance between first-gen scholars and their loved ones. Some families perceive the pursuit of higher education or a scholarly career as unnecessary, “elitist,” or an abandonment of the family business or trade, and these sentiments may be expressed in various ways. Many first-gen students have had the experience of being shamed within their families, assumed to be “showing off” or “selling out” when sharing their accomplishments, accused of being “super liberal,” and being mocked with statements like “Is that what they’re teaching you in college?” when they make a mistake or express a viewpoint not held by others in the family. These criticisms are not necessarily offered out of cruelty, and are sometimes even delivered as a back-handed compliment. Sometimes this criticism stems from the pain and fear that family members feel when their child begins to become less recognizable. Regardless of intent, the comments can still cause first-gen students to feel less accepted and understood by their parents, siblings, or non-academic peers.

Some parents may initially experience great pride in their child’s success (“My child is going to be a doctor!”), but as their child grows increasingly independent, and acquires academic role models, they may feel less relevant and important to their child. These feelings may be amplified when their child moves far away (as often is required for academic careers) or discusses psychology-related topics that remain stigmatized back home. At the start, parents may encourage their children to “do better than they did” by going to college, but the implications of these good intentions for family relationships can later be surprising and difficult to bear. Over time, parents’ pride may dwindle and be replaced with concerns that their child’s chosen path is diverging from family values, which in turn can strain family relationships. Some of our parents feared that we would become “one of those ivory tower liberals”

who would forget our humble beginnings. For others of us, the pursuit of individual success, although it was rooted in helping others, was perceived as an offense to our collectivistic cultural backgrounds. A few of us were raised in religious households, where our parents worried that studying psychology would promote secular views that would conflict with our religious faith. Additionally, almost all of our parents shared concerns about when we were going to “get married” and “start a family,” pointing out the impact of our career decisions on these family-oriented life goals (“If you wait any longer to have kids, I might not be around to see them graduate high school”). While these concerns can be helpful for reminding first-gen students to reflect on and balance their personal and career goals, they can also feel invalidating as first-gen students assess the value of the sacrifices they made to pursue higher education (“Wait, I thought getting a PhD was a good thing?”).

1.3.6 Identity Challenges

The challenge of *fitting in* with family and academic colleagues can create a perpetual identity conflict (e.g., Leyva, 2011). On the one hand, first-gen students could cling to their unique, decidedly non-academic roots, which can make them feel vulnerable or insecure when surrounded by their professional-background colleagues. On the other hand, first-gen students who assimilate to their professional environment may feel guilty for betraying their family of origin. Ironically, attempts to satisfy both identities simultaneously can leave individuals feeling unfulfilled in both realms, as though they are always sacrificing one part of their identity in some way. Those who are practicing clinicians may advise their clients to strive for alignment and reconciliation between their personal and professional values. Yet, many first-gen students (and some of the authors) may struggle to do this, as they find that having separate identities specific to each context is often reinforced with positive social feedback.

To further complicate the identity clarification process, first-gen students are among those who are particularly vulnerable to acute (and chronic) experiences of “impostor syndrome,” wondering whether they deserved admission to a graduate program, feeling compelled to explain why they did not have similar prior experiences to their peers, and being afraid to ask questions about things that “everyone else just knows” (Bernard & Stone-Sabali, this volume; Canning et al., 2020; Craddock et al., 2011). The impostor syndrome can amplify the internalization of negative feedback across all professional contexts (“They’ve finally realized that I’m not as competent of a clinician/researcher/instructor/etc. as I’ve pretended to be!”), leaving a first-gen student’s identity and self-esteem in constant limbo. First-gen students may be fraught with high levels of anxiety and stress when faced with seeing patients, giving presentations, writing research papers, and defending research projects, exercises commonly associated with pursuing an advanced degree in psychology. As such, they may work extremely hard on these tasks, set unreasonably high expectations for their performance, and put in excessive amounts of time and energy relative to their continuing-gen peers in efforts to “prove their worth” to themselves and others (Sakulku, 2011). While this may lead to success and praise in the short

term, as the next impending project arises, the cycle repeats. This psychologically draining process can lead first-gen students to experience academic burnout as this approach to overcoming internalized insecurities may not be sustainable over the course of their graduate school tenure.

1.3.7 Intersecting Multicultural Identities

The challenges of pursuing a graduate degree may be especially amplified for first-gen students who come from historically under-represented racial/ethnic backgrounds or who possess other marginalized multicultural identities (e.g., religious minority backgrounds, LGBTQ). Given that the range of intersecting multicultural identities is limitless, attempting to capture them all far exceeds the scope of this chapter. Instead, we focus on two multicultural identities that most commonly add to the challenges faced by first-gen students.

One prominent challenge comes from being a first-gen student who is also a member of a historically under-represented racial or ethnic group (Howard, 2017; Leyva, 2011). Indeed, the journey of obtaining an advanced degree in psychology in itself represents a stressful period denoted by major life transitions, increasing scholarly independence, and struggles to maintain a healthy work/life balance. However, for first-gen students who are one of the only students on campus of a particular race, these stressors may be compounded by feelings of isolation and marginalization (Stone et al., 2018). Unfortunately, the relevance of microaggressions and other negative interactions pertaining to one's race or ethnicity may serve to instantly invalidate the years of hard work and effort that students of color have put in to attain success. For instance, at least one of us who identifies as a person of color can recall being told as a graduate student, "You only got this award because you are Black" when sharing with a professor news about receiving a competitive fellowship. These invalidating messages may directly refute affirming messages provided by family and friends that led many of us to pursue advanced degrees in the first place. Such experiences may be particularly taxing for first-gen students who may be attending institutions with no formal programming or support systems in place for students of color to feel supported and validated.

Another challenge in particular lies in the experience of first-gen students who come from immigrant families in which the student's parents and other role models do not speak English and/or have limited understanding of the US educational system. This presents a unique set of challenges over the course of the student's academic life. Beginning in early childhood, the student may not have had the luxury of having parents who could help with homework assignments, advocate for their child in the school system, or help their child navigate the complexities of academic transitions. When applying to college, and later to doctoral programs, these students did not have the advantage of parents who could proofread personal statements, assist with demystifying the process of applying for financial aid, or help with the practicalities of transitioning to university life. In addition, in some immigrant families, there may be an overreliance on children and/or other family members due to a limited proficiency in the English language, which could continue even as the child pursues higher education.

1.4 Program Support and Mentorship

We all agree that graduate programs and individual mentors can increase the likelihood of a first-gen student's success. Some first-gen students have been fortunate to have mentors who were extraordinarily sensitive to some of the above challenges and who took them "under their wings," providing mentorship that went above and beyond what is typically expected. Others may not have had such good fortune, but have strived to provide a higher level of mentorship to their own first-gen students. Doctoral programs can strive to institute practices to help first-gen students navigate challenges they may face throughout their graduate training. In the next section, we provide specific pieces of advice to first-gen students to avoid some of the challenges discussed above.

1.4.1 Program Support

First-gen students are likely to seek out and feel supported by programs that have relevant support mechanisms in place. To start, determine if your university has a first-gen organization, and if so, reach out to see if they provide resources and support for first-gen *graduate* students (many focus primarily on undergraduate students, but some of the resources they provide could benefit graduate students as well). Encourage your graduate program to host or identify seminars on funding opportunities, financial planning (e.g., student loans in the long term), and professional development could be particularly helpful for reducing financial stress among first-gen students. A peer mentorship program led by more senior students could help first-gen students boost their proficiencies in academic writing, statistics, applying for awards/internship, submitting conference proposals, conducting peer reviews, and more. Peer mentorship may be especially effective for helping first-gen students set realistic expectations (through peer comparison), which could alleviate stress caused by the impostor syndrome. Self-care seminars hosted by fellow students could help first-gen students establish a healthy work–life balance. Establishing a student resource library funded by the program could also reduce the need for first-gen students to locate and purchase training resources (e.g., costly statistics/therapy manuals). To reduce the financial burden of conference travel, programs may consider setting up a travel fund (funded by donations from alumni, other donors, or clinic proceeds) to prevent first-gen students from incurring any upfront out-of-pocket costs from conference travel; programs could also advocate for such funds to be offered by the department, college, or university. If your program forbids students from seeking outside employment, you may ask them to revisit this policy, as first-gen students may rely on additional funding to make ends meet, or be responsible for providing money to their families of origin.

Universities and training programs that offer a variety of supportive mechanisms for first-gen students also alleviate burden on mentors, who may at times feel overwhelmed by the different layers of support a first-gen student may need. Being able to refer first-gen students to other available resources (e.g., resource library, peer consultation, institutional organizations) can help ensure that mentors are able

to provide more targeted support that best capitalizes on their expertise. If your program does not have a diversity committee, advocate for one. Supporting and training increasingly diverse students, and creating an accepting culture in a program/department, requires a team-based approach, especially given that the time dedicated to these efforts is often based on volunteerism. Diversity committees can alleviate some of the burden on individual mentors to seek resources relevant to first-gen students' needs. Pushing for increased diversity among the faculty will likely increase awareness of first-gen training needs and potential support mechanisms. However, it is important that program faculty share the responsibility of supporting first-gen students and do not overburden under-represented faculty with this task. For instance, instead of tasking a faculty member of color with leading a seminar on a topic relevant to first-gen students, programs might choose to create regularly scheduled panels of faculty who can share advice and guidance to these trainees.

1.4.2 First-Gen Students and the Mentor–Mentee Relationship

Given the power differential in the mentor–mentee relationship, it can sometimes be difficult for students to openly share their first-gen status. Students may fear that doing so will lead mentors to see them as less capable or qualified than other students. However, sharing your first-gen status and discussing relevant personal growth areas could lead to collaboratively developed support efforts that will increase the chances of achieving your goals and having a rewarding graduate school experience. Personal disclosures of this nature do not necessarily need to happen right away; it can take time to build trust with a mentor and feel safe sharing personal information. If your direct mentor is not able to support you in the ways that you need, seek supplemental mentorship. Many programs have a diversity training committee that may be able to offer additional guidance and mentorship.

Additional tips for students are provided below.

2. Tips for Dealing with Financial Challenges

- Be proactive in seeking funding opportunities. In many programs, grad school costs can often be deferred or mitigated through TA-/RA-ships and other fellowships. You may also explore national and federal funding mechanisms. For instance, female-identified students can qualify for very low interest loans (www.peointernational.org/about-peo-educational-loan-fund-elf) and/or apply for a \$15,000 dissertation award (www.peointernational.org/scholar) through the Philanthropic Education Organization. In addition, the American Psychological Association, National Institutes of Health, and numerous other organizations provide funding opportunities to support students at all levels of training.
- Apply for travel awards to buffer travel costs for conference attendance. These awards may exist at your home institution and through the organization hosting the conference; for some conferences, students can receive registration and travel subsidies for volunteering. If you are unable to obtain (or are ineligible

for) external travel awards, ask your mentor if any laboratory or departmental funds could pay for conference expenses. Determine if there are ways for larger expenses (air/hotel/registration) to be paid directly by your department's grant manager or the entity funding a travel award, so that you do not have to pay out-of-pocket and wait for reimbursement.

- If you are unable to travel home to see family for the holidays, explore alternative ways to make holidays away from home feel less lonely. You might organize program holiday events, suggest community holiday events in the area, or simply talk to other students about the difficulties of being away from family during these times. Many college campuses coordinate (e.g., through their International Student Affairs Office) social events for students, including for those unable to travel for the holidays.

3. Tips for Increasing Professional Familiarity and Engagement

- Set professional growth goals and ask for support you need in achieving these goals. Student success programs on campus and elsewhere (e.g., writing center, study tip training workshops) can provide low-pressure opportunities to practice your writing and research skills (e.g., journal clubs). Discuss different options for support with your mentor, and be specific in telling them how they could be most helpful (e.g., "it would be helpful if you could walk me through the process of creating a narrative outline for the introduction section of a paper"). It can be particularly helpful to seek support as you apply for various awards or positions (e.g., internship), as having opportunities to receive feedback on application materials and engage in mock interviews can increase the likelihood of a successful outcome.
- Seek out opportunities to expand your professional awareness and knowledge. Attend conferences and professional meetings when possible, and ask others how to make the most of your time at these events. If you are hoping to learn more about writing empirical manuscripts, ask your mentor if you could assist them in reviewing manuscripts for journals that relate to your interests.
- Ask your mentor to connect you with important others in the field. For example, at an annual conference, your mentor could reach out to a colleague to introduce you as a potential future intern or postdoc. Mentors could also support you in asking a "big name" in the field to serve on your thesis committee.

4. Tips for Managing Challenging Issues of Identity

- Seek support (e.g., from the program, mentors, local therapists, your family) to balance competing personal and professional demands. Admit when competing demands are difficult to manage and ask for help when needed. There may be options, solutions, or ways of thinking about a situation differently that you have not yet considered!

- Acknowledge the impostor syndrome (e.g., unobtainable standards, unsustainable work habits, internalizations of self-doubt), and work to develop healthy work habits that will help daunting milestones (e.g., defending theses, writing dissertations) become more manageable. Establish reasonable timelines and expectations for research tasks (e.g., writing, analyses). Challenge disparaging cognitions (e.g., “I’m not qualified to help”) that may arise when you begin to see patients in a clinical capacity. Set appropriate expectations that normalize the difficulty and nuance of being a clinician to buffer feelings of self-doubt when faced with challenging sessions, slow treatment progress, and/or other unforeseen circumstances (e.g., conducting a first risk assessment). Other students are likely struggling with impostor syndrome as well; talk with them to support, and learn from, one another.
- Consider and disclose competing personal and professional values when considering career trajectory and goals. First-gen students’ overarching values may be unique to their families of origin (e.g., more collectivistic than individualistic, more in need of a balance between their family’s needs and their own), which may influence the type and geographic location of positions they pursue. Identify other mentors who may help with various aspects of your intersecting identities while building your personal academic community.
- You may consider introducing your mentor to your family if the opportunity presents itself. This could help to increase family emotional support, demystify the graduate school process for the family, and help you integrate these two facets of your life.
- If you are a first-gen student of color, you may benefit from attending national conferences designed to promote the development of underrepresented groups in psychological science (e.g., Black Graduate Conference in Psychology) and become a member of affinity groups associated with national organizations (e.g., Latinx Caucus of the Society of Research on Child Development).

5. Closing Notes

At long last, the field of psychology has begun to seriously consider a multicultural framework, recognizing the biases that exist in our professional gateways, traditions, and even in the content of our scientific and clinical work. Far more work must be done to acknowledge potential barriers to professional advancement of racial, ethnic, sexual, and gender minorities. In recent years, our field also has recognized blind spots with regard to religious and political diversity within our psychology community. We believe these remain high-priority areas for attention as our field increasingly values diversity and commits significant resources to the future of our discipline. As reflected in this chapter, first-gen status is an identity characteristic that often intersects with more visible, and commonly discussed, forms of diversity. By acknowledging first-gen status as an important factor contributing to the graduate student experience, we can improve upon our collective efforts to support the increasingly diverse cohorts of students entering graduate programs in psychology.

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1. Developing and Practicing Ethics

We bring our personal ethics to graduate school and start to create our professional ethics. We face important questions: Are ethics central to who we are and what we do? Do our professional ethics depart from the values that we lived by before graduate school? How do we respond when the choice we view as most ethical means risking or sacrificing a golden opportunity, money, a valued relationship, our job, or reputation? What do we do when ethical decision-making leads us into overwhelming complexity, gray areas, and conflicting values? How do we do no harm when clients' traditional cultural values conflict with the profession's ethical values?

Graduate school often presents us with intriguing situations involving the ethics of research and publication, faculty–student interactions, psychological assessment and intervention, and other aspects of what we do as psychologists. Consider the following scenarios.

- As a research assistant for one of the department's most respected and influential professors, you compute the inferential statistics on a large data set. The findings are not statistically significant and fail to support the professor's new theory. The professor then throws out the data from 20 percent of the participants. When you rerun the stats, the test results become significant and support the theory. You receive your first authorship credit (congratulations!) when the results are published in a prestigious scientific journal and you're listed as coauthor. The article makes no mention of the initial tests or excluded participants.
- For the past 10 months, you have been working with an undocumented artist who immigrated to the United States two years ago. Your client was the primary caregiver for their mother, an 80-year-old woman who suffered from dementia and recently passed away. Prior to your next scheduled session, your client sends you an email thanking you for helping them cope with their mother's illness. They shared that your support has been invaluable and you have become their

family in this country where they feel so lonely. On their next appointment the client brings you a gift, a stunning painting they created specifically for you and your office. Because local galleries and art houses display and sell this person's art, you know that this gift is worth thousands of dollars. You also know that in the person's culture, gifts have deep meaning and that rejecting a gift is a deep insult. You consider the power dynamic and feel torn between the client's cultural way of expressing gratitude while being mindful of not exploiting the relationship by accepting a lucrative gift. You also reflect on ways in which accepting a gift of such value might affect the therapy.

- Your dissertation is on how young children think about their own creativity. The contract and form for informed consent – which you sign along with your supervisor and a representative of the university prior to the parents signing – assures each parent that in exchange for their consent, you, the supervisor, and the university attest that (a) your contact with the child will be limited to a single hour session, and (b) the session will be absolutely confidential and that the names and any other personally identifying information will never be shared with anyone else. In each session, the child makes up a story during the first half-hour, then you ask questions about how they thought up the theme, characters, plot, and details. One girl, whose father is a famous attorney who has won multimillion dollar judgments in both defamation suits and contract law cases, makes up a story about how a little girl is terrified of her father, an attorney, because he comes into her room almost every night and has sex with her. He has told her that if she ever tells anyone their secret, he will kill her dog and that no one would believe her anyway. When you ask her how she thought up the story about the little girl, your research participant says, “Well, she's almost exactly like me in a lot of ways.” When you ask her what she means, she says she is afraid to talk anymore and remains silent until the hour is up.
- You and your best friend are talking about how much you're both looking forward to graduating next spring. Your friend confides: “I had no idea how I'd ever get my dissertation done but luckily I had enough money to hire a consultant to design the study and analyze the data. And I was so relieved to find a good professional author who could write it up for me.”

What do you consider the most ethical response to each situation? If the scenarios involve conflicting values, responsibilities, or loyalties, how do you sort through the conflicts and decide what to do? What are the costs, risks, and possible outcomes of the various approaches you can imagine to each situation? How we work our way through such complex situations not only reflects but also actively shapes our professional ethics and character.

Developing ethics is, for most, a career-long process. Ethical development that stops at graduate school can be a little like the professor relying on the same yellowing lecture notes, PowerPoint slides, and stale jokes decade after decade, never bothering to update, rethink, or renew. The rest of this chapter is organized

into two parts. The first discusses seven steps that seem key to developing professional ethics, including:

- Start with what we actually do.
- Stay awake, distrust quick answers, and keep questioning.
- Know the ethics codes – their similarities and differences – but don't let them replace critical thinking, professional judgment, and taking personal responsibility.
- Know the legal standards, but don't let them replace critical thinking, professional judgment, and taking personal responsibility.
- Prevent needless mistakes by actively and proactively addressing our weaknesses, limitations, and blind spots, which we all, beginner and seasoned psychologist alike, have and fall prey to from time to time.
- When looking for ethical missteps, start with ourselves. Question what seems beyond questioning.

The second part looks at 16 of the most common ethical fallacies that help us justify unethical behavior.

2. Developing Professional Ethics

Taking the following steps can help develop professional ethics that are informed, useful, and practical. Some of the material in this section is adapted from Pope (2010) and Pope et al., (2021).

2.1 Start with What We Actually Do

Professional ethics are meaningless unless they fit what we actually do. We're not in a good position to consider the ethical implications of our acts unless we clearly understand what we do as psychologists. Teaching, research, supervision, mentoring, assessment, consultation, and intervention are abstractions until we understand what they mean in our day-to-day lives. This is not always easy. In 1947, APA president Carl Rogers appointed David Shakow to chair a committee on defining and teaching psychotherapy. Shakow's report resulted in the influential Boulder Conference and the "Boulder Model" of training (i.e., the scientist-practitioner model) of clinical psychology. On August 28, 1949, the recorder for the Boulder task force attempting to define therapy and establish criteria for adequate training wrote the following summary: "We have left therapy as an undefined technique which is applied to unspecified problems with a non-predictable outcome. For this technique we recommend rigorous training."

It is important to ask ourselves: Do our own professional ethics fit what we actually do as psychologists? Do they take account of the pressures, conflicting needs, ambiguities, subtleties, gray areas, and other realities we – and our students, supervisees, research participants, therapy clients, and others – face? The ethics codes, standards, and guidelines tend to be abstract so that they can apply to a variety of extremely diverse situations, fact patterns, and contexts. They lack the almost

infinite variety of details involved when two or more unique people, each with their own cultural contexts and assumptions, each changing over time, meet in a relationship that constantly evolves.

Life in the real world tends to be messy, with gray areas, contradictions, blurrings, unknowns, overlaps, complexities, surprises, and rough edges that don't match up with the clarity, clean corners, and smooth edges we've come across in some courses, books, and codes. For example, professors and therapists, trained and accustomed to working in person with their students, and clients suddenly found themselves cut off from in-person meetings when the novel coronavirus (COVID-19) pandemic hit, and were forced to meet with students and clients using Zoom and other videotelephony and online chat service apps. Do our professional ethics give us reliable guidance or other forms of help when the specifics of a situation throw us into confusion and the texts, codes, authorities, support, and traditions we've drawn on fail us?

2.2 Stay Awake, Distrust Quick Answers, and Keep Questioning

However fun and fulfilling psychology can be *at times*, there are other times when it can be daunting, draining, and discouraging. Conflicts with administrators, supervisors, endless paperwork, urgent needs that go unmet, meetings that make the Ice Age seem like the blink of an eye, bureaucratic barriers, worry about making ends meet, shortages of resources and support, concerns about the well-being of clients and colleagues, sheer exhaustion, and so much else can overwhelm us, drain us dry, dull our awareness, and lull us into ethical sleep. To the extent that what we do as psychologists is meaningful and important, our work requires us to remain actively alert, mindful, inquisitive, and aware of the implications of what we are choosing to do and not do.

When we're tired, running late, distracted, or burnt out, we can grow careless or desperate, grabbing the first answer that occurs to us, that we hear from a consultant, or that we read in a book. However, a mindful approach to ethics recognizes that ethical alertness is a continuous, active process that involves constant questioning, seeking new information and perspectives, and avoiding premature closure.

2.3 Know the Ethics Codes: Their Similarities and Differences – But Don't Let Them Replace Critical Thinking, Professional Judgment, and Taking Personal Responsibility

Understanding relevant codes of ethics is a key step in developing and practicing ethics, but codes cannot replace a thoughtful, informed, creative approach to meeting the ethical challenges of specific situations. Codes can expand and sharpen our awareness, inform the ways we think through a problem, and provide helpful guidance. Codes can *not* serve as a substitute for thinking, provide an excuse to duck a difficult decision, or remove our personal responsibility for our ethical choices. Developing and practicing ethics never means following codes in

a reflexive, thoughtless manner or using codes as a shield against personal responsibility. Knowing how ethics codes evolved, the values they embody, the forms they take, and how they resemble and differ from each other can strengthen our ethical development and practice. The American Psychological Association's (APA) and the Canadian Psychological Association's (CPA) ethics code provide examples.

Founded in 1892, APA saw no need for an ethics code for its first 60 years of existence. APA created its first Committee on Scientific and Professional Ethics (CSPE) in 1938. Without a written code, the committee tried to come up with informal approaches that relied on persuasion to address complaints. Beginning in 1939, the committee spent 8 years considering whether a written code would be helpful. They decided that a written code would be useful in part because an "unwritten code is tenuous, elusive, and unsatisfactory" (APA, 1952). APA designated Edward Tolman to chair a Committee on Ethical Standards that would develop an ethics code.

The decision sparked controversy. Some exceptionally prominent members argued that a written code would be a terrible mistake. Calvin Hall, for example, believed that even the best possible code would favor the crooked psychologist. An unethical psychologist would study a written code "to see how much he can get away with . . . and since any code is bound to be filled with ambiguities and omissions, he can rationalize his unethical conduct" (Hall, 1952, p. 430).

CPSE came up with a revolutionary way to develop a code. The method broke sharply with the traditional methods that had been used by over 500 professional and business associations (Hobbs, 1948). The problem with the traditional methods, according to CPSE, was that they resorted to what Hobbs termed the "armchair approach" (p. 82) in which a committee of those *presumably* most qualified – or at least most well connected – would consider the available codes, critical issues, and scholarly literature; then issue general calls for case studies, comments, suggestions, and other input. The calls would appear in various publications, but would not involve sending a call to every individual member of the organization.

Instead of the old methods of general calls for input, CPSE recommended that developing the ethics code actively put to use the methods of psychological science, specifically empirical survey research. APA would reach out to each member individually, sending each a letter that would ask about the psychologist's personal experiences. This empirically informed method of contacting members individually could establish a direct and explicit connection between the committee and each member that would be more effective than running a general announcement in some APA publications that members might or might not happen to see and would not be personally addressed to the individual. It conveyed how much the committee valued each individual member's views and experiences and the care and seriousness of the committee's attempt to actively draw input from the full diversity of *all* members.

The revolutionary method held other advantages as well. Contacting every member individually and asking for personal experience would give all members, rather than just a relative few, a personal stake in the code. Their views and experiences would make up the *primary* data from which the code emerged, would

serve as a firm foundation, reflecting the association's full diversity, and would actively shape the code by which they would have to live. Nicholas Hobbs described this method of contacting each member as one firmly rooted in the scientific principles and able to produce "a code of ethics truly indigenous to psychology, a code that could be lived" (Hobbs, 1948).

In 1948, every APA member received a letter asking that the psychologist share "experiences in solving ethical problems by describing the specific circumstances in which someone made a decision that was ethically critical" (APA, 1949). The critical incidents led to a draft code, published in *American Psychologist* (APA Committee, 1951a, 1951b, 1951c), consisting of six sections:

- Ethical standards and public responsibility
- Ethical standards in professional relationships
- Ethical standards in client relationships
- Ethical standards in research
- Ethical standards in writing and publishing
- Ethical standards in teaching

After extensive discussion and revision, the first APA ethics code was adopted in 1952 and published in 1953. New versions of the code appeared in 1959, 1963, 1968, 1977, 1979, 1981, 1990, 1992, 2002, and 2010. The current version includes:

- Introduction
- Preamble
- Five general principles
- Ethical standards

The preamble and general principles, which include beneficence and nonmaleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignity, are *aspirational* goals representing psychology's ethical ideals. The specific ethical standards are *enforceable*.

The code was always to be revised by mailing a survey form to each APA member (Holtzman, 1960, p. 247). Maintaining this unique empirical approach would preserve the stake that all members had in a code, reflect the experiences and values of the full diversity of APA members, and cultivate loyalty to the code. It reflected beliefs about empowerment, management style, group process, and allegiance (e.g., Golann, 1969; Hobbs, 1948; Holtzman, 1960).

APA's unique approach was believed (a) to empower all members by involving them meaningfully and individually (through the mailed survey) from the start, (b) benefit from better group or organizational dynamics by creating a psychological sense of community among all members, and (c) produce a better revision. The code and its revisions would be "based upon the day-to-day decisions made by psychologists in the practice of their profession, rather than prescribed by a committee" (Golann, 1969, p. 454). Surveying all members individually was considered essential to maintain an ethics code "close enough to the contemporary scene to win the genuine acceptance of the majority who are most directly affected by its principles"

(Holtzman, 1960, p. 250). However, no APA ethics code revision to date has been based on critical incident survey forms mailed individually to all APA members.

Formed in 1939, the CPA functioned for two decades without a written ethics code. Still representing only a small number of psychologists living in diverse parts of a large country, CPA incorporated in 1950 and recognized the need for an explicit code. Deciding that it was unrealistic at that point to bring together a sufficient number of psychologists often enough to carefully think through how a code should be created and then develop the code, CPA decided “to adopt the 1959 . . . APA code for a 3-year trial. This was followed by adoptions (with minor wording changes) of the 1963 and 1977 APA revised codes” (Sinclair & Pettifor, 2001). Dissatisfaction with the APA code grew, and when APA released the 1977 revision, Canadian disagreements with the APA approach to ethics reached the stage of irreconcilable differences (Sinclair et al., 1996). Canadian psychologists viewed the APA ethics code as running “the risk of changing the nature of the professional relationship from a primarily fiduciary contract to a commercial one” (Sinclair et al., 1996).

Sinclair (1998) reported that CPA set four criteria for its first indigenous code:

- Conceptual coherence, which would make it better suited to use in education.
- Inclusiveness, so that it would embrace more new areas of psychological practice.
- Explicitness, so that it would provide clearer guidelines for what to do when two or more ethical values were in conflict.
- Usefulness, so that it would include helpful rules for the ethical decision-making process.

Taking an empirical approach, CPA sent 37 ethical dilemmas to its members, inviting them to describe not only what they would do when confronting the dilemmas but also what decision-making steps they followed (Truscott & Crook, 2004). Content analysis revealed that the Canadian psychologists had relied on four basic values, which became the foundation of the new code (Canadian Psychological Association, 1986):

- Respect for the dignity of persons
- Responsible caring
- Integrity in relationships
- Responsibility to society

To meet the four criteria it had defined for the code, CPA created a code that represented “a radical departure from previous codes of ethics in both its underlying philosophy and structure” (Sinclair, 2011, p. 152). Aspects of the new code included:

First, an overriding theme . . . was the concept of a discipline or profession having a “contract with society,” in which members of the psychology community strive for excellence in ethical behaviour, not just meeting minimal standards or rules. Second, rather than containing primarily a list of rules to be followed, the Code emphasised the importance of ethical decision making . . . Several aids to ethical decision making were

provided in the Preamble, including a model for ethical decision making, ordering the ethical principles according to the weight each generally should be given when they conflict, differential weighting of the ethical principles to be considered, and a role for personal conscience. Third, all ethical standards, which included both minimum and aspirational standards, were organized around four ethical principles: Respect for the Dignity of Persons, Responsible Caring, Integrity in Relationships, and Responsibility to Society. (Sinclair, 2011, pp. 152–153)

The original CPA code (CPA, 1986) was “welcomed both within Canada and beyond its borders” (Pettifor & Sinclair, 2011). Pettifor (2011) notes that the current CPA code receives “continuing international attention and acclaim” (p. 230). The CPA model has influenced a wide variety of subsequent codes (Pope, 2011). For example, Seymour (2011) wrote: “Undoubtedly the most powerful influence on the development of our Code of Ethics for New Zealand Psychologists working in Aotearoa/New Zealand (2002) was the 1991 Canadian Code of Ethics for Psychologists. The working party that developed our new code was directed to produce a code that was modeled on the 1991 Canadian Code of Ethics for Psychologists” (p. 232). Similarly, Hernandez-Guzman (2011) wrote that the Mexican Psychological Society’s ethics code, the *Codigo Etico del Psicologo*, “is based on the experiences and problems faced by Mexican psychologists during their professional practice, with the Canadian Code of Ethics for Psychologists as the main guideline. Today, many universities and professional associations, not only in Mexico but in several Latin American countries, have adopted the *Codigo Etico del Psicologo* as their main decision-making reference concerning ethical issues” (p. 232).

Pettifor (2011) summarized some of the CPA ethics code’s most valued contributions:

First, the most valued contribution of the Canadian Code appears to be the formulation of an explicit moral framework or foundation of ethical principles that are defined separately but linked to specific conduct and behaviours. The second theme seems to be the delineation in the Code of a process for value-based decision-making in contrast to an emphasis on complying only with rules about what psychologists must or must not do. It is recognised that rules cannot cover all possible situations, and especially cannot be used to negotiate solutions to dilemmas. The third valued contribution is the emphasis in the Code on positive aspirations rather than on the bottom line for acceptable behaviour. Fourth is the conceptual clarity, user-friendly language, and practical approach, which are thought to enhance the effectiveness of teaching, supervising, and learning ethics and ethical decision-making. (pp. 230–231)

Finally, members representing the four Ethnic Minority Psychological Associations (EMPAs) in the United States including the Asian American Psychological Association (AAPA), Association of Black Psychologists (ABPsi), the National Latinx Psychological Association (NLPA), and the Society of Indian Psychologists (SIP) met with the APA Ethics Committee at the 2011 annual APA convention. During this meeting the EMPAs and APA agreed to review whether the ethics code addresses issues of culture adequately, appropriately, and knowledgeably.

Specifically, the EMPAs shared their thoughts on how the ethical code both “assists or hinders their work as Psychologists of Color” with the goal of broadening knowledge on “how culture intersects with ethical dilemmas” (APA, 2012, para. 15). Several EMPAs have developed and published their own set of ethical commentaries (see SIP, 2014), guidelines (see NLPA, 2018), or standards (see ABPsi, n.d.). More recently, scholars and practitioners have written about the core ethical principle of “justice” in psychology (Hailes et al., 2021, p. 1; see also Leong et al., 2017; Pope et al., 2021; Varghese et al., 2019; Walsh, 2015). They offered seven guidelines for social justice ethics including “(1) reflecting critically on relational power dynamics; (2) mitigating relational power dynamics; (3) focusing on empowerment and strengths-based approaches; (4) focusing energy and resources on the priorities of marginalized communities; (5) contributing time, funding, and effort to preventive work; (6) engaging with social systems; and (7) raising awareness about system impacts on individual and community well-being” (Hailes et al., 2021, p. 1).

2.4 Know the Legal Standards, But Don’t Let Them Replace Critical Thinking, Professional Judgment, and Taking Personal Responsibility

A complex array of constantly evolving legislation, case law, administrative law, and other legal standards governs our work as psychologists. These standards change from time to time and from jurisdiction to jurisdiction. A psychologist may be required to do something (e.g., breach confidentiality) under certain conditions in one state or province, be forbidden to do it in another, and be allowed but not required to do it in a third. Keeping up with the legal standards in the relevant jurisdiction is essential, but as with an ethics code’s standards, the law should inform but not replace professional judgment.

Focusing too exclusively on legal standards can blind us to ethical issues, sometimes leading us to mistake what is legal for what is ethical. All too often public figures holding positions of trust resort, when caught doing something ethically wrong, to claim “I broke no law”; “While some may disagree with what I did, all my acts were clearly legal”; or “All of my acts were consistent with controlling legal authority.”

2.5 Actively Address Fallibility to Prevent Problems

It is a cliché but true: None of us is perfect. Each of us makes mistakes, has limitations, gets things wrong sometimes. All of us have vulnerabilities, shortcomings, and blind spots. The major differences are not so much between those with many imperfections and those with few (or at least those who think they have only a few), but between those who freely acknowledge – to themselves and others – how their own flaws and weaknesses affect their work and those who look down on others as inferior versions of themselves.

It’s easy to make pro-forma admissions of “I might be wrong, but . . . ” and remain passive in the face of what we know or suspect are the barriers between us and our best work. It is something else entirely to question ourselves constantly,

actively; to ask “What if I’m wrong about this?”; “Are there facts, fallacies, contexts, unintended consequences, or perspectives I’m overlooking?”; “Is there a more creative, positive, effective, comprehensive way to address this ethical challenge?” This approach can prevent countless problems.

2.6 When Looking for Ethical Missteps, Start with Ourselves

It is so easy to spot the ethical blunders of others. Even while reading this sentence, we might find our minds drifting to times we spotted – or thought we spotted – a colleague’s ethical carelessness, questionable behavior, or intentional wrongdoing. We miss a wildly waving red flag if we fail to recognize something amiss when our critical gaze remains exclusively outward. We need to spend at least as much time and energy questioning our own behavior as we question what others do.

2.7 Question What Seems Beyond Questioning

All of us have certain tightly held beliefs. We throw away chances to learn, grow, and discover if we don’t loosen our grip on these beliefs enough to take a fresh look, engage in critical thinking, and pursue creative questioning. It is relatively easy to explore areas of uncertainty, minor concern, or little consequence. The challenge is to question our most cherished and “unquestionable” assumptions, those beliefs that are most central, those principles that form the core of our ethics. Following this open questioning can lead us into areas that are confusing, (temporarily) disorienting, and sometimes frightening. It can take us through ideas that are politically incorrect or what tends to be more uncomfortable for many of us – “psychologically incorrect” (Pope et al., 2006). It can also show us the path toward more ethical behavior.

2.8 Avoiding Ethical Fallacies

However well-developed our individual professional ethics, we may face times when the temptation is just too great and we need to justify behaving unethically. The following rationalizations – adapted from those originally suggested by Pope et al. (2006) and by Pope et al., (2021) – can make even hurtful and reprehensible behaviors seem ethical or at least trivial. All of us, at one time or another, have *likely* endorsed at least some of them. If an excuse seems absurd, it is likely that we have not yet needed it desperately. At some future moment of great stress or temptation, those absurdities may seem plausible if not downright self-evident.

1. It’s not unethical as long as a departmental chair, administrative supervisor, or managed care administrator required or suggested it.
2. It’s not unethical as long as the professional or educational association you belong to allows it.
3. It’s not unethical if you don’t know of any ethics code, legislation, case law, or professional standard that *specifically* prohibits it. Two basic fallacies are at

work here: specific ignorance and specific literalization. “Specific ignorance” means that if you don’t know about, for example, a prohibition against making a custody recommendation without actually meeting with the people involved, then the prohibition doesn’t really exist in a way that applies to you. As long as you weren’t aware of certain ethical standards in advance, then you cannot be considered ethically accountable for your actions. The fallacy of “specific literalization” allows you declare any act that is not *specifically* mentioned in the formal standards to be ethical. Interestingly, this rule can be called into play even when the psychologist knows in advance about a specific prohibition, if the psychologist also invokes the rule known as “insufficient qualification.” Consider, for example, a psychologist who knows that there is an ethical standard prohibiting sexual involvement with a therapy client. The psychologist can call attention to the fact that the sex occurred outside of the consulting room and that the standards made no mention of sex occurring outside the consulting room, or that the psychologist’s theoretical orientation is cognitive-behavioral, psychoanalytic, or humanistic, and that the standards do not explicitly mention and therefore presumably are not relevant for his or her specific theoretical orientation.

4. It’s not unethical if you know at least three other psychologists who have done the same thing. After all, if there were anything wrong with it, do you really think others would be doing it so openly that you would have heard about it?
5. It’s not unethical if none of your students, research participants, supervisees, or therapy clients has ever complained about it. If one or more did complain about it, it is crucial to determine whether they constitute a large representative sample of those you encounter in your work, or are only a few atypical, statistically insignificant outliers.
6. It’s not unethical if a student, research participant, supervisee, or therapy client wanted you to do it.
7. It’s not unethical as long as the student’s/research participant’s/supervisee’s/therapy client’s condition made them so awful to be around that their behavior evoked (that is to say: *caused*) whatever it was you did, and they must own responsibility for it. Which is not, of course, an admission that you actually did something.
8. It’s not unethical if you have a disorder or condition (psychological, medical, or just being tired and cranky) and that disorder or condition can be made to assume responsibility for your choices and behavior.
9. It’s not unethical if you’re skilled at using the passive voice and a “looking forward rather than wallowing in the past” approach. If someone discovers that our CV proclaims degrees we never actually earned, honors we never actually received, and accomplishments that were not ours, we need only shrug non-defensively, note that apparently mistakes were made and that it is time to move on.
10. It’s not unethical if you’re basically a good person and have upheld most of the other ethical standards. This “majority rule” gives you time off (from ethics) for good behavior. This means that all of us can safely ignore a few of the ethical

standards as long as we scrupulously observe the other, far more important ones. In tight circumstances, we need to observe only a majority of the standards. In a genuine crisis, we need only have observed one of the standards at some time in our lives, or at least given it serious consideration.

11. It's not unethical if you don't mean to hurt anybody. If anyone happens to get hurt it was clearly an unforeseeable accident because you didn't intend it, and no one should be held responsible for something that is a chance, accidental happenstance.
12. It's not unethical if there is no set of peer-reviewed, adequately replicated, universally accepted set of scientific research findings demonstrating, without qualification or doubt, that exactly what you did was the sole cause of harm to the student, supervisee, research participant, or therapy client. Few have articulated this principle with more compelling eloquence than a member of the Texas pesticide regulatory board charged with protecting Texas citizens against undue risks from pesticides. Discussing chlordane, a chemical used to kill termites, he said, "Sure, it's going to kill a lot of people, but they may be dying of something else anyway."
13. It's not unethical if it's a one-time-only exception to your customary approach. Really. This is it. Last time. Never again. Don't even ask.
14. It's not unethical if you're an important figure in the field. Many psychologists have defined importance using such criteria as well known, extensively published, popular with students, popular with granting agencies, holding some appointive or elective office, being rich, having a large practice, having what you think of as a "following" of like-minded people, etc. But many of us find such ill-considered criteria to be far too vulnerable to Type II error. In deciding whether we are an important figure in the field, who, after all, knows us better than ourselves?
15. It's not unethical if you're really pressed for time. In light of your unbelievable schedule and responsibilities, who after all could really expect you to attend to every little ethical detail?
16. It's not unethical if we stress the importance of judgment, consistency, and context. For example, it may seem as if a therapist who has submitted hundreds of thousands of dollars' worth of bogus insurance claims for patients he never saw might have behaved "unethically." However, as attorneys and others representing such professionals often point out: It was simply an error in judgment, completely inconsistent with the high ethics manifest in every other part of the person's life, and insignificant in the context of both the unbelievable good that this person has done and the much-needed good he can continue to do if let off with a token penalty or a good talking to.

We're guessing that each of you reading this chapter could extend this list. Our abilities to think creatively and respond ethically to even the most daunting challenges seem mirrored by the strategies available to rationalize even the most unethical approaches.

3. Conclusion

Developing and practicing ethics requires an active, mindful approach that continues from graduate school throughout our careers. The psychologist who remains unaware of the constantly evolving ethical and legal standards, fails to engage in critical self-examination, and stops actively seeking to do better is like – in light of the possible consequences of ethical missteps – the driver who dozes at the wheel. A human endeavor that focuses on humans in all their infinite variety, psychology never runs short of ethical challenges that are complex, filled with gray areas and conflicting values, and lacking clear, easy, or definitive answers. Meeting these challenges is an inescapable responsibility that confronts each of us.

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Additional Resources

Online Resources

- *Ethics Codes & Professional Guidelines*. Over 120 links to complete copies of codes, standards, and guidelines addressing: (a) specific areas of practice (e.g., online psychotherapy, forensic, rehabilitation, neuropsychology, school psychology, group therapy, body work, hypnotherapy, employee assistance, pastoral counseling, biofeedback, custody evaluations, diminished capacity assessments, end-of-life decisions); (b) specific

aspects of practice (e.g., supervision, managed care, duty to protect, record keeping, email communication with patients); (c) specific theoretical orientations (e.g., Feminist Therapy Institute, Christian Association for Psychological Studies, Canadian Psychoanalytic Society); and (d) different professions (e.g., psychologists, psychiatrists, social workers, counselors). <http://bit.ly/ethcodes>

- *US & Canadian Psychology Laws, Continuing Ed Requirements, Licensing Boards, etc.* Includes for each US state and Canadian province: (a) contact information (e.g., phone and address) for the psychology licensing; (b) a link to each psychology board's home page if the board has a website; (c) a link to the psychology licensing law or rules and regulations regulating the practice of psychology if these are available on the web; (c) a link to information about applying for licensure and to application forms if these are available online; and a link to that state or province's continuing education requirements if this information is available online. <http://bit.ly/licensinglawsandboards>
- *Informed Consent Requirements, Sample Forms, & Articles.* <http://bit.ly/informedconsent>.
- *Boundaries in Therapy: Standards of Care, References, & Resources.* Five major sections: (1) excerpts from ethics codes addressing boundary issues; (2) quotes and information from articles, books, and studies addressing boundary issues; (3) widely used decision-making guides; (4) full-text articles; and (5) links to related resources. <http://bit.ly/ethicsandboundaries>
- *Therapist's Guide to Creating a Professional Will.* <http://bit.ly/professionalwill>
- *US Department of Health & Human Services Office of Research Integrity.* <http://bit.ly/researchintegrity>

Ethnic Minority Psychological Associations Ethical Commentaries, Guidelines and Standards:

- *Association of Black Psychologists (ABPsi) Ethical Standards:* www.abpsi.org/pdf/EthicalStandardsAssociationofBlackPsychologists.pdf
- *National Latinx Psychological Association (NLPA) Guidelines:* www.nlpa.ws/assets/docs/ethical%20guidelines%20nlpa_adopted%20jan%201st.pdf
- *Society of Indian Psychologists (SIP) Commentaries:* www.aiansip.org/commentary.html

Books and Articles

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PART III

YOUR RESEARCH/ACADEMIC CAREER

An Open Science Workflow for More Credible, Rigorous Research

Katherine S. Corker

Recent years have heralded a relatively tumultuous time in the history of psychological science. The past decade saw the publication of a landmark paper that attempted to replicate 100 studies and estimated that just 39 percent of studies published in top psychology journals were replicable (Open Science Collaboration, 2015). There was also a surplus of studies failing to replicate high-profile effects that had long been taken as fact (e.g., Hagger et al., 2016; Harris et al., 2013; Wagenmakers et al., 2016). Taken together, suddenly, the foundations of much psychological research seemed very shaky.

As with similar evidence in other scientific fields (e.g., biomedicine, criminology), these findings have led to a collective soul-searching dubbed the “replication crisis” or the “credibility revolution” (Nelson et al., 2018; Vazire, 2018). Clearly, something about the way scientists had gone about their work in the past wasn’t effective at uncovering replicable findings, and changes were badly needed. An impressive collection of meta-scientific studies (i.e., studies about scientists and scientific practices) have revealed major shortcomings in standard research and statistical methods (e.g., Button et al., 2013; John et al., 2012; Nuijten et al., 2016; Simmons et al., 2011). These studies point to a clear way to improve not only replicability but also the accuracy of scientific conclusions: open science.

Open science refers to a radically transparent approach to the research process. “Open” refers to sharing – making accessible – parts of the research process that have traditionally been known only to an individual researcher or research team. In a standard research article, authors summarize their research methods and their findings, leaving out many details along the way. Among other things, open science includes sharing research materials (protocols) in full, making data and analysis code publicly available, and pre-registering (i.e., making plans public) study designs, hypotheses, and analysis plans.

Psychology has previously gone through periods of unrest similar to the 2010s, with methodologists and statisticians making persuasive pleas for more transparency and rigor in research (e.g., Bakan, 1966; Cohen, 1994; Kerr, 1998; Meehl, 1978). Yet, it is only now with improvements in technology and research infrastructure, together

with concerted efforts in journals and scientific societies by reformers, that changes have begun to stick (Spellman, 2015).

Training in open science practices is now a required part of becoming a research psychologist. The goal of this chapter is to briefly review the shortcomings in scientific practice that open science practices address and then to give a more detailed account of open science itself. We'll consider what it means to work openly and offer pragmatic advice for getting started.

1. Why Open Science?

When introducing new researchers to the idea of open science, the need for such practices seems obvious and self-evident. Doesn't being a scientist logically imply an obligation to transparently show one's work and subject it to rigorous scrutiny? Yet, abundant evidence reveals that researchers have not historically lived up to this ideal and that the failure to do transparent, rigorous work has hindered scientific progress.

1.1 Old Habits Die Hard

Several factors in the past combined to create conditions that encouraged researchers to avoid open science practices. First, incentives in academic contexts have not historically rewarded such behaviors and, in some cases, may have actually punished them (Smaldino & McElreath, 2016). To get ahead in an academic career, publications are the coin of the realm, and jobs, promotions, and accolades can sometimes be awarded based on number of publications, rather than publication quality.

Second, human biases conspire to fool us into thinking we have discovered something when we actually have not (Bishop, 2020). For instance, confirmation bias allows us to selectively interpret results in ways that support our pre-existing beliefs or theories, which may be flawed. Self-serving biases might cause defensive reactions when critics point out errors in our methods or conclusions. Adopting open science practices can expose researchers to cognitive discomfort (e.g., pre-existing beliefs are challenged; higher levels of transparency mean that critics are given ammunition), which we might naturally seek to avoid.

Finally, psychology uses an apprenticeship model of researcher training, which means that the practices of new researchers might only be as good as the practices of the more senior academics training them. When questionable research practices are taught as normative by research mentors, higher-quality open science practices might be dismissed as methodological pedantry.

Given the abundant evidence of flaws in psychology's collective body of knowledge, we now know how important it is to overcome the hurdles described here and transition to a higher standard of practice. Incentives are changing, and open science practices are becoming the norm at many journals (Nosek et al., 2015). A new generation of researchers is being trained to employ more rigorous practices. And although the cognitive biases just discussed might be some of the toughest problems

to overcome, greater levels of transparency in the publishing process help fortify the ability of the peer review process to serve as a check on researcher biases.

1.2 Benefits of Open Science Practices

A number of benefits of open science practices are worth emphasizing. First, increases in transparency make it possible for errors to be detected and for science to self-correct. The self-correcting nature of science is often heralded as a key feature that distinguishes scientific approaches from other ways of knowing. Yet, self-correction is difficult, if not impossible, when details of research are routinely withheld (Vazire & Holcombe, 2020).

Second, openly sharing research materials (protocols), analysis code, and data provides new opportunities to extend upon research and adds value above and beyond what a single study would add. For example, future researchers can more easily replicate a study's methods if they have access to a full protocol and materials; secondary data analysts and meta-analysts can perform novel analyses on raw data if they are shared.

Third, collaborative work becomes easier when teams employ the careful documentation that is well-honed for followers of open science practices. Even massive collaborations across time and location become possible when research materials and data are shared following similar standards (Moshontz et al., 2018).

Finally, the benefits of open science practices accrue not only to the field at large, but also to individual researchers. Working openly provides a tangible record of your contributions as a researcher, which may be useful when it comes to applying for funding, awards, or jobs.

Markowitz (2015) describes five “selfish” reasons to work reproducibly, chiefly: (a) to avoid “disaster” (i.e., major errors), (b) because it's easier, (c) to smooth the peer review process, (d) to allow others to build on your work, and (e) to build your reputation. Likewise, McKiernan et al. (2016) review the ample evidence that articles that feature open science practices tend to be more cited, more discussed in the media, attract more funding and job offers, and are associated with having a larger network of collaborators. Allen and Mehler (2019) review benefits (along with challenges) specifically for early career researchers.

All of this is not to say that there are not costs or downsides to some of the practices discussed here. For one thing, learning and implementing new techniques takes time, although experience shows that you'll become faster and more efficient with practice. Additionally, unsupportive research mentors or other senior collaborators can make it challenging to embrace open science practices. The power dynamics in such relationships may mean that there is little flexibility in the practices that early career researchers can employ. Trying to propose new techniques can be stressful and might strain advisor-advisee relationships, but see Kathawalla et al. (2021) for rebuttals to these issues and other common worries.

In spite of these persistent challenges and the old pressures working against the adoption of open science practices, I hope to convince you that the benefits of

working openly are numerous – both to the field and to individual researchers. As a testament to changing norms and incentives, open science practices are spreading and taking hold in psychology (Christensen, Freese, et al., 2019; Tenney et al., 2021). Let us consider in more detail what we actually mean by open science practices.

2. Planning Your Research

Many open science practices boil down to forming or changing your work habits so that more parts of your work are available to be observed by others. But like other healthy habits (eating healthy food, exercising), open science practices may take some initial effort to put into place. You may also find that what works well for others doesn't work well for you, and it may take some trial and error to arrive at a workflow that is both effective and sustainable. However, the benefits that you'll reap from establishing these habits – both immediate and delayed – are well worth putting in the effort. It may not seem like it, but there is no better time in your career to begin than now.

Likewise, you may find that many open science practices are most easily implemented early in the research process, during the planning stages. But fear not: if a project is already underway, we'll consider ways to add transparency to the research process at later stages as well. Here, we'll discuss using the Open Science Framework (<https://osf.io>), along with pre-registration and registered reports, as you plan your research.

2.1 Managing the Open Science Workflow: The Open Science Framework

The Open Science Framework (OSF; <https://osf.io>) is a powerful research management tool. Using a tool like OSF allows you to organize all stages of the research process in one location, which can help you stay organized. Using OSF is also not tied to any specific academic institution, so you won't have to worry about transferring your work when you inevitably change jobs (perhaps several times). Other tools exist that can do many of the things OSF can (some researchers like to use GitHub, figshare, or Zenodo, for instance), but OSF was specifically created for managing scientific research and has a number of features that make it uniquely suited for the task. OSF's core functions include (but are not limited to) long-term archival of research materials, analysis code, and data; a flexible but robust pre-registration tool; and support for collaborative workflow management. Later in the chapter, we'll discuss the ins and outs of each of these practices, but here I want to review a few of the ways that OSF is specialized for these functions.

The main unit of work on OSF is the "project." Each project has a stable URL and the potential to create an associated digital object identifier (DOI). This means that researchers can make reference to OSF project pages in their research articles without worry that links will cease to function or shared content will become unavailable. A sizable preservation fund promises that content shared on OSF will

remain available for at least 50 years, even if the service should cease to operate. This stability makes OSF well-suited to host part of the scientific record.

A key feature of projects is that they can be made public (accessible to all) or private (accessible only to contributors). This feature allows you to share your work publicly when you are ready, whether that is immediately or only after a project is complete. Another feature is that projects can be shared using “view-only” links. These links have the option to remove contributor names to enable the materials shared in a project to be accessible to peer reviewers at journals that use masked review.

Projects can have any number of contributors, making it possible to easily work collaboratively even with a large team. An activity tracker gives a detailed and complete account of changes to the project (e.g., adding or removing a file, editing the project wiki page), so you always know who did what, and when, within a project. Another benefit is the ability to easily connect OSF to other tools (e.g., Google drive, GitHub) to further enhance OSF’s capabilities.

Within projects, it is possible to create nested “components.” Components have their own URLs, DOIs, privacy settings, and contributor list. It is possible, for instance, to create a component within a project and to restrict access to that component alone while making the rest of the project publicly accessible. If particular parts of a project are sensitive or confidential, components can be a useful way to maintain the privacy of that information. Similarly, perhaps it is necessary for part of a research group to have access to parts of a research project and for others to not have the access. Components allow researchers this fine-grained level of control.

Finally, OSF’s pre-registration function allows projects and components to be “frozen” (i.e., saved as time-stamped copies that cannot be edited). Researchers can opt to pre-register their projects using one of many templates, or they can simply upload the narrative text of their research plans. In this way, researchers and editors can be confident about which elements of a study were pre-specified and which were informed by the research process or outcomes.

The review of OSF’s features here is necessarily brief. Soderberg (2018) provides a step-by-step guide for getting started with OSF. Tutorials are also available on the Center for Open Science’s YouTube channel. I recommend selecting a project – perhaps one for which you are the lead contributor – to try out OSF and get familiar with its features in greater detail. Later, you may want to consider using a project template, like the one that I use in my lab (Corker, 2016), to standardize the appearance and organization of your OSF projects.

2.2 Pre-Registration and Registered Reports

Learning about how to pre-register research involves much more than just learning how to use a particular tool (like OSF) to complete the registration process. Like other research methods, training and practice are needed to become skilled at this key open science technique (Tackett et al., 2020). Pre-registration refers to publicly reporting study designs, hypotheses, and/or analysis plans prior to the onset of

a research project. Additionally, the pre-registered plan should be shared in an accessible repository, and it should be “read-only” (i.e., not editable after posting). As we’ll see, there are several reasons a researcher might choose to pre-register, along with a variety of benefits of doing so, but the most basic function of the practice is that pre-registration clearly delineates the parts of a research project that were specified before the onset of a project from those parts that were decided on along the way or based on observed data.

Depending on their goals, researchers might pre-register for different reasons (da Silva Frost & Ledgerwood, 2020; Ledgerwood, 2018; Navarro, 2019). First, researchers may want to constrain particular data analytic choices prior to encountering the data. Doing so makes it clear to the researchers, and to readers, that the presented analysis is not merely the one most favorable to the authors’ predictions, nor the one with the lowest *p*-value. Second, researchers might desire to specify theoretical predictions prior to encountering a result. In so doing, they set up conditions that enable a strong test of the theory, including the possibility for falsification of alternative hypotheses (Platt, 1964). Third, researchers may seek to increase the transparency of their research process, documenting particular plans and, crucially, when those plans were made. In addition to the scientific benefits of transparency, pre-registration can also facilitate more detailed planning than usual, potentially increasing research quality as potential pitfalls are caught early enough to be remedied.

Some of these reasons are more applicable to certain types of research than others, but nearly all research can benefit from some form of pre-registration. For instance, some research is descriptive and does not test hypotheses stemming from a theory. Other research might feature few or no statistical analyses. The theory testing or analytic constraint functions of pre-registration might not be applicable in these instances. However, the benefits of increased transparency and enhanced planning stand to benefit many kinds of research (but see Devezer et al., 2021, for a critical take on the value of pre-registration).

A related but distinct practice is Registered Reports (Chambers, 2013). In a registered report, authors submit a study proposal – usually as a manuscript consisting of a complete introduction, proposed method, and proposed analysis section – to a journal that offers the format. The manuscript (known at that point as “stage 1”) is then peer-reviewed, after which it can be rejected, accepted, or receive a revise and resubmit. Crucially, once the stage 1 manuscript is accepted (most likely after revision following peer review), the journal agrees to publish the final paper regardless of the statistical significance of results, provided the agreed upon plan has been followed – a phase of publication known as “in-principle acceptance.” Once results are in, the paper (at this point known as a “stage 2” manuscript) goes out again for peer review to verify that the study was executed as agreed.

When stage 1 proposals are published (either as stand-alone manuscripts or as supplements to the final stage 2 manuscripts), registered reports allow readers to confirm which parts of a study have been planned ahead of time, just like ordinary

pre-registrations. Likewise, registered reports limit strategic analytic flexibility, allow strong tests of hypotheses, and increase the transparency of research. Crucially, however, registered reports also address publication bias, because papers are not accepted or rejected on the basis of the outcome of the research. Furthermore, the two-stage peer-review process has an even greater potential to improve study quality, because researchers receive the benefit of peer critique during the design phase of a study when there is still time to correct flaws. Finally, because the publication process is overseen by an editor, undisclosed deviations from the pre-registered plan may be less likely to occur than they are with unreviewed pre-registration. Pragmatically, registered reports might be especially worthwhile in contentious areas of study where it is useful to jointly agree on a critical test ahead of time with peer critics. Authors can also enjoy the promise of acceptance of the final product prior to investing resources in data collection.

Table 11.1 lists guidance and templates that have been developed across different subfields and research methods to enable nearly any study to be pre-registered. A final conceptual distinction is worth brief mention. Pre-registrations are documentation of researchers' plans for their studies (in systematic reviews of health research, these documents are known as protocols). When catalogued and searchable, pre-registrations form a *registry*. In the United States, the most common study

Table 11.1 *Guides and templates for pre-registration*

Method/subfield	Source
Clinical science	Benning et al. (2019)
Cognitive modeling application	Crüwell & Evans (2020)
Developmental cognitive neuroscience	Flourney et al. (2020)
EEG/ERP	Paul et al. (2021)
Experience sampling	Kirtley et al. (2021)
Experimental social psychology	van 't Veer & Giner-Sorolla (2016)
Exploratory research	Dirnagl (2020)
fMRI	Flannery (2020)
Infant research	Havron et al. (2020)
Intervention research	Moreau & Wiebels (2021)
Linguistics	Roettger (2021); Mertzen et al. (2021)
Psychopathology	Kryptos et al. (2019)
Qualitative research	Haven & Van Grootel (2019); Haven et al. (2020)
Quantitative research	Bosnjak et al. (2021)
Replication research	Brandt et al. (2014)
Secondary data analysis	Weston et al. (2019); Mertens & Kryptos (2019); Van den Akker et al. (2021)
Single-case design	Johnson & Cook (2019)
Systematic review (general)	Van den Akker et al. (2020)
Systematic review and meta-analysis protocols (PRISMA-P)	Moher et al. (2015); Shamseer et al. (2015)
Systematic review (non-interventional)	Topor et al. (2021)

registry is clinicaltrials.gov, because the National Institutes of Health requires studies that it funds to be registered there. PROSPERO (Page et al., 2018) is the main registry for health-related systematic reviews. Entries in clinicaltrials.gov and PROSPERO must follow a particular format, and adhering to that format may or may not fulfill researchers' pre-registration goals (for analytic constraint, for hypothesis testing, or for increasing transparency). For instance, when registering a study in clinicaltrials.gov, researchers must declare their primary outcomes (i.e., dependent variables) and distinguish them from secondary outcomes, but they are not required to submit a detailed analysis plan. A major benefit of study registries is to track the existence of studies independent of final publications. Registries also allow the detection of questionable research practices like outcome switching (e.g., Goldacre et al., 2019). However, entries in clinicaltrials.gov and PROSPERO fall short in many ways when it comes to achieving the various goals of pre-registration discussed above. It is important to distinguish brief registry entries from more detailed pre-registrations and protocols.

3. Doing the Research

Open science considerations are as relevant when you are actually conducting your research as they are when you are planning it. One of the things you have surely already learned in your graduate training is that research projects often take a long time to complete. It may be several months, or perhaps even longer, after you have planned a study and collected the data before you are actually finalizing a manuscript to submit for publication. Even once an initial draft is completed, you will again have a lengthy wait while the paper is reviewed, after which time you will invariably have to return to the project for revisions. To make matters worse, as your career unfolds, you will begin to juggle multiple such projects simultaneously. Put briefly: you need a robust system of documentation to keep track of these many projects.

In spite of the importance of this topic, most psychology graduate programs have little in the way of formal training in these practices. Here, I will provide an overview of a few key topics in this area, but you would be well served to dig more deeply into this area on your own. In particular, Briney (2015) provides a book-length treatment on data management practices. (Here "data" is used in the broad sense to mean information, which includes but extends beyond participant responses.) Henry (2021a, 2021b) provides an overview of many relevant issues as well. Another excellent place to look for help in this area is your university library. Librarians are experts in data management, and libraries often host workshops and give consultations to help researchers improve their practices.

Several practices are part of the array of options available to openly document your research process. Here, I'll introduce open lab notebooks, open protocols/materials, and open data/analysis code. Klein et al. (2018) provide a detailed, pragmatic look at these topics, highlighting considerations around what to share, how to share, and when to share.

3.1 Open Lab Notebooks

One way to track your research as it unfolds is to keep a detailed lab notebook. Recently, some researchers have begun to keep open, digital lab notebooks (Campbell, 2018). Put briefly, open lab notebooks allow outsiders to access the research process in its entirety in real time (Bradley et al., 2011). Open lab notebooks might include entries for data collected, experiments run, analyses performed, and so on. They can also include accounts of decisions made along the way – for instance, to change an analysis strategy or to modify the participant recruitment protocol. Open lab notebooks are a natural complement to pre-registration insofar as a pre-registration spells out a plan for a project, and the lab notebook documents the execution (or alteration) of that plan. In fact, for some types of research, where the a priori plan is relatively sparse, an open lab notebook can be an especially effective way to transparently document exploration as it unfolds.

On a spectrum from completely open research to completely opaque research, the practice of keeping an open lab notebook marks the far (open) end of the scale. For some projects (or some researchers) the costs of keeping a detailed open lab notebook in terms of time and effort might greatly exceed the scientific benefits for transparency and record keeping. Other practices may achieve similar goals more efficiently, but for some projects, the practice could prove invaluable. To decide whether an open lab notebook is right for you, consider the examples given in Campbell (2018). You can also see an open notebook in action here: <https://osf.io/3n964/> (Koessler et al., 2019).

3.2 Open Protocols and Open Materials

A paper's Method section is designed to describe a study protocol – that is, its design, participants, procedure, and materials – in enough detail that an independent researcher could replicate the study. In actuality, many key details of study protocols are omitted from Method sections (Errington, 2019). To remedy this information gap, researchers should share full study protocols, along with the research materials themselves, as supplemental files. Protocols can include things like complete scripts for experimental research assistants, video demonstrations of techniques (e.g., a participant interaction or a neurochemical assay), and full copies of study questionnaires. The goal is for another person to be able to execute a study fully without any assistance from the original author.

Research materials that have been created specifically for a particular study – for instance, the actual questions asked of participants or program files for an experimental task – are especially important to share. If existing materials are used, the source where those materials can be accessed should be cited in full. If there are limitations on the availability of materials, which might be the case if materials are proprietary or have restricted access for ethical reasons, those limitations should be disclosed in the manuscript.

3.3 Reproducible Analyses, Open Code, and Open Data

One of the basic features of scientific research products is that they should be independently reproducible. A finding that can only be recreated by one person is a magic trick, not a scientific truism. Here, reproducible means that results can be recreated using the same data originally used to make a claim. By contrast, replicability implies the repetition of a study's results using different data (e.g., a new sample). Note that also, a finding can be reproducible, or even replicable, but not be a valid or accurate representation of reality (Vazire et al., 2020). Reproducibility can be thought of as a minimally necessary precursor to later validity claims. In psychology, analyses of quantitative data very often form the backbone of our scientific claims. Yet, the reproducibility of data analytic procedures may never be checked, or if they are checked, findings may not be reproducible (Obels et al., 2020; Stodden et al., 2018). Even relatively simple errors in reporting threaten the accuracy of the research literature (Nuijten et al., 2016).

Luckily, these problems are fixable, if we are willing to put in the effort. Specifically, researchers should share the code underlying their analyses and, when legally and ethically permissible, they should share their data. But beyond just sharing the “finished product,” it may be helpful to think about preparing your data and code to share while the project is actually under way (Klein et al., 2018).

Whenever possible, analyses should be conducted using analysis code – also known as scripting or syntax – rather than by using point-and-click menus in statistical software or doing hand calculations in spreadsheet programs. To further enhance the reproducibility of reported results, you can write your results section using a language called R Markdown. Succinctly, R Markdown combines descriptive text with results (e.g., statistics, counts) drawn directly from analyses. When results are prepared in this way, there is no need to worry about typos or other transcription errors making their way into your paper, because numbers from results are pulled directly from statistical output. Additionally, if there is a change to the data – say, if analyses need to be re-run on a subset of cases – the result text will automatically update with little effort.

Peikert and Brandmeier (2019) describe a possible workflow to achieve reproducible results using R Markdown along with a handful of other tools. Rouder (2016) details a process for sharing data as it is generated – so-called “born open” data. This method also preserves the integrity of original data. When combined with Peikert and Brandmeier's technique, the potential for errors to affect results or reporting is greatly diminished.

Regardless of the particular scripting language that you use to analyze your data, the code, along with the data itself, should be well documented to enable use by others, including reviewers and other researchers. You will want to produce a codebook, also known as a data dictionary, to accompany your data and code. Buchanan et al. (2021) describe the ins and outs of data

dictionaries. Arslan (2019) writes about an automated process for codebook generation using R statistical software.

3.4 Version Control

When it comes to tracking research products in progress, a crucial concept is known as *version control*. A version control system permits contributors to a paper or other product (such as analysis code) to automatically track who made changes to the text and when they made them. Rather than saving many copies of a file in different locations and under different names, there is only one copy of a version-controlled file, but because changes are tracked, it is possible to roll back a file to an earlier version (for instance, if an error is detected). On large collaborative projects, it is vital to be able to work together simultaneously and to be able to return to an earlier version of the work if needed.

Working with version-controlled files decreases the potential for mistakes in research to go undetected. Rouder et al. (2019) describe practices, including the use of version control, that help to minimize mistakes and improve research quality. Vuorre and Curley (2018) provide specific guidance for using Git, one of the most popular version control systems. An additional benefit of learning to use these systems is their broad applicability in non-academic research settings (e.g., at technology and health companies). Indeed, developing skills in domain general areas like statistics, research design, and programming will broaden the array of opportunities available to you when your training is complete.

3.5 Working Openly Facilitates Teamwork and Collaboration

Keeping an open lab notebook, sharing a complete research protocol, or producing a reproducible analysis script that runs on open data might seem laborious compared to closed research practices, but there are advantages of these practices beyond the scientific benefits of working transparently. Detailed, clear documentation is needed for any collaborative research, and the need might be especially great in large teams. Open science practices can even facilitate massive collaborations, like those managed by the Psychological Science Accelerator (PSA; Moshontz et al., 2018). The PSA is a global network of over 500 laboratories that coordinates large investigations of democratically selected study proposals. It enables even teams with limited resources to study important questions at a large enough scale to yield rich data and precise answers. Open science practices are baked into all parts of the research process, and indeed, such efforts would not be feasible or sustainable without these standard operating procedures.

Participating in a large collaborative project, such as one run by the PSA, is an excellent way to develop your open science skillset. It can be exciting and quite rewarding to work in such a large team, but in so doing, there is also the opportunity to learn from the many other collaborators on the project.

4. Writing It Up: Open Science and Your Manuscript

The most eloquent study with the most interesting findings is scientifically useless until the findings are communicated to the broader research community. Indeed, scientific communication may be the most important part of the research process. Yet skillfully communicating results isn't about mechanically relaying the outcomes of hypothesis tests. Rather, it's about writing that leaves the reader with a clear conclusion about the contribution of a project. In addition to being narratively compelling, researchers employing open science practices will also want to transparently and honestly describe the research process. Adept readers may sense a conflict between these two goals – crafting a compelling narrative vs. being transparent and honest – but in reality, both can be achieved.

4.1 Writing Well and Transparently

Gernsbacher (2018) provides detailed guidance on preparing a high-quality manuscript (with a clear narrative) while adhering to open science practices. She writes that the best articles are transparent, reproducible, clear, and memorable. To achieve clarity and memorability, authors must attend to good writing practices like writing short sentences and paragraphs and seeking feedback. These techniques are not at odds with transparency and reproducibility, which can be achieved through honest, detailed, and clear documentation of the research process. Even higher levels of detail can be achieved by including supplemental files along with the main manuscript.

One issue, of course, is how to decide which information belongs in the main paper versus the supplemental materials. A guiding principle is to organize your paper to help the reader understand the paper's contribution while transparently describing what you've done and learned. Gernsbacher (2018) advises having an organized single file as a supplement to ease the burden on reviewers and readers. A set of well-labeled and organized folders in your OSF project (e.g., Materials, Data, Analysis Code, Manuscript Files) can also work well. Consider including a "readme" file or other descriptive text to help readers understand your file structure.

If a project is pre-registered, it is important that all of the plans (and hypotheses, if applicable) in the study are addressed in the main manuscript. Even results that are not statistically significant deserve discussion in the paper. If planned methods have changed, this is normal and absolutely fine. Simply disclose the change (along with accompanying rationale) in the paper, or better yet, file an addendum to your pre-registration when the change is made before proceeding. Likewise, when analysis plans change, disclose the change in the final paper. If the originally planned analysis strategy and the preferred strategy are both valid techniques, and others might disagree about which strategy is best, present results using both strategies. The details of the comparative analyses can be placed in a supplement, but discuss the analyses in the main text of the paper.

A couple of additional tools to assist with writing your open science manuscript are worth mention. First, Aczel et al. (2020) provide a consensus-based transparency checklist that authors can complete to confirm that they have made all relevant transparency-based disclosures in their papers. The checklist can also be shared (e.g., on OSF) alongside a final manuscript to help guide readers through the disclosures. Second, R Markdown can be used to draft the entire text of your paper, not just the results section. Doing so allows you to render the final paper using a particular typesetting style more easily. More importantly, the full paper will then be reproducibly. Rather than work from scratch, you may want to use the *papaja* package (Aust & Barth, 2020), which provides an R Markdown template. Many researchers also like to use *papaja* in concert with Zotero (www.zotero.org/), an open-source reference manager.

4.2 Selecting a Journal for Your Research

Beyond questions of a journal's topical reach and its reputation in the field, different journals have different policies when it comes to open science practices. When selecting a journal, you will want to review that journal's submission guidelines to ensure that you understand and comply with its requirements. Another place to look for guidance on a journal's stance on open science practices is editorial statements. These statements usually appear within the journal itself, but if the journal is owned by a society, they may also appear in society publications (e.g., American Psychological Association *Monitor*, Association for Psychological Science *Observer*).

Many journals are signatories of the TOP (Transparency and Openness Promotion) Guidelines, which specify three different levels of adoption for eight different transparency standards (Nosek et al., 2015; see also <https://topfactor.org/>). Journals with policies at level 1 require authors to disclose details about their studies in their manuscripts – for instance, whether the data associated with studies are available. At level 2, sharing of study components (e.g., materials, data, or analysis code) is required for publication, with exceptions granted for valid legal and ethical restrictions on sharing. At level 3, the journal or its designee verifies the shared components – for instance, a journal might check whether a study's results can be reproduced from shared analysis code. Importantly, journals can adopt different levels of transparency for the different standards. For instance, a journal might adopt level 1 (disclose) for pre-registration of analysis plans, but level 3 (verify) for study materials. Again, journal submission guidelines, along with editorial statements, provide guidance as to the levels adopted for each standard.

Some journals also offer badges for adopting transparent practices. At participating journals, authors declare whether they have pre-registered a study or shared materials and/or data, and the journal then marks the resulting paper with up to three badges (pre-registration, open data, open materials) indicating the availability of the shared content.

A final consideration is the pre-printing policies of a journal. Almost certainly, you will want the freedom to share your work on a preprint repository like PsyArXiv (<https://psyarxiv.com>). Preprint repositories allow authors to share their research ahead of publication, either before submitting the work for peer review at a journal or after the peer-review process is complete. Some repositories deem the latter class of manuscripts “post-prints” to distinguish them from papers that have not yet been published in a journal. Sharing early copies of your work will enable you to get valuable feedback prior to journal submission. Even if you are not ready to share a pre-publication copy of your work, sharing the final post-print increases access to the work – especially for those without access through a library including researchers in many countries, scholars without university affiliations, and the general public. Manuscripts shared on PsyArXiv are indexed on Google Scholar, increasing their discoverability.

You can check the policies of your target journal at the Sherpa Romeo database (<https://v2.sherpa.ac.uk/romeo/>). The journals with the most permissive policies allow sharing of the author copy of a paper (i.e., what you send to the journal, not the typeset version) immediately on disciplinary repositories like PsyArXiv. Other journals impose an embargo on sharing of perhaps one or two years. A very small number of journals will not consider manuscripts that have been shared as preprints. It’s best to understand a journal’s policy before choosing to submit there.

Importantly, sharing pre- or post-print copies of your work is free to do, and it greatly increases the reach of your work. Another option (which may even be a requirement depending on your research funder) is to publish your work in a fully open-access journal (called “gold” open access) or in a traditional journal with the option to pay for your article to be made open access (called “hybrid” open access). Gold open-access journals use the fees from articles to cover the costs of publishing, but articles are free to read for everyone without a subscription. Hybrid journals, on the other hand, charge libraries large subscription fees (as they do with traditional journals), *and* they charge authors who opt to have their articles made open access, effectively doubling the journal’s revenue without incurring additional costs. The fees for hybrid open access are almost never worth it, given that authors can usually make their work accessible for free using preprint repositories.

Fees to publish your work in a gold open-access journal currently vary from around US\$1000 on the low end to US\$3000 or more on the high end. Typically, a research funder pays these fees, but if not, there may be funds available from your university library or research support office. Some journals offer fee waivers for authors who lack access to grant or university funding for these costs. Part of open science means making the results of research as accessible as possible. Gold open-access journals are one means of achieving this goal, but preprint repositories play a critical role as well.

5. Coda: The Importance of Community

Certainly, there are many tools and techniques to learn when it comes to open science practices. When you are just beginning, you will likely want to take it slow

to avoid becoming overwhelmed. Additionally, not every practice described here will be relevant for every project. With time, you will learn to deploy the tools you need to serve a particular project's goals. Yet, it is also important not to delay beginning to use these practices. Now is the time in your career where you are forming habits that you will carry with you for many years. You want to lay a solid foundation for yourself, and a little effort to learn a new skill or technology now will pay off down the road.

One of the best ways to get started with open science practices is to join a supportive community of other researchers who are also working towards the same goal. Your region or university might have a branch of ReproducibiliTea (<https://reproducibilitea.org/>), a journal club devoted to discussing and learning about open science practices. If it doesn't, you could gather a few friends and start one, or you could join one of the region-free online clubs. Twitter is another excellent place to keep up to date on new practices, and it's also great for developing a sense of community. Another option is to attend the annual meeting of the Society for the Improvement of Psychological Science (SIPS; <http://improvingpsych.org>). The SIPS meeting features workshops to learn new techniques, alongside active sessions (hackathons and unconferences) where researchers work together to develop new tools designed to improve psychological methods and practices. Interacting with other scholars provides an opportunity to learn from one another, but also provides important social support. Improving your research practices is a career-long endeavor; it is surely more fun not to work alone.

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Recommended Reading

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12 Presenting Your Research

Lindsey L. Cohen, Abigail Robbertz, & Sarah Martin

1. Reasons for Presenting Research

There are several pros and cons to evaluate when deciding whether to submit your research to a conference. There is value in sharing your science with others at the conference, such as professors, students, clinicians, teachers, and other professionals who might be able to use your work to advance their own work. As a personal gain, your audience may provide feedback, which may be invaluable to you in your professional development. Presenting research at conferences also allows for the opportunity to meet potential future advisors, employers, collaborators, or colleagues. Conferences are ideal settings for networking and, in fact, many conferences have forums organized for this exact purpose (e.g., job openings listed on a bulletin board and networking luncheons). The downsides to submitting your work to a conference include the time commitment of writing and constructing the presentation, the potential for rejection from the reviewers, the anxiety inherent in formal presentations, and the potential time and expenses of traveling to the meeting. Although we do believe that the benefits of presenting at conferences outweigh the costs, you should carefully consider your own list of pros and cons before embarking on this experience.

2. Presentation Venues

There are many different outlets for presenting research findings, ranging from departmental colloquia to international conferences. The decision of submitting a proposal to one conference over another should be guided by both practical and professional reasoning. In selecting a convention, you might consider the following questions: Is this the audience to whom I wish to disseminate my findings? Are there other professionals that I would like to meet attending this conference? Are the other presentations of interest to me? Are the philosophies of the association consistent with my perspectives and training needs? Can I afford to travel to this

location? Will my institution provide funding for the cost of this conference? Will my presentation be ready in time for the conference? Am I interested in visiting the city that is hosting the conference? Do the dates of the conference interfere with personal or professional obligations? Will this conference provide the opportunity to network with colleagues and friends? Is continuing education credit offered? Associated with the COVID-19 pandemic, many meetings are virtual, which provides a lower-cost option, but networking is more challenging and the options of linking a vacation to the conference is no longer an option. Fortunately, there are a range of options and you should be able to find a venue that satisfies most of your professional presenting needs.

3. Types of Presentations

After selecting a conference, you must decide on the *type* of presentation. In general, presentation categories are similar across venues and include poster and oral presentations (e.g., papers, symposia, panel discussions) and workshops. In general, poster presentations are optimal for disseminating preliminary or pilot findings, whereas well-established findings, cutting-edge research, and conceptual/theoretical issues often are reserved for oral presentations and workshops. A call for abstracts or proposals is often distributed by the institution hosting the conference and announces particular topics of interest for presentations. If you are unsure about whether your research is best suited for a poster or oral presentation or workshop, refer to the call for abstracts or proposals and consult with more experienced colleagues. Keynote and invited addresses are other types of conference proceedings typically delivered by esteemed professionals or experts in the field. It is important to note that not all conferences use the same terminology, especially when comparing conferences across countries. For example, a “workshop” at one conference might be a full-day interactive training session and at another conference it might indicate a briefer oral presentation. The following sections are organized in accord with common formats found in many conferences.

The most common types of conference presentations, poster presentations, symposia, panel discussions, and workshops, deserve further discussion. Typically, these scientific presentations follow a consistent format, which is similar to the layout of a research manuscript. For example, first you might introduce the topic, highlight related prior work, outline the purpose and hypotheses of the study, review the methodology, and, lastly, present and discuss salient results and implications (see Drotar, 2000).

3.1 Poster Presentations

Poster presentations are the most common medium through which researchers disseminate findings. In this format, researchers summarize their primary aims,

results, and conclusions in an easily digestible manner on a poster board. Poster sessions vary in duration, often ranging from 1 to 2 hours. Authors typically are present with their posters for the duration of the session to discuss their work with interested colleagues. Poster presentations are relatively less formal and more personal than other presentation formats, with the discussion of projects often assuming a conversational quality. That said, it is important to be prepared to answer challenging questions about the work. Typically, many posters within a particular theme (e.g., health psychology) are displayed in a large room so that audiences might walk around the room and talk one-to-one with the authors. Thus, poster sessions are particularly well-suited for facilitating networking and meeting with researchers working in similar areas.

Pragmatically, conference reviewers accept more posters for presentations than symposia, panel discussion, and workshops, and thus, the acceptance criteria are typically more lenient. Relatedly, researchers might choose posters to present findings from small projects or preliminary or pilot results studies. Symposia, panel discussions, and workshops allow for the formal presentation of more groundbreaking findings or of multiple studies. Poster presentations are an opportune time for students to become familiarized with disseminating findings and mingling with other researchers in the field.

3.2 Research Symposia

Symposia involve the aggregation of several individuals who present on a common topic. Depending on time constraints, 4–6 papers typically are featured, each lasting roughly 20 minutes, and often representing different viewpoints or facets of a broader topic. For example, a symposium on the etiology of anxiety disorders might be comprised of four separate papers representing the role of familial influences, biological risk factors, peer relationships, and emotional conditioning on the development of maladaptive anxiety. As a presenter, you might discuss one project or the findings from a few studies. Like a master of ceremonies, the symposia Chair typically organizes the entire symposia by selecting presenters, guiding the topics and style of presentation, and introducing the topic and presenters at the beginning of the symposium. In addition to these duties, the Chair often will present a body of work or a few studies at the beginning of the symposium. In addition to the Chair and presenters, a Discussant can be part of a symposium. The Discussant concludes the symposium by summarizing key findings from each paper, integrating the studies, and making more broad-based conclusions and directions for future research. Although a Discussant is privy to the presenters' papers prior to the symposium in order to prepare the summary comments, he or she will often take notes during the presenters' talks to augment any prepared commentary. Presenters are often researchers of varying levels of experience, while Chairs and Discussants are usually senior investigators. The formal presentation is often followed by a period for audience inquiry and discussion.

3.3 Panel Discussions

Panel discussions are similar to research symposia in that several professionals come together to discuss a common topic. Panel discussions, however, generally tend to be less formal and structured and more interactive and animated than symposia. For example, Discussants can address each other and interject comments throughout the discussion. Similar to symposia, these presentations involve the discussion of one or more important topics in the field by informed Discussants. As with symposia presentations, the Chair typically organizes these semi-formal discussions by contacting potential speakers and communicating the discussion topic and their respective roles.

3.4 Workshops

Conference workshops typically are often longer (e.g., lasting at least three hours) and provide more in-depth, specialized training than symposia and panel discussions. It is not uncommon for workshop presenters to adopt a format similar to a structured seminar, in which mini-curricula are followed. Due to the length and specialized training involved, most workshop presenters enhance their presentations by incorporating interactive (e.g., role-plays) and multimedia (e.g., video clips) components. Workshops often are organized such that the information is geared for beginner, intermediate, or advanced professionals. Often conferences are organized such that participation in workshops must be reserved in advance and there might be additional fees associated with attendance. The cost should be balanced with the opportunity of obtaining unique training in a specialized area. These are most often presented by seasoned professionals; however, more junior presenters with specialized skills/knowledge might conduct a workshop.

4. The Application Process

After selecting a venue and deciding on a presentation type, the next step is to submit an application to the conference you wish to attend. The application process typically involves submitting a brief abstract (e.g., 200–300 words) describing the primary aims, methods, results, and conclusions of your study. For symposia and other oral presentations, the selection committee might request an outline of your talk, curriculum vitae from all presenters, and a time schedule or presentation agenda. Some conferences might also request information regarding the educational objectives and goals of your presentation. One essential rule is to closely adhere to the directions for submissions to the conference. For example, if there is a word limit for a poster abstract submission, make sure that you do not exceed the number of words. Whereas some reviewers might not notice or mind, others might

view it is as unprofessional and possibly disrespectful and an easy decision rule to use to reject a submission.

Although the application process itself is straightforward, there are differences in opinion regarding whether and when it is advisable to submit your research. A commonly asked question is whether a poster or paper can be presented twice. Many would agree that it is acceptable to present the same data twice if the conferences draw different audiences (e.g., regional versus national conferences). Another issue to consider is when, or at what stage, a project should be submitted for presentation. Submitting research prior to analyzing your data can be risky. It would be unfortunate, for example, to submit prematurely, such as during the data collection phase, only to find that your results are not ready in time for the conference. Although some might be willing to take this risk, remember that it is worse to present low-quality work than not to present at all.

5. Preparing and Conducting Presentations

5.1 Choosing an Appropriate Outfit

Dress codes for conference proceedings typically are not formally stated; however, data suggest that perceptions of graduate student professionalism and competence are influenced by dress (e.g., Gorham et al., 1999). Although the appropriateness of certain attire is likely to vary, a good rule of thumb is to err on the side of professionalism. You also might consider the dress of your audience, and dress in an equivalent or more formal fashion. Although there will be people at conferences wearing unique styles of dress, students and professionals still early in their careers are best advised to dress professionally. It can be helpful to ask people who have already attended the conference what would be appropriate to wear. In addition to selecting your outfit, there are several preparatory steps you can take to help ensure a successful presentation.

5.2 Preparing for Poster Presentations

5.2.1 The Basics

The first step in preparing a poster is to be cognizant of the specific requirements put forth by the selected venue. For example, very specific guidelines often are provided, detailing the amount of board space available for each presenter (typically a 4-foot by 6-foot standing board is available). To ensure the poster will fit within the allotted space, it may be helpful to physically lay it out prior to the conference. This also may help to reduce future distress, given that back-to-back poster sessions are the norm; knowing how to arrange the poster in advance obviates the need to do so hurriedly in the few minutes between sessions. If you are using PowerPoint to design your poster, you can adjust the size of your layout to match the conference requirements.

5.2.2 Tips For Poster Construction

The overriding goal for poster presentations is to summarize your study using an easily digestible, reader-friendly format (Grech, 2018b). As you will discover from viewing other posters, there are many different styles to do this. If you have the resources, professional printers can create large glossy posters that are well received. However, cutting large construction paper to use as a mat for laser-printed poster pages can also appear quite professional. Some companies will even print the poster on a fabric material, so it can be folded up and stored easily in a suitcase for travel to and from the conference. Regardless of the framing, it is advisable to use consistent formatting (e.g., same style and font size throughout the poster), large font sizes (e.g., at least 20-point font for text and 40-point font for headings), and alignment of graphics and text (Zerwic et al., 2010). Another suggestion for enhancing readability and visual appeal is to use bullets, figures, and tables to illustrate important findings. Generally speaking, brief phrases (as opposed to wordy paragraphs) should be used to summarize pertinent points. It has been suggested to limit horizontal lines to 10 or fewer words and avoid using more than four colors (Zerwic et al., 2010). In short, it is important to keep your presentation succinct and avoid overcrowding on pages. Although there are a variety of fonts available and poster boards come in all colors imaginable, it is best to keep the poster professional. In other words, Courier, Arial, or Times New Roman are probably the best fonts to use because they are easy to read and they will not distract or detract from the central message of the poster (i.e., your research). In addition, dark font (e.g., blue, black) on a light background (e.g., yellow, white) is easier to read in brightly lit rooms, which is the norm for poster sessions. Be mindful of appropriately acknowledging any funding agencies or other organizations (e.g., universities) on the poster or in the oral presentation slides. Recently, the format of posters has shifted. The “better poster” format (<https://youtu.be/1RwJbhkCA58>) includes the main research finding in large text in the center of the poster with extra details and figures on the sides (Figure 12.1). This allows conference attendees to quickly assess whether the research is of interest to them and if they would like more detailed information.

5.2.3 What To Bring

When preparing for a poster presentation, consider which materials might be either necessary or potentially useful to bring. For instance, it might be wise to bring tacks (Grech, 2018b). It also is advisable to create handouts summarizing the primary aims and findings and to distribute these to interested colleagues. The number of copies one provides often depends on the size of the conference and the number of individuals attending a particular poster session. We have found that for larger conferences, 20 handouts are a good minimum. In general, handouts are in high demand and supplies are quickly depleted, in which case, you should be equipped with a notepad to obtain the names and addresses of individuals interested in receiving the handout via mail or e-mail. With the “better poster” format, researchers often include a QR code on their poster. The QR code can link them to a copy of the poster, contact information of the researchers, or other relevant electronic documents.

Adult Ratings of Pediatric Pain: The Roles of Anxiety and Nursing Training

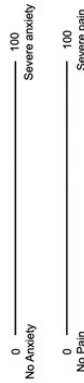
Authors
Department of Psychology, University

BACKGROUND

- The accuracy of nurses' assessment of pediatric pain is essential for the appropriate diagnosis, treatment, and care of children in pain.
- Unfortunately, nurses' assessment of pediatric pain might be inaccurate and lead to inadequate pain management.
- As part of their training, nurses gain greater exposure and experience with patients in pain, which likely influences their procedural anxiety as well as assessment accuracy.
- However, the nature of the relationships among nurse training experience, nurse anxiety, and pain ratings is difficult to understand given that patient pain behavior will vary with each procedure.
- The current study examined student nursing training experience, anxiety, and rating of child pain while holding child pain constant.
- Purpose:** To examine psychology undergraduates', beginning nursing students', and advanced nursing students' ratings of their own anxiety and perceptions of pediatric pain
- Hypothesis:** Student anxiety level will mediate the relationship between clinical training and ratings of pediatric pain

METHODS

- Two hundred students participated in the current study.
- Psychology undergraduate students ($n = 100$)
- Beginning nursing students ($n = 87$)
- Advanced nursing students ($n = 35$)
- Participants watched a short video of a child receive a finger stick and were asked to rate their own anxiety using a 100mm visual analog scales (0 = no anxiety to 100 = severe anxiety).
- Additionally, participants were asked to rate their perception of the child's pain using a 100mm visual analog scales (0 = no pain to 100 = severe pain)
- Participants also completed a basic demographic questionnaire.



DEMOGRAPHICS

	Average or Percentage	Range (if applicable)
Age (years)	$M = 25.07 \pm 7.31$	17-55
Sex (% female)	85.1%	
Race (% white)	59.5%	
Household Income	\$16,576.92 ± \$36,402.20	\$0-400,000
Parent Status (% with children)	16.8%	
Experience with Pediatrics	61.7%	

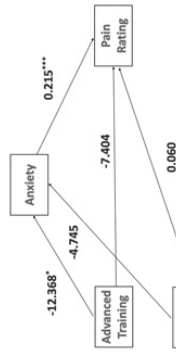
ANALYSIS

- A mediation analysis was used to test the primary hypothesis that anxiety would mediate the relationship between status of nurse training (no training, beginner, advanced) and observational pain ratings.
- With a multi-categorical predictor, each level of the independent variable (beginner, advanced) relative to the baseline group (no-training) has an associated relative direct effect (C_{begin}, C_{adv}) and an associated relative indirect effect (ab_{begin}, ab_{adv}) (Hayes & Preacher, 2014).

RESULTS

- Anxiety levels did not differ significantly between the group of beginning students and the baseline group. However, relative to the baseline group, students with advanced nursing training endorsed significantly lower levels of anxiety.
- $a_{begin} = -12.368$, 95% BCI [-23.214, -1.522]
- While holding level of training constant, those who endorsed lower levels of anxiety endorsed lower observational pain ratings, $b = 0.215$, BCI [0.119, 0.310]
- The relative indirect effect of advanced nursing training was significant $ab_{adv} = -2.655$, BCI [-5.244, -0.443]. Those with advanced nursing training endorsed pain ratings that were -2.66 units lower, as a result of the negative effect of training on anxiety; this, in turn, decreased pain ratings.
- The relative indirect effect of beginner nursing training was non-significant. Both relative direct effects were non-significant.

MEDIATION MODEL



DISCUSSION

- Findings suggest that training level may significantly impact nurses' perceptions of child pain, such that greater training is associated with decreased perception of pain.
- Findings suggest that training is mediated by anxiety, which in turn, lowered pain ratings.
- It is possible that with more clinical training, nursing students habituate to children's responses to pain. It is unclear whether this increases or decreases accuracy
- Future study is needed to assess whether this mediation model is applicable to other healthcare providers and parents who also make important decisions based on child pain assessment.

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For re-prints or more information, please contact:

Figure 12.1 Poster formats.

5.2.4 Critically Evaluate Other Posters

We also recommend critically evaluating other posters at conferences and posters previously used by colleagues. You will notice great variability in poster style and formatting, with some researchers using glossy posters with colored photographs and others using plain white paper and black text. Make mental notes regarding the effective and ineffective presentation of information. What attracted you to certain posters? Which colors stood out and were the most readable? Such informal evaluations likely will be invaluable when making decisions on aspects such as poster formatting, colors, font, and style.

5.2.5 Prepare Your Presentation

Poster session attendees will often approach your poster and ask you to summarize your study, so it is wise to prepare a brief overview of your study (e.g., 2 minutes). In addition, practice describing any figures or graphs displayed on your poster. Finally, attendees will often ask questions about your study (e.g., “What are the clinical implications?”, “What are some limitations to your study?”, “What do you recommend for future studies?”), so it may be helpful to have colleagues review your poster and ask questions. Table 12.1 provides some suggestions as to how to handle difficult questions.

Table 12.1 *Handling difficult questions*

Type of question	Suggestions
Questions without readily available answers	<ul style="list-style-type: none"> ● Admit your unfamiliarity with the question ● Ask the questioner if he/she has thoughts as to the answer ● Hazard a guess, but back it up with literature and acknowledge that it is a guess ● Pose an answer to a related question ● Simply state that the questioner raised an important point and move on to other questions
Irrelevant questions (e.g., “Where were you born?”)	<ul style="list-style-type: none"> ● Avoid digressing from the topic ● Offer to meet with the questioner following the presentation
“Dumb” questions (e.g., “What does ‘hypothesis’ mean?”)	<ul style="list-style-type: none"> ● Offer a brief explanation and move on ● Do not insult the questioner
Politically sensitive questions (e.g., being asked to comment on opposing theoretical viewpoint)	<ul style="list-style-type: none"> ● Stick to empirical data and avoid personal attacks
Multiple questions asked simultaneously	<ul style="list-style-type: none"> ● Choose either the most pertinent question or the question you would like to answer first (e.g., “I’ll start with your last question.”) ● Ask the questioner to repeat the questions
Offensively worded questions	<ul style="list-style-type: none"> ● Avoid becoming defensive ● Avoid repeating offensive language
Vague questions	<ul style="list-style-type: none"> ● Ask for clarification from the questioner ● Restate the question in more specific terms

5.3 Conducting Poster Presentations

In general, presenting a poster is straightforward – tack the poster to the board at the beginning of the session, stand next to the poster and discuss the details of the project with interested viewers, and remove the poster at the end of the session. However, we have found that a surprisingly high number of presenters do not adequately fulfill these tasks. Arriving to the poster session at least five minutes early will allow you to find your allocated space, unpack your poster, and decide where to mount it on the board. When posters consist of multiple frames, it might be easiest to lie out the boards on the floor prior to beginning to tack it up on the board.

During the poster session, remember this fundamental rule – be present. It is permissible to browse other posters in the same session; however, always arrange for a co-author or another colleague knowledgeable about the study to man the poster. Another guideline is to be available to answer questions and discuss the project with interested parties. In other words, refrain from reading, chatting with friends, or engaging in other activities that interfere with being available to discuss the study. At the conclusion of the poster session, it is important to quickly remove your poster so subsequent presenters have ample time to set up their posters. Suggestions for preparing and presenting posters are summarized in Table 12.2.

Table 12.2 *Suggestions for poster presentations*

Constructing your poster	<ul style="list-style-type: none"> ● Follow conference guidelines ● Summarize study using a professional and reader-friendly format (e.g., short phrases, large font size, plain font) ● Use consistent formatting throughout poster (e.g., same style and font type) ● Use bullets, graphs, tables, and other visual aides ● Keep succinct and avoid overcrowding on pages
Deciding what to bring	<ul style="list-style-type: none"> ● Tacks to mount poster ● Handouts summarizing primary aims and findings ● Notepad and pen for addresses
Evaluating other presentations	<ul style="list-style-type: none"> ● Observe variability in poster formats ● Note effective and ineffective presentation styles ● Incorporate effective aspects into your next presentation
Presenting your poster	<ul style="list-style-type: none"> ● Arrive at least five minutes early to set up ● Be present or arrange for co-author(s) to be available to answer questions at the designated time ● Avoid engaging in interfering activities (e.g., reading, talking to friends)

5.4 Preparing for Oral Presentations

5.4.1 The Basics

Similar to poster sessions, it is important to be familiar with and adhere to program requirements when preparing for oral presentations. For symposia, this might include sending an outline of your talk to the Chair and Discussant several weeks in advance and staying within a specified time limit when giving your talk. Although the Chair often will ensure that the talks adhere to the theme and do not excessively overlap, the presenter also can do this via active communication with the Chair, Discussant, and other presenters.

5.4.2 What To Bring

As with poster presentations, it is useful to anticipate and remember to bring necessary and potentially useful materials. For instance, individuals using PowerPoint should bring their slides in paper form in case of equipment failure. Equipment, such as microphones, often are available upon request; it is the presenter's responsibility, however, to reserve equipment in advance.

5.4.3 Critically Evaluate Other Presenters

By carefully observing other presenters, you might learn valuable skills of how to enhance your presentations. Examine the format of the presentation, the level of detail provided, and the types and quality of audiovisual stimuli. Also try to note the vocal quality (e.g., intonation, pitch, pace, use of filler terms such as "um"), facial characteristics (e.g., smiling, eye contact with audience members), body movements (e.g., pacing, hand gestures), and other subtle aspects that can help or hinder presentations.

5.4.4 Practice, Practice, Practice

In terms of presentation *delivery*, repeated practice is essential for effective preparation (see Williams, 1995). For many people, students and seasoned professionals alike, public speaking can elicit significant levels of distress. Given extensive data supporting the beneficial effects of exposure to feared stimuli (see Wolpe, 1977), repeated rehearsal is bound to produce positive outcomes, including increased comfort, increased familiarity with content, and decreased levels of anxiety. Additionally, practicing will help presenters hone their presentation skills and develop a more effective presentational style. We recommend practicing in front of an "audience" and soliciting feedback regarding both content and presentational style. Solicit feedback on every aspect of your presentation from the way you stand to the content of your talk. It might be helpful to rehearse in front of informed individuals (e.g., mentors, graduate students, research groups) who ask relevant and challenging questions and subsequently provide constructive feedback (Grech, 2018a; Wellstead et al., 2017). Based on this feedback, determine which suggestions should be incorporated and modify your presentation

accordingly. As a general rule, practice and hone your presentation to the point that you are prepared to present without any crutches (e.g., notes, overheads, slides).

5.4.5 Be Familiar and Anticipate

As much as possible, try to familiarize yourself with the audience both before and during the actual presentation (Baum & Boughton, 2016; Regula, 2020). By having background information, you can better tailor your talk to meet the professional levels and needs of those in attendance. It may be particularly helpful to have some knowledge regarding the educational background and general attitudes and interests of the audience (e.g., is the audience comprised of laymen and/or professionals in the field? What are the listeners' general attitudes toward the topic and towards you as the speaker? Is the audience more interested with practical applications or with design and scientific rigor?). Are you critiquing previous work from authors that may be in the audience? By conducting an informal "audience analysis," you will be more equipped to adapt your talk to meet the particular needs and interests of the audience. It is important to have a clear message that you want the audience to take with them after the presentation (Regula, 2020). Most conference-goers will be seeing many presentations during the conference, so having a clear take-home message can make it easier for the audience to remember the key points.

Similarly, it might be helpful to have some knowledge about key logistical issues, such as room size and availability of equipment (Baum & Boughton, 2016). For example, will the presentation take place in a large, auditorium-like room or in a more intimate setting with the chairs arranged in a semi-circle? If the former, will a microphone be available? Is there a podium at the front of the room that might influence where you will stand? Given the dimensions of the room, where should the slide projector be positioned? Although it may be impossible to answer all such questions, it is a good idea to have a general sense of where the presentation will take place and who will be attending. It may also help to rearrange the seating, so that latecomers do not pose as a distraction (Baum & Boughton, 2016). Suggestions for preparing and conducting oral presentations are summarized in Table 12.3.

If the conference is virtual, it is critical to become familiar with the software or online platform well in advance of a synchronous event. For example, practicing with the camera and microphone and watching recordings of yourself will allow you to fine-tune the presentation and audio quality. Whether synchronous or asynchronous, there are a number of tips for optimizing video presentations, including how to position the camera, how to light the presenter, behaviors to include or avoid, and what to consider in terms of the background. Given the variability and subjectivity related to video presentation suggestions, we encourage the readers to research this extensive topic to personalize and optimize their virtual presentations.

Table 12.3 *Oral presentations*

Preparing for your oral presentation	<ul style="list-style-type: none"> ● Adhere to program requirements (e.g., stay within time limit) ● Check on equipment availability ● Reserve necessary equipment (e.g., laptop for PowerPoint presentation, adapters) ● Bring necessary materials (e.g., flash drive, copy of notes or slides) ● Be prepared to present without any materials in case of equipment failure ● Be prepared to shorten your talk if previous speakers exceed their allotted time
Familiarizing yourself with the environment	<ul style="list-style-type: none"> ● Conduct informal “audience analysis” – familiarize yourself with audience before and during presentation ● Tailor your talk to meet the professional levels and needs of the audience ● Anticipate room size (e.g., will talk be held in a large auditorium or in a more intimate setting?)
Giving your talk	<ul style="list-style-type: none"> ● Dress professionally ● Maintain good posture ● Avoid distracting mannerisms (e.g., pacing and filler words such as “um”) ● Avoid standing in one place or behind a podium ● Maintain eye contact with your audience ● Be vocally energetic and enthusiastic
Enhancing your presentation	<ul style="list-style-type: none"> ● Practice, practice, practice! ● Solicit feedback from colleagues and make appropriate modifications ● Observe other presenters; imitate effective presentational styles and incorporate effective modes of delivery ● Use enhancements and audio/visual aids such as video clips, PowerPoint slides, cartoons or comics ● Use humor and illustrative examples (e.g., metaphors, real-life stories, cartoons, comic strips, jokes) ● Avoid information overload; instead, clearly deliver 2–4 “take-home messages”

5.5 Conducting Oral Presentations

5.5.1 Using Audiovisual Enhancements

One strategy for enhancing oral presentations is to use audio/visual stimuli, such as slides or props (e.g., Grech, 2019; Hoff, 1988; Wilder, 1994; see Table 12.4). When using visual enhancements, keep it simple, and clearly highlight important points using readable and consistent typeface (Blome et al., 2017; Grech, 2018a). Information should be easily assimilated and reader-friendly, which generally means limiting text to a few phrases rather than complete sentences or paragraphs and using sufficiently large font sizes (e.g., 36- to 48-point font for titles and 24- to

Table 12.4 *Using audiovisual enhancements*

Examples of audiovisual aids	<ul style="list-style-type: none"> ● Slides ● Video clips ● Cartoons and comic strips
Tips for using slides	<ul style="list-style-type: none"> ● Test equipment in advance ● Keep it simple; use to clarify and enhance ● Avoid going overboard (too much might detract from presentation) ● Use reader-friendly format (e.g., short phrases, avoid overcrowding) ● Use bullet points rather than sentences ● Remember <i>One × Six × Six</i>: only ONE idea per visual; less than SIX bullets per visual; less than SIX words per bullet point ● Highlight important points using readable, consistent typeface ● Use professional color schemes (e.g., light background, dark text for overheads and dark background, light text for slides) ● Speak to audience, not to visual aids ● Stand to the side of your screen to avoid blocking audience's view ● Pause as you change slides; practice for smooth transitions ● Be prepared to present without your overheads/slides
Tips for using videos	<ul style="list-style-type: none"> ● Test equipment in advance ● Pre-set volume levels and cue video in advance ● Introduce video clip and announce its length ● Dim the lights before playing ● Give a concluding statement following the video ● Use video clips to illustrate and enhance presentations

36-point font for text). In addition, it is a good idea to keep titles to one line and bullets to no more than two lines of information. Additionally, color schemes should be relatively subdued and “professional” in appearance. For slide presentations, a dark background and light text might be easier to read. Utilize fonts without serifs (e.g., Arial) as opposed to fonts with serifs (e.g., Times New Roman; Lefor & Maeno, 2016). Some conferences prefer a particular slide size, so it can be important to check with their requirements before designing the presentation. Additionally, depending on the room set up, it can be hard for the audience to see the bottom of slides, so it can be helpful to avoid placing text near the bottom of the slide. See Figure 12.2 for an example of a poor and good slide for an oral presentation.

Using audiovisual aids, such as video clips, also can contribute substantially to the overall quality and liveliness of a presentation. When incorporating video clips, pre-set volume levels and cue up the video in advance. We also recommend announcing the length of the video, dimming lights, and giving a concluding statement following the video.

The Impact of Trauma on South African women with HIV: The Role of Anxiety and Physical Symptomology

Authors

INTRODUCTION

HIV is a global health problem affecting close to 37 million people worldwide; South Africa is the most affected country in the world.

Violence against South African women is also prevalent and is associated with contracting HIV.

Exposure to other types of trauma is widespread.

Women living with HIV (WLH), with a trauma history, experience adverse physical health outcomes in addition to negative psychological outcomes, such as anxiety.

Hypotheses: 1) WLH will report more traumatic life events than those not living with HIV (NWLH). 2) WLH who experience a greater number of traumatic events will have more symptoms of anxiety, which in turn will be associated with more physical symptoms.

METHODS

355 women completed measures for the current study, with 104 of those self-identifying as HIV Positive.

The Life Stressor Checklist (Wolfe & Kimerling, 1997) assessed the number of traumatic events a woman endorsed over her lifetime.

The Physical Symptom Inventory (Wahlner, 1968) assessed Physical symptoms.

Institute for Personality and Ability Testing Anxiety Scale (IPAT; Cattell & Scheier, 1963) was used to assess anxiety symptoms.

RESULTS

WLH reported a greater number of traumatic events (3.69) than those not living with HIV (3.06).

Regression analysis showed that there was a significant indirect effect of trauma history on physical symptoms through anxiety, $\beta = 0.97$, 95% *BCI* [0.29, 1.69].

DISCUSSION

WLH are experiencing more trauma than NWLH and it is negatively impacting their mental and physical health.

Interventions that target WLH's traumatic experiences, and associated anxiety symptoms, are necessary to prevent the negative impact on their physical health.

In South African women living with HIV, trauma history is associated with more physical symptoms indirectly through anxiety.



Descriptive Statistics

Characteristic	WLH	NWLH
<i>N</i>	161 (50)	194 (58)
Age	36.58 (8.21)	36.88 (10.65)
Female Living in the Home	121 (75.16)	151 (77.83)
Economic Stability Composite	4.56 (1.04)	4.66 (1.04)
Number of Children	2.14 (1.32)	2.66 (1.54)
	19 (6%)	19 (6%)

Language	WLH	NWLH
Afrikaans	1 (1%)	2 (1.0%)
English	29 (18.0%)	59 (30.4%)
Sotho	69 (42.9%)	82 (42.8%)
Marital Status		
Never married and not living with a partner	50 (31%)	57 (29.4%)
Never married and not living with a partner	10 (6.2%)	14 (7.2%)
Married	14 (8.7%)	7 (3.6%)
Married and currently living with a partner	14 (8.7%)	13 (6.8%)
Married and currently living with a partner	50 (31.2%)	47 (24.5%)
Education		
Less than Grade 7	23 (14.3%)	24 (12.4%)
Grade 8-11	43 (26.7%)	51 (26.3%)
Matric	28 (17.4%)	51 (26.6%)
Post-Matric	7 (4.3%)	11 (5.7%)

Traumatic experiences in WLH versus NWLH

	WLH	NWLH	<i>t</i> -test	<i>p</i> -value
Number of traumatic experiences	$M = 3.69, SD = 2.32$	$M = 3.06, SD = 2.42$	2.07	.04
Saw a serious accident	38.5%	44.8%	6.04	.01
In a serious accident	22.3%	11.9%	3.5	.08
Personally went to jail	13.0%	4.6%	3.24	.08
Emotionally abused	42.9%	48.5%	2.28	.08
Physically neglected	17.3%	15.5%	0.83	.41
Threatened to harm you	20.2%	15.5%	2.03	.05
Family substance abuse (not a family member)	54.6%	55.1%	0.08	.94
Family substance abuse (family member)	65.4%	63.9%	0.33	.74
Been mugged by a stranger	31.7%	24.5%	1.25	.21
Attacked by someone they know	27.9%	21.9%	1.68	.09
Physically forced to have sex	24.9%	15.2%	2.22	.03
Threatened to have sex	9.6%	6.0%	1.03	.30



* $p < .05$
** $p < .01$

Figure 12.2 Sample poor and good slides for an oral presentation.

Multimedia equipment and audiovisual aids have the potential to liven up even the most uninspiring presentations; however, caution against becoming overly dependent on *any* medium. Rather, be fully prepared to deliver a high-quality presentation without the use of enhancements. It also might be wise to prepare a solid “back-up plan” in case your original mode of presentation must be abandoned due to equipment failure or some other unforeseen circumstance. Back-up overheads, for example, might rescue a presenter who learns of equipment failures minutes before presenting.

When using slides, it is important to avoid “going overboard” with information (Blome et al., 2017; Regula, 2020). Many of us will present research with which we are intimately familiar and invested. With projects that are particularly near and dear (e.g., theses and dissertations), it may be tempting to tell the audience as much as possible. It is not necessary, for example, to describe the intricacies of the data collection procedure and present *every* pre-planned and post-hoc analysis, along with a multitude of significant and non-significant *F*-values and coefficients. Such information overload might bore audience members, who are unlikely to care about or remember so many fine-grained details. Instead of committing this common presentation blunder, present key findings in a bulleted, easy-to-read format rather than sentences. To avoid overcrowding of slides and overheads, you might remember the *One × Six × Six* rule of thumb: only *ONE* idea per visual, less than *SIX* bullets per visual, and less than *SIX* words per bullet (Regula, 2020; see Figure 12.2).

The length of your oral presentation will vary depending on time restrictions, but there are some general guidelines for how to structure your presentation. Zerwic et al. (2010) proposed a possible structure for research presentations, which should include a title, acknowledgments, background, specific aims, methods, results, conclusions, and future directions sections. Zerwic et al. also recommended how many slides should be allocated to each section with your title, acknowledgments, background, specific aims, conclusions, and future directions sections each taking up one slide with the majority of your slides focusing on the methods and results sections.

In short, remember and hold fast to this basic dictum: Audio/visual aids should be used to *clarify* and *enhance* (Cohen, 1990; Grech, 2018a; Wilder, 1994). Aids that detract, confuse, or bore one’s audience should not be used (soliciting feedback from colleagues and peers will assist in this selection process; Regula, 2020). Overly colorful and ornate visuals or excessive slide animation, for example, might detract and distract from the content of the presentation (Lefor & Maeno, 2016). Likewise, visual aids containing superfluous text might encourage audience members to read your slides rather than attend to your presentation. Keeping visuals simple also might prevent another presentation faux pas: reading verbatim from slides.

5.5.2 Using Humor and Examples

The effective use of humor might help “break the ice,” putting you and your audience at ease. There are many ways in which humor can be incorporated into presentations, such as through the use of stories, rich examples, jokes, and cartoons or comic strips. As with other aids, humor should be used in moderation and primarily to enhance

a presentation (Collins, 2004). When using humor, it is important to be natural and brief and to use non-offensive humor related to the subject matter.

Another strategy for spicing up presentations is through the use of stories and examples to illustrate relevant and important points (Bekker & Clark, 2018). This can be accomplished in many ways, such as by providing practical and real-life examples or by painting a mental picture for the audience using colorful language (e.g., metaphors, analogies). Metaphorical language, for instance, might facilitate learning (Skinner, 1953) and help audience members to remember pertinent information. Similarly, amusing stories and anecdotes can be used to engage the audience and decrease the “impersonal feel” of more formal presentations. Regardless of whether or how humor is used, remember to do what “works” and feels right. Trying *too hard* to be amusing may come across as contrived and stilted, thus producing the opposite of the intended effect.

5.5.3 Attending To Other Speakers

When presenting research in a group forum (e.g., symposia), it may be beneficial to attend to other speakers, particularly those presenting before you. Being familiar with the content of preceding talks will help to reduce the amount of overlap and repetition between presentations (although some overlap and repetition might be desirable). You might, for example, describe the similarities and differences across research projects and explain how the current topic and findings relate to earlier presentations. The audience probably will appreciate such integration efforts and have a better understanding of the general topic area.

5.5.4 Answering Questions

Question and answer sessions are commonplace at conferences and provide excellent opportunities for clarifying ambiguous points and interacting with the audience. When addressing inquiries, it is crucial to maintain a professional, non-defensive demeanor (Wellstead et al., 2017). Treat every question as legitimate and well-intentioned, even if it comes across as an objection or insult. As a general rule, in large auditoriums it is good to repeat the question so that everyone in the room hears it. If a question is unclear or extremely complicated, it may be wise to pause and organize your thoughts before answering. If necessary, request clarification or ask the questioner to repeat or rephrase the question. It also may be helpful to anticipate and prepare for high-probability questions (Wilder, 1994).

There are several types of difficult questions that can be anticipated, and it is important to know how to handle these situations (Table 12.1). Also, we recommend preparing for a non-responsive audience. If audience members do not initiate questions, some tactics for preventing long, uncomfortable silences are to pose commonly asked questions, reference earlier comments, or take an informal survey (e.g., “Please raise your hand if you work clinically with this population.”). Even if many questions are generated and lead to stimulating discussions, it is important to adhere to predetermined time limits. End on time and with a strong concluding statement.

Above all, avoid becoming defensive and critical, particularly when answering challenging questions. Irrespective of question quality or questioner intent, avoid making patronizing remarks or answering in a way that makes the questioner feel foolish or incompetent. Try to avoid falling into an exclusive dialogue with one person, which might cause other members of the audience to feel excluded or bored. If possible, offer to meet with the questioner and address their questions and concerns at the end of the talk. Another suggestion is to avoid engaging in mini-lectures by showcasing accumulated knowledge and expertise in a particular area. Instead, only provide information that is directly relevant to the specific question posed by the audience (Wilder, 1994).

6. Conclusion

There are great benefits to presenting research, both to the presenter and the audience. Before presenting, however, you should consider carefully a number of preliminary issues. For instance, you must decide whether your study is worthy of presentation, where to present it, and what type of presentation to conduct. Once these decisions are made, prepare by practicing your presentation, examining other presentations, and consulting with colleagues. Sufficient preparation should enhance the quality of your presentation and help decrease performance anxiety. We are confident that you will find that a well-executed presentation will prove to be a rewarding and valuable experience for you and your audience.

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A key characteristic of science is the accumulation of knowledge. This accumulation depends not only on the completion of research but also on preparation of reports that disseminate the results. Consequently, publication of research is an essential part of science. Publication can serve other goals as well. Preparing a manuscript for publication helps the investigator to consider the current study in a broader context and chart a course for a series of studies. In addition, many professional and career goals are served by publishing one's research. Publication of one's research signals a level of competence and mastery that includes developing an idea, designing, executing and completing the study, analyzing the results, preparing a written report, submitting it for publication, and traversing the peer-review process. This chapter focuses on publishing one's research. The topics include preparing a manuscript, selecting a publication outlet, submitting the manuscript for review, and revising the manuscript as needed for publication.

There are many outlets to communicate the results of one's research. Prominent among these are presentations at professional meetings, chapters in edited books, full-length books, and professional journals. Journal publication, the focus of this chapter, holds special status because it is the primary outlet for original research. In terms of one's career, journal publication also plays a special role primarily because articles accepted for publication usually have undergone peer review. Acceptance and publication attest to the views of one's peers that there is merit in the work. For any given article, only a few peers (one editor, two to three reviewers) may actually see the manuscript. Multiple publications add to this and after a few publications one can assume there is a building consensus about one's work, i.e., others view the contributions as important and worthy of publication.

1. Preparing a Manuscript for Publication

1.1 Writing the Article

A central goal of scientific writing is to convey what was actually done so that the methods and procedures can be replicated. Concrete, specific, operational, objective,

and precise are some of the characteristics that describe the writing style. The effort to describe research in concrete and specific ways is critically important. However, the task of the author goes well beyond description.

Preparation of the report for publication involves three interrelated tasks that I refer to as description, explanation, and contextualization. Failure to appreciate or to accomplish these tasks serves as a main source of frustration for authors, as their papers traverse the process of manuscript review toward journal publication. *Description* is the most straightforward task and includes providing details of the study. Even though this is an obvious requirement of the report, basic details often are omitted in published articles (e.g., sex, socioeconomic status, and race of the participants; means and standard deviations) (e.g., Case & Smith, 2000; Gerber et al., 2014; Tate et al., 2016). Omission of basic details can hamper scientific progress. If a later study fails to replicate the findings, it could be because the sample is very different along some dimension or characteristic. Yet, we cannot surmise that without knowing at least basic details of the sample in both studies. If a study does repeat the findings, that is important, but is the new finding an extension to a new type of sample? Again, we need basic information in the studies to allow such comparisons.

Explanation is more demanding insofar as this refers to presenting the rationale of several facets of the study. The justification, decision-making process, and the connections between the decisions and the goals of the study move well beyond description. Here the reader of the manuscript has access to the author decision points. There are numerous decision points pertaining to such matters as selecting the sample, choosing among many options of how to test the idea, selecting the measures, and including various control and comparison groups. The author is obliged to explain why the specific options elected are well suited to the hypotheses or the goals of the study. There is a persuasion feature that operates here. The author of the manuscript is persuaded that the decisions are reasonable ways to address the overriding research question. Now the author must convey that to persuade the reader. In other words, explanation conveys why the procedures, measures, and so on were selected, but that explanation ought to be cogent, persuasive, and above all explicit. We do not want the reader to think, "This is an important research question, but why study it that way?" And in many cases, the related prior question of the same ilk emerges, why do we even need this study or why is study important? For the many decision points beginning with selection of the research question, these are very reasonable questions that the author ought to anticipate and pre-empt.

Finally, *contextualization* moves one step further away from description and addresses how the study fits in the context of other studies and in the knowledge base more generally. This latter facet of the article preparation reflects such lofty notions as scholarship and perspective, because the author places the descriptive and explanatory material into a broader context. Essentially, the author is making the case for the study based on the knowledge base. Relatively vacuous claims (e.g., this is the first study of this or the first study to include this or that control condition or measure) are rarely a strong basis for the study and often means or is interpreted as meaning that the author could not come up with something better. Without context,

any “first” is not very important by itself. Indeed, it is easy to be first for a topic that is not very important and has been purposely neglected. We need a more compelling rationale.

For example, if this study is done on why people commit suicide we need the context of why this specific study ought to be done and where in the puzzle of understanding this piece fits. Perhaps prior research omitted some critical control procedure; perhaps there is a special group that has a novel characteristic that reduces (or increases) the likelihood of suicide that would inform the field in unique ways; or perhaps some new twist on a theory or intervention will have clear implications for reducing suicide attempts. These and other such comments convey three points that are wise to address: (1) there is a gap in knowledge, (2) that gap is important, and (3) that gap will be filled in whole or in part by this study.

1.2 General Comments

The three components I identified vary in difficulty. When individuals write their first project for publication, they focus heavily on the descriptive part to make sure all the material and sections are included. And this part is fundamental. Explanation and contextualization are much more difficult. Explanation requires having considered options and conveying to the reader why the one selection was a good choice. Yet one’s first study is often with or from an advisor who has made these decisions and the bases of these decisions might be buried in one of the advisor’s other articles but otherwise is tacit. As authors we need to be prepared for other scientists looking at our paper and doing their job by asking, “Why on earth did we [use: that population, measure, control condition, means of data evaluation, and so on]”. These are not only legitimate questions but are central to science.

Contextualization is even more difficult. Contextualization benefits from experience, scholarship, time, and knowledge of as many related areas of work as one can bring to bear. How is the study connected to the literature or topic, how does it relate to theory, to other disciplines, to a critical problem we ought to care about or that is now facing society? The puzzle analogy might help. A given study is one puzzle piece and merely showing that piece to someone is not inherently interesting. It may be inherently boring. Yet, the piece becomes more interesting as all the other pieces are shown (e.g., the outside box with a full photo of the puzzle) and even more interesting, fascinating actually, if one can paint a verbal picture of the whole puzzle and show how one or two pieces are needed and this study is that part! Explanation gives the rationales for decisions; contextualization determines whether the study is compelling or not. Authors often complain that the reviewers did not understand, “get it,” appreciate the importance of their study. The authors are usually completely right, but guess whose responsibility that is?

The extent to which description, explanation, and contextualization are accomplished increases the likelihood that the report will be viewed as a publishable article and facilitates integration of the report into the knowledge base. Guidelines are provided later in the chapter to convey these tasks more concretely in the

preparation and evaluation of research reports. The guidelines focus on the logic of the study, the interrelations of the different sections, the rationale for specific procedures and analyses, the strengths and limitations, and where the study fits in the knowledge base. Consider main sections of the manuscript that are prepared for journal publication and how these components can be addressed.¹

2. Sections of an Article

2.1 Title

The title of an article includes the key variables, focus, and population with an economy of words. The special features of the study are included to convey the focus immediately to potential readers. It is critical here to be direct, clear, and concise (e.g., “Memory loss and gains associated with aging” or “Predictors of drug use and abuse among adolescents”). These examples are especially concise. Ordinarily an author is encouraged to fit the title within 10–12 words. The words ought to be selected carefully. Titles occasionally are used to index articles in large databases. Words that are not needed or that say little (e.g., “preliminary findings,” “implications,” “new findings”) might be more judiciously replaced by substantive or content words (e.g., among preschool children, the elderly; consequences for sleep and stress) that permit the article to be indexed more broadly than it otherwise would have been.

Occasionally, comments about the method are included in the title or more commonly in the subtitle. Terms like “a pilot study” or “preliminary report” may have many different meanings, such as the fact that this is an initial or interim report of a larger research program. These words could also be gently preparing readers for some methodological surprises and even tell us not to expect too much from the design. These qualifying terms might be accurate, but they implicitly apologize or ask for mercy as well. Better to give a strong title and in the write up give the explanation (decision making) and contexts to convey why this study was done, where it fits in the scheme of this literature, and why this was important. No apologies needed; just let the reader know your thinking on the matter. Although I am reluctant to boast, my dissertation won a prize for the best qualifying terms in a title. (In the subtitle of my dissertation, I conveyed this as: “A pre-preliminary, tentative, exploratory pilot study©.”)

In some cases, terms are added to the study such as, “A Controlled Investigation,” which moves our expectation in the other direction, namely, that the present study is somehow well conducted and controlled, and perhaps by implication stands in contrast to other studies in the field (or in the author’s repertoire). Usually words noting that the investigation is controlled are not needed unless this is

¹ Preparing a manuscript for publication entails several format requirements, such as print style and size, citations of sources, use of abbreviations, structure of tables and figures, and order in which sections of the article appears. These are detailed in the *Publication Manual of the American Psychological Association* (APA, 2020b) and are not covered in this chapter.

truly a novel feature of research on the topic. Some words when added can be important because they are novel. An example would be the subheading, “A replication.” That is important because replications are of interest and not too often published. They have taken on even increased importance given the concerns in science that many studies produce findings that are not replicable. Another word to add as a subtitle might be: A review or A meta-analysis. These are important to convey that the article is not an individual investigation but an evaluation of a broad literature.

Occasionally authors are wont to use titles with simple questions, “Is depression really a detriment to health?” or “Is childhood bullying among boys a predictor of domestic violence in adulthood?” In general, it is advisable to avoid “yes, no” questions in the title. Science and findings are often nuanced and findings are likely to be both yes and no but under very different circumstances or for some subgroups of people but not for others. As an example, consider a hypothetical yes–no question for the title of a study as, “Is cigarette smoking bad for one’s health?” For anyone on the planet, the answer might be a resounding yes. Yet, the yes–no nature of the question makes this a poor choice of title because the answer is likely to depend on either how smoking is defined (e.g., how much smoking – a cigarette a year, a pack after each meal) and how health is defined (e.g., mental, physical, what diseases, disorders). Very familiar is how horrible smoking is for one’s physical health in so many domains (e.g., heart disease, cancer, chronic respiratory disease), but the question in the title can be answered both yes and no. Less familiar is the fact that cigarette smoking and exposure to cigarette smoke (among nonsmokers) reduce the risk for Parkinson’s disease and there are reasonable explanations for that based on brain chemistry and neurotransmitters (Ma et al., 2017; Miller & Das, 2007). Clearly, the hypothetical title is plainly simplistic and not very helpful or informative because we can show many circumstances in which yes and no are correct answers. I am not arguing in favor of cigarette smoking (although I used to be a chain smoker until I switched to cigarettes). I am advising against titles of empirical articles that have a yes–no question given that most answers involve essays. Few phenomena allow the simplistic thinking the question can reflect.

2.2 Abstract

The Abstract is likely to be read by many more people than is the full article. The Abstract will be entered into various databases and be accessible through Internet and online searches. Many journals list the tables of contents for their issues and provide free access on the Web to abstracts of the articles but charge for the full article. Consequently, the Abstract is the only information that most readers will have about the study. For reviewers of the manuscript and readers of the journal article, the Abstract conveys what the author studied and found. Ambiguity, illogic, and fuzziness here are ominous. Thus, the Title and Abstract are sometimes the only impression or first impression one may have about the study.

Obviously, the purpose of the Abstract is to provide a relatively brief but comprehensive statement of goals, methods, findings, and conclusions of the study. Critical methodological descriptors pertain to the participants and their characteristics, experimental and control groups or conditions, design, and major findings. Often space is quite limited; indeed a word limit (e.g., 150–250 words maximum) may be placed on the abstract. It is useful to deploy the words to make substantive statements about the characteristics of the study and the findings, rather than to provide general and minimally informative comments. For example, vacuous statements (“Implications of the results were discussed” or “Future directions for research were suggested”) ought to be replaced with more specific comments of what one or two implications and research directions are (e.g., “The findings suggest that the family and peers might be mobilized to prevent drug abuse among adolescents and that cultural influences play a major role.”). Also, the more specific comments can convey the study’s relevance and interest value beyond what is suggested by the manuscript title or the opening comments of the Abstract. As a reader, I am not going to read very eagerly an article with the vacuous “implications” or “future directions” sentences, but if I am interested in the specific topics mentioned as implications (brain activity, the immune system, family, peers, culture), this article is a must for me to read. As authors, we often lament the word restrictions placed on us in the Abstract, but the first task is to make sure we are using the existing allotment with maximum information.

2.3 Introduction

The Introduction is designed to convey the overall rationale and objectives. The task of the author is to convey in a crisp and concise fashion why this study is needed and the current questions or deficiencies the study is designed to address. The section should not review the literature in a study-by-study fashion, but rather convey issues and evaluative comments that set the stage for the study. Placing the study in the context of what is and is not known (contextualization) and the essential next step in research in the field requires mastery of the pertinent literatures, apart from reasonable communication skills. Ironically, mastery of the literature is needed so the author knows precisely what to omit from the Introduction. A vast amount of material one has mastered and that is very interesting will need to be omitted because it does not set the stage or convey the precise context for this study.

Saying that the study is important (without systematically establishing the context) or noting that no one else has studied this phenomenon (measure or sample) usually are feeble attempts to short-circuit the contextualization of the study. In a manuscript I reviewed, the author mentioned four times in the Introduction (and three more in the Discussion) that this was the first time this study has been done. This was not amusing. Someone had not advised or helped the author very much and a very poor case was made for the study. Among the tasks of the Introduction is to lead the reader to the conclusion that the study is important and worthwhile. Telling the reader that the study is important is an argument from

authority and that is not how science works. This might even strongly suggest that the author has not done his or her contextualization homework.

It may be relevant to consider limitations of previous work and how those limitations can be overcome. These statements build the critical transition from an existing literature to the present study and the rationale for design improvements or additions in relation to those studies. It is important to emphasize that “fixing limitations” of prior work is not necessarily a strong basis for publishing a study. The author must convey that the limitations of prior work are central to a key building block in theory or the knowledge base. Convey that because of that specific limitation, we really do not know what we thought we did or that there is a new ambiguity that is important but hidden in prior studies considering what was studied and by what means. Alternatively, the study may build along new dimensions to extend the theory and constructs to a broader range of domains of performance, samples, and settings. The rationale for the specific study must be very clearly established. Theory and previous research usually are the proper springboard to convey the importance of the current study.

In general, the Introduction will move from the very general to the specific. The very general refers to the opening of the Introduction that conveys the area, general topic, and significance of a problem. For example, in studies of diagnosis, assessment, treatment, or prevention of clinical dysfunction, the Introduction invariably includes a paragraph to orient the reader about the seriousness, prevalence or incidence, and economic and social costs of the disorder. Reviewers of the manuscript are likely to be specialists in the area of the study and hence know the context very well. Yet, many potential readers would profit from a statement that conveys the significance, interest, and value of the main focus of the study.

After the initial material, the Introduction moves to the issues that underlie this specific study. Here the context that frames the specific hypotheses of the study are provided and reflect theory and research that are the impetus for the investigation. There is an introduction syllogism, as it were, a logic that will lead the reader from previous theory and research to the present study with a direct path. Extended paragraphs that are background without close connections to the hypotheses of the study serve as a common weakness of manuscripts rejected for publication.

The Introduction does not usually permit us to convey all the information we wish to present. In fact, the limit is usually 2–5 manuscript pages. A reasonable use of this space is in brief paragraphs or implicit sections that describe the nature of the problem, the current status of the literature, the extension to theory and research this study is designed to provide, and how the methods to be used are warranted. The penultimate or final paragraph of the Introduction usually includes a statement of the purpose of the study and the specific hypotheses and predictions. By the time the reader reaches this paragraph or set of paragraphs, it should be very clear that these hypotheses make sense, are important, and address a critical issue or need in the knowledge base. In short, the Introduction must establish that the study addresses a central issue. To the extent that the author conveys a grasp of the issues in the area and can identify the lacunae that the study is designed to fill greatly improves the

quality of the report and the chances of acceptance for journal publication. By the time the readers arrive at the purpose of the study or hypotheses paragraph, they should be nodding enthusiastically and saying to themselves, “This study is really needed, it should have been done years ago, I am so glad this is being done now.” As authors we often believe a description of the study is all that is needed. The identical study (description of what was done) can be viewed as a weak and just another study or strong, compelling, and sorely needed. All this can be decided by how the Introduction is cast.

2.4 Method

This section of the paper encompasses several points related to who was studied, why, and how. The section not only describes critical procedures, but also provides the rationale for methodological decisions. Subject selection, recruitment, screening, and other features ought to be covered in detail. Initially, the subjects or clients are described. Why was this sample included and how is this appropriate to the substantive area and question of interest? In some cases, the sample is obviously relevant because participants have the characteristic of interest (e.g., parents accused of child abuse, siblings of children with autism spectrum disorder) or are in a setting of interest (e.g., daycare center, wilderness camp). In other cases, samples are included merely because they are available. Such samples, referred to as samples of convenience, may include college students or a clinic population recruited for some other purpose than to test the hypotheses of this study. The rationale for the sample should be provided to convey why *this* sample provides a good – or if not good, a reasonable – test of the hypotheses and whether any special features may be relevant to the conclusions.

The design is likely to include two or more groups that are treated in a specific fashion. The precise purpose of each group and the procedures to which they are exposed should be clarified. Control groups should not merely be labeled as such with the idea that the name is informative. The author should convey precisely what the group(s) is designed to control. The author is advised to identify the critical methodological concerns and to convey how these are controlled in the design. Plausible threats to experimental validity that are uncontrolled deserve explicit comment to arrest the reasonable concerns of the reviewers (see Kazdin, 2017).

Several measures are usually included in the study. Why the *constructs* were selected for study should have been clarified in the Introduction. Then the specific *measures* and why they were selected to operationalize the constructs should be presented in the Method section. Information about the psychometric characteristics of the measures is often highlighted. This information relates directly to the credibility of the results. Apart from individual assessment devices, the rationale for including or omitting areas that might be regarded as crucial (e.g., multiple measures, informants, settings) deserves comment.

Occasionally, ambiguous statements may enter into descriptions of measures. For example, measures may be referred to as “reliable” or “valid” in previous

research, as part of the rationale for their use. There are, of course, many different types of reliability and validity. It is important to identify those characteristics of the measure found in prior research that are relevant to the present research. For example, high internal consistency (reliability) in a prior study may not be a strong argument for use of the measure in a longitudinal design where the author cares more about test–retest reliability. Even previous data on test–retest reliability (e.g., over 2 weeks) may not provide a sound basis for repeated testing over annual intervals. The author ought to present information to convey the suitability of the measures for the study.

It often appears that reliability and validity of assessment are not routinely taught, at least if one looks at Method sections of articles in clinical psychology. These are important concepts because they can determine what is measured by a given instrument and how well. One sees more routinely that authors report Cronbach's alpha for a measure and then move on. Alpha is one measure of reliability (internal consistency) and can be very useful to know. However, this has little to do with validity of the measure and by itself is not a justification for using a specific measure without much more explanation. Perhaps add a couple of sentences in this section to comment specifically on reliability and validity and what types have been supported in prior research. This is not merely to convince a reader but also ourselves on the wisdom of electing this measure. It is unreasonable to expect the measures to have the ideal reliability and validity data that the investigator would like to make a flawless case for use of these measures. Yet, make the case from what psychometric data there are. If data are not available, include some analyses in the study to suggest the measure(s) behave in ways that suggest pertinent forms of reliability or validity (Kazdin, 2017).

2.5 Results

It is important to convey why specific statistical tests were selected and how these serve the goals of the study. A useful exercise is for the investigator to read that paragraph about hypotheses and predictions from the Introduction and then immediately start reading the Results section, i.e., for the moment completely bypass the Methods. The results ought to speak directly to and flow from that narrative statement in the Introduction.

Analyses often are reported in a rote fashion in which, for example, the main effects are presented and then interactions for each measure. The author presents the analyses in very much the same way as the software output. Similarly, if several dependent measures are available, a set of analyses is automatically run (e.g., omnibus tests of multivariate analyses of variance followed by univariate analyses of variance for individual measures). The tests may not relate to the hypotheses, predictions, or expectations outlined at the beginning of the paper. It is important that the statistical tests be seen and presented as tools to answer questions or enlighten features of those questions and to convey this to the reader. The reader should not be able to legitimately ask, "Why was that statistical test done?"

Knowledge of statistics is critical for selecting the analyses to address the hypotheses and conditions met by the data. Yet, as important in the presentation is to convey precisely why a given statistical test or procedure is suitable to test the hypotheses and then again what the results of that test reveal in relation to those hypotheses.

It is often useful to begin the Results by presenting basic descriptors of the data (e.g., means, standard deviations for each group or condition), so the reader has access to the numbers themselves. The main body of the Results is to test the hypotheses or to evaluate the predictions. Organization of the Results (subheadings) or brief statements of hypotheses before the analyses are often helpful to prompt the author to clarify how the statistical test relates to the substantive questions and to draw connections for the reader.

Several additional or ancillary analyses may be presented to elaborate the primary hypotheses. For example, one might be able to reduce the plausibility that certain biases may have accounted for group differences based on supplementary or ancillary data analyses. Ancillary analyses may be more exploratory and diffuse than tests of primary hypotheses. Manifold variables can be selected for these analyses (e.g., sex, race, height differences) that are not necessarily conceptually interesting in relation to the goals of the study. The author may wish to present data, data analyses, and findings that were unexpected, were not of initial interest, and were not the focus of the study. The rationale for these excursions and the limitations of interpretation are worth noting. From the standpoint of the reviewer and reader, the results should make clear what the main hypotheses were, how the analyses provide appropriate and pointed tests, and what conclusions can be reached as a result. As in other portions of the manuscript, how the author has reached a decision (what analysis) and why are very important.

2.6 Discussion

The Introduction began with a statement of the need for this study and issues or lacunae in theory or research the study was designed to address. The Discussion continues the storyline by noting what we know now and how the findings address or fulfill the points noted previously. With the present findings, what puzzle piece has been added to the knowledge base, what new questions or ambiguities were raised, what other substantive areas might be relevant for this line of research, and what new studies are needed? From the standpoint of contextualization, the new studies referred to here are not merely those that overcome methodological limitations of the present study, but rather focus on the substantive next steps for research. Also, this is not the place for vacuous suggestions such as, “This study needs to be replicated with people who are . . .”. If one is suggesting an extension of the study to different subjects, settings, or other dimensions, specify exactly why this specific extension would be of special interest.

The Discussion usually includes paragraphs to provide an overview of the major findings, integration or relation of these findings to theory and prior research, limitations and ambiguities and their implications for interpretation, and future

directions. These are implicit rather than formally delineated sections and the author ought to consider the balance of attention to each topic. Usually, the Discussion is completed within 3–5 manuscript pages.

Description and interpretation of the findings can raise a tension between what the author wishes to say about the findings and their meaning versus what can be said in light of how the study was designed and evaluated. It is in the Discussion that one can see the interplay of the Introduction, Methods, and Results sections. For example, the author might draw conclusions that are not quite appropriate given the method and findings. The Discussion may convey flaws, problems or questionable methodological decisions within the design that were not previously evident. That is, the reader of the manuscript can now state that if these are the statements the author wishes to make, the present study (design, measures, or sample) is not well suited. The slight mismatch of interpretative statements in the Discussion and Methods is a common, albeit tacit basis for not considering a study as well conceived and executed. A slightly different study may be required to support the specific statements the author makes in the Discussion. It is important to be precise about what can and cannot be asserted in light of the design and findings.

It is usually to the author's credit to examine potential limitations or sources of ambiguity of the study. A candid, non-defensive appraisal of the study is very helpful. Here too, contextualization may be helpful because limitations of a study also are related to the body of prior research, what other studies have and have not accomplished, and whether a finding is robust across different methods of investigation. Although it is to the author's credit to acknowledge the limitations of the study, there are limits on the extent to which reviewers grant a pardon for true confessions. At some point, the flaw is sufficient to preclude publication, whether or not the author acknowledges it. For example, the authors of the study might note, "A significant limitation of the present study is the absence of a suitable control group. We are aware that this might limit the strength of the conclusions." Awareness here does not strengthen the demonstration itself. A huge limitation in the study is sufficiently damaging to preclude drawing valid inferences.

In noting the limitations of the study, there is a useful structure for the presentation. First note the limitation. Then discuss to the extent reasonable that this limitation is not likely to influence the conclusion (if this is the case). If the role of the limitation cannot be diminished or dismissed by sound reasoning or related data, note that addressing this issue is a logical if not important next step for research. All studies have limitations by their very nature so reasoning about their likely and unlikely impact on the findings is invariably relevant.

At other points, acknowledging potential limitations conveys critical understanding of the issues and guides future work. For example, in explaining the findings, the author may note that although the dependent measures are valid, there are many specific facets of the construct of interest that are not covered. Thus, the results may not extend to different facets of the construct as measured in different ways. Here too it is useful to be specific and to note precisely why other constructs and their measure

might show different results. In short, be specific as to why a limitation or point might really make a difference. This latter use of acknowledgment augments the contribution of the study and suggests concrete lines of research.

3. Questions to Guide Manuscript Preparation

The section-by-section discussion of the content of an article is designed to convey the flow or logic of the study and the interplay of description, explanation, and contextualization. The study ought to have a thematic line throughout and all sections ought to reflect that in a logical way. The thematic line consists of the substantive issues guiding the hypotheses and decisions of the investigator (e.g., about procedures and analyses) that are used to elaborate these hypotheses. I mentioned that one way to check this is to read sections together like the Introduction and Results (by skipping the Method section). These sections ought to follow a similar flow. Analyses should be connected logically but with sentences about what is being tested and what was found in relation to the ideas or hypotheses presented in the Introduction. Skipping the Method section for this reading helps one to consider the flow. Similarly, one could push this further and read the Introduction and then Discussion – are they connected? The opening of the Discussion can address issues that were written at the end of the Introduction, i.e., the purpose of this study. This is not a repeat of the purpose but a summary of the main results that addressed those purposes and goals. All these little tools are designed to help us as authors convey a thematic and logical flow that the reader can easily see.

A more concrete and hence perhaps more helpful way of aiding preparation of the manuscript is to consider our task as authors as that of answering many questions. There are questions for the authors to ask themselves or, on the other hand, questions reviewers and consumers of the research are likely to ask as they read the manuscript. These questions ought to be addressed suitably within the manuscript. Table 13.1 presents questions according to the different sections of a manuscript. The questions emphasize the descriptive information, as well as the rationale for procedures, decisions, and practices in the design and execution. The set of questions is useful as a way of checking to see that many important facets of the study have not been overlooked. As a cautionary note, the questions alert one to the parts rather than the whole; the manuscript in its entirety or as a whole is evaluated to see how the substantive question and methodology interrelate and how decisions regarding subject selection, control conditions, measures, and data analyses relate in a coherent fashion to the guiding question.

4. Guidelines for Research

4.1 Impetus for Reporting Guidelines

There have been a long-series of guidelines on how to conduct and report research and these are directly related to preparation of a study for publication. The history

Table 13.1 *Major questions to guide journal article preparation*

Abstract

- What are the main purposes of the study?
- Who was studied (sample, sample size, special characteristics)?
- How were participants selected and assigned to conditions?
- To what conditions, if any, were participants exposed?
- What type of design was used?
- What are the main findings and conclusions?
- What are one or two specific implications or future directions of the study?

Introduction

- What is the background and context for the study?
- What in current theory or research makes this study useful, important, or of interest?
- What is different or special about the study in focus, methods, or design to address a need in the area?
- Is the rationale clear regarding the constructs (independent and dependent variables) to be assessed?
- What specifically are the purposes, predictions, or hypotheses?
- Are there ancillary or exploratory goals that can be distinguished as well?

Method

- Participants
- Who are the participants and how many of them are there in this study?
- Why was this sample selected in light of the research goals?
- How was this sample obtained, recruited, and selected?
- What are the subject and demographic characteristics of the sample (e.g., sex, age, ethnicity, race, socioeconomic status)?
- What, if any, inclusion and exclusion criteria were invoked, i.e., selection rules to obtain participants?
- How many of those subjects eligible or recruited actually were selected and participated in the study?
- In light of statistical power considerations, how was the sample size determined?
- Was informed consent solicited? How and from whom (e.g., child and parent), if special populations were used?
- If non-human animals are the participants, what protections were in place to ensure their humane care and adherence to ethical guidelines for their protection?
- Are there any professional, personal, or business interests or connections, financial or otherwise (e.g., service on boards) that might be or be perceived as a conflict of interest in relation to the focus of the study or direction of the findings?

Design

- What is the design (e.g., group, true-experiment) and how does the design relate to the goals?
- How were participants assigned to groups or conditions?
- How many groups were included in the design?
- How are the groups similar and different?
- If groups are “control” groups, for what is the group intended to control?
- Why are these groups critical to address the questions of interest?

Procedures

- Where was the study conducted (setting)?
- What measures, materials, equipment, or apparatus were used?
- What is the chronological sequence of events to which participants were exposed?
- What intervals elapsed between different aspects of the study (e.g., assessment, exposure to the manipulation, follow-up)?

(continued)

Table 13.1 (continued)

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- If assessments involved novel measures created for this study, what data can be brought to bear regarding pertinent types of reliability and validity?
 - What checks were made to ensure that the conditions were carried out as intended?
 - What other information does one need to know to understand how participants were treated and what conditions were provided to facilitate replication of this study?

Results

- What are the primary measures and data upon which the hypotheses or predictions depend?
- What analyses are to be used and how specifically do these address the original hypotheses and purposes?
- Are the assumptions of the statistical analyses met?
- If multiple tests are used, what means are provided to control error rates (increased likelihood of finding significant differences in light of using many tests)?
- If more than one group is delineated (e.g., through experimental manipulation or subject selection), are they similar on variables that might otherwise explain the results (e.g., diagnosis, age)?
- Are data missing due to incomplete measures (not filled out completely by the participants) or due to loss of subjects? If so, how are these handled in the data analyses?
- Are there ancillary analyses that might further inform the primary analyses or exploratory analyses that might stimulate further work?

Discussion

- What are the major findings of the study?
- Specifically, how do these findings add to research and support, refute, or inform current theory?
- What alternative interpretations, theoretical or methodological, can be placed on the data?
- What limitations or qualifiers are necessary, given methodology and design issues?
- What research follows from the study to move the field forward?
- Specifically, what ought to be done next (e.g., next study, career change of the author)?

More generally

- What were the sources of support (e.g., grants, contracts) for this specific study?
 - If there is any real or potentially perceived conflict of interest, what might that be?
 - Are you or any coauthors or a funding agency likely to profit from the findings or materials (e.g., drugs, equipment) that are central to the study?
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-

Note: These questions capture many of the domains that ought to be included, but they do not exhaust information that a given topic, type of research, or journal might require. Even so, the questions convey the scope of the challenge in preparing a manuscript for publication.

includes special emphasis on ethical treatment of participants. Regulations followed in response to atrocities of the Nazi regime during World War II and the resulting development of the Nuremberg Code (1940). Since then, many other codes have developed (e.g., Declaration of Helsinki of the World Medical Association, Belmont Report), beyond the scope of the present discussion (see Kazdin, 2017). Protection of participant rights remain as important as ever and even of greater concern considering new opportunities to obtain and combine data sources (“big data”), often with information that is public in some way (e.g., medical records, social

media, tracking locations and purchases). Individuals may not be aware of the collection and use of the information. Even when participants may be anonymous, in fact often groups (e.g., by ethnic, culture or setting) can be readily singled out and identified in ways that can reflect quite negatively on them (e.g., Metcalf & Crawford, 2016; Zimmer, 2010).

The need for guidelines for reporting research has emerged from multiple additional concerns. First, collaborative research currently is more the rule rather than the exception in science. Collaborations often involve scores of authors, from multiple disciplines, and from many different countries. There is interest across nations in reaching common standards in relation to the openness of research, access to information, the merit-review process, and ethical issues (e.g., Suresh, 2011). That has provided a critical context for providing guidelines for research and the reporting of research that span multiple disciplines, countries, and journals.

Second, lapses in what is reported in research have been well documented. For example, information often is omitted such as exactly who the participants are (e.g., subject and demographic variables) and how they were recruited, who administered treatment or experimental procedures, the extent of their training, whether the integrity or execution of treatment was assessed, fundamental characteristics of the data evaluation, and more, as reflected in citations noted previously.

Third, selective reporting of results and data analyses has been raised as a critical issue that introduces biases in individual studies and entire literatures. The selective reporting of results of some data analyses or some of the dependent measures can increase the likelihood of more chance findings in the literature (Simmons et al., 2011). For example, in identifying evidence-based treatment, often there is a clear bias in how authors report the data by not presenting the full range of measures, some of which would not support conclusions about the impact of treatment (De Los Reyes & Kazdin, 2008). Guidelines are intended to foster consistency and clarity in how the study will be reported to minimize the biases in reporting that emerge.

Fourth, more flagrant than “mere” omission of information and selective reporting has been fraud and fabrication of data in science. Fraud is not new in science. However, both the visibility of fraud to the public, including the circulation through social media, and direct and disastrous implications from fraudulent studies have been more evident than ever before (see Levelt, Noort, & Drenth Committees, 2012; Watanabe & Aoki, 2014).²

Finally, there has been renewed concern about the replicability of research. Replication as a general tenet, if not practice, has always been the backbone of science. Given many of the points I have already mentioned (publication biases,

² Arguably the most visible case in the past 20 years was the fabricated report that a commonly used vaccine (measles, mumps, rubella) in young children caused autism among well-functioning children (Wakefield et al., 1998). That the data were faked eventually came to light, but not after far-reaching consequences, including an enormous international backlash against vaccines and the unnecessary deaths of many children whose parents refused vaccinations. Antivaccination movements antedate this report, but social media and the Internet permitted this one to spread widely and over an extended period that continues to this day (Yang et al., 2019).

statistical analyses, and selective reporting), various authors have reached the dramatic conclusion, occasionally supplemented with mathematical proofs and simulations, that many and even most published research findings are not correct, i.e., are false (see Francis, 2012; Ioannidis, 2005; Moonesinghe et al., 2007). Several calls for increased replication have been made. Psychology has taken the lead in calling for and supporting replications and underscoring the importance of transparency of procedures (Center for Open Science, <https://cos.io/>). Central to replication, of course, is making the procedures explicit and the materials and results available. Guidelines for conducting research to increase the likelihood that a study can be replicated are obviously important. Many journals, national and international, require providing information about a study and the data so they are freely available to others to facilitate re-evaluation of the data and replication of the entire study.

Overall, science has come under increased scrutiny both from within the sciences, government, and the public at large. Even though the assorted problems I highlighted are seemingly infrequent, the circulation of information (e.g., Web, news and social media) is more extensive than ever before and retractions (when authors and journals make some effort to “take back” and renounce what was published) are more visible and available as well. And news media more routinely comment on scientific findings and reflect skepticism about replication and replicability of effects (e.g., Lehrer, 2010). The points I have raised have served in part as the impetus for improving research, especially focusing on transparency and accountability of investigators. Guidelines have been helpful in fostering greater consistency in reporting of the research and in the process sensitizing researchers of what to attend to in advance of a study.

4.2 Sample Guidelines Briefly Noted

Several organizations and groups have developed standards for reporting research and in the process convey the need to address many of the issues I have highlighted previously. The scope of guidelines that are available is enormous. An international umbrella organization that collects, oversees, and promotes the use of research guidelines is the Equator Network. The network maintains a comprehensive database of guidelines, numbering over 400, as of this writing (www.equator-network.org/reporting-guidelines/). The network is nicely organized by type of paper (guidelines for empirical studies, literature reviews, meta-analyses) and by different methodologies (e.g., randomized trials, observational studies), and so on. With so many guidelines, with enormous overlap in what they cover, one can see this is not a minor movement to improve research.

Examples of such standards are the:

- Consolidated Standards of Reporting Trials (CONSORT; Moher et al., 2001);
- International Clinical Trials Registry Platform (ICTRP; World Health Organization, www.who.int/ictcp/en/);

- Transparent Reporting of Evaluations with Nonexperimental Designs (TREND; Des Jarlais et al., 2004);
- Strengthening of Reporting of Observational Studies in Epidemiology (STROBE; Von Elm et al., 2007);
- Journal Article Reporting Standards for Research in Psychology (JARS; Appelbaum et al., 2018; Levitt et al., 2018);
- Standards for Reporting on Empirical Social Science Research in American Educational Research Association (AERA) publications (AERA, 2006);
- Transparency and Openness Promotion (TOP) Guidelines (Aalbersberg et al., 2018);
- Materials Design Analysis Reporting (MDAR; Hawkins, 2019); and
- Meta-Analytic Reporting Standards (MARS; Kepes et al., 2013).

Most of the guidelines include some combination of checklists, flow charts, and narrative explanations of what specific items are to be included in a report and what the information is designed to accomplish. I mention two briefly.

First, the CONSORT standards, mentioned above, are arguably the most familiar set of guidelines. They have been adopted by hundreds of professional journals encompassing many disciplines and countries (see www.consort-statement.org/). The CONSORT guidelines have been devised primarily for clinical trials in medical research but have extended well beyond that and are routinely used in clinical trials of psychosocial interventions. As noted in the most recent version, clinical trials have a history of omitting significant information such as description of who was included in the study; sample size calculation (e.g., why a specific size was included in relation to statistical power issues), descriptions of procedures; and presentation of procedures (e.g., randomization) that were not really invoked; and so on with other lapses (Moher et al., 2001). Beginning in the early 1990s, efforts began to make recommendations for reporting of studies and from that the CONSORT guidelines emerged.

The guidelines consist of a checklist of essential items that ought to be included in any randomized controlled trial of treatment. The checklist displays what is needed, but along with the checklist is a detailed explanation of the items and their rationale for inclusion (Moher et al., 2001). In addition, the website provides educational material and a database of materials related to reporting of randomized controlled trials (e.g., examples from real trials). In preparation of journal articles, the CONSORT criteria include a list of what to cover and how. This is more concrete than my general statements of ensuring there is a logical flow and underlying theme to the journal article. Yet, the details are basic and critical and hence these guidelines are valuable and widely adopted by many journals.

Second, ClinicalTrials.Gov (<https://clinicaltrials.gov/>) provides another model to guide research. This consists of preregistration of a study that requires authors to convey their plan for conducting research and analyzing the data. Preregistration allows for the range of participants in research (investigators, peer reviewers, journal editors, funding agencies, policy makers, the public at large) to determine whether

the research, when completed, has deviated from the pre-registered plan. Pre-registration of research is now common across many funding agencies and journals (Nosek et al., 2018). ClinicalTrials.gov is a large database that includes privately and publicly funded studies of investigations throughout the world. Indeed, this is the largest clinical trials database and as of this writing over 327,000 studies are registered and include studies from all 50 states in the United States and 209 countries (as of January 2020). When clinical trials are comparing interventions or an intervention against a control group, funding agencies (e.g., National Institutes of Health), organizations (e.g., World Health Organization), and a consortium of journal editors (the International Committee of Medical Journal Editors) require investigators to register their clinical trials in advance of the study.

In registration of one's study, information covers diverse facets of the project. Indeed, there is a multi-page template that includes identification of the investigators of the study, the design, what the interventions are, what will be the outcome criteria (e.g., primary and secondary), the number of anticipated subjects, criteria for inclusion of the subjects, status of procedures to protect clients, and much more. Merely mentioning some of the domains that are included in the register does not underscore their significance in the conduct and reporting of the study. Consider three examples to convey the point.

First, the guidelines require specification of the outcome criteria and which outcomes or measure will be primary and secondary. This is a pre-commitment of the investigator to be clear about the outcome. This does not mean that investigators cannot look at all outcome measures or derive new ones based on interesting findings, pre-specified or not, as the study is completed. However, pre-specification can reduce the tendency in written reports to underscore, emphasize, and consider as primary, those measures that "come out," i.e., support the hypotheses.

Second, in many studies there are multiple investigators whose roles vary in the design, execution, analysis and other facets of the study and these investigators are likely to be listed as authors. Specification of the investigators and their roles clarifies accountability for the final manuscript. Also, this requires that people in fact have a role in the study before being included. All the expected dynamics of human interactions (e.g., who does and does not get to be an author, where they are placed in the list of authors) and human emotions (e.g., indignation, disappointment, rage, helplessness) surround authorship. War stories here could fill volumes. The guidelines can help a little. At the end of a study, there is accountability of who is in charge, who had what role, and who was involved. If there is fraud or faked data or questionable practices or a manuscript retraction (once there is a question about practices or a finding), the team involved in the study and their roles can be delineated. This can enhance the integrity of the research progress by making clear that one is accountable for the study and its conduct. Third, the guidelines specify whether, how, and where the data will be stored and whether other materials critical to the study will be available. Occasionally journals or funding agencies require that the data are deposited and made available. This practice fostered by the guidelines increases the transparency of the research but also helps replication efforts.

A few comments in passing. To begin, pre-registration does not fix the research so that no further changes can be made. In fact, one can update changes that occur in the course of a study. “Pre”-registrations can be updated after participant enrollment or even after data collection has begun to document any changes that occur in the course of a study (DeHaven, 2017; Nosek et al., 2018). All that is required is to make sure the changes are clear, transparent, and explained. The registration still thwarts post-hoc decision making based on how the data come out or switching some measures and ignoring others, some of the sins of research. An additional point, the many guidelines are designed to improve reporting of research. However, so many facets need to be considered ahead of time in these guidelines that they necessarily influence and guide the design of a study. This article is about preparing a manuscript for journal publication. Consulting and following many widely adopted guidelines underscores the point that key issues about the publication of a journal article emerge before the first subject is run in the study.

5. Selecting a Journal

Preparation of the manuscript logically occurs before selecting a journal and submitting to the journal for publication. However, investigators occasionally have the journal or a couple of journals in mind before the manuscript is prepared. Journals have different emphases and research with specific foci (e.g., theory, application), samples (e.g., non-human animals, college students, community samples), settings (laboratory, field), and research designs (cross-sectional, longitudinal, experimental, observational). Consequently, it is not odd for the investigator to plan/hope that a study when completed will be appropriate for a journal he or she targeted well before preparing the manuscript for publication. In my own case, I prefer to see the final or almost final write up to consider what journals might be reasonable outlets for the article. I mention selecting a journal here on the assumption that this logically follows in the sequence of completing a study, preparing the write up, and submitting the article for publication. Selecting a journal is part of submitting the article.

Thousands of journals are available in the behavioral and social sciences and the resources and potential relevance to your study are easily obtained from the Web (Gunther, 2011; Thomson Reuters, 2011; Thursby, 2011). These sources can be searched by topic and keywords in relation to how you view your study (e.g., clinical psychology, candidate for Nobel prize). It is beneficial to skip the search among the thousands of journals and begin the search more narrowly. There are many professional organizations within psychology that have their own publications. The two major professional organizations whose journal programs are widely recognized and emulated are American Psychological Association (APA, 2020a) and the Association for Psychological Science (2020).

Each source I have noted here provides information about the editorial policy, content area or domain, type of article (e.g., investigations, literature reviews, case studies), guidelines for manuscript preparation, and access to tables of contents of current and past issues. I have emphasized journals in the English language.

Psychology is an active discipline internationally and psychological associations in many countries and regions (e.g., European Union, Scandinavia) have many excellent journals as well.

Many criteria are invoked to select a journal to which one will submit a manuscript, including the relevance of the journal in relation to the topic, the prestige value of the journal in an implicit hierarchy of journals in the field, the likelihood of acceptance, the breadth and number of readers or subscribers, and the discipline and audience one wishes to reach (e.g., psychology, psychiatry, medicine, social work, health, education). As for the prestige value, clearly some journals are regarded as more selective than others. For example, some of the APA journals are premier journal outlets in their respective areas (e.g., *Journal of Consulting and Clinical Psychology*, *Journal of Personality and Social Psychology*). Yet, journals from other organizations, journals not sponsored by an organization, and journals from other professions or disciplines can be as or more highly regarded. Indeed, in some areas (e.g., behavioral neuroscience), some of the most discriminating and selective publication outlets are not psychology journals (*Science*, *Nature Neuroscience*). One can identify the best outlets by familiarity with the literature (e.g., where do the best studies seem to be published) and by chatting with colleagues.

Word of mouth and reputation of a journal often are well recognized and their status within professional organizations is known. There has been an enduring interest in having more objective measures and they are available. The impact of a journal is primary among these measures (Web of Science, 2020) and includes the extent to which articles in a journal are cited by others. Journals with articles that are heavily cited are those with much higher impact. Information is available for journals in virtually all areas of science. Within the social sciences alone over 3400 journals are covered. There are reasons not to be wedded to journal impact.³ The impact of

³ A quantitative measure to evaluate journals is referred to as the “impact factor,” and is based on the frequency with which articles appear in the journal in a given time period (2 years) in proportion to the total number articles published in the journal. An objective quantitative measure of impact has multiple uses for different parties who have interest in the impact of a journal (e.g., libraries making subscription decisions, publisher evaluating the status of a specific journal they have published). Administrators and faculty peers often use impact of the journals in which a colleague publishes as well as how often their work is cited by others among the criteria used for job appointments and promotions in academic rank, and salary adjustments. There has been a strong movement to no longer use the impact factor to evaluate research or merit of an investigator (see Alberts, 2013). Impact was not designed to measure that and is subject to all sorts of influences (e.g., that vary by discipline, artifacts of publishing practices of individual journals). Moreover, that impact factor bears little relation to expert views of scientific quality. In 2012, an organization (San Francisco Declaration of Research Assessment, abbreviated as DORA), initiated at a meeting of the American Society for Cell Biology and including many editors and publishers, examined the ways in which journals are evaluated. Among the consequences was agreement that “impact factor” might be useful for the purposes for which it was intended, but not for evaluating the merit of scientific research. Consequently, DORA urged journals and scientific organizations to drop the use of impact factor as an index of quality of the journal or articles in which the journal appears. Now many scientific and professional organizations (>1800 at the time of this writing) and researchers (~15,000) have signed on to this recommendation to not use or flaunt impact factor as an index of quality (<https://sfdora.org/read/>). Even so, many journals still flaunt their “impact factor” and occasionally researchers promote their own work based on the impact factor of the journal in which their work has appeared. It

one's work is very important, and it appears that is not really related to the journal impact measure.

Some journals are not very selective and, indeed, must hustle (e.g., invite, accept many) articles so they can fill their pages. Indeed, it is not difficult at all to get one's work published in the genre referred to as predatory journals (e.g., Brainard, 2020). These are journals that send countless emails to professionals seeking their manuscripts and with little and sometimes no evaluation of merit. The journals are primarily business ventures and charge high author fees. The journal landscape is intricate because some journals with a peer-review process offer the option of open access (article available to anyone on line) if the author pays a publication fee.

Be a little wary of journals in psychology that charge authors for publishing their papers. For these journals, when one's paper is accepted, the author is charged based on how many journal pages the article will require. These outlets do not necessarily take all submissions, but they often take most. These journals tend not to be as carefully peer-reviewed and hence publications in such journals are commensurately much less well regarded. Within psychology, career advice is to focus on peer-reviewed and well-regarded journals, leaving aside other issues (e.g., who publishes the journal, whether there are charges). Knowledge of the area of research, journal citation impact, and contact with one's colleagues can readily identify the ideal outlets for one's research. Early in my career, I asked a senior colleague about a journal and he gave me a sharp NEVER publish there. Decades later I can see that was sound advice. If in doubt, seek advice. If you have no doubts but you are early in your career, perhaps also seek advice.

The audience one wishes to reach may be a critical and indeed primary consideration in selecting a journal. Who might be interested in this study (beyond blood relatives)? One way to answer this is to consider the Reference section of one's article. Are one or two journals emphasized in the Reference section of the manuscript? If so, one of these journals might be the most appropriate outlet. Citation of the journal on multiple occasions indicates that the journal publishes work on the topic and readers who are likely to be interested in the topic are also likely to see the article. Also relevant, journals vary markedly in their readership and subscription base. Some journals have relatively few subscribers (e.g., 200–600 up to several thousand) or are omitted from easily accessed databases. The visibility of one's study and the chance that others will see it are influenced by these considerations. Fortunately, most professional journals have their abstracts included in databases that can be accessed from the Web. This makes even the most obscure study accessible.

Most journals are in print (hard copy) and electronic form, but many are only Web-based and are sometimes referred to as electronic journals or e-journals. This is not the place to discuss that topic except to note often publication on the Web is much faster (less delay in review of the manuscript and acceptance of the manuscript) than is publication in a printed journal. There are still dynamic changes in how journals will be published and disseminated and print versions may be on

is important to mention here in case the reader is considering this as a main or major reason for submitting a manuscript to one journal rather than another.

borrowed time. The central issue for one's career is the extent to which the publication outlet is well regarded by one's peers and the care with which manuscripts are reviewed before they are accepted and published. Electronic versus printed journal format is not as critical as the quality of the publication. If publication in the journal requires little or no peer review, if most manuscripts are accepted, and if manuscripts are accepted largely as they are (without revision), quality of the research and the value of the publication to one's career may be commensurately reduced.

6. Manuscript Submission and Review

6.1 Overview of the Journal Review Process

Alas, through careful deliberation and 30 minutes with your coauthor at a Ouija board, you select a journal and are ready to submit your manuscript for publication. Before you do, consult the Instructions to Authors written in the journal to make sure you submit the manuscript correctly. Usually manuscripts are submitted through a journal portal, i.e., electronically, in which the manuscript file and a letter of submission are uploaded to the journal website. In some cases, you may be required to include sentences or paragraphs in the letter you submit that say this study is not being considered elsewhere in another journal, has not been published before, has met ethical guidelines specified by university or institutional policy and various laws, and that you will give the copyright to the publisher if the manuscript is accepted. Processing of the manuscript could be delayed if your letter does not meet the guidelines provided in the journal.

Once the manuscript is submitted, the journal editor usually sends the electronic file to two or more reviewers who are selected because of their knowledge and special expertise in the area of the study or because of familiarity with selected features of the study (e.g., novel methods of data analyses). Reviewers may be selected from the names of authors whose articles you included in your Introduction. Some reviewers are consulting editors who review often for the journal and presumably have a perspective of the type and quality of papers the journal typically publishes; other reviewers are ad-hoc reviewers and are selected less regularly than consulting editors. Reviewers are asked to evaluate the manuscript critically and to examine whether or the extent to which:

- The question(s) is important for the field;
- The design and methodology are appropriate to the question;
- The results are suitably analyzed;
- The interpretations follow from the design and findings; and
- The knowledge yield contributes in an incremental way to what is known already.

(You may note that these bulleted points encompass the explanation and contextualization features I noted in relation to manuscript preparation. Each point is one that can be readily addressed by the author in preparing the manuscript.)

Typically, reviewers are asked to give a summary recommendation (e.g., reject or accept the manuscript). All recommendations to an editor are advisory and not binding in any way. At the same time, the editor sought experts and usually follows their recommendations. Yet reviewers too must make the case for their comments.

Once the paper is reviewed, the editor evaluates the manuscript and the comments of the reviewers. In some cases, the editor may provide his or her own independent review of the paper; in other cases he or she may not review the paper at all but defer to the comments and recommendations of the reviewers. The editor writes the author and notes the editorial decision. Usually, one of three decisions is reached: the manuscript is accepted pending a number of revisions that address points of concern in the reviewers' comments; the manuscript is rejected and will not be considered further by the journal; or the manuscript is rejected but the author is invited to resubmit an extensively revised version of the paper for reconsideration.

The *accept* decision usually means that the overall study was judged to provide important information and was well done. However, reviewers and the editor may have identified several points for further clarification and analysis. The author is asked to revise the paper to address these points. The revised paper would be accepted for publication.

The *reject* decision means that the reviewers and/or editor considered the paper to include flaws in conception, design, or execution or that the research problem, focus, and question did not address a very important issue. For journals with high rejection rates, papers are usually not rejected because they are flagrantly flawed in design. Rather, the importance of the study, the suitability of the methods for the questions, and specific methodological and design decisions conspire to serve as the basis for the decision.

The *reject–resubmit decision* may be used if several issues emerged that raise questions about the research and the design. In a sense, the study may be viewed as basically sound and important but many significant questions preclude definitive evaluation. The author may be invited to prepare an extensively revised version that includes further procedural details, additional data analyses, and clarification of many decision points pivotal to the findings and conclusions. The revised manuscript may be re-entered into the review process and evaluated again as if it were new. On other occasions, the manuscript may be resent to reviewers familiar with the prior version. Less often the editor may make an executive decision and accept or reject the manuscript without outside input.

Of the three letters, clearly a rejection letter is the most commonly received. Authors, and perhaps new authors in particular, are insufficiently prepared for this feature of the journal publication business.⁴ Journals often publish their rejection

⁴ Excellent readings are available to prepare the author for the journal review process (*The Trial* by Kafka, *The Myth of Sisyphus* by Camus, *Inferno* by Dante, and *Nausea* by Sartre). Some experiences (e.g., root canal without an anesthetic, bungee jumping with a cord that does not stretch in any way, income tax audit) also are touted to be helpful because they evoke reactions that mimic those experienced when reading reviews of one manuscript.

rates, i.e., proportion of submitted manuscripts that are rejected, and this figure can be quite high (e.g., 70–90 percent). Often the prestige value of the journal is in part based on the high rejection rate. Yet, the rate is ambiguous at best because of self-screening among potential authors. For example, for very prestigious publication outlets (e.g., *Psychological Review*, *Science*) where psychological papers are published, the rejection rates cannot consider the fact that most authors are not likely to even try that outlet if they have a contribution that falls within the topic and format domain. Rejection rates across journals are not directly comparable. Even so, the rates give the would-be author the approximate odds if one enters the fray.

Although beyond our purpose, the review process deserves passing comment. The entire process of manuscript submission, review, and publication has been heavily lamented, debated, and criticized. The peer-review process has a long history as an effort of quality control over the content and standards of what is published (Spier, 2002). The topic is central to science broadly and continues to be assessed, commented on, and evaluated with efforts to alter or improve the processes (e.g., Elson et al., 2020; Kirman et al., 2019). The alternatives to peer review (e.g., no review, judgment by one person such as the editor) have their own liabilities. Many journals invoke procedures where the identity of the authors and the reviewers is masked, i.e., names are not included on the manuscript sent to reviewers or the reviews sent to authors. The goal is to try to limit some of the human factors that can operate about responses to a person, name, or other facet and to allow reviewers to be candid in their evaluations without worrying about facing the colleague who will never speak to them again. The peer-review system is far from perfect. The imperfections and biases of peer review, the lack of agreement between reviewers of a given paper, the influence of variables (e.g., prestige value of the author's institution, number of citations of one's prior work within the manuscript) on decisions of reviewers, and the control that reviewers and editors exert over authors have been endlessly vigorously discussed (e.g., Bailar & Patterson, 1985; Benos et al., 2007; Cicchetti, 1991; Smith, 2006; Stahel & Moore, 2014).

Understanding the review process can be aided by underscoring the one salient characteristic that authors, reviewers, and editors share, to wit, they are all human. This means that they (we) vary widely in skills, expertise, perspectives, sensitivities, motives, and abilities to communicate. Science is an enterprise of people and hence cannot be divorced from subjectivity and judgment. In noting subjectivity in the manuscript review and evaluation process, there is a false implication of arbitrariness and fiat. Quality research often rises to the top and opinions of quality over time are not idiosyncratic. Think of the peer-review process as the home-plate umpire in a baseball game. Any given call (e.g., strike) may be incorrect, arguable, and misguided. And any given pitcher or batter suffers unfairly as a result of that call. As reviewers (the umpires) make the call on your manuscript (rejection, you strike out), you too may have that occasional bad call. But over time, it is unlikely that all manuscripts an author submits receive a misguided call. Pitchers and batters earn their reputations by seeing how they perform over time, across many umpires, and

many games. One looks for patterns to emerge, and this can be seen in the publication record of an active researcher.

6.2 You Receive the Reviews

Alas, the editorial process is completed (typically within three months after manuscript submission) and the reviews are in. You receive an email (or in olden days a printed letter) from the editor noting whether the paper is accepted for publication and if not whether it might be if suitably revised. It is possible that the letter will say the manuscript is accepted as is (no further changes) and praise you for your brilliance. The letter may comment further that the reviewers were awed by how the study was executed and how well the manuscript was written. If this occurs, it is the middle of the night and you are dreaming. Remain in this wonderfully pleasant state as long as you can. When you awake, your spouse, partner, or significant ($p < .05$) other reads the email and you read one of the three decisions noted previously.

If the manuscript is accepted, usually some changes are needed. These do not raise problems. More often than not, the manuscript is rejected. There are individual differences in how one reacts to this decision. Typically, one feels at least one of these: miffed, misunderstood, frustrated, or angry at the reviewers. Usually one has only the email comments and has limited avenues (e.g., scrutiny of the phrasing and language) for trying to identify who could have possibly rejected the manuscript. If a hard (printed) version of the reviews was sent to you, one can scrutinize the font style, key words, possible DNA remnants of the reviewers' comments sheets, and molecules on the pages that might reveal pollutants associated with a specific city in the country. (I myself would never stoop to such behaviors but I have a "friend" who, over the years, was able to identify two not-so-friendly reviewers who unwittingly left clues that I – I mean my friend – was able to decipher.) To handle a rejection verdict, some authors select one of the very effective psychotherapies or medications for depression; others use coping strategies (e.g., anger management training, stress inoculation therapy) or complementary and integrative medicines (e.g., acupuncture, mineral baths, vegan enemas). (I myself use all these routinely with their order balanced in a Hyper-Graeco-Latin Square Design.)

The task is to publish one's work. Consequently, it is useful and important to take from the reviews all one can to revise the manuscript. Maladaptive cognitions can harm the process. For example, when reading a review, the author might say, the reviewer misunderstood what I did or did not read this or that critical part. These claims may be true, but the onus is always on the author to make the study, its rationale and procedures, patently clear. A misunderstanding by a reviewer is likely to serve as a preview of the reactions of many other readers of the article. Indeed, most readers may not read with the care and scrutiny of the reviewers. If the author feels a rejected manuscript can be revised to address the key concerns, by all means write to the editor and explain this in detail and without righteous indignation and affect.

Authors often are frustrated at the reactions of reviewers. In reading the reactions of reviewers, the authors usually recognize and acknowledge the value of providing more details (e.g., further information about the participants or procedures). This is the descriptive facet of manuscript preparation I discussed previously. However, when the requests pertain to explanation and contextualization, authors are more likely to be baffled or defensive. This reaction may be reasonable because much less attention is given to these facets in graduate training and explanation and contextualization are much less straightforward. Also, reviewers' comments and editorial decision letters may not be explicit about the need for explanation and contextualization. For example, some of the more general reactions of reviewers are often reflected in comments such as: "Nothing in the manuscript is new," "I fail to see the importance of the study," or "This study has already been done in a much better way by others."⁵ In fact, the characterizations may be true. Authors (e.g., me) often feel like they are victims of reviewers who wore sleep masks when they read the manuscript, did not grasp key points, and have had little exposure to, let alone mastery of, the pertinent literature. Occasionally two or more of these are true.

As often as not, it is the reviewers who might more appropriately give the victim speech. The comments I noted are great signs that the author has not made the connections among the extant literature and this study and integrated the substantive, methodological, and data-analytic features in a cohesive and thematic way. Reviewers' comments and less than extravagant praise often reflect the extent to which the author has failed to contextualize the study to mitigate these reactions. The lesson for preparing and evaluating research reports is clear. Describing a study does not establish its contribution to the field, no matter how strongly the author feels that the study is a first.

Let us assume that the manuscript was rejected with an invitation to resubmit. As a rule, I try to incorporate as many of the reviewers' and editor's recommendations as possible. My view is that the reviewer may be idiosyncratic, but more likely represents a constituency that might read the article. If I can address several or all issues, clarify procedures that I thought were already perfectly clear, and elaborate a rationale or two, it is advisable to do so. Free advice from reviewers can and ought to be used to one's advantage.

There are likely to be aspects of the reviews one cannot address. Perhaps reviewers provide conflicting recommendations, or a manuscript page limit precludes addressing or elaborating a specific point. Even more importantly, perhaps as an author one strongly disagrees with the point. Mention these in the letter to the editor that accompanies the revised manuscript. Explain what revisions were or were not made and why. If there are large revisions that alter the text (few sentences), methods or data analyses, help the editor by noting where the change can be found in the manuscript and even submit an extra copy of the manuscript in which the changes are tracked in some editing/word-processing system.

⁵ Thanks to my dissertation committee for letting me quote from their comments.

The investigator may receive a rejection letter and decide simply to submit the manuscript as is to another journal. I believe this is generally unwise. If there are fairly detailed reviews, it is to the author's advantage to incorporate key and often not-so-key points, even if the manuscript is to go to another journal. I have often seen the same manuscript (not mine) rejected from two different journals in which there were no changes after the rejection from the first journal. The authors could have greatly improved the likelihood of publication in the second journal but were a bit stubborn about making any revisions. Even if the manuscript were to be accepted as is in the second journal, it is still likely the author missed an opportunity to make improvements after the first set of reviews was provided. In general, try to take all the recommendations and criticisms from the reviews and convert them to facets that can improve the manuscript. Obstacles to this process may stem from our natural defensive reactions as authors or a negativity bias and the occasional brutish way in which reviewers convey cogent points. (I remember being highly offended the first two or three times reviewers noted such comments, "the author [me] would not recognize a hypothesis if it fell on his lap" and "the design of this study raises very important issues, such as whether it is too late for the author [me] to consider a career change." I have come to refer to all this as the *pier*-review process to underscore how often reviewers have made me want to jump off one.)

There is an additional reason to encourage taking advantage of the review process and trying to improve a manuscript we might think is perfect. For those researchers who remain in academia, one's published studies occasionally are read as part of a promotion process. As an author we might feel relieved that a study or two was published and view that automatically as things are great. In some ways it does, but as this study is read later we still want to be sure the case was made in a compelling fashion and reviewer suggestions might help. My view is to incorporate as many recommendations, changes, and comments as possible. I begin with the view that reviewers are experts and their recommendations, concerns, and misunderstandings are facets of the manuscript it behooves me to address.

It is worthwhile and highly rewarding to publish one's research. The process takes time and persistence. Also, contact with others through the review process can greatly improve one's work. In my own case, reading the reviews occasionally has stimulated the next studies that I carried out. In one case, I befriended a person who had been a reviewer of my work earlier in my career. Over time and from following his work, it was very clear that he was behind an influential review although his identity had been masked. Years later over dinner, I mentioned his review in a distant past, the study it generated, and the very interesting results and, of course, expressed my gratitude. His suggestion actually led to a few studies. (His review of my manuscript was not entirely positive, which probably is the main reason I hid in the bathroom of the restaurant until he paid the check for dinner.) The lesson is more than getting one's manuscript published. Reviews can be very educational and it is useful to let the comments sit for a while until the rage over rejection subsides.

The journal review process is not the only way to obtain input on one's manuscript. Once in a while, I send a penultimate draft of a manuscript to experts in the field whom I do not know. I convey in a letter what I am trying to accomplish and ask if they would provide feedback. I have done this on several occasions and cannot recall any colleague who has refused to provide comments. The comments are usually detailed and quite constructive and have a different tone from those that emanate from the journal review process. The comments in turn can be used to devise the version that is submitted for publication.

5. Closing Comments

Designing and completing a study requires many skills. Publication and communication of results of research represent a separate set of skills and most of these skills are not mentioned or detailed in graduate training. I have mentioned three tasks that are involved in preparing a manuscript for journal publication: description, explanation, and contextualization of the study. The writing we are routinely taught in science focuses on description, but the other portions are central as well and determine whether a study not only appears to be important but also in fact actually is. Recommendations were made in what to address and how to incorporate description, explanation, and contextualization within the different sections of a manuscript (e.g., Introduction, Method).

It is often useful to identify a model study from one's own reading that nicely integrates description, explanation, and contextualization. Read this paper for content and then evaluate sections and paragraphs from a higher level of abstraction. What does this paragraph accomplish in leading to the next section, what did the author do to make the case for the study, how did she keep the same story line of the Introduction, Results, and Discussion very clear, and so on? These meta-level questions can help identify a template to better operationalize points I have emphasized.

Another way to approach the task of preparing the manuscript is to consider the set of questions that ought to be addressed. Questions were provided to direct the researcher to the types of issues reviewers are likely to ask about a manuscript. I mentioned the many guidelines now that govern research. These guidelines sometimes must be followed as a matter of policy for various journals. The guidelines are useful in relation to identifying key facets of a study and a report that need to be addressed including clarity of all facets of the study, transparency of procedures, ethical issues and attention to participants, and others. All these facets are obviously important, but they are more focused on description rather than explanation and contextualization. As you prepare the manuscript, give great attention to these latter components because these areas are likely to be the Achilles heel as the manuscript is evaluated for publication.

Publication of one's research has many rewards. Certainly salient among them are generating new knowledge. There is a canvas of ignorance that is still mostly blank and one's research can paint one stroke. That is hugely rewarding. Added

external rewards are often available as well. Fame and fortune are not likely, but one's publication record can contribute directly to job and job promotion and the opportunity to work with students at all levels and postdoctoral researchers who join in and improve the work by their ideas. Research also helps one's own thinking that began with conceptualization of the study and an effort to better understand the phenomenon. Writing up the results often helps to extend one's own thinking further and hence is a critical step in the next study or in conceptualization of the topic or area. This is a reciprocal process where we too are influenced by the publications of others and hopefully exert influence with our own publications. In short, publication is not just about publication but is a gateway experience that fosters many additional fulfilling activities including participation in the larger scientific agenda and community.

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1. Introduction: Becoming a Teacher

Teaching is one of the legs in the academic tripod, along with research and service. As a typical academic psychologist, you will find that teaching will occupy a significant percentage of your time, despite the fact that you may never get any formal training in pedagogy. Today, with increasing numbers of universities offering training in teaching to graduate students, more people are starting their professional careers prepared to teach. Some psychology graduate students receive teaching preparation directly from their departmental mentors and take part in training organized by a campus center for teaching and learning. In either case, the process of becoming a teacher – of learning how to reach students in ways that allow them to grow and flourish – begins and ends with your commitment to develop the skills and habits of mind of an expert teacher.

Graduate students who attend rigorously to this kind of training and mentoring are fortunate; regardless of their innate success with students, they are better able to articulate the elements of their craft, they enter the job market ready to teach well, and they have a much easier time making the transition from student to academic professional. They are also more likely to be in control of the teaching process in a way that allows them to vary the style they use and the amount of time they spend on teaching, while maintaining a very high standard for themselves and their students.

Due to the vagaries of the job market, new assistant professors may find themselves at institutions with vastly different teaching cultures and expectations from where they were trained. Faculty members who never mastered the art of their own teaching are more likely to struggle with the adaptation. What is worse is that this burden can last a long time, creating a career hampered by a hostile relationship with “teaching load” – never giving their full potential to students, and never achieving the rewards of great teaching that so many senior faculty experience (McKeatchie, 1999).

Teaching well is important throughout your career, but it is particularly important in the early years. The “publish or perish” scenario that once applied only to highly competitive research universities now applies to almost all academics, even those who chose careers in teaching-oriented, liberal arts colleges. Increasingly, new psychology PhDs are seeking short-term, adjunct faculty positions for reasons of preference or necessity. These per/course positions are typically free of pressure to publish. However, in certain markets, good adjunct faculty positions are competitive and the standards for hiring are quite high. Some schools can use active publication as a standard for hiring adjuncts, while others are not simply looking for credentialed scholars – they are looking for scholars with proof of excellent teaching. In either case, the more desirable full-time and part-time teaching opportunities are going to people who have proof of success in the classroom and in the lab. In today’s market, schools can overlook the scholar who neglects teaching or who hasn’t had time to publish because they are still trying to figure out how to teach.

For starters, you have to choose what kind of teacher you will be. As you take classes and serve as a TA in others, begin to develop your own teaching values and priorities. Look at what students are doing during class, how they approach the subject, and what they are learning. Ask yourself what you want for your students when you are a teacher. To be consistently effective in the classroom, it is helpful to know who you are as a teacher and understand the assumptions and core values you bring to the process of teaching (Brookfield, 1995). This reflective process may seem esoteric, but be assured, it is not. One can easily design a class based on the activities of teaching and learning without giving a lot of thought to the “why.” But when unusual things start to happen in your classroom, and they always do, having a deep understanding of your basic assumptions about students, learning, authority, fairness, and purpose, etc. will give a solid foundation for action. As a graduate student, it is a good idea to reflect on the following:

- Why do I teach psychology? What is the essential value to my students of studying psychology with me?
- What is my role as a teacher, and what does that mean for the relationship I will have with my students?
- What sort of behaviors do I expect of students? How do I expect to be treated? How do I expect students to treat each other?
- What is the nature of my authority in the classroom?

The fact remains that the time you devote to teaching will have to come from some other important endeavor, like research. If the price for that trade-off seems terribly high, consider the following:

- Evolving methods of teaching assessment are allowing schools to give greater weight to quality teaching at hiring, promotion, and tenure time.
- Teaching, like any skill, becomes easier as you get better. Skilled teachers can achieve great results with less time and effort than unskilled teachers.

- As a new professor, a reputation for good teaching allows you to attract graduate students and talented undergraduates to you and your work. This can create enormous professional benefits at a time when you really need them.
- Teaching well is a joy. Teaching poorly is a burden, or worse, a drain on your time and energy.
- The time you devote to teaching this year will pay off in time you can devote to other things next year and in the years to come.

Many of the resources on teaching, including this chapter, are sufficiently general to apply across a variety of subject areas. Nevertheless, as you explore each resource, you may wish to keep in mind some ways in which teaching psychology poses special challenges and opportunities.

- Psychology may attract students who are unusually introspective and seek to use introspection as a source of evidence.
- Psychology students will have strong intuitions or preconceptions about human psychology, and some of those preconceptions may be strongly held and resistant to change. A similar consideration is relevant across most social sciences, and some humanities (where, e.g., students may have strong convictions about historical narratives), but is probably of lesser importance in the natural sciences. (It would be an unusual student that had strong personal commitments to particular concepts in organic chemistry, and it's been centuries since we've seen committed Aristotelians put up a fuss over the laws of motions in classical mechanics.)
- Issues of inference from evidence (statistical and otherwise) are especially challenging because the data in much of psychology are so noisy.

The three special challenges combine to bring epistemology closer to the surface in the study of psychology than in many other disciplines. This presents tremendous opportunities to teachers to address fundamental questions about the nature of knowledge, but also imposes a burden of addressing epistemological issues in introductory courses where many students are not prepared to deal with them.

At some point in your career, you will be faced with the tasks of designing and teaching your own class. In our experience, this is a key moment in the development of a teacher. The remainder of this chapter contains tips and strategies for success in this critical moment. These suggestions point to many different styles of teaching, all of which have proven effective in their own way.

One concept unifies every idea herein, and that is this: That the goal of a great class is not to cover material or get through the book. It is to reach students in ways that will help them learn (Bain, 2004). Your goal, as you gain more teaching experience, is to figure out what learning psychology means for you and how you want your students to be different – smarter, wiser, more reflective, more skilled, more appreciative, more critical – as a result of being in class. Then, you must learn ways to help students achieve those goals (Wiggins & McTighe, 2005).

2. Five Steps to Designing a College Course in Psychology

2.1 Step One: Consider the Institution, the Curriculum, and the Students

It is helpful to take a realistic look at the academic culture of the place where you are teaching. You can build on your own observations by consulting with colleagues, and from students themselves, about habits, practices, and expectations that are most common (Nilson, 2010). If you are new to an institution, you may be surprised at the norms for teaching and even more surprised at how students typically approach their learning. Some norms are part of the formal institutional structure, such as the lecture/section method used at many research institutions, or the types of assignments given within a certain curriculum. Other norms arise informally, and are passed down from student to student, and from teacher to teacher.

The purpose of understanding teaching and learning norms is not to copy what has been done before, but to anticipate how your pedagogical choices will be received. If you are new to a campus, AND you are asking students to learn in a whole new way, you may want to ease them into the change and be prepared for a little resistance. It is not always easy to discern the norms and culture of an institution, and you may want to take some assertive steps to get the information you need. We suggest talking to as many colleagues and students as you can. Here are some questions you might ask:

- How much of the reading will students do?
- What kinds of lectures are students used to? PowerPoint? Stand-up comedy?
- Is there precedent for students working together in groups? Do they do group projects?
- What kinds of assignments are typical? Long, formal, end-of-term papers or shorter, more targeted essays and exercises?
- How much of the teaching is experiential? Formal? Innovative?

Once you have a better sense of the context in which you are teaching, you can consider your goals and determine ways to achieve them.

2.2 Step Two: Think about Who Your Students Are and How You Will Include All of Them

In the previous section, we discussed the importance of designing the course around student learning, focusing on cognitive elements that allow students to understand course goals and engage in activities that facilitate learning. But there is more to learning than cognition, because (a) students are more than mere thinkers – they are individuals with their own feelings and sense of themselves, (b) instructors are more than mere providers of knowledge – we bring our own identities, biases, and practices to the process of teaching, and (c) science is more than facts and theories – the psychological literature reflects the identities, biases and limitations of the scientists and the systems that created it. Unfortunately, teaching is an opportunity

to recreate and promulgate ideas and practices that, even in their desire to illuminate and explain, allow some students to experience affirmation and growth while others experience disenfranchisement and isolation.

There is a robust literature that explains the process by which schooling includes some students and excludes others, and provides guidance to instructors for making their teaching more inclusive. For example, the literature on Stereotype Threat (Steele, 2011) suggests the process by which the perception of cultural stereotypes results in different levels of performance among students. Building on the work of Maslow (1962), researchers in recent decades have been exploring the concept of students' sense of belonging as a variable that might determine motivation and engagement. This research suggests strategies of creating a more inclusive classroom (Strayhorn, 2012).

This research is ongoing and expanding. Consider becoming more familiar with the literature by reading one of the articles listed below. In the meantime, the following strategies will begin to help you address your students' sense of belonging:

- Get to know your students and give them a chance to be known in class using ice breakers and other activities that allow students to reveal themselves.
- Build one-on-one or small group office hours into your class early in the term.
- Articulate clearly and regularly your desire for everyone to learn. Focus especially on classroom discussions as places of learning and respect. Set standards of respect and fairness for all discourse that takes place in your classroom.

2.3 Step Three: Focus on Student Learning to Define the Overall Purpose of the Course

As implied above, there is enormous benefit in framing or defining your class around core learning goals (Diamond, 2008). Teachers experience renewed motivation in teaching when they move from a content-centered approach (i.e., getting through the material) to a learning-centered approach (i.e., helping students achieve). This renewed sense of purpose typically generates more creative and innovative approaches to classroom teaching, which, if nothing else, makes the process more interesting. In addition, teachers who successfully communicate their purpose to students may find their students have increased motivation and willingness to work and learn. In classes where the purpose seems to be defined around teacher's lectures and interests, students are more likely to feel like and act like spectators. However, when a class and all its activities are defined around student learning, students are more likely to feel engaged and act like interested participants (Nilson, p. 18, 2010).

The process of defining your goals and objectives begins by asking yourself *how you want your students to be different by the end of the course*. This holistic approach to thinking about change in students is the first step in Backward Design of your course, a design strategy that begins with the most important aspect of your course, your goals for your students (Wiggins and McTighe, 2005). The difficulty in accomplishing this stems from the challenge of figuring out which goals are most important,

and how some goals are prerequisite to other goals. In addition, teachers typically have objectives of different types. For example, there may be facts we want students to know, or skills we want them to acquire or feelings and appreciations we hope they develop. We may also have goals around how students experience us, our course, and our field, and all of these might reflect our own values and beliefs about undergraduate education. All of these goals should be part of your inventory, but then, as mentioned above, the challenge is making sense of them, giving certain goals priority, and turning them into a plan of action. One way to do this is to define a large, terminal goal – the main objective you want your students to be able to achieve by the end of the course – and then work backward, identifying as many of the subordinate skills students will need as you can. Here is an example:

Terminal Goal or Objective: I want my students to demonstrate the ability to use data and reasoning to address a major issue in public health, education or social policy.

Subordinate Goals or Abilities: In order to complete the Terminal Objective, my students will need to demonstrate the following:

- The ability to distinguish among different sub-areas of psychology.
- The ability to critically evaluate social science findings reported in journals or the popular press.
- The ability to write at least three paragraphs that demonstrate the distinction between observation and inference.
- The ability to articulate the power and complexity of experimental design.
- The ability to identify 10 threats to validity in a well-respected journal article.
- The ability to apply the scientific method to questions about human behavior, and be able to identify misapplications of the method.

Notice that in the example above, the emphasis is on the demonstration of well-defined abilities. The common trap of many teachers is their tendency to define their goals in terms of what students will “understand” without defining the depth and breadth of the understanding, nor the way that the understanding will be demonstrated. The complexity of the learning process, and the fact that all of our students start out with different skills, prior knowledge, and approaches to learning, make teaching difficult to begin with. However, the more clearly you can define the skills and abilities that students should acquire during a semester, as well as how each and every activity and assignment furthers those goals, the more likely your students are to actually learn something (Mayer et al., 2001). Notice also that, in the example, the Terminal Goal has a real-world application. It is the kind of task that might motivate students because it addresses a practice with which they are familiar. The Subordinate Goals are less real-world, more academic, but if you organize the course around the more engaging applications of the Terminal Goal, students will be more motivated to develop subordinate skills.

To highlight the process of thinking about institutions, curriculum, and students, it is helpful to contrast the differences between introductory and advanced courses and to illustrate how one might design an engaging and successful class for each.

In psychology, as in other disciplines, there are predictable differences between the approach to introductory and advanced courses in the field. Introductory course enrollments are typically large and therefore courses are taught in a lecture format. The aim of many introductory courses is to expose students to a breadth of content and to introduce students to a large set of basic concepts and foundational facts, and to test their abilities to comprehend them. Assessment often involves some kind of objective tests with a combination of multiple choice and short answer items. This may not be the best way to introduce students to the field of psychology, but as it is a common practice, it is a good place to start.

Recently, instructors and scholars have noticed some failings in this mode of introductory psychology course. First, the pedagogical process is not very interesting or engaging, making it a poor way to attract students to the field, which is an important yet often unrecognized departmental goal for any introductory course. Second, this mode of pedagogy gives students little introduction to the work that psychologists actually do. A student who is wondering what it's like to be a researcher or a psychological practitioner will get no feel for what that work is actually like. Finally, the process of listening to lectures and taking tests is not very engaging for students. Many students in an introductory class will be freshmen who are new to college. These students would benefit from learning to apply theories and critique ideas. They would also benefit from practicing these skills with other students with whom they could make connections. It's true that a fiery, dynamic lecturer can generate interest by sheer force of personality and entertainment value, but a conscientious designer of introductory courses would want to build a course that benefits the institution, the department, and the students. Consider the following approaches:

- Build the course around some big questions or themes that have relevance for students.
- Learn to use small-group or paired-work exercises in your large lecture course. Break up the lecture and get students working on interesting questions together. This is especially crucial if your class meets for more than 50 minutes at a shot.
- If you have to use objective tests as your primary mode of assessment, try to create an assignment during the semester that allows students to explore their own interests. Even in the big class, find a way to see or acknowledge every student.
- If you are going to lecture, lecture really well. If you don't know how well you lecture, have a colleague or consultant observe you. Once you've mastered the art of delivery, design lectures around the most interesting feature of any chapter. Tell stories. Find a way to demonstrate a concept or give students a chance to experience it.
- Use end-of-class assessment activities and ungraded writing, e.g., one-minute paper assignments, to help students realize what they have learned in every class.

Advanced courses, in contrast, are more likely to be well designed for the interests of students and the institution. They are typically small, sometimes very

small. The aim is to explore one area of psychology in detail through reading, lecture, discussion, and sometimes active experimentation. Students are often asked to design experiments or engage in psychological practices, and write longer, journal-length papers – in other words, to start doing some of the real activities that psychologists do. Another goal may be to test for advanced analytical abilities and to assess students' capacity to integrate and synthesize theories and methodological approaches. Many advanced or capstone courses may also be designed to socialize students into the values and norms of the field.

2.4 Step Four: Develop a Course Plan that Pulls Everything Together

Every course has multiple elements: purposes and goals, motivation and incentives, content, activities, and assessments and grading are just a sampling. The end product of a course plan is a course syllabus in which you and your students should be able to identify all of these elements. As a course designer, you should consider how each element of the course fits together or aligns, and how subsequent elements of the course build on previous elements (Wulff, 2005). The degree to which your pedagogical plan is transparent to students is an issue we will discuss in a later section. For now, consider using the questions below to develop your plan for how you will teach each aspect of the course.

- What is the purpose of this section or chapter (develop a skill, practice a technique, master an area of knowledge)?
- How will I motivate students to learn this? Is the material or skill innately interesting or valuable? What does it teach students to do? Will students benefit from a demonstration or model? Will I use a graded test or assignment to increase motivation?
- What new information will students need (theories, studies, examples, etc.) and how will they get it (lecture, reading, video, observation, etc.)?
- What action will students perform on that new information (write about it, discuss it with peers, experiment on it, reflect on it, etc.)?
- How will I assess what students are learning (graded paper, ungraded written assignment, observation)?

2.5 Step Five: Write a Course Syllabus that Establishes a Contract between You and Your Students

The final step in designing a course is the presentation of the syllabus. The syllabus accomplishes one essential goal: it supplies students with all the information they need in order to understand and complete the course in a way that helps them set their expectations and guide their behavior. It can be useful to think of the syllabus as an informal contract between you and your students.

There are many styles of syllabi. Some faculty members choose to put everything in writing, including the purpose of the course and the rationale for its design, while

others include just bare-bones logistical information about due dates, grade requirements, and texts. To help you decide how much detail to include, think about what is important to you and to your students. Also, use the syllabus as a reference or teaching tool throughout the semester. Tone and style are both personal choices; however, be aware that the tone of the syllabus does communicate something to your students. You've seen hundreds of syllabi in your lifetime, so we don't have to describe one. Still, you might want to consider these suggestions for writing a good one.

- Do not take for granted that your students know more about your institution than you do. Remember, many students in any classroom are just as new as you are. Avoid abbreviations and lingo. Remember, first-year students and part-time students may not be familiar with nicknames and other local jargon. Stick to the facts and include as many as you can.
- Highlight the most important ideas or processes of the course. Don't be afraid to include some big ideas in the syllabus, especially if they provide a context or purpose for the course.
- Build your weekly calendar around questions rather than topics.
- Edit carefully the calendar information you include. Be aware of holidays and other campus activities. Remember, students will use this syllabus to plan their semester.
- Make the document as useful as possible, so that students will keep it and look to it often. Whether on paper or on the web, the syllabus should be a useful document that you and your students refer to because it has good, reliable information.
- Build the weekly items in your syllabus around questions to be answered rather than topics to be covered.

3. Some Practical Considerations in Creating a Course

Once a faculty member establishes goals and rationales for a course, the pragmatic steps and choices become much easier. In the alternative, the structure of the text or the vagaries of semester calendar end up driving the purpose of the class, which is not ideal. In this section, we discuss four choices that every faculty member has to make: textbooks and readings; use of class time; assignments and other out-of-class work; and grading.

3.1 Choose a Textbook, Readings, and Resources that Help You Teach

The trick here is to resist the temptation to let the tail wag the dog by allowing the content and structure of the text to structure the goals of your course. Few faculty members ever find the perfect textbook until they break down and author their own, and even then, there always seems to be something out of place, missing, or

overemphasized. Most instructors use supplemental readings and digital resources to add emphasis and to provide students with more varied ways of learning material.

Some easy ways to find a respectable pool of good textbooks to consider are: ask your colleagues to make recommendations (they will know the level and type of textbook students at your institution are used to, and they may even have direct experience teaching with that book); the core collection or reserve room of the library will have copies of all the textbooks currently in use; write to publishers for review copies of books you have heard of or seen advertised; consult an online resource, e.g., A Compendium of Introductory Psychology Texts at <http://teachpsych.org/otrp/resources>.

Your first consideration is the content. You cannot teach effectively from a book that you neither respect nor agree with, unless you design the entire course around debunking the text, which many students find confusing. This does not mean that you have to agree with everything the authors present. Allowing students to see you display a little healthy disagreement with authority of the text is probably good for most students, but it should not be a daily ritual. Find a book that provides intelligent and scholarly treatment of most topics, and that does so in language that you and your students can understand and appreciate. If the book organizes material in a way that advances your understanding of things, then you have an additional advantage. Quality of content is the most important consideration, but textbooks contain many other qualities that can help you teach more effectively. Some of these include: illustrative examples that explain concepts in various ways; exercises and activities that you can use during class or as out-of-class assignments; side bars and special inserts that discuss related topics like teaching students about the field, real-life or policy applications, personal biographies of researchers or historically important research. Most books these days also include student study aids, such as review questions or self-test. A textbook today may include an online supplement that can help you develop lectures or add vibrant visual material to the class. Where cost is an important consideration, consider using one of the increasing number of “open-source” or royalty-free textbooks available in electronic form. Textbooks come with myriad bells and whistles, not all of which will be helpful. Remember, the book is just a tool to help you teach better. It is not the entire class, nor is it a script that you have to follow. On the other hand, students are used to focusing on “the book” and looking to it for answers and guidance, so you are smart to get one that really complements your approach.

3.2 Be Smart and Creative in Your Use of Class Time

There are many things you can do with class time other than lecture. Class time is your most valuable teaching commodity, but to make the most of it, we need to design it in the context of what students will do in other settings such as read, do homework, or work with other students. With this in mind, class time is probably not the best time for students to encounter new material for the first time. Research in science education, for example, suggests that class time is a good opportunity to let

students work together, and for you to observe students at work and give them timely appropriate feedback (Deslauriers et al., 2011). If you are a stimulating lecturer who can motivate, stimulate, and inspire students to greater heights of academic achievement, then some amount of lecture will likely serve you and your students well. But uninspired lectures that simply cover material, particularly material that can be learned by reading or watching a video, are a poor use of valuable time with students. If you need to introduce or review material, do it quickly – within 15 or 20 minutes. Use the remainder of the time to:

- organize small-group tasks that allow students to engage or question material; or
- all-class discussions about interesting controversial topics. These can be organized as debates, or extended role-play exercises that ask students to take the perspective of a point of view or theoretical orientation; or
- demonstrations with discussion and analysis.

The design of class time is even more important if your class is longer than 50 minutes or only meets once a week. In these cases, it is important to break the class into clear segments with clear goals.

Class time with students is a valuable resource that you must steward with advanced planning. Design your class so that students arrive with questions or insights they have gleaned on their own. Use class time to give students a chance to practice analyzing theories, applying concepts, building models, or simply answering questions. Some good examples appear below.

3.3 Design Assignments that Allow Students to Make Better Use of Class Time

Students spend more time completing assignments than any other aspect of school, so it is vital that assignments require students to do significant, targeted, academic work. Students' performance on assignments can be improved by connecting some aspect of the assignment to the work students will do in class the next day. For example, if students are writing reports on research articles, have them use some aspect of those reports to do an in-class analysis. Motivation can be further increased by setting up in-class peer groups that require individuals to come to class prepared. As you begin to develop your first assignments, look back on some of the assignments you were given, and ask colleagues for their ideas. Consider the assignments that are typically used in psychology classes – the research report, the case analysis, compare and contrast, journal article review, lab report – because these are forms that may be familiar to students. Then focus on the specific goals and objectives you have created for that section of that course, and modify the assignment in the following ways.

- Consider designing a series of assignments that build students' skills over the course of term.
- Align what students are doing in their assignments with what they are doing in class. Students can practice modes of analysis in class that they can apply to

assignments. Conversely, students build expertise in assignments that they use to participate in class. Make these connections clear to students.

- Match the length, difficulty, and scope of the task to the skills you want students to demonstrate. Shorter, focused assignments typically offer more stimulating educational experiences than longer, more complex works. At some point, it may become necessary for undergraduates to demonstrate their ability to sustain an analysis or project for over 40 pages, but such work is often done as an undergraduate thesis or capstone project.
- Communicate the purpose of the assignment in clear terms of high academic standards. Focus on what students are accomplishing for themselves.
- Effective assignments are clearly defined and have well-established standards. It does no good to wait until you grade a paper to tell students what you were looking for.
- Effective assignments are no larger than the skills they are designed to teach. Don't ask students to produce huge products and long papers to demonstrate small skills over and over again.
- Effective assignments produce real products, with form and structure. Rather than asking students to write a 5-page paper on X, ask them to write up a case analysis or grant proposal, mock legal brief, committee report, letter to the editor, or a publishable book review.
- Effective assignments may make use of imagination and perspective, ask students to take on a role and write from that perspective, e.g., take the role of a patient, or speculate on a hypothetical situation.
- Effective assignments combine the demonstration of well-defined skills and abilities with opportunities for creativity, uniqueness and personal expression.
- Effective assignments ask students to demonstrate skills that are directly related to the core goals of the course. That is, students should have to rely on what they learned in class to successfully complete an assignment.
- Effective assignments often include students working in pairs or teams, although students should be individually accountable for their own work and their own grades.

3.4 Use Assessment and Grading to Review Students' Work and Give them Necessary Feedback

Grading students' work effectively is a critically important part of teaching, and not easily done. First of all, let's define our practice. Assessment is the practice of critically reviewing students' performance. It can be formal or informal. It can result in constructive feedback, or simply a shift in our perception. Assessments, such as ungraded quizzes or "clicker" questions, can also be used to help students assess their own understanding. Assessments are powerful teaching tools. They keep teachers and students connected to learning and they provide both with valuable guidelines for how to succeed.

Sometimes, as with formal tests, quizzes, and papers, our assessments result in grades. Grades are fraught because they are typically associated with formal, institutional records. In other words, they have lasting consequences. All assessments should be accurate, fair, constructive, and timely, but grades need to be especially so. Like it not, they are a big part of what motivates students to work. Because of that, the achievement of grades should be based on your central values and objectives for whatever course you teach. Here are some suggestions.

- Grading begins with your very first thoughts about the course. Once you identify the skills and abilities you want students to demonstrate, you must assign value to the achievement of those skills and to the partial achievement of those skills, and then translate that value into what every grading scheme your institution requires. Listed below are a set of considerations that you can apply to every assignment or test you grade, as well as to the overall grade.
- Establish and communicate specific standards for everything you grade. Inform students upfront what will be graded and how. Reaffirm those standards in the comments that accompany your grades. Remember, the primary purpose of grades is to give students useful feedback about their progress.
- Begin grading short assignments and in-class work early in the term. This will help students become familiar with your standards and their level of preparation.
- Establish ground rules to achieve fairness in grading. Inconsistency in rules and procedures will communicate favoritism and capriciousness. It is not necessary to establish rigid practices to achieve a sense of fairness; however, your rules must apply to all your students and in the same way.
- Grade a variety of student work. Make sure your grading structure reflects all of the objectives you have identified for the course. Naturally, you will want to give greater weight to the core objectives. However, you can keep students working and learning at a steady pace throughout the term if your grading scheme gives them continuous feedback about how well they are doing along the way.
- The grading of participation in class should, like all other grades, include clearly defined standards.

Remember that, under the best of circumstances, grading is difficult. Grading brings to the forefront a fundamental conflict inherent in our work as teachers. We are helpful guides, mentors, and coaches who work compassionately and tirelessly to help students master a new terrain; but we are also gatekeepers, charged with setting and enforcing standards for participating in a profession (Elbow, 1986). The tension between those two roles is enough to give all of us a knot in our gut when faced with a difficult grading task. The best way to mediate this conflict, fortunately, is relatively straightforward: set out clear standards that students must meet at the outset; then enjoy your role as helpful guide.

4. Teaching Psychology in an Age of Remote Instruction

The recent COVID epidemic has changed the landscape of teaching and learning. At the time of this writing, we are still in the midst of the pandemic, and remote teaching and learning are the norm. Once considered an option, technological teaching tools like Learning Management Systems, Zoom, Panopto, asynchronous learning, breakout rooms, and testing software, etc. are currently essential. In all likelihood, the technological tools of remote instruction will continue to be widely used post COVID. Some schools will increase their remote learning options and instructors who are once again in the classroom will enhance aspects of their teaching using the tools they learned out of necessity.

In this section, we provide some observations about our new, technology-enhanced learning environment and suggest some steps for successful teaching in the years ahead.

- Just as instructors used to articulate their facility with teaching large lecture courses or small seminars, instructors in the days ahead will, at the very least, discuss teaching with Zoom (or some similar platform), and using a Learning Management System such as Canvas. This is the new minimum.
- The pedagogical conversation among instructors has shifted dramatically toward what experts would call, “student-centered learning.” The move to remote learning has focused attention and conversation to key issues in learning, including: engaging students, sustaining motivation, building community, inclusivity and equity, and thinking about students’ learning environments.
- Attention to students’ access is higher, and instructors are thinking carefully about synchronous and asynchronous modes of learning.

The shift to remote teaching and learning has made online instruction ubiquitous. However, not all instructors were successful in their remote teaching efforts, which is fully understandable. Technology, online or otherwise, is like any other tool for enhancing student achievement (Manning & Johnson, 2011) – it is only as powerful as the thoughtfulness of the person using it. Consider the following as you engage in remote teaching or any other technology enhanced pedagogy.

1. Define your goals. In student-centered terms: what changes (learning or abilities) do I want to see in my students? What teaching/learning problem am I trying to solve with application of a technology?
2. Consider what tools are easily available (e.g., Zoom, and LMS, email, web, newsgroups, chat, multimedia software, discussion boards, etc.). What are the institutional resources you can draw upon? What tools are other psychology instructors using?
3. Define a strategy for integrating technology into the core learning of the class. Think about incentive structures to motivate student engagement within and across platforms and assignments.
4. Have a back-up plan. Issues of access and functionality can quickly undermine instructional plans that rely on technology. A great example is the use of

classroom discussions on Zoom. What if time zones or bandwidth limit student access? What are the asynchronous, limited-technology options for learning and completing assignments?

5. Assess how well your strategy has met your goals. Was the effort worth it? Did using this technology increase student learning or motivation?

When you consider the framework above, the answer to the question “When should I use technology in my teaching?” becomes straightforward: whenever it helps you achieve a clear pedagogical goal in a cost-effective way.

4.1 How Do I Get Started Using Instructional Technology in my Teaching?

Psychology researchers are often proud of being Jills-of-all trades. Many of our research projects call on a broad spectrum of skills, and we may often have to switch hats from manager, to programmer, to carpenter in a space of an afternoon. It’s tempting to bring some of those skills to bear on developing technological solutions to teaching problems. However, the costs of developing teaching technologies from scratch are often prohibitive (in terms of your time). Activities like website design may be fun for some of us, but they compete for scarce time with syllabus design, lesson planning, and student contact. Keeping it simple should be a paramount consideration for implementing any technological innovation.

At most universities, the shift to remote teaching has necessitated a vast expansion of technology services to instructors. It is likely that your psychology department will have its own staff of technologists and instructional designers who can assist you as needed. Get to know these people. In the meantime, consider that modern information technology has enabled some discipline-agnostic approaches for engaging students and facilitating reaching learning goals. For example:

- Novel approaches and tools for collaborative knowledge construction, like shared virtual whiteboards, allow small groups to engage in real-time interactions around a shared artifact to create collaborative mind-maps and other diagrammatic or narrative representations. Two widely available examples of such tools are gSlides and LucidChart.
- The availability of volunteer-driven knowledge creation and curation communities provides students an unprecedented chance to engage with the content as contributors. Consider, for example, class assignments that ask student teams to create or improve Wikipedia articles, create and manage new Reddit threads, or ask and answer Quora questions.

Both the discipline-specific and the discipline-agnostic tools have evolved at a phenomenal rate in the last decade, and make today an especially exciting time to use technology to accelerate the teaching of psychology.

5. Managing and Mentoring Teaching Assistants

In many ways, the Teaching Assistant (or Teaching Fellow or Graduate Student Instructor) is a strange creature whose role is rarely well defined. The TA walks the shadow world between colleague, student, and servant, as all apprentices must. It's the supervising professor who determines, often implicitly, which role a TA will play. The TA experience is likely to feel servile when their roles are unclear, their tasks menial, or when the TAs do not participate in setting goals of courses and sections they help teach. For example, TAs commonly feel least satisfied when they grade exams they've had no part in creating and papers they've had no part in assigning. On the other hand, a great relationship between faculty member and TA can be a graduate student's most rewarding experience. Supervising faculty can, and often do, have a profound impact on the lives and careers of their students by introducing them to teaching and the life of an academic.

Just as you may not have received training in undergraduate teaching, you almost certainly had no training in management or mentorship. Here are some strategies to help you become a better manager and mentor for your TAs.

- Meet with the TAs prior to the beginning of class. Explain your pedagogical goals and ask for their input. If the TAs will teach sections, ask them to articulate, preferably in writing, what their section will do for the students. Engage them in a conversation about their overall goals, as well as their emerging understandings about teaching and learning.
- If possible, involve your TAs in planning the course, the lessons, and the assignments. This will not only help you come up with better material, but will also be an invaluable learning experience for the future faculty members under your wing. The more invested each TA feels in the course the more rewarding the work will be. For example, you can have each TA give a guest lecture, then generate exam questions about the guest lecture, and grade the specific questions they've generated.
- Give your TAs more autonomy to run their section as they see fit. Once you have agreed on what the goals of the section are, let the TA experiment with means.
- Clarify expectations at the outset. What will the TAs do? What will they be trying to accomplish? How will they be evaluated?
- Give your TAs the support they need to function effectively. Usually this means meeting early and often, especially in the very beginning of the course. It also means keeping track of your end of the course paperwork, and clearly delegating various assignments to different TAs. For example, who will be responsible for compiling all the section grades at the end of the course?
- Offer to observe your TA's section to help them become better teachers.
- If your institution offers TA training and development, require your TAs to avail themselves of the training before teaching your course. Make it your business to let your TAs know about the resources available to them.
- If your TAs are responsible for grading, effectively delegate to them that authority. One of the most frequent and bitter complaints heard from TAs is

that course instructors summarily overrule their grading decisions without consultation. If you feel you have a question about a grading decision, meet with the TA about it. The TA will often have directly relevant information about the grade and the student in question. Remember, TAs probably know more about the students in their sections than you do.

- Once you have effectively delegated authority to your TAs, you must also hold them accountable for whatever tasks you have assigned. Lack of accountability leads to complaints from students. Some of those complaints will come to you, but others will go straight to your chair or dean. Rest assured, if these complaints become vociferous or numerous, you will be hear about it. Save yourself the headaches; have clear, fair standards and stick to them. Consider that effective delegation implies you have given the members of your team the freedom to fail, as well as to succeed.

Although successful delegation is difficult, the rewards are large. By investing energy in effective delegation, you will save time in the long run, develop better mentoring relationships with your TAs, and have a better class.

6. Conclusion

We hope this short introduction to teaching will help you navigate the uncertain waterways towards the land of confident and competent teaching. The first years are important, but don't be discouraged if they don't go well. Keep trying new things and asking for help. We've seen great teachers emerge after years of average performance. As a faculty member, teaching will be a big part of your life, so it's important to figure out how to do it well and also how to enjoy it. We've only scratched the surface in this chapter. Here are some additional resources:

- Your Campus Teaching Center. Chances are your campus has a teaching center with consultants who can help you define goals, think of strategies for meeting those goals, and observe your teaching. There, you are also likely to find a library of books on teaching, and access to a network of people on campus who can give you advice.
- The American Psychological Association, www.apa.org/. Type "teaching" into the search box for the latest articles on teaching in psychology.
- APS Resources for Teachers of Psychology, www.psychologicalscience.org/index.php/members/teaching
- The Society for the Teaching of Psychology, <http://teachpsych.org/>

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15 Applying for NIH Grants

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1. Introduction

One of the most important and daunting roles of the early academic is the pursuit of National Institutes of Health (NIH) grant funding. Although NIH funding allows for great autonomy and comes with validation and prestige, the process can feel overwhelming even for the most seasoned investigators. Therefore, being armed with information is crucial.

Most importantly, it is vital to keep in mind that applying for NIH funding is much more of a marathon than a sprint. Only, it is a marathon where there is no planned route, where you often realize you have been going in the wrong direction and have to double-back with few signs to assure you. In addition, it is a run in which everyone else also struggles at one time or another, but most are much more eager to talk of their success than their struggles. You will be questioned and second-guessed at every step by those evaluating your performance as well as your supporters, and you will be guaranteed to feel like you are stumbling across the finish line no matter how confident you were at the start.

With those caveats in place, it is a marathon with some tangible positives for those who are successful, including resources to do your research in the best way possible with an opportunity to build a research team of pre- and post-doctoral trainees and support staff, as well as better visibility in the research community and a big boost in the promotion and tenure process. Moreover, these scientific benefits also often come with financial support which may serve as the basis for your salary in an academic medical setting or allow you more time to devote to research through course buy-outs or summer salary support in a Psychology Department. Clearly, the pursuit of an NIH grant is a high-risk/high-reward venture that should not be entered into lightly, but also should be an option for anyone who is willing.

Aiming to provide a guide to NIH grants with the early stage investigator in mind, this chapter outlines many of the key issues you will tackle throughout the process. These include: (a) Developing Your Idea; (b) Finding the Right Mechanism for You and Your Idea; (c) Preparing Your Application; (d) Submission and Receipt

of Your Application; (e) The Review Process; and (f) Post-Review Strategies. We will address these issues in light of the recent changes in the NIH grant submission and review process to provide an objective source, complemented by our favorite tips for your consideration.

2. Developing Your Idea

A lot must go into moving from the first spark of an idea to the completion of a fully formed grant. A viable grant should begin with an idea that is well suited to your background and focused on a topic you know well. It is important to select research questions that will allow you to maximize your professional development and provide a chance to make your own “mark” on the field. Therefore, it is critical to consider how you can strategically develop your research to be programmatic in nature so that it will be sustaining and long-lasting, making numerous cumulative contributions to the field. While it is imperative to select a topic that fits with your expertise and interests, a successful NIH grant also must have clear public health relevance, a place within the scientific literature in that field, and potential to significantly advance the existing knowledge base.

Based on the review criteria we will discuss in detail later, key questions to consider when generating ideas include: How will this study be significant, exciting, or new? Is there a compelling rationale? Is there potential for high impact? How will aims be focused, clear, feasible, and not overly ambitious? How will the study clearly link to future directions? Have I demonstrated expertise or publications in line with the approach? Do I have collaborators who offer expertise to the proposed research? Do I have the necessary institutional support?

Once you get a bit further along in developing your idea, it can be helpful to talk to NIH staff, particularly staff who have a portfolio that includes similar types of grants. One way to see funded grants to ensure your research idea is reasonable (and also not already being done!) is NIH REPORTER (<http://projectreporter.nih.gov/reporter.cfm>). This electronic database provides information on NIH-funded research including titles, principal investigators, and abstracts. REPORTER is a means to get a snapshot of one’s field including possible collaborators and competitors.

3. Finding the Right Mechanism for You and Your Idea

A critical component of the idea development process is selecting the right grant mechanism. Similar to getting advice on your grant idea as noted above, you should consider checking with a program official from the institute you are targeting with your application to assess fit between your idea and programmatic priorities, your career trajectory and goals, and a particular mechanism. As an early career psychologist, the choice will likely be between a career development award (“K award”) or an investigator-initiated research award (“R grant”).

In the following sections we provide a detailed description of the K award and the R01 grant including a direct comparison of the two. Although we will not discuss

it here, you should also be aware that NIH also offers post-doctoral fellowship awards called F32's that may be a useful option to consider (see <https://grants.nih.gov/grants/guide/pa-files/PA-20-242.html> for details). Moreover, there are some exciting newer mechanisms that provide high levels of flexible funding opportunities for unusually creative early stage investigators. You should consider these especially if your work is particularly interdisciplinary and/or novel in ways that do not fit well into existing funding niches. We will not address these here but more information can be found at the NIH Office of Extramural Research (<https://researchtraining.nih.gov/>).

3.1 K Awards

There are a number of types of K awards (for more details see: <https://researchtraining.nih.gov/programs/career-development>). The most relevant for early career psychologists are the K01 (Mentored Research Scientist Development Award for career development in a new area of research or for a minority candidate), K08 (Mentored Clinical Scientist Development Award for development of the independent clinical research scientist), and K23 (Mentored Patient-Oriented Research Career Development Award for development of the independent research scientist in the clinical arena). There also are mid-career and even later career development awards that provide resources for investigators to develop new areas of expertise – and provide mentorship to junior investigators. The K award usually requires that at least 75 percent of your effort (9 calendar months in NIH terms) be devoted to the research project and to career development for 3–5 years. These awards are evaluated as training mechanisms. Applications require not only a research plan but also a training plan for career development activities under the guidance of a research mentor, local collaborators, and external consultants. The university must usually agree to release the PI from most teaching, clinical, and administrative duties. In return, NIH will pay the PI's salary, up to certain limits. There is a great deal of variation among the different NIH institutes as to which Career Awards are available, what PI qualifications they expect, the dollar limits for salary and research expenses that they will award, their application deadlines, and their supplemental proposal instructions. It is best to contact the relevant institute prior to preparing your proposal to be sure you understand that institute's guidelines for a K award.

3.2 R Grants

The R grants most relevant to the early academic include the R03, R21, R34, and R01 (for more details see: http://grants.nih.gov/grants/funding/funding_program.htm#RSeries). The R03, small grant program, provides limited funding for a short period of time. Funding is available for two years with a budget up to \$50,000 per year. Some institutes (e.g., NIDA) also offer rapid transition awards called a B/Start (i.e., Behavioral Science Track Award for Rapid Transition), which consists of one year of funding for \$75,000. Because reviewers submit reviews without a full review

meeting, this mechanism often includes a shorter lag time to completion of the review process (i.e., funding occurs within approximately 6 months of the date of receipt of the application).

The R21 is considered to be an exploratory/developmental research grant used to support the early stages of project development (e.g., pilot or feasibility studies). Funding is available for two years and the budget cannot exceed \$275,000. Extensive preliminary data are not expected, but applications must make clear that the proposed research is sound and that the investigators and available resources are appropriate to the task. While the R21 mechanism can sometimes be considered to be most relevant for previously funded senior investigators undertaking high-risk/high-reward research and/or a new area of research, it is our experience that first-time investigators can be successful seeking R21s if their idea is novel and has potential for transformative impact in their field of study.

The R34 is a clinical trial planning grant intended to support development of a clinical trial. This program may support: establishment of the research team, development of tools for data management, development of a trial design, finalization of the protocol, and preparation of a manual. For example, NIDA offers this mechanism exclusively for treatment development and some initial testing. The R34 lasts for 3 years with a budget of \$450,000, with no more than \$225,000 in direct costs allowed in any single year.

The R01 is NIH's most commonly used grant program which is generally awarded for 3–5 years. There is no specific budget limit, but budgets under a particular amount can be submitted with less detail than more expensive R01s (called modular and typically \$250,000 direct costs each year). Budgets over a particular amount (typically \$500,000 direct costs each year) must obtain institute approval before being submitted. Although you should request the budget you need to conduct your project, an extremely large scope and budget in an application from a new investigator may raise red flags for reviewers. Interestingly, it is our experience that some early career investigators avoid the R01 mechanism because of their junior status; however, as outlined below, NIH has taken some steps to encourage early career investigators with a “big” idea and adequate pilot data to consider an R01.

3.3 K/R Hybrids

Of note, there is an additional mechanism that serves as a bridge between a K award and an R grant called a Pathway to Independence Award (K99/R00, nicknamed kangaroo). This mechanism provides up to five years of support consisting of two phases. The first phase provides 1–2 years of mentored support as a postdoctoral fellow. The second phase is up to 3 years of independent support (contingent on securing an independent research position). Recipients are expected to compete for independent R01 support during the second phase to allow for continued funding once the K99/R00 support has ended. Eligible principal investigators must have no more than 5 years of postdoctoral research training.

3.4 Advantages and Disadvantages of K Awards and R Grants

K awards and R grant mechanisms each have a number of advantages and disadvantages. A K award can provide 50–100 percent of your salary (depending on the type of K and branch of NIH) for up to 5 years. This allows for a more highly stable period of funding than the typical R01, which usually funds only 20–40 percent of the principal investigator's (PI) salary for a period of 3–5 years. This allows investigators to concentrate on their specified research efforts without the concerns or distractions of needing to constantly be pursuing additional sources of support or fulfilling extensive clinical or teaching responsibilities at their university. Other advantages of the K award are the opportunities for mentorship, training, and thoughtful development of a programmatic line of research in the PI's chosen area. The K will provide funding (typically \$50,000 in addition to salary support) specifically to support these critical opportunities, which include: time and funds for focused coursework, study materials, access to consultants and mentors – and funds to travel to meet with off-site mentors at their research labs or attend professional conferences. These resources are paired with a highly personalized training plan that is developed as a part of the grant application. Because career development and training is a central aspect of K awards, the expectation of research is different and more modest than that for an R grant that will have a much more highly specified research project (and no training component).

For all of those reasons, the K award is very well suited for the needs of junior investigators who may have only limited pilot data of their own and require additional training experiences before attempting the larger-scale R grant projects. Also, the fact that a K award covers most if not all of one's salary can be very helpful in environments that require a large percentage or even all of one's salary to be covered on grants, which often include most medical school positions. It is unusual for more than 33 percent of one's salary to be covered by an R01, even though the latter is a larger grant because it is less focused on training/support of a junior investigator and more focused on supporting the research project. More recently, even psychology departments and other similar environments that are more associated with hard salary funding have begun creating positions or providing greater flexibility in existing positions for those with a K Award, expanding the scope of environments in which they have great value. Nevertheless, the K award is not necessarily the best mechanism for some junior investigators. Some are discouraged by the prospect of an ongoing role as "trainee." Others are deterred by the lack of flexibility in the mechanism itself. For example, a K can be transferred to other institutions, but it can take some time and specific evidence that the new environment can support the research and that relevant and willing mentors are on-site. They also do not provide sufficient funding to implement large-scale research projects (e.g., a randomized clinical trial). Moreover, they require significant institutional support documented within the application that is not always proffered or feasible for budgetary reasons or instructional needs. Mentors on Ks do not receive financial support from the grant, which can create challenges getting

engagement and sufficient time devotion. K awards also pay a vastly lower indirect cost rate (8 percent) than R grants (typically in the 50–65 percent range). Indirect costs are funds provided to the applicant's institution to cover the costs of administering and supporting the applicant's research. This amount is above and beyond the funds provided to the applicant for the research (called direct costs), but is calculated as a percentage of the direct costs. Although this should not lead you to apply for an R grant over a K award if the latter is a better choice for you and your research, you should be aware that the disparity in indirect costs of a K award may leave junior faculty investigators at a disadvantage in terms of obtaining additional institutional support once the application is funded and the research begins. Finally, there has been considerable chatter in recent years that while a K award can really jump-start a career for some, they might counterintuitively slow progress to an R grant for others. Because K awards cover so much of one's salary it is actually challenging to show one has the available effort to devote to other projects, particularly as the PI, and there is always some confusion about when someone with a K is "allowed" to start submitting R-level grants. As such, K awardees may be slower to write their first R than those without a K award. We should be clear, this is not an argument against a K award per se, as they are indeed great for one's career, but this unexpected potential impediment to future development of an independently funded research portfolio is important to be aware of for those who pursue a K. These timing concerns need to be balanced with preliminary evidence that researchers who have received a K award compared to those who did not have great success getting their first NIH award (<https://nexus.od.nih.gov/all/2019/04/02/association-between-receiving-an-individual-mentored-career-development-k-award-and-subsequent-research-support/>).

A major advantage of the conventional R01 award (and to a lesser extent other R grants) is the significantly larger project budgets, dictated by the specific requirements of the scientific protocol. However, new investigators applying for any R grant must be prepared to demonstrate to the review committee that they have the appropriate background, expertise, and skills to implement and complete an independent research project. There are a number of ways to successfully demonstrate these qualities. They include the availability of relevant scientific pilot data, a "track record" of publications in your area of research, and a thorough, well-conceived, and convincingly argued research plan (i.e., scientific protocol). Applications for R funding are evaluated almost exclusively on their scientific merit, significance, and innovation. R01 grants are quite competitive, but there is a tangible advantage in the evaluation process if you are a new investigator defined as not previously or currently holding R01 support (previous R01 submissions do not affect this status until one is funded). Specifically, in many cases your application will be considered in a separate pool of applications devoted to only new investigators. This "levels the playing field" and prevents your application from competing directly with applications from more seasoned investigators. While not a significant disadvantage per se, as noted above, even large-scale R grants rarely cover all or even most of one's salary. This is unlikely to be a problem in environments where other "hard" or "soft"

funding is available, but should be a consideration where one is expected to cover a large portion of their salary as an R grant alone will not be sufficient in these cases.

3.5 Application Types

A large percentage of applications are investigator-initiated (often called “unsolicited”). Investigator-initiated applications can be submitted according to published submission deadlines, most often in February, June, and October. Applications that fall under special interest areas such as HIV/AIDS have different deadlines that accommodate a faster review, so you are encouraged to check these deadlines closely (see <https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/due-dates.htm>).

Another option is to submit in response to a Request for Applications (RFA). RFAs are meant to stimulate research activity to address NIH-identified high priority issues and areas. They do not utilize regular deadlines and are announced with a specified deadline (often less than 4 months from the announcement). As such, researchers most interested and immersed in these areas of research have a decided advantage because they are likely to have already thought through some of the key issues and in some cases already have available pilot data that could serve as the base for the RFA submission. Of note, these applications typically are reviewed by specially convened panels that are selected based on the specific RFA and are therefore likely to have significant relevant expertise. As one might guess this can be an advantage in that one is getting a review from individuals who are most qualified to evaluate that application. However, an expert also may have particular expectations about how things should be done and may be more likely to focus on esoteric aspects of the application that might go unnoticed by reviewers with less expertise in that area.

One source of confusion can be Program Announcements. PAs are similar to RFAs in that they are issued by one or many Institutes and outline topics that are of particular interest. Like an RFA, PAs provide a level of assurance that the type of research you are proposing will be of interest to the institute that issued the PA. More recently, NIH has begun phasing out PAs and opting to implement Notice of Special Interest (NOSI). A NOSI is a new format for NIH Institutes/Centers to share and update their research priorities. NOSIs are intended to replace PAs that do not have special review criteria or set-aside funds. Each NOSI describes aims in a specific scientific area(s) and points to Funding Opportunity Announcements (FOAs) through which investigators can apply for support.

4. Preparing Your Application

The following paragraphs outline each section of a typical research grant. We also provide practical guidance regarding a few things to do and not do. Please note that in addition to this information, you can find helpful information on preparing your application at: http://grants.nih.gov/grants/writing_application.htm and information

on page limits can be found at: http://grants.nih.gov/grants/forms_page_limits.htm. Moreover, we also encourage you to utilize the following link which provide more general tips in a video format: <https://public.csr.nih.gov/FAQs/ApplicantsFAQs>.

4.1 Project Summary

The project summary is a two-part overview of your proposed project. The first part is the abstract in which you have 30 lines to describe succinctly every major aspect of the proposed project, including a brief background, specific aims, objectives, and/or hypotheses, public health significance, innovative aspects, methodology proposed, expected results, and implications. The second component of the Project Summary is the Project Narrative, which provides a plain-language 2–3 sentence description of your application.

4.2 Aims

Aims provide a one-page statement of your goal, objectives, and expected outcomes and implications. The aims should start with a brief statement of the problem and its public health impact, followed by what is known, and then the gap between what is known and how your project will address this gap. The most important part is the statement of your specific aims and the hypotheses you have for each aim. These statements should be concise and include clear, testable hypotheses. Occasionally, you may include an exploratory aim that addresses an important question but for which enough information is not available to draw a hypothesis; however, these should be used sparingly. You then should conclude with a summary paragraph that also suggests the research directions and implications that this work will spawn. NIH wants long-term not short-term relationships with its applicants. As such, your ability to discuss how this work will not be a single effort but the start of an effective line of research is crucial. A handy template of possible steps to follow in arranging your aim statement is provided in Table 15.1 and we provide guidance on things to consider doing and to avoid doing at the end of this section in Table 15.2.

Table 15.1 *Possible template of steps in your aims section*

Step 1: Identify the important societal/health problem of focus
Step 2: Review work that has been done towards solving this problem
Step 3: Identify the gap in the literature (e.g., what is missing, next, or even wrong with existing work)
Step 4: Articulate how you intend to address this gap with basic details of your intended approach/method
Step 5: Specify your aims for this research (i.e., specific aims) and what you expect to find (i.e., hypotheses)
Step 6: Highlight the potential implication of this research and how it sets up future studies (and your long-term independent line of research if possible) to make short- and long-term progress towards solving the problem outlined in Step 1

Table 15.2 *Tips by grant section*

Section	Do	Don't
Project Summary	Focus on the big picture	Include a lot of jargon
Aims	Highlight public health significance Include clearly testable hypotheses End with a paragraph on future directions	Get overly technical Be overly ambitious or spread too thin Propose too many exploratory aims
Significance	Build a bridge from the problem to your study Tell a clear story, making few assumptions	Introduce study without first building a case Wait until the end for public health significance
Innovation	Be bold without overpromising	Forget to note any methodological innovations
Approach	Discuss current and future benefits of your work Provide rationale for approach decisions Link expertise of team to strategies proposed	Minimize this section for space reasons Leave out key methodological details Leave out details establishing feasibility
Data-Analytic Plan	Include a detailed power analysis Link all analyses closely to the study aims	Power only for the main aims and hypotheses Leave out an appropriate consultant
Human Subjects	Discuss all aspects of subject safety Focus on inclusion of underserved groups	Use for extra space for scientific information Exclude a group without a rationale

4.3 Research Strategy

4.3.1 Significance

This section explains the importance of the problem or critical barrier to progress in the field that the proposed project addresses, and how the project will advance the application of scientific knowledge. In doing so, this section outlines the relevant literature and how this project directly addresses relevant gaps.

4.3.2 Innovation

This section explains how this work takes a new perspective, develops/utilizes a new approach, and/or moves the field in new directions. It is important in this section to emphasize that the novelty is not simply for the sake of being new, but holds important strengths over existing approaches – and sometimes novelty involves nothing new per se but creative use of existing methods or samples. You also should note that innovation can be a slow process and your work can be innovative if it sets the stage for future work. However, in this case it is especially up to you to be clear how your work can be the start of a fruitful and impactful line of research and why that makes the current work innovative. This may be especially true for those conducting pre-clinical or other forms of basic research.

4.3.3 Approach

This section describes the overall strategy, scientific methodology, and analyses to be used to accomplish the specific aims of the project. It is useful to link the approach as clearly as possible to the specific aims and hypotheses. Although there is a human subjects section below, human subjects issues that have important scientific bearing are addressed here. These might include an empirical justification for including only one gender or a theoretical reason to focus on a narrow developmental period in adolescence. Within Approach you also are encouraged to include two subsections. One subsection is *Preliminary Studies*, which outlines the previous work of you and other members of your research team that support your aims and hypotheses, and establishes that you are qualified to undertake and successfully complete the project. The other subsection is *Potential Problems, Alternative Strategies, and Benchmarks for Success*, which provides you with the opportunity to anticipate and address the questions that reviewers are likely to ask themselves as they read your application. We discuss the importance of these subsections and strategies to make the most of them below in “Tips.”

4.3.4 Data-Analytic Plan

This section outlines your statistical approach. Here it is crucial to address issues of statistical power and sample size calculation and preliminary analyses before outlining the primary analyses. The readability of this section and the overall flow of the application will be greatly enhanced if the plan is presented in the context of the specific aims and hypotheses.

4.4 Human Subjects

Although it is not placed in the body of the research plan, the section on the protection of human subjects and the inclusion of both genders, children, and underserved members of minority groups is an important part of your application. It should carefully describe aspects of the grant related to the risk–benefit ratio and demonstrate that all necessary precautions are in place to protect the rights and safety of human subject participants. In most R grants this section includes virtually all of the information expected in an application for Institutional Review Board (IRB) approval. This should include strategies to ensure adequate recruitment of underserved groups and a clear statement for why certain groups aren't included, especially if for methodological reason (which also should be noted in the section on Approach). This section also should include a data and safety monitoring plan as it is now required for all clinical trials (phases I, II, or III) and a monitoring board for larger-scale trials, multi-site trials, and those including vulnerable populations (e.g., prisoner populations).

4.5 Additional Sections

The following sections also need to be included in your grant application: Appendix Materials, Bibliography & References Cited, Care and Use of Vertebrate Animals in Research, Consortium/Contractual Arrangements, Consultants, Facilities & Other Resources, Resource Sharing Plan(s), Select Agents, Multiple PD/PI, and Use of Internet Sites. See http://grants.nih.gov/grants/writing_application.htm for additional details. Additional content sections specific to K award applications include the Candidate's Background, Career Goals and Objectives, Career Development/ Training Activities during Award Period, Training in the Responsible Conduct of Research, Statements by Mentor, Co-mentor(s), Consultants, Contributors, Description of Institutional Environment, and Institutional Commitment to the Candidate's Research Career Development.

5. Submission and Receipt of Your Application

All applications are submitted through an electronic portal called grants.gov. You should note that your application must be submitted and free of errors by the due date. Therefore, be sure to closely follow all of the rules and regulations governing each aspect of the application to prevent your application from being withdrawn from the review process. Given these warnings, the actual submission process might seem daunting in its own right. However, your research office should have numerous tutorials and provide support to ensure that you complete this part on time and accurately.

Once you have worked with your research office to submit your application on grants.gov, an NIH referral officer will typically assign the application to the most appropriate institute. Although this includes a review of the entire application,

decisions are driven by the title, abstract, and to a lesser extent the aims. This process also can be influenced by a cover letter you can prepare with your application indicating which institute you believe is the best fit for the application. The most common institute for psychologists to submit applications is the National Institute of Mental Health. However, it is important for you to develop your idea and then consider the most appropriate institute, which often means branching out to other institutes (for a list of institutes see www.nih.gov/icd/). Once directed to a particular institute, it will be assigned to an Integrated Review Group (IRG) and then ultimately a study section within that IRG. These study sections keep a regular roster of reviewers that rotates every four years. You can get an idea of the study section based on the roster and you may choose to request a particular section in the previously motioned cover letter.

Once your application has received an assignment to a NIH institute and study section, it is given a unique grant number. Shortly thereafter, you will receive a notice documenting this information and providing you with the name and contact information for the Scientific Review Officer (SRO) who organizes the work of the review committee (e.g., distributing applications; assigning specific reviewers; coordinating dates and sites for the three review committee meetings each year). There is a lengthy interval between the time you submit your application and the time it is actually reviewed; for example, applications received on June 1 are typically reviewed in October or November. For this reason, many study sections will accept supplementary materials in the 3–4 weeks prior to review. For example, if you have collected additional pilot data since submitting your application, you may want to provide a brief report about these research activities and results. Such supplemental materials should be brief (e.g., 1–2 pages). To determine whether and when you might submit a supplement, contact your SRO. Supplemental material can be helpful, especially when a new paper is accepted for publication or if new data become available that were not expected at the time of the submission. With that said, we do not recommend relying on supplementary material as “extra time” to add to your application after the deadline. Although often accommodated, supplemental material is not always accepted and more importantly there is no guarantee that reviewers will consider this additional material, especially given that they already will have plenty to cover in the original application.

6. The Review Process

Approximately 6 weeks prior to the review meeting, members of the study section receive copies of all of the applications being reviewed in that cycle. Typically, three members (designated as primary, secondary, and tertiary) are assigned to each application, based on the fit between their research expertise and the content of the grant. Reviewers provide written critiques of the application, organized according to the NIH review criteria: significance, approach, innovation, investigator, and research environment (see Table 15.3 for more detail about the criteria and how best to address them). If sufficient expertise is not available from the standing

membership of the committee, the SRO can invite ad-hoc reviewers to participate. However, do not assume everyone or even anyone will be an expert in your particular topic, and be sure that your application does not rely on jargon or make assumptions about reviewer familiarity regarding idiosyncrasies or convention approaches in a particular area of research.

As the meeting approaches, the SRO will solicit feedback about which grants are ranked in the bottom half of the current group and will not be formally discussed at the meeting (referred to as streamlining). A final consensus about streamlining is usually made at the beginning of each review meeting. Although they will not be discussed at the meeting and will not receive a score, the PI will receive the feedback prepared by each of the three reviewers for the meeting. The rationale for streamlining is to allow greater time for discussion about those applications perceived to be ready for support and thus to maximize the value of the review for both applicants and NIH program staff.

About the top half of applications are discussed at the review meeting. The primary reviewer provides a description of the application and then outlines strengths and weakness in the domains listed above. Each additional reviewer adds any further information and can add new points or issues where they disagree with a previous reviewer. At this point the other panel members can ask questions and raise additional points (although they are not required to have read the application). The group then has a discussion. The goal is consensus, but this is not a requirement and sometimes there can be significant disagreement among the reviewers. After discussion, the reviewers provide scores again. Reviewers may shift scores after the discussion to support consensus but are under no obligation. The remaining committee members then provide their votes anonymously; however, if they are outside of the low and high score by a predetermined range, they are asked to provide a written explanation.

6.1 Core Review Criteria

Your application is evaluated on the following five core review criteria: (1) Significance, (2) Investigator(s), (3) Innovation, (4) Approach, and (5) Environment. For a detailed outline of these criteria with a comparison with previous criteria, see http://grants.nih.gov/grants/peer/guidelines_general/comparison_of_review_criteria.pdf. As we have covered Innovation and Approach thoroughly in “Preparing Your Application,” we focus only on the key features of the other three criteria here.

- *Significance.* Is this work addressing an important question and will have an impact on the field in terms of knowledge, application, or in the best case scenario both? It is not crucial that the application be immediately addressed in a submission (especially in more basic research projects), but reviewers will want to see evidence of how this work ultimately could have such impact.

- *Investigator(s)*. Are you qualified to conduct this project and how well does your team of collaborators (or mentors for career awards) provide specific support in areas where your experience and expertise could be supplemented? For evaluating your credentials, reviewers often will focus on training and specific research productivity. Also, evidence that there is a specific role for the collaborators/mentors is crucial, as is some evidence of past work together or future plans to ensure their participation. This can be best represented in a letter of support and clearly articulated in “personnel justification,” which is an additional administrative section of the grant not covered here.
- *Environment*. Can the work be carried out with adequate institutional support and resources? Additionally, are there unique features of the scientific environment, subject populations, or collaborative arrangements that are evident at the research site? These strengths should be clearly articulated in “facilities,” which is an additional administrative section of the grant not covered here.

6.2 Overall Impact/Priority Score

For each of the five core review criteria, reviewers evaluate your application and provide a score from 1 (exceptional) to 9 (poor). Each reviewer then also provides an overall score, also from 1 to 9. There are no clear guidelines to reviewers in how to develop the overall score from the scores for the core areas, and it is not meant to be an average or median score. Moreover, your score can be influenced by several other additional criteria including human (or animal) subject issues. Reviewers can make recommendations about your budget, but these recommendations should not affect your score.

From the overall scores of each reviewer as well as the other committee members, a normalized average is calculated and multiplied by 10 to provide a final priority score from 10 to 90, where 10 is the best score possible. As much as we'd like to indicate a range of likely fundable scores, there just simply aren't hard rules that apply in all cases across all institutes (but for some guidance see: www.nlm.nih.gov/ep/FAQScores.html). With that said, many PIs would be quite pleased with a score under 30.

7. Post-Review Strategies

Often within a week of the review meeting, you will be informed via eRA Commons about whether your application was scored, and if so, the priority score. The written critiques are organized into “summary statements” (still called “pink sheets” by some older investigators because of the color of the paper originally used). Approximately 4–8 weeks later, you will receive this summary statement, which includes a brief account of the committee discussion as well as the written comments provided by separate reviewers. A new feature is that reviewers can now make additional comments that will be made available to the PI. Sometimes it is difficult to read between the lines of reviews and these comments are an opportunity to provide

direct recommendations about the overall viability of the project and particular methodological issues.

At this point several things can happen. If your application was scored it will go to a “Council” meeting (the second level of review) where the quality of the SRG review is assessed, recommendations to Institute staff on funding are made, and the program priorities and relevance of the applications are evaluated and considered. If your application was unscored or it went to Council, but was not recommended for funding (or it was recommended, but for one reason or another such as budget issues ultimately wasn’t funded), then you can consider resubmitting. Of note, before the Council meeting you will receive a request from a member of Grants Management staff for the following additional documentation, referred to as “Just-in-time information” (JIT): updated “other support” for key participants; the status of IRB action on your proposal; certification that key personnel have received training in the protection of human subjects. This request for additional information is not an award notice, although it is encouraging because it represents a critical step prior to the notice of grant award (NGA).

It can be difficult to decide on what to do next if the original submission is unscored. The first thing to do is to avoid the very real feeling that you and your grant have been rejected. Without question your grant being scored is better than it being unscored and in some case reviews will indicate serious problems that might not be addressable without considerable reformulation or even at all, but in most cases the eventual fate of this research project is in no way doomed by an initial submission being unscored.

An unscored grant may be revised, resubmitted, and eventually funded, but you should read the reviews carefully and with an open mind to help your decision. There is no simple formula to determine whether you should resubmit. Ask yourself several questions: Do the reviewers acknowledge the importance and innovation of the proposed research? Do they credit you, the PI, with having the appropriate background and abilities to accomplish the work in the area? Are their scientific concerns ones that you can effectively address? If the answer to each of these questions is “yes,” then you should strongly consider resubmission of a revised application. Many of us have had the experience of going from an unscored application to a funded grant award upon resubmission. However, it’s important to be honest with yourself about what is realistic. Talking with a relevant program officer also may be helpful to discuss next steps, especially if they were in attendance at the review committee when your application was discussed and can offer insights from the discussion.

We don’t mean to suggest that it is easy to objectively consider reviews of your grant. Particularly on a first read it is easy to jump to assume a reviewer (or all of the reviewers) clearly didn’t understand the grant and that their points are all wrong. This is a natural reaction and probably is rooted in important self-preservation in other important ways. However, an honest assessment requires stepping away from the grant and the review for a few days, considering that the reviews probably have a lot to offer. Moreover, the first set of reviews will always have an impact on the review of your resubmitted grant, and resubmitted grants that do not heed critical

feedback almost never succeed. It is also important to read between the lines. In most cases, a poor score with few accompanying comments that aren't really addressable is worse than a poor score with many comments that are addressable. Unless you are sure you understand why the grant was unscored, and what you can do to meaningfully improve it, you may want to consider that it may be hard to change reviewers' minds and that it may not be best to resubmit.

If you do decide to resubmit, possibly the most important part of your revised application is the single page you are given to address all reviewer comments, called the Introduction to the Revised Application. The success of your application will be greatly influenced by the thoughtfulness of your response to the reviewers outlined in this page. Although your revisions will be reflected in the application (we recommend doing so with underlining as opposed to bolding to save space if needed), it is crucial to show that you understand and have addressed the reviewer points. And in rare cases where you disagree with the reviewer point, it is crucial here to address the spirit of the point, and make a clear theoretical, empirical, or practical argument to defend your choice. Although mindlessly agreeing with reviewers or other empty attempts at pandering will certainly not help your case, declining reviewer suggestions should not be undertaken lightly. Also be sensitive to the "tone" of your response, because the reviewers most certainly will be!

Finally, if your application was unscored (or in some unusual cases scored) and you are not optimistic about your likelihood of significantly improving your chances for funding in a resubmission, then you can consider going back to the drawing board and developing a new application. By new it can be entirely different with a new focus and aims, but it also can be similar in rationale and goals but also meaningfully distinct from the original application with these differences possibly manifesting in the focus on the question, the methodology used, or the specific way the larger question is addressed. Although there is no official connection between these applications, the good news is that the new application often benefits from your experiences in preparation and review of the original application.

8. Tips

8.1 Respect Deadlines

For many individuals deadlines are crucial to setting goals, staying on task, and not losing motivation. Be aware of the deadlines and what goes into getting things done in a timely manner. Be more conservative with things that rely on others, such as letters of support or analytic sections prepared by a statistician. With that said, deadlines can have their drawbacks, because they can lead to procrastination and a burst of work near the deadline, without ample time to run ideas past others and have a sufficient pre-review of the application from collaborators and potentially helpful colleagues. For this reason it can be useful to utilize a timeline for each step along the way to submitting your application. As can be seen in Table 15.3 illustrating a mock timeline, it can take nearly two years from the start of idea development

Table 15.3 *Hypothetical grant timeline*

Grant phase	Starting	Ending
Initial development	October 1	November 30
Preparing application	December 1	December 31
Final preparation and submission	January 1	February 10
Grant review completed	June 15	June 30
Review comments received	July 1	July 30
Plan resubmission	August 1	September 30
Finalize and resubmit application	October 1	November 14
Grant review completed	February 3	March 29
IRB approval to get in JIT	April 1	April 30
Council meets	May 1	May 31
Funding starts	July 1	

for a grant to actual funding should resubmission be needed (as it most often is). This timeline illustrates the previously stated notion that grant funding is more of a marathon than a sprint.

8.2 Ensure Feasibility

While you want your application to be methodologically rigorous and have high impact on your field, you cannot lose sight of feasibility. The reviewer code word used when there are doubts about feasibility is “over-ambitious,” and it is a clear kiss of death when this term is used to describe an application. Therefore, keep your specific aims focused, and make hypotheses that you can clearly tie back to theory and/or pre-existing data. Consider the necessity of multiple studies within a single grant. Although these can be quite elegant, the connection between studies can provide many pitfalls, especially if subsequent studies rely on particular results from initial studies. Remember, although your passion for your research area may be strong and your intellectual curiosity high, each grant application represents only one small step in a research career that may last for several decades. Try not to be ruled by emotions (especially when receiving and responding to critical feedback) and keep a clear eye on your long-term goals. Persistence, patience, and creative problem solving are usually critical ingredients in the career of a successful independently funded investigator.

8.3 Be Clear

NIH clearly states that you cannot have any contact with reviewers before, during, or after your review. Therefore, the only way you can get your point across is the extent to which you communicate with them in the application. Within the section on Approach, the subsections on Preliminary Studies as well as Potential Problems, Alternative Strategies, and Benchmarks for Success provide a great opportunity

for this. For the subsection on Preliminary Studies, you can make your case that you have sufficient background (and pilot data especially for an R01) to conduct this work and that it marks a logical next step in this line of research, both for you and for the field in general. For the subsections on Potential Problems and Alternative Strategies (previously referred to as design considerations), this is your chance to walk reviewers through the highly complex discussions you and your collaborators had when you determined the best decisions for the application. This is an interesting section and presents a real opportunity because some applicants largely ignore it and at best tell the reviewers essentially “don’t worry we know what we are doing” or “we’ve got it covered.” As a new investigator, it is up to you to ensure that the reviewers understand the decisions you made. This section also increases the odds that the primary reviewer can best present your application and that others reading can quickly understand some of the key features of your application. Think of it as giving reviewers access to all the critical thought that went into the strategies you ultimately chose (as well as those you didn’t choose). Finally, your Benchmarks for Success show a level of sophistication and often can help ameliorate any fears about feasibility. This section would benefit greatly from a table that outlines the planned activities of the grant and the deliverables at each time point.

8.4 Show You Know the Literature and Your Work is Adding to it

Especially as a young investigator, your research team is crucial and it is important for you to clearly highlight their role in your application. For K awards, mentors are especially key elements of the successful application. It is critical to tell a clear story of each person’s role in your training, with as much detail as possible. Explicitly, it is not enough to simply list the “right” people. It is necessary to explain who they are and why they were chosen, show that you will have the right training experience with them, and describe how each mentor will contribute to your career development.

For R grants and the young investigator, the role of collaborators can be a bit more ambiguous. In some academic settings, you may experience a tension between the traditional value placed on independence and the emerging growth of team-based or multidisciplinary science where it’s no longer expected (or even possible) for one individual to master all elements of a complex research project. In fact, at NIH it is usually expected that applications will include a team of experts representing different domains. For example, in applications related to mental health and addictions it is common to see psychologists, psychiatrists, statisticians, anthropologists, epidemiologists, neuroscientists, economists, etc. collaborating together. A true research team will involve well-selected experts that can work well together, each contributing unique and relevant expertise to the proposed project. It is crucial to clearly articulate the key parts of the application and the role that each collaborator plays in those parts.

8.5 Trust the System and Put Your Best Work Forward

As mentioned above, there are strategies to increase the odds of funding such as trying to steer your application to the most appropriate committee, “guessing” what likely reviewers might want, and talking to program staff to avoid making mistakes or proceeding in a negative direction. However, you should be careful about these efforts becoming more about gaming the system than developing the best application for you. It is important to note that for every great game player, there is a straight-shooting scientist who has a strong sense of their interests, is willing to find a mechanism in NIH that accommodates that interest, makes efforts to align their interests with that of NIH including RFAs and PAs but does not let this betray their own actual interests, and simply allows the process to play out. This is not to say that some strategizing is not warranted, but when the strategies approach more of a game-like level, they hold as much likelihood of backfiring (or simply being irrelevant) than actually helping.

9. Final Words

In conclusion, the NIH grants process can be frightening and exhausting, and sometimes the secrets to securing them can feel quite elusive. However, your biggest weapon in this battle is knowledge to give you both the direction you need to be most effective in developing your application as well as the confidence to endure the ups and downs of the process. This is simply one of many available resources and we encourage you to utilize as many as possible as you begin to develop your own style and secrets to your success!

Kristen A. Lindquist, Eliza Bliss-Moreau, June Gruber,
& Jane Mendle

The goal of this chapter is to offer a candid snapshot of what it's like to be a woman in modern academic Psychology and Neuroscience. We also hope to generate conversation around shared experiences and provide a vision into a more equitable path forward for women in our field. By academic Psychology, we mean careers focused on research and teaching in the fields of psychological science or Neuroscience. We are most directly speaking to careers that are housed in universities, colleges, or research institutes, but of course the issues we discuss are not unique to those places (or even Psychology or academia, more specifically).

We are four mid-career psychologists who identify as women, have held appointments and worked in Departments of Psychology and Neuroscience, Human Development at major universities, research centers housed within universities, and have also worked in clinical and academic-oriented medical schools. Our research collectively spans areas of Psychology that include questions in social, affective, clinical, developmental, Neuroscience, and comparative perspectives in the field. Oh, and we're writing to you in the midst of a pandemic that has caused seismic shifts to health and well-being, financial stability, and work–family dynamics that intersect with gender and other identities in important, and unprecedented, ways (Guy & Arthur, 2020; Minello, 2020; Minello et al., 2021).

We've each been interested in women's issues for many years; those interests have piqued as we've moved through different phases of our lives and careers, through the BA, PhD, clinical internship (where applicable), postdoc, junior faculty, and mid-career years. During these different phases of academic Psychology, we have experienced first-hand how this process might (and might not) be different for women. One would imagine that fields now dominated by women such as Psychology would have overcome the longstanding gender disparities that affect many workplaces. Yet our own personal experiences suggested that women continue to face disparities in the field, and this led us to take stock of and synthesize the literature on different academic outcomes and productivity for women. Specifically, we decided to systematically investigate the science on gender parity in science, more broadly, and Psychology, in particular. Our paper united 59 women

psychologists across major universities and the business sector spanning the US, Canada, and Australia. Authors are former Presidents of major scientific societies, Department Chairs, “Genius Award” winners, public intellectuals and TED speakers, best-selling book authors, and highly respected scientists. Yet our analysis revealed that many gender disparities are still alive and well in Psychology, despite the success of this set of female authors (Gruber et al., 2021). We’ll be drawing from those data here with a sprinkling of personal anecdotes where applicable.

Our task in this chapter is to share with you what it’s like to identify as a woman in (academic) Psychology. So we decided to walk you through the good, the bad, and the really bad, and with hope for a better future for women in our field. Why is identifying as a woman even meaningful for your psychological career, you might ask? Oh, but we wish that it wasn’t! Psychology (and to some extent, Neuroscience) has seen a *huge* influx of women since the 1970s and 1980s. In fact, so many women have entered the field in the past few decades that one might assume that Psychology is immune to the gender-related problems faced by other Science, Technology, Engineering, and Math (STEM) fields. That is, as relative minorities in STEM, women’s career outcomes and sense of belonging significantly lags behind that of men. Yet as we recently revealed in Gruber et al. (2021), the relative representation of women in Psychology does not make it immune to gender-based disparities in career outcomes.

Throughout this chapter, we take an evidence-based approach by using the tools of our own science to evaluate questions about whether women do (or do not) face gender-related challenges in academic careers in Psychology. Overall, the good news is that women are entering careers in academic Psychology at record rates. They are becoming assistant professors and associate professors at unprecedented rates. The not-so-good news is that they still trail behind men in terms of numbers of papers published, grants held, impact, and financial compensation. As we discuss below, the reasons for these differences stem from a host of systemic, and interpersonal factors (some of which we, as women, can control and effect change on!). The really bad news is that both blatant and subtle sexual harassment and other forms of bias (racism, classism, homophobia, etc.) that intersect with gender still exist, and still impact people’s careers and well-being. We’ll close by discussing what we think we can do about it and how you can make decisions that optimize both your career outcomes and your well-being.

1. An Introduction and Some Caveats

Before we discuss the evidence, we want to begin by introducing ourselves.

Kristen Lindquist: I’m an associate professor at the University of North Carolina at Chapel Hill. I am in the Department of Psychology and Neuroscience and am also a faculty member at the Biomedical Research Imaging Center in the School of Medicine. I direct the Carolina Affective Science Lab and teach courses on Neuroscience and Social Psychology. I got my PhD in Psychology from Boston College

and did a joint postdoc in Neurology and Psychology at Harvard Medical School/Harvard University. I focus on how the brain, body, and culture alter emotional experiences and perceptions. I'm married to an academic psychologist (i.e., have a "two-body problem") and we are parents of a preschooler and a toddler.

Eliza Bliss-Moreau: I'm an associate professor of psychology and a core scientist at the California National Primate Research Center, both located at the University of California, Davis. I train graduate students in our Psychology and Neuroscience graduate programs, but also in our Animal Behavior and Animal Biology graduate programs. I did my PhD in Psychology (social, affective science) before transitioning to a postdoc in neuroanatomy working with animals. My group studies the evolution and neurobiology of emotions and social behavior, using a comparative approach – somewhere in the ballpark of 85 percent of our work is with rhesus monkeys, although we work with other species as well (humans, agricultural animals, and other animal models).

June Gruber: I'm an associate professor and licensed Clinical Psychologist in the Department of Psychology and Neuroscience at the University of Colorado Boulder. I was previously an assistant professor at Yale University after completing graduate school. I got my BA in Psychology and PhD in Clinical Psychology at the University of California Berkeley. I am interested in understanding the connection between emotions and severe mental illness, as well as the science of happiness and positive emotions, more generally. I run a laboratory and teach classes to undergraduate and graduate students focused on positive emotions and mental health. I grew up in California in a working-class family (my mother was a travel agent and my father was a salesman) and was the first member of my family to attend graduate school and experience what life in academia was like. I'm also married to an academic; we met as undergraduates in a philosophy class together and endured several years of long-distance to secure careers together. Much of my own understanding of gender biases first became palpable while I was pregnant and on maternity leave (with my now two young boys: 6 and 4 years old).

Jane Mendle: I'm an associate professor in the Department of Human Development at Cornell University. I got my PhD in Clinical Psychology at the University of Virginia. I study psychopathology during the transition from childhood to adolescence. This is a pivotal time for mental health risk and vulnerability, and I'm interested in why that's the case.

One of the many caveats we should note is that we bring our own identities to the table here. We are white, cis-gendered women who chose to pursue careers in academic Psychology. That already means that our experiences are not going to be the same as all women's experiences in this field. We are also talking about academic Psychology specifically, so we don't discuss primarily clinical careers (such as being a psychotherapist, social worker, or counselor) or primarily education careers (such as teaching classes full-time or serving as full-time administrators overseeing a campus-wide curriculum), and we don't discuss industry or government careers that are increasingly available to Psychology PhDs. It's also important to underscore that although we have a range of scholarly and personal backgrounds, our experiences are by no means representative and universal. Our perspectives are simply that – personal viewpoints that might not be shared by others even with similar experiences. Moreover, we certainly cannot speak personally to the experiences of

women with other intersectional identities such as Black, Indigenous, Women of Color (BIWOC) and women of the LGBTQIA community. We know through both personal connections and the empirical evidence that BIWOC scholars and scholars who identify as LGBTQIA face additional challenges that we do not (see Carter-Sowell et al., 2016; Gruber et al., 2021; Zimmerman et al., 2016). We reached out to several women scholars who identify as having other under-represented identities in academia, and they all graciously declined to join in on this effort because their workload right now was already too large. We know from the literature that women with other intersectional identities are especially likely to be burdened with service as the token representative of their identity in a department or even a school (see Gruber et al., 2021). This fact is likely *especially* exacerbated right now, due to the diversity, equity, and inclusion movements that are happening in Psychology departments and universities around the US following the racial equity protests that happened in summer 2020 and the disproportionate effect of the COVID-19 pandemic on communities of color.

Another caveat is that we are mid-career and tenured academics, meaning that we no longer face the same pressures as more untenured and more junior women (although they're not so far in the distant past for us, especially for Bliss-Moreau who due to her longer training in Neuroscience and Neurosurgery has only been a tenure track faculty member for about four years). Given that we are also not yet senior faculty or full professors, we also lack the longer view of what it was like to be a woman in this field when women were in the extreme minority, because the data show that things have steadily changed for the better with regard to gender representation in Psychology departments since roughly the 1980s (Gruber et al., 2021). That being said, being mid-career offers us the unique advantage of "being in the thick of things" – we all balance research, teaching, and increasing service loads amidst all of the challenges of mid-life, including, but not limited to, caregiving.

A final caveat lies in how we use the term "women" throughout this chapter. Neither sex nor gender are binary and we use the term "woman" here to refer to anyone who identifies as a woman. We acknowledge that the disparities we discuss are compounded for those who identify as non-binary, trans, or otherwise embody other marginalized gender or sexual identities, and we note that there is not a lot of empirical evidence out there about how aspects of gender identity impact career success and progression in Psychological Science. These caveats aside, we will speak to a host of experiences in academia that we think other women will relate to and may benefit from reading more about.

2. A Preface

Before we really begin laying out the good, bad, and the really bad data, we want to set the stage with our own personal experiences. We have in many ways had really positive experiences as we have moved up the career ladder. We authors are all a testament to the fact that women can and do succeed in academic Psychology (and yes, we recognize that there is inherent survivorship bias in our narrative as a result).

We all ascended through PhDs, postdocs/internships, and got competitive tenure-track jobs. We all have tenure at our respective schools, which span well-resourced, large, research universities. We all hold government and/or private institute grants and direct labs that do well-cited research. We've all been the recipients of early career awards. We should underscore that another piece of good news is that we LOVE our careers – we get to ask and answer big questions through our science. We get to teach and inspire the next generation of psychological scientists and the next generation of citizens, more broadly. We get to be among the thought leaders who use scientific research to weigh in on important societal issues. We have incredible flexibility in often deciding when (e.g., 9–5 or off hours?) and where (e.g., lab or coffee shop?) we want to work and which topics we want to work on. We get to travel to speak with interesting people and work in all corners of the world (at least pre-pandemic). We have meaningful, productive, and largely respectful relationships with our colleagues in our departments and universities, and our colleagues all over the globe. We have found our scientific and personal niches and eventually made our careers what we want them to be. There is a lot to like about this gig.

That said, we have also had many experiences our male colleagues likely have not. We have had other academics comment on our clothes, breasts, legs, hair, the size of pregnant bellies and our weight. In some cases, they've touched those things. We've been offered positions because a male PI stated he was interested in hiring an “enthusiastic female postdoc.” There's been weird unwanted kissing, where you think “is he just a little drunk and is trying to be avuncular?” before you reminded yourself that no one should EVER kiss anyone they work with without consent. During faculty interviews, we have had a Dean highlight the existence of local “high-end women's clothing stores” as one of the major pros of accepting a position at that school. When seeking serious career pre-tenure advice with university administrators we have been told not to “wear dangly earrings” and to “dress like other women” in order to succeed. There must just be something about our wardrobes, because our student evaluations throughout the years have often addressed our fashion sense and niceness as much as our course content. We've been asked about our marital status and childbearing plans, in interviews, as “jokes.” We've been given formal feedback that we were “too moody” while pregnant. We've been bullied while on parental leave, including the day we literally gave birth.

Our demeanor has also come into scrutiny. We've had concerns raised when we were not “smiling” in meetings with students and colleagues. During meetings with administrators discussing promotion timelines, we've been asked if we wanted “our hands held.” During job interviews, senior male professors have closed the door and patted the chair next to them and said “come on, sit a little closer to me.” Once we had jobs, we've been told we should be “thankful” for them and “act happy” in dulcet undertones that clearly imply we didn't deserve them (and to be clear, we are thankful for our jobs, but we also earned them). We have had “equity” adjustments to our salaries, to bring them in line with those of male colleagues, including male colleagues at earlier career stages. Sometimes this has happened after we have directly asked for a raise and been told that our

perception of our worth was not accurate. At the time of hiring, we were not offered as much in terms of lab space, start up, or other financial resources as our same-cohort male colleagues. When we asked for more space, however, we tainted relationships with colleagues because women shouldn't ask for more. We have been mistaken for undergraduates, graduate students, and administrative assistants because no one assumed that a woman could also be the principal investigator of a lab. We have been censored for speaking up and called "bitches" or "difficult" or "personality disordered" for doing so. We've brought babies to campus during daycare snafus and have gotten sideways stares while our male colleagues have been considered "dad of the year!" for the same behavior. Many people who are under-represented in academia have had some combination of these experiences, but talk to most academic women (we certainly have over drinks at conferences or late-night texts with friends) and most have had at least some of these experiences.

Let's look at the data and talk about what you can do to navigate this, and maybe change things for the better for yourself and the women who will follow in your footsteps.

3. The Good News

Despite the harrowing experiences shared above, we have also had many positive experiences and outcomes. Indeed, our own positive experiences in academic Psychology are echoed in the data. Women are now the majority (>70 percent) in undergraduate Psychology classrooms and many Psychology PhD programs (APA, 2017). This semester, in fact, there are *only* women students enrolled in Mendle's advanced psychopathology seminar. If you are a woman who chooses to pursue a tenure-track job, the data suggest that you are just as likely (if not more so) than a man to get that job (we will discuss the "if you are a woman who *chooses to pursue a tenure track job*" in the next section, because this is key). Other good news abounds. As a woman in today's academic Psychology, you are also as likely as a man to get tenure and to receive the grants that you apply for (again, caveat being, you get *the grants you apply for*). In our computations of major Association for Psychological Science (APS) and American Psychological Association (APA) awards, we also found that women are roughly as likely as men to be recognized for their early career research (but not their later career research; see Gruber et al., 2021 for all these statistics).

This news is great, and certainly represents a shift from a time in the not-so-distant past (e.g., the 1970s and 1980s) when women were less likely to enter PhD programs, get hired into tenure-track positions, and to become tenured as their male counterparts. Yet, the good news can obscure the bad, which is that gender disparities *do* still exist in Psychology. A quick look at rates of gender representation in the field at large – or even a glance through some faculty line-ups – might give the false impression that women's careers are on par with men's in academic Psychology. We're sorry to say this is not (yet) the case.

4. The Bad News

The bad news is that women still face systemic, interpersonal, and intrapersonal barriers that contribute to disparities in success in academic Psychology. In fact, for almost every piece of good news there is a “yeah, but . . .” qualification. Let’s start unpacking those “yeah buts . . .” As we review in Gruber et al. (2021), although women are getting hired and tenured at equal rates as men, they still, on average, lag behind men in almost every other metric of career success. For example, women in psychology apply for fewer tenure-track jobs, they hold more low-status academic jobs (e.g., as adjunct professors, university administrators), they publish less, they are cited less, they submit fewer grants, they are invited for fewer talks, they are seen as less “eminent,” they are financially compensated to a lesser extent (even when controlling for productivity), and they likely do more unpaid service than men.

But why? We know that these gender disparities don’t exist because women are less intelligent than men. That hypothesis has been laid to rest (see Ceci et al., 2014 for a discussion of, e.g., the lack of evidence for strong gender differences in math). It’s also the case that women and men’s academic products tend to be considered of comparable quality when compared head-to-head (e.g., women’s grants are rated as good, if not better, than men’s; Hechtman et al., 2018), meaning that women’s lesser productivity is not a product of lesser scientific capacity. As we conclude in Gruber et al. (2021), a mix of systems-level factors, interpersonal processes, and intrapersonal processes likely contribute to the differences observed in women’s versus men’s career success. Let’s unpack some of the ways that these factors might play a role in women’s career success.

4.1 Academic Pipeline

First and foremost, let’s address the fact that fewer women than men apply for tenure-track academic positions. This is almost surely a product of a “leaky pipeline.” A “leaky pipeline” describes a systematic exit of certain people from the career path. Gender-related pipeline leaks are well-known in science (Alper, 1993), and it is possible that Psychology is “leakier” or worse than other fields when it comes to our pipeline because we start with so many women interested in our undergraduate major. Yet at each stage from undergraduate, to PhD, to postdoc, to faculty positions, women drop out of the field at rates disproportionate to men (Ceci et al., 2014; Gruber et al., 2021). Meanwhile, women are over-represented in adjunct professor positions, university administration, and in fields outside of research such as education and healthcare (APA, 2017; NCES, 2013), suggesting that women are systematically “opting-out” of tenure-track academic Psychology. As we note above, when women do apply for tenure-track jobs, they are more likely to get them than men (both in large observational studies and in experiments; see Gruber et al., 2021), so that’s good news. As we mention above, another source of good news is the fact that women who go up for tenure are now as likely as men to get it. Yet, women lag behind men in the rate of being named full professor, which is the highest

(non-administrative) academic rank post-tenure. It's not clear based on the data whether this is just a time lag, and we'll see more women fill the ranks of full professor in the years to come, or whether women are getting "stuck" at the mid-career associate level rank and are not moving to more senior level positions and recognition (Gruber et al., 2021).

Why is it that women leak from the pipeline at a greater rate than men, and why are there not more women in full professor roles if women have been filling the pipeline in large numbers since the 1980s? One possibility is that women do not want academic Psychology jobs and never did – in this scenario, women are leaving the field at each juncture because they are choosing careers that they prefer more. That is of course a reasonable interpretation, especially at the undergraduate level, where many may see Psychology as a great generalist major that will prepare them for other careers. Alternatively, you could argue that this means that we're missing out on the opportunity to convince more women that they might like to go on to become scientists in our field. Either way, this doesn't address why the pipeline leaks following a PhD, or especially a postdoc, when trainees have gotten further along the career path toward becoming professors. Don't get us wrong: it would be great if women were actively choosing careers that they most prefer. But we suspect that women are, at least in some proportion, being forced to "opt out" of the pipeline due to a combination of factors at various levels. We review these pressures in full in Gruber et al. (2021) and point to a couple of especially important ones here.

Let's start with the systemic factors that might be at play in the pipeline. Systemic factors are those related to the values, norms, and institutions that our society creates that in turn impact interpersonal and intrapersonal behavior. One major systemic set of values and norms – that in turn shape our institutions – are gender role expectations. Gender roles are prevalent cultural stereotypes about the behaviors, personalities, and occupations that women and men should engage in and hold (e.g., Wood & Eagly, 2012). Gender role stereotypes have a major impact on the institutions in which we work and live. The fact of the matter is, our academic institutions (and work institutions, and political systems, more generally) were not created with caregiving in mind. Yet due to gender-based stereotypes related to caregiving and the biological practicalities of childbirth and early child rearing, women are expected to be – and frequently are – the primary caregivers of others in our society. Childcare, eldercare, and care for extended family and community members in need often falls to women. Our society expects, and frankly, benefits from, the largely free caregiving labor expended by women. For instance, when it comes to childcare, American mothers spend roughly 75 percent more hours per week on childcare than fathers (14.0 vs. 8.0 hours; Geiger et al., 2019). Women are likely aware of these realities – in fact, they have been implicitly or explicitly faced with them since early childhood and *both* women and men see academia as relatively incompatible with raising children (Mason et al., 2013). The difference may be that (some) men expect that they will have a spouse who can pick up the slack with regards to childcare while they focus on their academic career. As most academic women are part of dual-career partnerships, they are much less likely to have this

luxury than their male counterparts (Gruber et al., 2021). What seems key to women opting into academic careers is seeing other women navigate both a career and kids. When women PhD students interact with women faculty who have children, they are more likely to pursue academic careers (Mason et al., 2013), underscoring the importance of representation in science and having access to women mentors (see Lindquist et al., 2020).

These realities are not unfamiliar to us at all. We have all struggled in some way with trying to combine our career trajectory with our preferred geographical location, dual careers, having children, and/or taking care of elderly parents. These are realities that at least some of our male colleagues don't face in the same magnitude.

Mendle: When I was younger, I was either unusually lucky or unusually oblivious. I didn't think much about being female in high school. In college, I loved my women's and gender studies classes, but I didn't perceive barriers related to my own gender. Ditto for graduate school, where I had a wonderful (male) advisor and cohort of friends, with whom I would occasionally discuss practicalities and observations about being a woman in academia – but again, rarely perceived substantial barriers. Then I became a faculty member and, boom, the fact that I was female was suddenly an enduring part of daily life. People noticed my gender more than I had ever assumed and I, consequently, began to react and respond in turn.

There have been various inflection points in my career, when I've thought more or less about gender. I hate to be trite, but becoming pregnant was one of those points. I study puberty, and one of the important aspects of puberty is that it places a big life transition – full of dramatic physical changes – on public display, where people comment on and observe it. Pregnancy made me fundamentally rethink my academic research. I wasn't ready to discuss it with my colleagues – and yet there it was.

Biological sex differences are not typically talked about in discussions of gender and careers. I understand and generally support the reasons for this, but my take is that they do matter. Women's fertility clocks coincide with the most important years of career building. This places many – not all, of course, but many – women in an impossible position that men don't have to grapple with in the same way. And, of course, while both male and female academics have babies, it's generally only the female academic who has to schlep to the weekly doctor appointments throughout pregnancy and the weekly postpartum physical therapy appointments after. Even setting aside the physical tolls of pregnancy and childbirth, the time those appointments take adds up. For every woman caught in traffic on the way to the OB, there is a man who was able to continue his workday. Talking about these facts is complicated, and there can be a competitiveness or an exclusivity to motherhood culture. It can leave out the experiences of women who aren't mothers and even hint that the biases they've encountered might be somehow lessened because they don't have or don't want to have children. I take this as a reflection that we still haven't solved the real issue of how to make careers and life choices happen in a way that feels right or manageable for a lot of people.

Lindquist: I echo Mendle's comments that I didn't *really* think about my gender until after I received my PhD. I had a really inspiring female mentor with a really successful career and we of course talked about how gender had impacted her career throughout my training, but I hadn't experienced the effect of gender in my career first hand until I was a postdoc in a Med School and it suddenly felt *blatantly* obvious that I was female.

I remember a prominent neuroscientist running into me in the hallway – I was in awe of his research and was so excited to get to talk to him about mine – and instead of asking me about my research, he looked at my finger and said “oh, so you’re engaged!” To this day, I am so disappointed by that conversation.

It was around this time that I really began to stress about whether I would find jobs for both myself and my academic partner – especially ones that we were both happy with, where we were equally valued and where our careers would be equally fruitful. We were super lucky to land positions at the same university. Our motto was always to take short-term costs for long-term gain (we lived apart for years to both pursue opportunities that best fit our careers) and we worked really hard for our positions but we both still feel like we won the lottery to solve the “two-body problem.” Of course, then we had to deal with trying to figure out how to get our careers in a place where we felt we could have kids, and to try to rear children in a way that was equitable across both our careers. I recall calling up my graduate advisor (another woman) and asking advice about when during my tenure clock I should try to get pregnant. Should I stop my tenure clock? How many grants should I submit before I have the baby? How much time should I expect to *really* be able to take off? Will my lab fall to pieces if I suddenly cannot spend 100 percent of my waking hours thinking about it? It felt like there were no resources to navigate this next stage. And despite the fact that my husband was experiencing the same thing, it felt especially fraught for me as a woman.

Ultimately, my advice is that these things are going to be challenges in most high-stress careers and are not unique to academia. I have friends who are lawyers, or work in large corporations, and they are no less hindered by their gender or childbearing decisions. Ultimately, neither workplaces nor governmental policies have done enough to support working families since women have entered the workforce in large numbers – it is still largely assumed that workers have an extensive support system to pick up the familial slack while they work on their careers. For academic women in particular, their child-rearing years coincide with the PhD or Assistant-to-Associate Professor years, which is a key time for establishing one’s career (see Gruber et al., 2021). And as much as we want to assume that men are hindered by childrearing in the same way, they just aren’t. As Mendle suggests, even starting with the process of conceiving a pregnancy (if you are able to and choose to give birth to a child), there are undue costs on the person carrying that baby. The many hours that I spent between two pregnancies and infancies vomiting, lying exhausted on the couch in my office in between meetings, going to doctor appointments, and breastfeeding and pumping breastmilk were all hours that my male spouse was able to do his work (and he is a great dad who otherwise does 50 percent of the childcare. He just couldn’t really help with the whole gestation/lactation part of it). My best advice is to be aware of the hurdles that come with your biological sex/gender and to make sure to choose to surround yourself with people who will *fully* support you in the child-rearing process, whether that is a partner, grandparents, or hired help. Be aware of the gender stereotypes that will put most of the caregiving responsibilities on you as a woman, and have frank and open conversations with your caregiving partner(s) about how to equally divide up tasks and time. Don’t go into it blind – you should be aware before you commit to a relationship whether your partner actually has equalitarian views on splitting work and family.

Gruber: I echo comments above by Lindquist and Mendle about early life experiences being distinct from, and seemingly absent of, gender biases that emerged later on in my

career. I was perhaps naive in a Pollyanna way as a teenager. In high school, I firmly believed that accolades were awarded based on merit and women would and could achieve the same level of respect and recognition as their male peers. I read with great passion about women writers and poets, and idolized my high school calculus, physics, and English teachers who were all brilliant and women. It seemed as if women could do anything.

I held tightly onto these idealized visions of women's roles in the professional world during graduate school, where many of my peers in clinical psychology were also women. I was also very lucky to have incredible women mentors as well. In the blink of an eye, however, when I became pregnant later on in my career, things began to shift. My status as a woman became more visible (literally so while pregnant), but not usually in positive ways. I was questioned about my decision to take parental leave and to pause pursuing full-time academic work so I could be present with and raise my babies. I was criticized for being unavailable during my FMLA (i.e., legally granted) parental leave. When I asked an organizer of an invitation-only conference if I could bring my nursing baby with me, I was told that it was not a baby-friendly event and was uninvited (this led my colleague and I to organize a small conference for mothers of young children to address barriers women with young children face when participating in professional activities). These experiences, however, catalyzed a decision that one of my professional and personal roles thereafter would be to try to shed light and help change the landscape for other women.

Bliss-Moreau: I delayed partnering and childrearing and I'm here to tell you that there are major challenges associated with balancing working life with life-life even if you do not have a partner and children at the moment. In many places there are assumptions that women without families (particularly women without children) should be more flexible in terms of time on call or the times we teach, etc.; and striking the delicate balance of being supportive of colleagues (particularly women colleagues who are often doing a disproportionate amount of caregiving) and taking care of self can be tough. There's a lot of talk about how "partner hire" or "partner opportunity" programs can be used to bolster women in the academy by ensuring that their partners are able to be placed for jobs (academic or otherwise), but these systems are only really built to work when people are initially hired. My experience was that navigating the dual-academic-career couple trying to secure jobs in the same place where I could do my work (more on this below), once I already had my tenure-track job, was a nightmare. While it was mostly a structural challenge (the systems aren't built to accomplish what we were trying to accomplish), it was a psychological challenge as well. Being told things like "this would have been easier if you'd been partnered when you were hired" is just a tough blow any way you slice it.

While navigating the system with a partner can be a challenge, not being partnered has a whole other set of challenges that are rarely discussed. Like many of my partnered colleagues, I own a house and have pets – and 100 percent of the efforts required to run the household fall to me. Pursuing a tenure-track job and career ladder often means you have to go where the job is, even if that place is far away from your support network. If you're making a move like that with a partner, you have support in the form of the primary relationship. The constraints of geographical location were exacerbated for me because I work with monkeys (and big groups of monkeys at that!) and there are very few places in the world where I can do that; I honestly hadn't given that constraint enough thought when making the decision to retrain in neuroscience after my PhD in social/affective Psychology and would encourage trainees to think

through the balance of what one needs to do the science one loves and what that means in terms of where one must live. So, I live in California, while most of my family and friends are on the east coast and abroad. In good times, this was primarily an issue of cost and time and that got easier as my career progressed – I could easily book a flight to connect with loved ones and learned to use that flying time to write papers and grants. But it has been exceptionally difficult during the pandemic, underscoring the importance of having a strong community locally.

Of course, the gender stereotypes that influence systems also impact interpersonal behavior and a person's own beliefs. These in turn influence who sees themselves in certain types of careers and can impact whether women opt into academic careers. In America, gender stereotypes include ideas that women are warm caregivers who focus on communal goals whereas men are assertive breadwinners who focus on self-achievement (e.g., Wood & Eagly, 2012). Women may thus initially be drawn to Psychology majors in unequal numbers because it is a field that – at least stereotypically – is seen as high on stereotypically female qualities, such as caregiving and communion. Psychology is also low on stereotypically male qualities, such as requiring “brilliance” to succeed (Leslie et al., 2015). Yet, academic Psychology may prove to have qualities that run against these stereotypes – it can be competitive, requires self-promotion and assertiveness, and does not always have immediate application to communal goals. Gender role congruity theory suggests that these systemic, societal norms interact with others' and a person's own view of themselves to predict how interpersonal processes unfold for women as they climb the career ladder.

For instance, gender role congruity shapes how others behave toward women. As women ascend the career ladder, they can get pushback from others for embodying behaviors that are necessary for a scientific career (e.g., being agentic, being a leader, promoting one's work) but are seen as male-typed. As we review in Gruber et al. (2021) there is indeed evidence that women get pushback for engaging in gender-incongruent behaviour – women who try to hold positions of power and who assert themselves often receive blowback from others. Women who identify with other under-represented identities can experience the additive effect of multiple stereotypes (e.g., the angry black woman, the overly emotional Latina; see Gruber et al., 2021).

Again, we have collectively experienced our fair share of this, ranging from microaggressions to full on aggression.

Bliss-Moreau: The list is long. I've had senior men aggress and belittle me publicly in an effort to keep me quiet about important issues. I've had senior women attribute mental states to me that I'm not experiencing – typically mental states with gendered content. I am regularly asked whose lab I'm “in.” I've been assumed to be the vet anesthetist when I was the neurosurgeon and then had my qualifications questioned because the questioner didn't believe me (“Too young!” “Clearly inexperienced!”). I've been asked about my marital status and childbearing plans during interviews. I am constantly reminded/told/informed that my direct communication style is aggressive, abrasive, and/or angry, when I watch men communicate similarly and be rewarded for being direct.

Mendle: A few years ago, I was editing a special series for a journal, ironically about women's reproductive transitions. One of our authors requested an extension. She had recently given birth and disclosed that she had some unexpected health complications. The journal had a tight time frame for publication and wasn't able to extend extra time for her to complete her manuscript. On the one hand, we all understand the realities of publishing and I respect the journal's decision. On the other, it was a bit bruising to have the author pull out of a series on reproductive transitions because she was, in fact, *recovering from childbirth*.

Gruber: I can recall several times where attempts to pursue projects or a career in academic Psychology was met with backlash. I recall co-leading the Gruber et al. (2021) paper on the future of women in Psychology, along with Bliss-Moreau, Lindquist, and Mendle (and over 50 other top women academics) and one of our reviewers mentioned that the paper lacked true "leadership" and couldn't be accomplished by a team of women-only authors. When we responded with detailed descriptions of the unique and authoritative contributions of our author team, we were met by skepticism as to whether our co-authors deserved authorship and scrutiny of our scientific integrity. At a personal level, I've been told my mind and my work was "superficial" while simultaneously warned by male colleagues that I was "too ambitious." I worked hard once leading a project for members of my field and one colleague responded by saying "who do you think you are?" I understood that loving what you do and wanting to work hard while being a woman was not a satisfactory answer.

Lindquist: Honestly, there are so many examples, it's hard to choose. I think it is better now that I'm a bit older. But early on, when I was a *young woman* it felt like no one could ever possibly imagine that I could be in a position of power, never mind know what I was talking about (although maybe when I'm an *old woman* no one will be able to believe that I could still be contributing meaningfully to society . . . we'll find out!). One microaggression stands out when I first started as a faculty member. I attended a meeting for users of our research computing clusters on behalf of some of my other neuroscience colleagues. So here was a young woman asking a question to a tech person about computing. The guy who worked for research computing kept asking me "so whose lab do you work in?" Every time I responded that I didn't work in anyone's lab and that I was a member of the faculty, he kept saying "Oh, do you work for [senior male colleague?]" In a bout of frustration, I eventually burst out "I work in my own lab! I have my own lab! I am a FACULTY MEMBER!" Now, I had become "the angry woman" – a stereotype with its own baggage.

Gender role congruity also shapes how women see themselves and what roles they are comfortable embodying. Women who have spent their whole life being implicitly or explicitly taught to be submissive, communal, and not overly assertive may feel personally uncomfortable embodying these counter-normative behaviors. Thus, as women ascend the career ladder, these systemic factors may increasingly make them feel like academic Psychology is not for them. This fact is almost certainly exacerbated by the very visible demographic shift that occurs as women go from being surrounded by predominantly women to being the only woman in the room.

Mendle: There are some folks who have always wanted to be Psychology professors. That's not my story. My first major in college was Medieval and Renaissance Studies

(yes, really) and I held a lot of checkered, artsy jobs on my way to graduate school. Even today, I'd rather read a novel than a journal article. In my case, I think having all these other, non-Psychology interests contributed to questions of belonging and sometimes made me wonder if the field was the right one for me. I wish I had known earlier on how normal these doubts are.

Lindquist: I distinctly remember the point in my career as an assistant professor when I looked at my graduate cohort and realized it was mostly me and the men left as assistant professors. I felt like “Where did all the women go? Why am I one of the last ones standing?” In fact, I've since become friends with other women in the field just by nature of the fact that we are all women of around the same age “who've made it.” I now work in a department where almost all the junior(ish) faculty are women neuroscientists (Bliss-Moreau once called my department a “unicorn” for this fact) and that has been a game-changer for me.

Bliss-Moreau: There are few women at my level or above in non-human primate neuroscience, and even fewer in my subfield (social and affective science). I often have had the same experience as Lindquist – looking around the room and being the only woman present. It's challenging, particularly in the context of sexist jokes, assumptions about “wives at home” to keep the household running, and other male-oriented comments. On the flip side, because there are so few women in my field, I've gotten to know many of them, and often the initial conversation is predicated only on the fact that we're both female neuroscientists working with monkeys. We are fiercely supportive of each other. I've also learned to explicitly ask my male colleagues to be allies and developed deep, rewarding collegial connections with men who are willing and able to serve in that role.

Gruber: I often say to my friends that I love what I study, but often feel that I never quite belonged in academia as a person. This became more difficult when part of who I was involved balancing personal-life choices. I was once planning a visit to my partner who was doing a fellowship internationally on the other side of the globe. I was told by a senior colleague that if I visited them for more than a week or two, even while on fellowship leave, that I would be “destroying” my career. I wondered whether I could continue to pursue this career in academia that would allow me to also be myself.

4.2 Productivity

It's clear from these data that women are likely opting out of academic Psychology at greater rates than men. But, in cases where women opt into academic Psychology, what accounts for their lesser productivity? We suspect that a similar confluence of systemic, interpersonal, and intrapersonal factors play a role. Take publishing and grant submission, for instance. Across all of academia, women publish fewer papers and submit fewer grants than men (see Gruber et al., 2021). At the systems level, this may be because women are spending their time elsewhere. Childcare is likely one big factor, as we discussed above. However, women also report spending more time on other things besides research when at work, perhaps as a product of systems-level pressures. For instance, in Gruber et al. (2021) we review the fact that women are likely spending more time on unpaid service within their departments, insofar as

service is seen as a “communal” activity that is more expected from women. Women also report that they spend far more time on unquantified sorts of service activities such as mentoring undergraduates, discussing careers with graduate students, and generally “taking care of the academic family” (Guarino & Borden, 2017). These stereotypes are exacerbated for BIWOC, who may be the “token” member of their under-represented group and seen as the one in charge of diversity efforts in the department. BIWOC and other under-represented scholars may also be expected to, or feel compelled to, mentor students who are under-represented in academia (see Gruber et al., 2021 for a discussion).

Lindquist: As the most junior female faculty member on my hallway at work for some time, I have spent a lot of time having graduate students pop in to ask advice about their research and careers, share their personal and mental health concerns, and even ask for advice about how to navigate issues with their mentors. Don’t get me wrong, I am happy to serve this role for students – and indeed, these roles are really necessary and undervalued by academia and our society more broadly – but it’s not lost on me that my male colleagues are writing papers while I’m offering a teary student a pack of tissues.

Bliss-Moreau: Separate from my formal service commitments (that are pretty easily tracked on a CV), a lot of the service that I do and that I see my female colleagues doing is sort of behind the scenes and hard to document. Like Lindquist refers to above, I spend a lot of time with people who would just pop into my office looking for a conversation on mentoring, career issues, or navigating the politics of our research center. Sometimes those are folks from my own group, but often they are other trainees and staff people at the center. I like those conversations and find them rewarding, and I am certain I would not be where I am today had I not had the opportunity to pop into other people’s offices and have similar exchanges, so I recognize their importance and value. But they take time, and often require emotional energy. A senior female colleague told me that she actually tracks the number of hours she spends in these conversations and reports them at her regular merit reviews because around a quarter of a 40-hour work week is devoted to such interactions. When discussing the number of hours I devote to these sorts of interactions, a male colleague recently told me that I “should care less.” My response: “I could care less if you would care more.” It’s a standing joke among my female science friends that we should make that into a bumper sticker.

One thing to be aware of in thinking through job offers and plans for career trajectories is that universities recognize service work in different ways – the sort of informal work like that described above and/or formal service work. In this vein, I do think that the University of California is really exceptional at least with regards to recognizing formal service work. At Davis, we have a very clear career ladder with steps and regular reviews during which our records are evaluated, and we are promoted anywhere from 1 step (normal advancement) to 2 steps (extraordinary advancement). Evaluating service is part of regular merit reviews and we can be rewarded for exceptional service work with additional steps. In 4.5 years, I have had two reviews (one merit within the assistant professor rank and one to promote from assistant to associate) and in both cases, I was promoted more than 1 step, in large part because of the formal service that I do.

It is possible that interpersonal processes such as bias also contribute to differences in publishing. There is some evidence that editors serve as biased gatekeepers

of the science that gets published in their journals. For instance, evidence shows that from 1974 to 2018, male editors at top social, cognitive, and developmental journals were significantly less likely to accept papers that were authored by women versus men; female editors at this time did not show any bias (Bareket-Shavit et al., in preparation). This effect mirrors evidence that white editors are less likely to accept the papers of BIPOC scholars in Psychology (Roberts et al., 2020) and suggests that BIWOC may experience an additive effect when it comes to publishing. An unpublished paper in economics suggests that women authors may face a much longer review process than men, during which their papers are held to higher standards (Hengle, 2020).

Fortunately, the data on grant review do not seem to show the same degree of bias. Although men hold more grants overall, this appears to be because they submit more grants overall (see Gruber et al., 2021). Studies do not find that women's grants are reviewed more poorly and, in some cases, women's grants may even fare better than men's in review (Gruber et al., 2021). In many grant review processes, there is an evaluation process for the person carrying out the science ("the researcher") in addition to a review process for the science itself. There is some evidence for bias when the decision architecture encourages reviewers to focus on or foreground the "researcher" versus the "science" (Wittman et al., 2019). Women's grants are rated as worse when the ratings of the "researcher" are more heavily weighted than the ratings of the proposed science itself, consistent with other evidence showing that women are less likely to be described as "leaders" and "pioneers" in reviews (Magua et al., 2017).

Intrapersonal processes also play a role in women's productivity. The biggest take-away from the data is that women submit fewer products (be they publications or grants) than men and this may be a product of their own beliefs or preferences. Women may believe that they should spend more time on communal tasks such as service and doing so may take away precious research time (note that this might happen because they feel pressure or because they truly get reward in engaging in these other tasks). Women may also have internalized bias and expect to get more pushback on their work. This can create a cycle of perfectionism in which women take much longer to produce publications or grants. The evidence is perhaps consistent with this interpretation insofar as women's grants are (at least in some data sets) rated as *stronger* than men's but men consistently submit more grants over all (see Gruber et al., 2021). This suggests that women may be taking a different approach to men by placing all their metaphorical eggs in a single, perfectly crafted basket, whereas men are placing eggs in multiple . . . er . . . less well-constructed baskets. Finally, as we review in Gruber et al. (2021), there are small but consistent differences in assertiveness and self-assuredness, which may mean that women are just less comfortable than men in "getting their ideas out there," an internalized gender stereotype that could ultimately hurt women's productivity.

Again, we certainly have personal experiences of what has seemed like bias in the publication and grant-receipt sphere.

Mendle: I've had to become less "precious" about my work over the years. I'm a slow writer. But as much as I love language, pondering each and every word for its lyrical value doesn't work in the current academic climate. The simple truth is that the field – at this time – is demanding *both* high quality and high quantity. The best solution I've found has been collaborators. When you have the right group of collaborators, their feedback can push your ideas in new directions – and, in the best of scenarios, their skills are opposite your own. I love working with June, for example, because she is a rapid writer and balances my own tendencies in that area.

Lindquist: I do try to reflect a lot on my own productivity and how I ultimately want to – and do – spend my time. For instance, a few of us were recently involved in writing a comment on a paper that had been published in a top-tier journal. This paper drew a lot of criticism across science because it wrongly drew the conclusion that PhD students shouldn't work with women if they want to have impactful careers. We busted our butts (during a pandemic when we already had limited time) to get this comment out there to correct the published record (see Lindquist et al., 2020 and a subsequent popular press article about it and the now-retracted original paper at www.wired.com/story/as-more-women-enter-science-its-time-to-redefine-mentorship/). Although it was important to write a formal comment on this paper – and the original paper was eventually retracted – it was definitely not lost on us that as women scientists, we were spending our time responding to someone else's biased scholarship rather than writing our own papers.

My broader take on publishing and productivity is this: I do think that quality is more important than quantity, and I strive for quality above all else in my lab. That said, I do urge women to recognize that publishing is one of the clearest metrics of success in this field and the easiest to quantify metric. So I urge students and junior women to be especially mindful of how to achieve their idealized productivity while also focusing on ways to shift norms surrounding what is most valued in academia. For instance, former APS President, Lisa Feldman Barrett recently discussed the downsides of the "publications arms race" (www.psychologicalscience.org/observer/the-publications-arms-race) and argued that we had gone too far in expecting junior faculty to have dozens of papers by the time they are applying for their first job.

This said, socialized gender differences in self-esteem and comfort with self-promotion almost certainly contribute to some of the differences in publication rates, impact, and grant receipt observed in the literature insofar as (at least statistically) men submit more papers, may submit to higher impact journals and submit more grants. Women should aim big when thinking about where to submit their work or when submitting grants. Remember cheesy old adages such as "perfection is the enemy of the good" and "100 percent of the shots not taken don't go in." I do think that women, in particular, hold themselves to impossible standards (probably in large part because they are expected of us by the rest of society). This might also mean sometimes having to shirk more "female" roles such as being the one to organize a meeting, worrying about the well-being of every student in your department, or trying to take on impossible societal roles such as "the perfect mother." Another academic friend and I have a running joke about how we refuse to personally handcraft Valentine's Day Gift bags for our kids' classes and just really don't care if that makes us "less perfect" parents.

Bliss-Moreau: I think the quality/quantity issue discussed by others is really important. But another related issue is figuring out how to divvy up one's time across tasks for "optimal" productivity and which ideas to pursue. I'm still in the process of figuring out

how I want to spend my time in terms of what work I do, both with regard to types of work (papers, grants, advocacy documents) and also what questions I ask. I think striking the right balance is hard, likely changes across career stages (at least that's been true for me so far), and also shifts as the norms of the academy shift. I try to balance work in my group in terms of core questions that we have a good sense we'll be able to answer and the high-risk/high-reward work that we all love, but ultimately can be risky in terms of not turning into papers and grants. I've struggled with this balance a lot and we have just recently begun to pursue the high-risk work – work that I've been explicitly told is “crazy” or “too far out there” or “unlikely to pay off.” The story that I have about this is that I waited until I was tenured and had multiple big grants to fund the group, so the risk of failure was somehow less. But, I see men in similar positions to where I was pre-tenure and pre-R01, chasing ideas on which they are getting similar feedback; this makes me wonder if the difference between me and them might be related to gendered stereotypes about brilliance (discussed above)? Regardless, pursuing some of the “out there” ideas has led my group to a burst of productivity, even with regards to advancing some of our more incremental and “less sexy” work. It hadn't occurred to me until we dove in that the risk of pursuing the high-risk work might be mitigated by productivity on low-risk work and that overall productivity would increase (and we'd have a lot more fun) if we were doing more high-risk work. The important thing for me as a mentor in this vein is to make sure that the high- and low-risk work is distributed across trainees so that no one runs the risk of not having success during their training phase.

4.3 Impact and Financial Remuneration

Finally, let's deal with scientific impact and financial remuneration. Even controlling for productivity, women have less impact in Psychology in terms of citations and are paid less (Gruber et al., 2021). As we review in Gruber et al. (2021) and Lindquist et al. (2020), there are longstanding and consistent biases in citation rates that cause men's papers to be more highly cited than women's. Some of this is driven by men's relative greater tendency to self-cite (King et al., 2017). Other recent evidence finds that in neuroscience, not only do men self-cite more, but they also cite other men more than they do women (meanwhile, women cite both men and women equally; Dworkin et al., 2020).

Other evidence again points to systemic, interpersonal, and intrapersonal processes that impact both women's and men's behaviors around publishing in the journals most likely to be impactful. In Psychology, as the impact of a journal increases, the prevalence of women authors on the papers published there decreases linearly (Odic & Wojcik, 2020). This may be due to systemic factors: for instance, if women are spending relatively more of their time on other tasks like service, teaching, or childcare at home, they might have less time to take a risk and “aim high” by submitting first to a top-tier journal and then revising their manuscript afresh for each new submission if it doesn't get in.

Women might also be less likely to submit to high-impact journals because they might have had bad experiences there in the past. The findings showing that editor gender is predictive of the gender of published authors (Bareket-Shavit

et al., in preparation) is suggestive that women might have systematic difficulty publishing at certain journals. Note that to our knowledge, research has not addressed how journal impact, editorial gender, and women's publication rates interact. That said, stereotypes that women are less "brilliant" than men (Leslie et al., 2015) could contribute to implicit bias against women's findings at top journals. At least in Psychology, many editors are not blind to author names (and presumed gender), even if reviewers are. Finally, women may not publish in the top-tier journals that are most impactful because of small but stable gender differences in intrapersonal processes such as self-esteem or self-promotion (see Gruber et al., 2021). Women may simply feel that their work is not important enough to be considered at top-tier journals due to internalized stereotypes that women are less "brilliant" than men or that women should not self-promote.

While the findings on impact are disconcerting, what is particularly concerning is that women are also less recognized *financially* for their work. As we review in Gruber et al. (2021), women receive on average, 68–99 percent of what men receive in salary as professors. These discrepancies are starkest for full professors, where women at R1 universities make 81 percent of what men make. It is possible to argue that women make less because they are less productive on average – and salaries and raises are based at least in part on merit – but a recent study of New Zealand academics found gender disparities in financial compensation even when comparing equally productive men and women scholars (Brower & James, 2020). For women on 9-month salaries (typical of US tenure-track jobs), differences in base pay may become exacerbated by differences in grant funding success when grant funds are used to pay 3 months of "summer salary."

The gender pay gap, as it's called, is certainly not unique to academia and its mechanisms are hotly debated. Some of the gender pay gap may be linked to systemic factors, such as women's mobility when applying for and accepting jobs in a wide range of geographical locations. As we discuss above, being in a dual-career partnership may influence women's desire to apply for tenure-track jobs; even if they do apply for those jobs, it may limit women's ability to apply broadly/accept any job because heterosexual women are more likely than heterosexual men to put their spouse's career first in the case of a "two-body problem" (Mason et al., 2013). This fact alone could hinder women's negotiation abilities and ability to seek out the best-paying position.

In addition to systemic factors, there are well-known interpersonal and intrapersonal factors that contribute to the gender pay gap, such as women's ability to successfully negotiate for themselves during initial offers and to attain retention offers. Again, due to stereotypes of women as communal, negotiation partners such as chairs and deans may be less likely to expect women to negotiate for pay raises either during hiring or retention and may be biased against them if they do engage in negotiation (Amanatullah & Morris, 2010). Meta-analyses show that women negotiate less than men do (Kugler et al., 2018), either because they are aware of the potential backlash associated with doing so (an interpersonal explanation) or because they are not comfortable advocating for themselves

(an intrapersonal explanation). Other studies find that women negotiate just as much as men, but are less likely to have their requests granted (Artz et al., 2018), suggesting that women may receive feedback over time that negotiation efforts are not worth it. Women are also less likely to receive outside job offers than men, which can result in fewer “retention offers” from their home university that increase salaries over time. This may be because other schools are less likely to seek out women to “poach,” because women are less likely to apply for these jobs, or because their home universities are less likely to put up the money to retain them. It’s worth noting that women are also granted less financial support outside of salaries when compared to men. In the biomedical sciences, men receive 2.5 times more in start-up funds than do women (Sege et al., 2015), which could alone lead to the discrepancies in productivity and grant receipt that may exacerbate the gender pay gap over time.

Our personal experiences of gender differences in impact and finances are varied. On the one hand, we feel lucky to be well-remunerated for the work that we love doing. On the other hand, we are aware of ways in which there has not been gender equality in our pay and we have experienced “equity adjustments” to our salaries.

Lindquist: As we reviewed above, men self-cite more than women and their impact is increased for doing so. I happen to self-cite a fair amount because I cite my own theoretical approach (which rightfully, is driving my empirical work). Yet I have been told by reviewers that I self-cite too much. I often wonder, do men ever get this comment during review given that we know empirically that they cite themselves more?! I somehow doubt it . . .

Gruber: Similar to Lindquist, my work falls within a subfield where only a small number of authors do similar work to our lab. In these cases, you’re penalized if you cite your own work. But the alternative – not citing one’s own work to support a claim or next-step study – is inappropriate and even intellectually dishonest. Yet we are encouraged to cite others’ work disproportionately to our own as women. I have wondered what the proposed alternative is – wait for other (male) colleagues to publish their work first for us to cite in place of our own work?

Bliss-Moreau: One of the major challenges that women face is the lack of transparency around salary and remuneration and social norms that suggest that asking others directly about those things is a major faux pas. At least for me, it has been hard to know what to ask for without knowing what is reasonable (perhaps this is a particularly female concern?) and it is here that working for a public university has major benefits. Our salaries are public (although the numbers in the public database are often not perfectly accurate), which provides a solid starting place for negotiation and also provides data by which the institution is held accountable for equity. When I was first hired, I looked up men and women with similar CVs and argued that my starting salary should be increased based on how much those other people were making. I was told no, that I wouldn’t be compensated more, and ultimately signed my offer. A few months later, I got an email indicating that my record had been reviewed as part of an equity review (an internal process that we have to ensure equity in pay and ladder step across faculty) and my salary had been increased – to basically the value for which I’d asked. Had I not

had access to data about other people's salaries, I probably would not have asked. And, had there not been a system in place for accountability, I probably would not have received the salary bump.

Mendle: I've had some complicated dialogues over how to spend my start-up or other research funds, even for the most mundane or necessary of purchases. Again, as Lindquist says, it's easy to find an alternative, non-gendered explanation, yet I've sometimes wondered if my male colleagues have had as much pushback over similar issues or if the pushback is phrased in the same way. I've repeatedly been asked "are you sure that's a wise choice?" about everything from participant compensation to the number of computers in my research lab.

5. The Really Bad News

You thought it couldn't get worse, right? Well, here's the really bad news: Overt sexual harassment, sexual assault, and racism still exist in academic Psychology (and really everywhere, #MeToo, but there is the sense that psychologists should be better about this given what we study). Recent high-profile lawsuits and resignations (e.g., www.nytimes.com/2019/08/06/us/dartmouth-sexual-abuse-settlement.html; www.sciencemag.org/news/2020/03/university-rochester-and-plaintiffs-settle-sexual-harassment-lawsuit-94-million; www.phillyvoice.com/penn-professor-kurzban-resigns-sexual-misconduct-allegations-relationships-students/) have made clear that gendered power dynamics still exist in some Psychology departments. In most of these alleged cases, men were senior professors and women were junior professors or students, suggesting that gender and power may interact to create an environment that is psychologically manipulative, or even dangerous for women. The problem with these behaviors is that many go unseen by others. As we reviewed in Gruber et al. (2021), climate surveys suggest that anywhere from 28 percent to 60 percent of women ranging from undergraduates to faculty have experienced some form of sexual harassment in an academic setting.

In the same vein, there is increasing acknowledgment that Psychology departments – and the field at large – remains racist and non-inclusive towards BIPOC scholars and others from identities under-represented in STEM (e.g., <https://news.stanford.edu/2020/06/24/psychological-research-racism-problem-stanford-scholar-says/>). For instance, the majority of Psychology journals fail to report on topics related to race, are not performed by diverse scholars, and do not study diverse populations (Roberts et al., 2020). Taken together, sexism and racism make BIWOC especially likely to face hurdles in Psychology.

We outlined some of our anonymized experiences of sexual harassment at the outset of this chapter and a few of us have been willing to bring up certain experiences in our non-anonymized comments. In reality, this advice is best given in person, so please catch us some time and we'll tell you how we dealt with our various experiences. The long and the short of it is that we hope you do not ever experience sexual harassment, racism, or some other form of discrimination as part of your job. But you may, and so know what your options are for legal

recourse (if you decide to go that route), for making sure that your workplace is safe and productive for you, and for how to engage in self-care.

6. What To Do About It?

Lest we leave you feeling demoralized about our field, it is important to note that the problems that women in Psychology face are not unique to Psychology (yes, that was an attempt to make you feel better . . .!). That is to say, there are certainly fields where it is just as fraught to be a woman, and fields where women are still in the large minority. As the #MeToo movement showed in 2017 and beyond, gender disparities and sexual harassment and violence are still rampant in many places (including workplaces). The backdrop of the recent race protests, Black Lives Matter movements, and #blackintheivory movement should highlight that gender disparities interact with the racism that still persists in the US and the world; the academy is not free of this racism. We believe that the only reason that Psychology's problems are interesting is because – well, as a field, we should really know better than say, Physics. As a field, we study human behavior and these disparities are a human behavior problem. Some in this field even study topics particularly relevant to these issues such as gender, stereotypes, productivity, family planning, etc. Many of us joined this field because we were interested in increasing people's well-being or understanding rampant social issues. We know, at least academically, what the issues are and thus should be well positioned to either develop or have the tools to fix these problems.

We suggest a number of evidence-based paths forward in Gruber et al. (2021). They include (1) ways that universities and departments can raise awareness and take stock of these disparities among their faculty and students, (2) ways to ensure that women are equally considered for jobs and other career opportunities such as colloquium invitations, (3) ways to increase transparency about finances that predict gender parity, (4) addressing work–family conflict, (5) equalizing service, (6) becoming aware of and confronting gender bias when it occurs, (7) allowing under-represented women to succeed, (8) increasing mentoring opportunities and a sense of belonging for women, and (9) addressing harassment in the workplace. We suggest you have a look at these and think about how you might implement them with your own mentors, collaborators, and department. As you move forward in your career, we hope you will take these with you and help shape the departments that you eventually join as faculty.

We'll close with our most targeted piece of advice – the thing that you can do to help carry these ideas forward. And that is *persist*. Survive. And when you can, thrive. Don't get us wrong, if at some point during your training, you think "this is not for me," that is OK. Everyone feels that at some point. And if in your heart of hearts, you don't want to pursue this career, you shouldn't. Many people (women and men alike) decide that an academic career is not for them and go on to have fulfilling, productive careers elsewhere. But when you feel that way (and you will at some points), take a step back and question why. Reach out to a trusted mentor (heck, reach out to one of us) and we will tell you that this too shall pass.

We know that it can be extremely difficult to be a woman in this field; it may be especially difficult to be a woman who identifies with another under-represented identity in Psychology. But think about it this way – the more diverse our field is, the more people coming up through the ranks will see people like them doing this, and the more likely they will feel that they can do it too. And that diversity will ultimately contribute to better science.

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PART IV

YOUR CAREER AS A PRACTITIONER

Preparation for entering and succeeding in private practice is one vital area that graduate programs typically cannot give adequate attention to due to the long list of “academic” courses and clinical training experiences that must be offered to ensure the development of necessary clinical competence. And it seems that there is never enough time to learn all we need to know to be fully prepared for our professional roles after graduation day. But the preparation specific to having a career as a private practitioner is an important aspect of career growth and planning. This chapter will provide guidance on how to prepare for a career in private practice.

Years ago, psychologists would receive their degree, become licensed, have business cards printed, take out a yellow pages ad, rent an office, and begin treating patients. Unfortunately, the practice landscape has become much more crowded, competitive, and complicated over the years. There are numerous mental health professionals with various amounts and types of training who are all competing for many of the same patients. While clinical proficiency is mandatory, it is not nearly enough to ensure success in private practice. Running a private practice is a business enterprise that requires advanced planning, market analysis, a business plan, targeted marketing, and solid business practices.

1. Preparation for Private Practice

Rather than using a trial-and-error approach and just learning as you go along, it is best if you prepare well in advance to enter private practice. You can begin by using the resources that surround you to explore options that will allow you to become more marketable and better prepared to be a successful private practitioner. Use your graduate school professors, professionals in your community, state and national professional associations, internet websites, and social media networking sites to explore your options as early as possible. Seek out mentors who can assist you to prepare for a successful career as a private practitioner. Refer to the checklist below to familiarize yourself with some of the issues you will want to consider both before and after receiving your degree.

1.1 While You Are Still in Graduate School

- Take elective courses in specialty areas that interest you. Possibilities include group or family psychotherapy, clinical hypnosis, stress management, and neuropsychological assessment.
- Explore specific externship/internship opportunities that will prepare you for the type of private practice you would like to have.
- If your school offers a course in the business aspects of practice, take it!
- Seek out professional continuing education classes that focus on business aspects of practice.
- Join your state psychological association and Psychologists in Independent Practice (Division 42) of the American Psychological Association. Participate in one of their mentoring programs.
- Talk to those professors who also work in private practice and other mentors with experience in private practice and ask questions such as:
 - What experiences should I seek out as a student to better prepare me for a career in private practice?
 - What challenges and obstacles might I face when entering private practice and what are some actions to take to help overcome them?
 - What lessons have you learned over the years that contribute to being successful in private practice?

1.2 After Obtaining Your Degree

- Explore post-doctoral opportunities that will enhance your skills as a private practitioner. See Chapter 23 of this volume for further information on the potential importance and role of post-doctoral fellowships.
- Continue working closely with a mentor who is an experienced and successful private practitioner. There is no need to have to go it alone.
- Research geographical areas that interest you and determine their needs. Consider the following when deciding to practice in a certain area:
 - If there are any groups of potential patients whose needs are not being adequately met.
 - Assess your local area to see if it is saturated with practitioners with a certain specialty.
 - Consider if the region you've selected for your private practice is saturated with managed care or if most private practitioners in that area have fee-for-service practices.
- Determine if you will be able to join managed care panels and if so, how long this process takes and when you can begin.
- Consider how much "unpaid" time you will spend collecting payment from managed care organizations and if it would be worth your while to hire administrative help.

- Determine if you should open your private practice immediately or if you will need to start with other work and build your private practice into a full-time enterprise over time.
- Develop a business plan, including a budget, for establishing and running your private practice. Determine which experts you should consult with to assist you with this endeavor. You might wish to seek out and consult with an attorney or a Certified Public Accountant at this stage to get a feeling for the ways in which you can set up to protect yourself, financially and legally.

1.3 After You Enter Practice

- Continue relationships with current mentors and seek out others who have expertise in areas of relevance to your private practice.
- Continue your relationships with your attorney, Certified Public Accountant, and perhaps add the services of a Certified Financial Planner to further assist you with the legal and financial aspects of private practice.
- Consider using the resources available through The Practice Institute (<https://thepracticeinstitute.com>) for business and marketing consultation, education, support, and assistance.
- Reflect on what successes and failures you have experienced in beginning and running a private practice. Learn from them, build on your successes, and don't repeat the failures – consider them lessons learned.
- Determine the most important things you have learned about running a successful private practice and keep these lessons in mind.
- Consider what impact your theoretical orientation has played on the nature of your private practice and on your level of success. Remember that you can build on what you know to be able to serve your client base more comprehensively. For instance, if you are trained in the use of Cognitive Behavioral Therapy (CBT), you may wish to enhance your competency around the practice of mindfulness meditation, which is often successfully used as a part of CBT.
- Seek out continuing education opportunities that will expand the skills you can offer to the public. Always consider the niche markets in your area that will keep the clients coming.

2. Is Private Practice For You?

A career as a private practitioner is not for everyone. However, for those who are well-prepared and who have realistic expectations, it is an enriching and rewarding career choice. Educate yourself about the realities of private practice to ensure your decisions are not influenced by common myths or misunderstandings about private practice (Barnett & Zimmerman, 2019). Consider if private practice is a good fit for your personality, needs, and professional goals. Personal characteristics such as strong

Table 17.1 *Pros and cons for a career in private practice*

Pros	Cons
Being your own boss	Financial uncertainty and risk with possible periods of low earnings
Ability to decide practice location, hours, areas of specialization	Responsibility for all expenses and overheads
Unlimited earnings potential	Possible professional isolation for solo practitioners
Flexibility	Responsibility for billing, collections, insurance, employee and staff decisions
Control over business decisions	
Full responsibility for success of practice	

internal motivation and an entrepreneurial spirit will certainly play a role in your success in private practice, but these factors alone are not enough. Consider the pros and cons to establishing and maintaining a private practice provided in Table 17.1.

After making the decision to enter private practice and considering the personal characteristics and professional issues above, it is important to start thinking about some of the more practical issues you will face as a private practitioner. For instance, how will you start your practice? Jumping right into full-time private practice is not necessarily a viable option for all recent graduates. Consider the most realistic and beneficial options relevant to your situation. Specifically, find out how much time it takes to build a full-time private practice, assess the financial demands of opening a practice in your area, evaluate how you will make ends meet while you are building your clientele, consider your need for health insurance and other benefits, and make sure you will be able to find sources of professional support, especially early on. When examining the big picture, some recent graduates prefer to start out in another setting and transition to private practice slowly. This is not considered failure or a 'second best' option, and in fact may teach you valuable lessons that will reinforce the success of your future practice as an independent practitioner.

One way to do this is to work full-time in a salaried position and start your private practice in the evenings and on weekends. This will provide you with a full-time salary, benefits, collegial interaction, and supervision. This is a good time to develop competence in specialty areas of practice that you can begin marketing in the local community. You will also have the opportunity to network with other professionals in the local area and to build your reputation while avoiding the potential financial instability that may be a part of your early years in practice. Or, if you have the financial flexibility, you might want to work part-time in a salaried position with benefits and build your practice in the remaining time. While perhaps slightly more risky from a financial perspective, this arrangement gives you more time to build your practice while enjoying the security and benefits of a salaried position.

An additional option is to dedicate yourself full time to the development of your private practice. This choice provides the fastest route to a full-time private practice but carries the greatest financial risk. With each of the first two choices you can decide, based on your success and/or preference, just how much of your time you want to spend in the private practice setting. Some practitioners cut back on the number of hours worked in a salaried position as their private practice grows. Others will find that working part-time in two positions provides them with the best possible combination of financial stability, benefits, varied work activities, and collegial interactions to meet their needs.

Another important decision to make concerns your practice setting. You may choose to open your own “solo” private practice; you may form a group practice with one or more colleagues; or you may join an already existing group practice, whether it be only with other psychologists or with a range of other mental health professionals. When starting out as a solo practitioner you may lease office space on your own or sublet an office in a suite with other mental health professionals. For those who decide to build their practice part-time, subletting space in a larger suite of offices may be the best course of action. Offices may typically be rented quite economically, often by the hour, the half-day, or by the day, and come furnished and offer amenities such as telephone, photocopier, internet access, and even a shared receptionist to greet patients and answer the phone. As your practice grows, you may be able to contract for additional time in the office. Another benefit of this arrangement is the proximity of colleagues. Being in a solo private practice on one’s own may be an isolating experience. Further, not having to pay for office space full time when only using it part time is much more economical. However, when working in a suite of offices with other mental health professionals it is important to ensure that your solo or independent practice is clearly represented to others so that you will not incur any liability from the actions of others in the office suite.

If you choose to participate in a group practice, an additional point to consider is the composition of the group. It may be comprised entirely of psychologists or it may be a multidisciplinary group. Further, as Walfish and Barnett (2008) recommend, “When joining a group practice, choose your associates wisely. These individuals can enhance or detract from your reputation and increase or decrease your liability” (p. 56) and your income! Thus, all potential practice arrangements should be fully investigated and careful consideration should be given before making such a decision. Table 17.2 provides an overview of the benefits and drawbacks of solo and group practice arrangements.

Again, it is helpful to speak with private practitioners in a variety of practice settings to hear about their various experiences. This will help you decide on the best plan of action for you. Keep in mind, however, that many practitioners look for positions, get interviewed, accept an offer, and *then* see how it works. There is only so much we can know in advance; some of it must be learned through experience. However, if you consider all these issues and get a clear sense that one practice arrangement best suits your needs, personality, and comfort level, then that is what you should try.

Table 17.2 *Considerations for a solo practice or group practice*

Solo practice	Group practice
Pro: Practitioner independence. Set your own hours, salary, benefits; decide how to run your practice	Pro: When you have a psychiatrist on staff you will have easy access and ongoing communication about your patients who need treatment with psychotropic medications in addition to their psychotherapy
Con: You must find mentorship and supervision on your own as you need it. This might come at a cost	Con: Interprofessional collaboration and within-group referrals
Con: No administrative support, you will have to allow time for paperwork and correspondence	Pro: Access to clerical and administrative support
Con: Higher costs of operation unless operating from your home, which has drawbacks of its own	Pro: Lower overheads/sharing of costs
Pro: Absolute authority over all decisions	Con: Sharing of decisions and of profits
Con: Unlimited personal liability	Con: Each member of the group must accept some liability for the actions of all group members

Note: A sole proprietorship is not taxed as a business entity. (Depending on your total income, this can be either an advantage or a disadvantage.)

2.1 Questions to Ask When Considering Joining a Group Practice

- Who owns the group and who makes business decisions?
- How are referrals shared and what assistance will be provided to help me get started?
- What administrative support do I receive from the group?
- What per cent of the income I generate goes to the practice and what per cent to me?
- Does this percentage change over time and if so, by how much and what factors impact this?
- What if I decide to leave the practice; can I take my patients with me?
- What benefits am I provided; malpractice insurance, continuing education, etc.?
- Am I allowed to decide which patients I will treat?
- What supervision and on-call coverage opportunities and obligations exist?
- What are the criteria for evaluation and how does one become an owner or partner?

As you begin to attempt to set yourself apart from the many psychotherapists, counselors, and other mental health clinicians competing with you for a limited number of potential patients, it is important to be able to be more than just another generic mental health professional. This is where your “niche” might come into play. This is not to suggest that providing psychotherapy and assessment services with excellence is not a worthy endeavor, but these skills should be viewed as the foundation for your private practice. Beyond that, consider developing an area of expertise that can be marketed to targeted audiences (and that also are typically

fee-for-service endeavors where you will earn more and not have to hassle with managed care).

Psychologists in Independent Practice, Division 42 of the American Psychological Association, has an excellent series of niche practice guides that provide an excellent introduction to developing a specialty. Each guide provides a detailed description of the specialty area, information on how to enter it, what training is needed, and where to obtain it and training resources available, ethics issues to consider, marketing considerations, and a list of resources to access for additional information. Thirty six niche practice guides are presently available for such diverse areas of practice as health psychology, infertility, psycho-oncology, eating disorders treatment, marital therapy, working with stepfamilies, smoking cessation, ADHD assessment and treatment, geriatrics, sport psychology, treatment of personality disorders, neuropsychology, women's issues, psychologist–dentist collaboration, child custody evaluations, men's issues, and many others. These very useful guides may be ordered through the Division 42 website at www.division42.org. Developing specialty areas is an important step for setting yourself apart from other practitioners in your community. Select areas that interest you, obtain the needed training, and then begin marketing the services you have to offer.

In addition to providing clinical services, you should consider how you might apply the knowledge and skills you already possess to other areas that would augment your clinical practice. Suggestions include business consultation and team building, personal and executive coaching, divorce mediation, school consultations, and forensic evaluations. An additional excellent resource for those starting out in practice is the book by Walfish (2010) that describes 50 different practice areas for providing professional services outside of managed care. While one should only enter specialty and niche areas of practice with supervision from, or consultation with, an experienced colleague, you may be surprised how little additional training and experience you'll need to be competent in these additional areas of practice. Another useful, and hopefully inspirational, resource is Verhaagen and Gaskill's (2014) book *How we built our dream practice: Innovative ideas for building yours*.

3. The Business of Practice

Even the most competent clinician can end up sitting alone in the office waiting for the phone to ring. After assessing your local area's needs, developing a specialty area or practice niche, deciding on group or solo practice/multidisciplinary or all psychologists, purchasing business cards and possibly even developing a website and/or social media presence for your practice, you must now tackle the business of practice; and it *is* a business. Ask yourself the following questions regarding the business of running a private practice.

First, will I work as an independent contractor or an employee? An employee is hired by, and works for, an employer; is directed by the employer which patients to treat, when, and how; and the employer takes out withholding for taxes and pays a portion of the individual's social security tax. IRS Tax Topic Bulletin 762,

Independent Contractor (Self-Employed) or Employee, explains that an independent contractor is defined as an individual who is not an employee, but who works with another individual under a contractual agreement. Independent contractors treat whichever patients they like, and when and how they might like. They purchase their own supplies and set their own hours. They pay quarterly estimated taxes and no taxes are withheld by the other person. For additional information see the Internal Revenue Service's website at www.irs.gov/taxtopics/tc762. Additional important information is provided at the IRS webpage Independent Contractor Defined at: www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-defined.

If you should choose to work as an employee, ask yourself how you will establish your fee structure for services rendered *and* how you will be compensated by the practice. Employees typically receive a specific salary and benefits, based on a certain number of employee billable hours provided in the practice. The employer also pays a portion of the employee's social security taxes. Additional administrative tasks may also be assigned as part of your work duties as specified in your employment contract. As an employee, you have the right to negotiate your employment contract, but do consider the learning and support you will receive as an employee as part of what you are gaining and factor that into your negotiations.

For independent contractors the typical arrangement is to pay the practice owner a certain fee or certain percentage of fees collected for each patient seen. Typically, independent contractors working within an established practice pay the practice owner 40 per cent of all fees collected and keep 60 per cent for themselves. If you are offered a lower percentage of fees collected, such as 50 per cent, be sure your contract stipulates criteria for it increasing over time. Keep in mind that a lower percentage reflects the fact that the practice may be providing referrals and your business will get built-in marketing just by being a part of an established practice with its own reputation. A typical arrangement would be to start with paying 50 per cent to the practice and then having this percentage decrease as you begin generating your own referrals. Should you begin providing referrals to others in the group due to your success, the percentage paid to the practice should decrease even further. All of this should be clearly laid out in the contractual agreement signed upon joining the group. Being aware of these long-term issues when starting out is very important to your success in private practice.

It is essential that you have all contracts reviewed by your own attorney prior to signing them. Without legal training, we are not able to know the implications of every clause that may appear in a contract. Your attorney is your advocate and considers each contract based on your best interests, at present and over the long term. An investment in legal services at the outset is an investment in yourself and your practice. Paying for the services of an attorney can save you tens of thousands of dollars over the years as opposed to trying to do it all on your own. Specifically, your attorney will help you agree to a contract that contains provisions that will grow your earnings in years to come. Failure to consult with your own attorney prior to signing a practice agreement or contract may result in your unknowing agreement to

provisions that promote the best interests of the practice owners over your own best interests, and sometimes even at your expense.

Additionally, as you negotiate the contract, you will need to consider what you are receiving for the percentage of collections you pay to the practice. The practice owner is providing the office space, furnishings, office staff and supplies, and perhaps most importantly, referrals of patients for you to evaluate and treat. Typically, practice owners who are very busy and have more incoming referrals than they can personally treat will take on independent contractors. For the new psychologist just entering private practice this can be an excellent way of starting out. There is a ready stream of referrals, a furnished office with trained staff and infrastructure already in place, and the possibility of supervision and peer support. As mentioned, other contractual arrangements are possible, such as leasing space in another practitioner's or group's office, so consider the options available to you as you find the arrangement that is in your best interest and best meets your needs based on your particular circumstances.

Finally, be sure to educate yourself on certain business principles such as non-competition clauses *before* you sign a practice agreement or contract. This is a major area of concern for independent contractors, especially when and if you eventually hope to leave the practice and branch out as a fully independent practitioner. The non-competition clause will be laid out and agreed upon between you and the practice owner when signing your initial contract. This clause may specify that if you decide to leave you may not practice psychology for a specified period of time within a certain distance of the practice you are leaving. This will protect the practice owner from direct competition from you should you decide to leave after they assist you in becoming established and developing your professional reputation with referral sources in the local area. Unless you have a specialty area not otherwise available in the local area, such contractual clauses are generally deemed enforceable. The practice owner is providing you with referrals and assisting you to develop your reputation and referral sources in the local area. Without such a clause in the contract you could fill your schedule, build your reputation, and then leave and open your own practice across the street or across town. Yet, these clauses can sometimes be negotiated and they do not necessarily need to be included in practice agreements and contracts. This is another important aspect of contractual negotiations where your attorney can prove invaluable.

4. Rules of Business Success

4.1 Consult the Experts

The first thing you need to know, even if you open a solo practice, is that you can never enter or run a private practice on your own. You will need the services of experts in two key areas of expertise: legal issues and accounting. As has been highlighted, unless you have graduated from law school we strongly suggest that you *never* enter a business arrangement or sign any contract before first consulting with your attorney. Too many practitioners have learned the hard way just how costly a mistake being your own attorney or accountant can be. While their fees may seem expensive, these

professionals will save you a great deal of money, anguish, and legal difficulties in the long run. Speak to experienced practitioners in your local area to find out who they use, if they are happy with the fees charged and services provided, and then use this input to guide you. You may also obtain referrals for attorneys through your local or state psychological association as well as through the local bar association, but be sure to check their references and reputation. Don't rely on fancy advertisements for guiding you in such an important decision. Just to clarify the point made above . . . never sign any contract without first having it reviewed by your attorney who will ensure it is in your best interest and suggest any needed modifications *before* you sign it.

A Certified Public Accountant (CPA) can assist you with numerous important financial aspects of setting up and running your private practice. For a detailed explanation of all this see the book *Financial management for your mental health practice* by Zimmerman and Libby (2015). Additionally, a CPA can assist you in making important decisions such as if you should incorporate your practice and if so, how. Numerous options exist to include incorporating as a Limited Liability Corporation or a Professional Corporation, among others. Each incorporation status brings with it different costs and benefits. Your CPA will be able to guide you to make the best choice for your needs and circumstances. A CPA can also assist you with retirement planning, something you should consider from the outset of your career.

A Certified Financial Planner can be of immense help in offering guidance on investments and retirement planning. Private practitioners need to save money for their retirement and invest it wisely over the long term. Unless one is a salaried employee who works for a company that offers a pension plan, one has to plan for and save for their own retirement. Consulting with a financial expert can make this process easier and more successful.

4.2 Market Your Practice at Every Opportunity

Even if you are an independent contractor in a group practice, but especially if you decide to open your own practice, marketing yourself to the local community and to a variety of possible referral sources is of great importance. Potential referral sources may include physicians in your community, schools, attorneys, other mental health professionals, and a variety of others depending on the type of professional services you offer. It is important that you have a visible and positive presence in-person in your community as well as online.

4.3 In-Person

Possible strategies to secure referrals include:

- Send an announcement of your practice opening. Follow up with a brief letter describing your training, background, and expertise. Be sure to tailor the letters to the perceived needs of each referral source and the specific population they serve. (See Appendix A for an example.)

- Telephone potential referral sources and request a brief meeting to meet and describe the services you offer (and how you can help them and their patients). Especially if you contact medical offices or other practices, determine whether you can offer a service they need and mention that specific service when you call. Let them know that you would be willing to briefly attend a few minutes at the start or the end of their next staff meeting so that you have the chance to meet everyone at once and answer any questions.
- Offer free presentations to the patients of your referral sources. For example, you could offer a seminar on behavior management strategies to the parents of a pediatrician's patients, a presentation on stress management skills to an internal medicine physician's or cardiologist's patients, or a seminar on strategies for working with certain types of learning disabilities for teachers at a school you hope will refer patients to you.
- If you give presentations or seminars, be sure to bring business cards, brochures, and fliers describing you, your practice, and the services you offer. Ensure that all these materials include your e-mail address and the web address for your website. You can utilize marketing professionals and create your own brochure or you can purchase brochures from the APA's Division 42 and then attach your business card to them.
- The APA offers free fact sheets that provide practical information on a wide range of mental health issues and how psychologists can help address them. These are available at www.apa.org/helpcenter/fact-sheet.
- Keep likely referral sources updated on additional training you receive and new types of patients you can treat.
- Some private practitioners write a monthly or bi-monthly newsletter or blog that they send to members of the community. Others write columns in local newspapers or do radio talk shows or podcasts on mental health topics, and some give presentations to local groups such as C.H.A.D.D., the PTA, support groups, or at sites such as the YMCA, senior centers, and schools. These indirect forms of marketing may also be very effective in establishing your reputation as a local expert and can increase your referrals over time. When giving these presentations do not worry about lost billable time; you are making an investment that may pay significant dividends over time through the referrals these presentations may generate.

4.4 Online

- Utilize available professional referral services. Some, such as Psychology Today which at present costs \$29.95 per month and which provides an online listing accessible over the Internet, can be very cost-efficient. If this generates just two referrals per year you will likely be making money on your investment. Other online referral networks exist and each should be investigated to see which best meets your needs.

- Use technology to market yourself as well. Create a website for your practice and link it to a variety of mental health sites. Be sure to keep it up-to-date and include useful information for visitors similar to a brochure or newsletter. If you write a blog or publish podcasts, make them public and sharable via your website so that referral sources can easily get to know you via this source.
- Visit a range of other practitioners' websites to see what you like and dislike about them as well as what you find to be effective and ineffective. You may create your own website utilizing many widely available templates that can be utilized by filling in your information. You also may hire a web designer who can assist you in designing, creating, and managing a customized website that best meets your practice's needs.
- It is also important to have a broader social media presence. This may include the use of platforms such as Facebook, LinkedIn, or Twitter, among others. Being seen as an expert by members of the public can help generate many referrals to your practice.
- You should also market yourself to your colleagues. Utilize your contacts in the State Psychological Association and let them know of your practice and the services you offer. Explore the successful practices in your local area and offer to take the practitioner(s) out to lunch to introduce yourself and meet with them. Many practitioners with busy practices are frequently looking for colleagues to whom they may refer patients they can't fit into their schedule. They also need competent practitioners to whom they can refer patients whose needs fall outside their areas of expertise. They are only likely to refer patients to you if they know you and the services you provide.
- Writing articles in your State Psychological Association's newsletter, giving presentations at conferences and continuing education events, and participating actively on the organization's listserv, each may make you known to your colleagues in a way that highlights your professionalism and areas of professional competence.

4.5 Follow-Up

Keep in mind that only half the work is done when you have received a referral. By nurturing the contact, you will be sure to keep the referrals flowing in. For instance, when a referral is received, always send a letter (or e-mail message) of acknowledgment of the referral (with appropriate consent of the patient). In the case of specific services, be sure to keep the referral source in the loop at pertinent stages. For instance, when doing an evaluation, forward a copy of your report to the referral source; for treatment, provide periodic written updates on the patient's treatment progress. Always be sure to first obtain the patient's written consent before doing sharing records of any kind.

Also bear in mind that your relationship with your referral sources will be best served if you can reduce their workload and help them to solve problems. Ask them,

specifically, what they need and what obstacles they are facing in their practice and market yourself accordingly, if appropriate. Initially, they may send you their most difficult and demanding patients. Satisfied clients and successful treatment outcomes are your most powerful marketing strategies (see Appendix B for a sample letter). Additionally, if a referral is inappropriate for you or your schedule is full, you may want to assist your referral source by offering other appropriate referral suggestions if you know of any. Being helpful in this way can possibly lead to receiving many more referrals from them.

In summary, you must provide high-quality services, give referral sources timely and useful feedback, and market your services both directly to referral sources and indirectly to the community. Actively follow-up all these marketing efforts on a regular basis.

5. Being a Business Person and Entrepreneur

If you are in practice, you are in business. While your goal undoubtedly is to help others in a compassionate and caring manner, if you are not adequately compensated for the professional services you provide you will not be able to stay in practice. Thus, you will need to run an effective business. You will need to create a business plan, understand what your start-up expenses will be and how much financial support you will need to run your practice while working to build it, and know how many patients you will need to have to break even and to then begin making a profit. Stout and Grand (2005) provide an excellent template for a business plan in their book *Getting started in private practice: The complete guide to building your mental health practice*. Using such a template can help ensure that you have a viable and realistic business plan for your private practice and increases the likelihood of being financially successful.

You will also need to address issues such as renting or leasing office space, buying or renting furniture and décor, signing up for utilities and telephone service, and purchasing and maintaining necessary insurance (professional liability insurance, premises insurance, etc.). You will also need to decide which administrative tasks you will do yourself and which ones will be supported by someone other than you. You can either contract out certain services (like insurance billing) or you can hire administrative support staff to do it in house. Depending on who you hire and the agreement you make, support staff can handle everything from billing, collecting, and bookkeeping to scheduling, client relations, and external communications, as directed by you. Finally, with guidance from your attorney and accountant you will need to decide what tax status is most advantageous to you. You may decide to become a professional corporation, a limited liability corporation, a sole proprietor, or some other legal status. Each brings with it certain potential tax and liability costs and benefits.

It goes without saying that as a business person it is essential that you provide patients and referral sources with excellent service. In fact, you should be thinking (at least in part) of your ability to provide high-quality customer service from start to finish, just as any business owner would with their customers. Your patients are

customers who are purchasing a service from you. Customer service can include business practices such as:

- Returning telephone calls, emails, and texts in a timely manner. Thus, you will need to schedule time to check for messages and to return communications throughout the day. Be sure to check for messages evenings, weekends, and holidays unless you have otherwise communicated your availability directly to your patients.
- Have an office that is welcoming and comfortable for patients. Many practices have complimentary water, coffee, and tea available in the waiting room. Comfortable furnishings and a professional atmosphere are important. Consider a white noise machine if you will have clients in a waiting area while you are in treatment. Even if you know that your treatment area is soundproof, your clients do not, and the extra step will give them comfort.
- Ensure that office staff members are warm, welcoming, and professional with patients.
- Be flexible with scheduling. Offering appointment times that are convenient to patients, especially when starting out, is very important. This may include working some early morning, evening, and weekend hours.
- Complete work in a timely manner. For those conducting evaluations, be sure to schedule feedback sessions quickly and have the evaluation report ready for the patient at that time.
- Be available to patients between sessions should they experience a crisis or have questions for you. If you use e-mail or texting, check it often and respond quickly. Be sure patients know how to reach you should a question or crisis arise between treatment appointments. Communicate your emergency procedures clearly and early in treatment, particularly a patient's need to call 911 (or other local emergency services number) if they are in crisis and cannot reach you.
- Return telephone calls from referral sources in a timely manner and periodically provide them with written feedback on the work you are doing with the patient they refer.

One goal is for your patients to feel that they were treated well and that the clinical services provided met all their expectations. However, Berman (2005) takes this one step further, speaking of customer delight, the notion of exceeding your patients' and referral sources' expectations and achieving high standards of excellence in all aspects of their experience with you. The goal here is to provide them with an experience that leaves them so satisfied that they share about their experience with others, thus being valuable referral sources for you.

6. Setting Up Your Practice

If you work as an employee or an independent contractor in someone else's practice, this will be taken care of for you, but if you open and run your own private practice you must consider and address these important issues.

First consider the physical office. The actual office must be set up so that patient privacy is protected. The use of soundproofing, white noise machines, and even insulated ceilings, walls, and doors all help to keep confidential communications private. Secretarial staff should have an area apart from the patient waiting room where telephone calls can be made. A locked room with lockable file cabinets for treatment record storage is mandatory.

Next, consider insurance coverage. At a minimum you will need malpractice insurance. It is typically recommended that your coverage be for \$1,000,000 per claim and \$3,000,000 per year. If you obtain hospital privileges or work on any managed care panels this is typically the amount of coverage they require you obtain and keep in force. You may also wish to obtain disability insurance to provide you with coverage should you be unable to work for a period of time and you should consult your attorney about additional types of insurance for your office and staff. You may purchase two types of malpractice coverage: occurrence and claims made. Occurrence insurance provides coverage for claims made against you any time during your career, even if you discontinue your coverage. Claims made insurance only provides coverage while the policy remains in effect. While occurrence insurance is more costly, many choose it due to the coverage provided. The largest malpractice carrier for psychologists is The Trust (www.trustinsurance.com). Others include the American Professional Agency (www.americanprofessional.com) and Healthcare Providers Service Organization (www.hpsso.com/individuals/professional-liability/malpractice-insurance-for-counselors).

Next, unless you plan to do all jobs (answering the phone, greeting patients, collecting fees, billing, doing insurance paperwork, filing, etc.) you will likely hire staff. Consult with your attorney and accountant and learn about applicable laws concerning interviewing and hiring practices, employment law, taxes, and related issues. Then be sure all persons hired understand both their job duties and all applicable ethical standards. Train your staff about confidentiality and related issues. Have written office policies that you instruct them in and have them agree to in writing. Be sure to supervise them adequately to ensure they do not exceed the agreed upon limits of their roles.

Another important area is fee setting. While you certainly should be paid what you are worth, it is advisable conduct an informal survey of private practitioners in your local area to see what fees they charge. You may either ask them directly, telephone their offices as a potential patient requesting information about their practice, or look for this information on their website. Not only will you learn their fees, but you will also learn about their office policies from the information they share.

You will then need to establish procedures, forms, and documents for informed consent, release of information, payment policies, billing and the use of insurance, the use of collection agencies, intake forms and questionnaires, follow-up letters to referral sources, follow-up letters for patients who drop out of treatment and for those who successfully complete treatment. You may also choose to do some patient satisfaction surveys, treatment outcome measures, and other measures. Rather than

try to develop all these policies and forms yourself, you should request copies of those forms used by colleagues when you meet with them as well as from your mentor. You may also find several resources very helpful in this endeavor.

First, Zuckerman and Kolmes' (2017) book *The paper office for the digital age* is an excellent resource. It includes numerous sample forms, written policies, handouts, and guidelines. The book also includes a CD so that forms may be downloaded and printed for use in your practice. Typical forms include those for informed consent; a practice information form to distribute to patients that includes explanations of such issues as appointments and fees, billing, cancellation policy, emergencies and after-hours contact, the process of therapy, confidentiality, and related issues; a patient intake form; an informed consent to submit insurance form; and an employee agreement to maintain confidentiality form, and many others. They also provide useful information on marketing your practice online to include a web presence and use of social media.

You may also obtain a model informed consent to treatment form on the website of The Trust (www.trustinsurance.com). Additionally, this website provides a sample child therapy contract and a sample forensic informed consent document. You may download each of these and modify them for your use.

An additional valuable resource is the *Clinical documentation sourcebook* by Wiger (2020). This volume provides many useful forms such as those designed for HIPPA compliance, administrative and intake forms, screening and assessment forms, and forms used during the course of treatment, among others. Additionally, several companies market software for tasks such as documentation and patient billing. Many psychologists find the use of such software a great benefit in terms of efficiency and consistency. Examples include TheraScribe (www.therascribe.com) and TherapyNotes (www.therapynotes.com). Finally, practice management software such as therapyappointment (www.therapyappointment.com) and TheraNest (www.theranest.com) provide software that assists in automated client management, scheduling, billing, insurance filing, and related services. Ratings of, and information on, numerous other practice management software products may be easily found by doing an online search.

Finally, supervision is especially important as you begin your career. In addition to individual supervision you may form or join a peer supervision and support group to connect you with other new private practitioners as well as more experienced colleagues. This may be of great help from a clinical standpoint, especially as you develop tools to help you better cope with the many demands of opening and running a private practice. A supervision relationship or group may also become a source of referrals. You should also consult with the information provided in Chapter 4 of this volume for much more detailed suggestions for addressing this important area of our professional development. Commit yourself to lifelong learning and ongoing professional development. It is essential that you keep your knowledge and skills current so you can best meet the assessment and treatment needs of your local community.

Table 17.3 *Checklist for beginning your private practice*

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- Analyze the local community's needs.
 - Select a location.
 - Develop areas of expertise.
 - Develop a comprehensive business plan.
 - Hire an attorney and accountant.
 - Rent or lease office space; ensure soundproofing and handicap accessibility.
 - Obtain needed insurance.
 - Furnish the office, hire needed staff, begin phone service, utilities, etc.
 - Establish office policies and train staff on ethics standards such as confidentiality.
 - Set fees using prevailing community standards as a guide.
 - Develop a multifaceted marketing plan and implement it.
 - Become involved in your community and professional associations.
 - Obtain needed supervision and additional training.
 - Periodically reassess your strategies and practices. Modify as needed.
 - Continue providing high-quality services and never stop marketing your practice.
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In conclusion, the private practice of psychology is an exciting and rewarding endeavor. With adequate advanced thought, preparation, and the use of the resources and strategies described in this chapter you should have a good head start. While a single chapter cannot be an exhaustive reference on all aspects of preparing for and being successful in private practice the information presented above and the checklist in Table 17.3 should be of assistance.

APPENDIX A SAMPLE TARGETED FOLLOW-UP LETTER

Jenny Jones, M.D.
Jones Cardiology Group
Jonesville, MD 21108

Dear Dr. Jones:

I am writing to follow-up the practice opening announcement you recently received. I am a licensed psychologist in your community who specializes in treating stress-related disorders. The enclosed brochures describe my practice and more information is available on my website at www.stressrelief.com

I understand that many of your patients suffer from stress-related disorders and many of them may benefit from several of the services I provide. I recently presented a stress management workshop at the Healthy Hearts Program at Community Hospital. I would be pleased to offer such a workshop to your patients free of charge. I will telephone you shortly to discuss this possibility.

My practice provides a full range of mental health assessment and treatment services. I focus on health and wellness, working to provide patients with the strategies and skills to overcome their difficulties. I know many cardiology patients need assistance with stress management, combating anxiety and depression, as well as with making difficult but crucial

lifestyle changes. I use a full range of evidence-based treatments and will work collaboratively with you to ensure that your patients receive the best possible care.

I look forward to meeting with you to discuss further how I may be of assistance to you and your patients. I will contact your office in the next week to schedule a time to speak.

Sincerely,

Jeffrey E. Barnett, PsyD, ABPP
 Licensed Psychologist
 Board Certified in Clinical Psychology and in
 Clinical Child and Adolescent Psychology

APPENDIX B SAMPLE LETTER TO FOLLOW-UP A REFERRAL

Jane Smith, MD.
 Smith Primary Care
 Smithville, MD 99999

Dear Dr. Smith:

Thank you for your recent referral of Ms. Jen Jones for evaluation and treatment. I met with Ms. Jones initially today and we had the opportunity to discuss her reported difficulties with depression. I began my assessment of these difficulties and will continue this over the next two to three sessions. Once my initial assessment is completed I will be back in touch with you to provide you with my findings, recommendations, and our agreed upon treatment plan. I anticipate having this to you within the next two to three weeks.

(Insert patient's relevant history and mental status examination here)

While no crisis or emergency exists at present, Ms. Jones' depression is a serious concern. She understands that if her symptoms worsen she should contact me immediately. Despite the serious nature of Ms. Jones' depression I am hopeful of being of assistance to her. I utilize a comprehensive treatment approach that will focus on reducing Ms. Jones' distress and provide her with the skills and techniques to help her move forward quickly. I will work closely with you to ensure that Ms. Jones receives the best possible care and will keep you informed of her progress and all significant changes in her functioning as they occur.

I have enclosed several of my business cards for your use along with several pamphlets that may be of use to your patients. I am also separately sending you copies of a stress management tip sheet that I hope will be of value to your patients.

Once again, thank you for this very timely and appropriate referral. I very much appreciate the opportunity to be of service to Ms. Jones. Please feel free to contact me at any time if you have any questions or concerns about her treatment.

Sincerely,

Jeffrey E. Barnett, PsyD, ABPP
 Licensed Psychologist
 Board Certified in Clinical Psychology and in
 Clinical Child and Adolescent Psychology

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Preparation for entering and succeeding in private practice is one vital area that graduate programs typically cannot give adequate attention to due to the long list of “academic” courses and clinical training experiences that must be offered to ensure the development of necessary clinical competence. And it seems that there is never enough time to learn all we need to know to be fully prepared for our professional roles after graduation day. But the preparation specific to having a career as a private practitioner is an important aspect of career growth and planning. This chapter will provide guidance on how to prepare for a career in private practice.

Years ago, psychologists would receive their degree, become licensed, have business cards printed, take out a yellow pages ad, rent an office, and begin treating patients. Unfortunately, the practice landscape has become much more crowded, competitive, and complicated over the years. There are numerous mental health professionals with various amounts and types of training who are all competing for many of the same patients. While clinical proficiency is mandatory, it is not nearly enough to ensure success in private practice. Running a private practice is a business enterprise that requires advanced planning, market analysis, a business plan, targeted marketing, and solid business practices.

1. Preparation for Private Practice

Rather than using a trial-and-error approach and just learning as you go along, it is best if you prepare well in advance to enter private practice. You can begin by using the resources that surround you to explore options that will allow you to become more marketable and better prepared to be a successful private practitioner. Use your graduate school professors, professionals in your community, state and national professional associations, internet websites, and social media networking sites to explore your options as early as possible. Seek out mentors who can assist you to prepare for a successful career as a private practitioner. Refer to the checklist below to familiarize yourself with some of the issues you will want to consider both before and after receiving your degree.

1.1 While You Are Still in Graduate School

- Take elective courses in specialty areas that interest you. Possibilities include group or family psychotherapy, clinical hypnosis, stress management, and neuropsychological assessment.
- Explore specific externship/internship opportunities that will prepare you for the type of private practice you would like to have.
- If your school offers a course in the business aspects of practice, take it!
- Seek out professional continuing education classes that focus on business aspects of practice.
- Join your state psychological association and Psychologists in Independent Practice (Division 42) of the American Psychological Association. Participate in one of their mentoring programs.
- Talk to those professors who also work in private practice and other mentors with experience in private practice and ask questions such as:
 - What experiences should I seek out as a student to better prepare me for a career in private practice?
 - What challenges and obstacles might I face when entering private practice and what are some actions to take to help overcome them?
 - What lessons have you learned over the years that contribute to being successful in private practice?

1.2 After Obtaining Your Degree

- Explore post-doctoral opportunities that will enhance your skills as a private practitioner. See Chapter 23 of this volume for further information on the potential importance and role of post-doctoral fellowships.
- Continue working closely with a mentor who is an experienced and successful private practitioner. There is no need to have to go it alone.
- Research geographical areas that interest you and determine their needs. Consider the following when deciding to practice in a certain area:
 - If there are any groups of potential patients whose needs are not being adequately met.
 - Assess your local area to see if it is saturated with practitioners with a certain specialty.
 - Consider if the region you've selected for your private practice is saturated with managed care or if most private practitioners in that area have fee-for-service practices.
- Determine if you will be able to join managed care panels and if so, how long this process takes and when you can begin.
- Consider how much "unpaid" time you will spend collecting payment from managed care organizations and if it would be worth your while to hire administrative help.

- Determine if you should open your private practice immediately or if you will need to start with other work and build your private practice into a full-time enterprise over time.
- Develop a business plan, including a budget, for establishing and running your private practice. Determine which experts you should consult with to assist you with this endeavor. You might wish to seek out and consult with an attorney or a Certified Public Accountant at this stage to get a feeling for the ways in which you can set up to protect yourself, financially and legally.

1.3 After You Enter Practice

- Continue relationships with current mentors and seek out others who have expertise in areas of relevance to your private practice.
- Continue your relationships with your attorney, Certified Public Accountant, and perhaps add the services of a Certified Financial Planner to further assist you with the legal and financial aspects of private practice.
- Consider using the resources available through The Practice Institute (<https://thepracticeinstitute.com>) for business and marketing consultation, education, support, and assistance.
- Reflect on what successes and failures you have experienced in beginning and running a private practice. Learn from them, build on your successes, and don't repeat the failures – consider them lessons learned.
- Determine the most important things you have learned about running a successful private practice and keep these lessons in mind.
- Consider what impact your theoretical orientation has played on the nature of your private practice and on your level of success. Remember that you can build on what you know to be able to serve your client base more comprehensively. For instance, if you are trained in the use of Cognitive Behavioral Therapy (CBT), you may wish to enhance your competency around the practice of mindfulness meditation, which is often successfully used as a part of CBT.
- Seek out continuing education opportunities that will expand the skills you can offer to the public. Always consider the niche markets in your area that will keep the clients coming.

2. Is Private Practice For You?

A career as a private practitioner is not for everyone. However, for those who are well-prepared and who have realistic expectations, it is an enriching and rewarding career choice. Educate yourself about the realities of private practice to ensure your decisions are not influenced by common myths or misunderstandings about private practice (Barnett & Zimmerman, 2019). Consider if private practice is a good fit for your personality, needs, and professional goals. Personal characteristics such as strong

Table 17.1 *Pros and cons for a career in private practice*

Pros	Cons
Being your own boss	Financial uncertainty and risk with possible periods of low earnings
Ability to decide practice location, hours, areas of specialization	Responsibility for all expenses and overheads
Unlimited earnings potential	Possible professional isolation for solo practitioners
Flexibility	Responsibility for billing, collections, insurance, employee and staff decisions
Control over business decisions	
Full responsibility for success of practice	

internal motivation and an entrepreneurial spirit will certainly play a role in your success in private practice, but these factors alone are not enough. Consider the pros and cons to establishing and maintaining a private practice provided in Table 17.1.

After making the decision to enter private practice and considering the personal characteristics and professional issues above, it is important to start thinking about some of the more practical issues you will face as a private practitioner. For instance, how will you start your practice? Jumping right into full-time private practice is not necessarily a viable option for all recent graduates. Consider the most realistic and beneficial options relevant to your situation. Specifically, find out how much time it takes to build a full-time private practice, assess the financial demands of opening a practice in your area, evaluate how you will make ends meet while you are building your clientele, consider your need for health insurance and other benefits, and make sure you will be able to find sources of professional support, especially early on. When examining the big picture, some recent graduates prefer to start out in another setting and transition to private practice slowly. This is not considered failure or a 'second best' option, and in fact may teach you valuable lessons that will reinforce the success of your future practice as an independent practitioner.

One way to do this is to work full-time in a salaried position and start your private practice in the evenings and on weekends. This will provide you with a full-time salary, benefits, collegial interaction, and supervision. This is a good time to develop competence in specialty areas of practice that you can begin marketing in the local community. You will also have the opportunity to network with other professionals in the local area and to build your reputation while avoiding the potential financial instability that may be a part of your early years in practice. Or, if you have the financial flexibility, you might want to work part-time in a salaried position with benefits and build your practice in the remaining time. While perhaps slightly more risky from a financial perspective, this arrangement gives you more time to build your practice while enjoying the security and benefits of a salaried position.

An additional option is to dedicate yourself full time to the development of your private practice. This choice provides the fastest route to a full-time private practice but carries the greatest financial risk. With each of the first two choices you can decide, based on your success and/or preference, just how much of your time you want to spend in the private practice setting. Some practitioners cut back on the number of hours worked in a salaried position as their private practice grows. Others will find that working part-time in two positions provides them with the best possible combination of financial stability, benefits, varied work activities, and collegial interactions to meet their needs.

Another important decision to make concerns your practice setting. You may choose to open your own “solo” private practice; you may form a group practice with one or more colleagues; or you may join an already existing group practice, whether it be only with other psychologists or with a range of other mental health professionals. When starting out as a solo practitioner you may lease office space on your own or sublet an office in a suite with other mental health professionals. For those who decide to build their practice part-time, subletting space in a larger suite of offices may be the best course of action. Offices may typically be rented quite economically, often by the hour, the half-day, or by the day, and come furnished and offer amenities such as telephone, photocopier, internet access, and even a shared receptionist to greet patients and answer the phone. As your practice grows, you may be able to contract for additional time in the office. Another benefit of this arrangement is the proximity of colleagues. Being in a solo private practice on one’s own may be an isolating experience. Further, not having to pay for office space full time when only using it part time is much more economical. However, when working in a suite of offices with other mental health professionals it is important to ensure that your solo or independent practice is clearly represented to others so that you will not incur any liability from the actions of others in the office suite.

If you choose to participate in a group practice, an additional point to consider is the composition of the group. It may be comprised entirely of psychologists or it may be a multidisciplinary group. Further, as Walfish and Barnett (2008) recommend, “When joining a group practice, choose your associates wisely. These individuals can enhance or detract from your reputation and increase or decrease your liability” (p. 56) and your income! Thus, all potential practice arrangements should be fully investigated and careful consideration should be given before making such a decision. Table 17.2 provides an overview of the benefits and drawbacks of solo and group practice arrangements.

Again, it is helpful to speak with private practitioners in a variety of practice settings to hear about their various experiences. This will help you decide on the best plan of action for you. Keep in mind, however, that many practitioners look for positions, get interviewed, accept an offer, and *then* see how it works. There is only so much we can know in advance; some of it must be learned through experience. However, if you consider all these issues and get a clear sense that one practice arrangement best suits your needs, personality, and comfort level, then that is what you should try.

Table 17.2 *Considerations for a solo practice or group practice*

Solo practice	Group practice
Pro: Practitioner independence. Set your own hours, salary, benefits; decide how to run your practice	Pro: When you have a psychiatrist on staff you will have easy access and ongoing communication about your patients who need treatment with psychotropic medications in addition to their psychotherapy
Con: You must find mentorship and supervision on your own as you need it. This might come at a cost	Con: Interprofessional collaboration and within-group referrals
Con: No administrative support, you will have to allow time for paperwork and correspondence	Pro: Access to clerical and administrative support
Con: Higher costs of operation unless operating from your home, which has drawbacks of its own	Pro: Lower overheads/sharing of costs
Pro: Absolute authority over all decisions	Con: Sharing of decisions and of profits
Con: Unlimited personal liability	Con: Each member of the group must accept some liability for the actions of all group members

Note: A sole proprietorship is not taxed as a business entity. (Depending on your total income, this can be either an advantage or a disadvantage.)

2.1 Questions to Ask When Considering Joining a Group Practice

- Who owns the group and who makes business decisions?
- How are referrals shared and what assistance will be provided to help me get started?
- What administrative support do I receive from the group?
- What per cent of the income I generate goes to the practice and what per cent to me?
- Does this percentage change over time and if so, by how much and what factors impact this?
- What if I decide to leave the practice; can I take my patients with me?
- What benefits am I provided; malpractice insurance, continuing education, etc.?
- Am I allowed to decide which patients I will treat?
- What supervision and on-call coverage opportunities and obligations exist?
- What are the criteria for evaluation and how does one become an owner or partner?

As you begin to attempt to set yourself apart from the many psychotherapists, counselors, and other mental health clinicians competing with you for a limited number of potential patients, it is important to be able to be more than just another generic mental health professional. This is where your “niche” might come into play. This is not to suggest that providing psychotherapy and assessment services with excellence is not a worthy endeavor, but these skills should be viewed as the foundation for your private practice. Beyond that, consider developing an area of expertise that can be marketed to targeted audiences (and that also are typically

fee-for-service endeavors where you will earn more and not have to hassle with managed care).

Psychologists in Independent Practice, Division 42 of the American Psychological Association, has an excellent series of niche practice guides that provide an excellent introduction to developing a specialty. Each guide provides a detailed description of the specialty area, information on how to enter it, what training is needed, and where to obtain it and training resources available, ethics issues to consider, marketing considerations, and a list of resources to access for additional information. Thirty six niche practice guides are presently available for such diverse areas of practice as health psychology, infertility, psycho-oncology, eating disorders treatment, marital therapy, working with stepfamilies, smoking cessation, ADHD assessment and treatment, geriatrics, sport psychology, treatment of personality disorders, neuropsychology, women's issues, psychologist–dentist collaboration, child custody evaluations, men's issues, and many others. These very useful guides may be ordered through the Division 42 website at www.division42.org. Developing specialty areas is an important step for setting yourself apart from other practitioners in your community. Select areas that interest you, obtain the needed training, and then begin marketing the services you have to offer.

In addition to providing clinical services, you should consider how you might apply the knowledge and skills you already possess to other areas that would augment your clinical practice. Suggestions include business consultation and team building, personal and executive coaching, divorce mediation, school consultations, and forensic evaluations. An additional excellent resource for those starting out in practice is the book by Walfish (2010) that describes 50 different practice areas for providing professional services outside of managed care. While one should only enter specialty and niche areas of practice with supervision from, or consultation with, an experienced colleague, you may be surprised how little additional training and experience you'll need to be competent in these additional areas of practice. Another useful, and hopefully inspirational, resource is Verhaagen and Gaskill's (2014) book *How we built our dream practice: Innovative ideas for building yours*.

3. The Business of Practice

Even the most competent clinician can end up sitting alone in the office waiting for the phone to ring. After assessing your local area's needs, developing a specialty area or practice niche, deciding on group or solo practice/multidisciplinary or all psychologists, purchasing business cards and possibly even developing a website and/or social media presence for your practice, you must now tackle the business of practice; and it *is* a business. Ask yourself the following questions regarding the business of running a private practice.

First, will I work as an independent contractor or an employee? An employee is hired by, and works for, an employer; is directed by the employer which patients to treat, when, and how; and the employer takes out withholding for taxes and pays a portion of the individual's social security tax. IRS Tax Topic Bulletin 762,

Independent Contractor (Self-Employed) or Employee, explains that an independent contractor is defined as an individual who is not an employee, but who works with another individual under a contractual agreement. Independent contractors treat whichever patients they like, and when and how they might like. They purchase their own supplies and set their own hours. They pay quarterly estimated taxes and no taxes are withheld by the other person. For additional information see the Internal Revenue Service's website at www.irs.gov/taxtopics/tc762. Additional important information is provided at the IRS webpage Independent Contractor Defined at: www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-defined.

If you should choose to work as an employee, ask yourself how you will establish your fee structure for services rendered *and* how you will be compensated by the practice. Employees typically receive a specific salary and benefits, based on a certain number of employee billable hours provided in the practice. The employer also pays a portion of the employee's social security taxes. Additional administrative tasks may also be assigned as part of your work duties as specified in your employment contract. As an employee, you have the right to negotiate your employment contract, but do consider the learning and support you will receive as an employee as part of what you are gaining and factor that into your negotiations.

For independent contractors the typical arrangement is to pay the practice owner a certain fee or certain percentage of fees collected for each patient seen. Typically, independent contractors working within an established practice pay the practice owner 40 per cent of all fees collected and keep 60 per cent for themselves. If you are offered a lower percentage of fees collected, such as 50 per cent, be sure your contract stipulates criteria for it increasing over time. Keep in mind that a lower percentage reflects the fact that the practice may be providing referrals and your business will get built-in marketing just by being a part of an established practice with its own reputation. A typical arrangement would be to start with paying 50 per cent to the practice and then having this percentage decrease as you begin generating your own referrals. Should you begin providing referrals to others in the group due to your success, the percentage paid to the practice should decrease even further. All of this should be clearly laid out in the contractual agreement signed upon joining the group. Being aware of these long-term issues when starting out is very important to your success in private practice.

It is essential that you have all contracts reviewed by your own attorney prior to signing them. Without legal training, we are not able to know the implications of every clause that may appear in a contract. Your attorney is your advocate and considers each contract based on your best interests, at present and over the long term. An investment in legal services at the outset is an investment in yourself and your practice. Paying for the services of an attorney can save you tens of thousands of dollars over the years as opposed to trying to do it all on your own. Specifically, your attorney will help you agree to a contract that contains provisions that will grow your earnings in years to come. Failure to consult with your own attorney prior to signing a practice agreement or contract may result in your unknowing agreement to

provisions that promote the best interests of the practice owners over your own best interests, and sometimes even at your expense.

Additionally, as you negotiate the contract, you will need to consider what you are receiving for the percentage of collections you pay to the practice. The practice owner is providing the office space, furnishings, office staff and supplies, and perhaps most importantly, referrals of patients for you to evaluate and treat. Typically, practice owners who are very busy and have more incoming referrals than they can personally treat will take on independent contractors. For the new psychologist just entering private practice this can be an excellent way of starting out. There is a ready stream of referrals, a furnished office with trained staff and infrastructure already in place, and the possibility of supervision and peer support. As mentioned, other contractual arrangements are possible, such as leasing space in another practitioner's or group's office, so consider the options available to you as you find the arrangement that is in your best interest and best meets your needs based on your particular circumstances.

Finally, be sure to educate yourself on certain business principles such as non-competition clauses *before* you sign a practice agreement or contract. This is a major area of concern for independent contractors, especially when and if you eventually hope to leave the practice and branch out as a fully independent practitioner. The non-competition clause will be laid out and agreed upon between you and the practice owner when signing your initial contract. This clause may specify that if you decide to leave you may not practice psychology for a specified period of time within a certain distance of the practice you are leaving. This will protect the practice owner from direct competition from you should you decide to leave after they assist you in becoming established and developing your professional reputation with referral sources in the local area. Unless you have a specialty area not otherwise available in the local area, such contractual clauses are generally deemed enforceable. The practice owner is providing you with referrals and assisting you to develop your reputation and referral sources in the local area. Without such a clause in the contract you could fill your schedule, build your reputation, and then leave and open your own practice across the street or across town. Yet, these clauses can sometimes be negotiated and they do not necessarily need to be included in practice agreements and contracts. This is another important aspect of contractual negotiations where your attorney can prove invaluable.

4. Rules of Business Success

4.1 Consult the Experts

The first thing you need to know, even if you open a solo practice, is that you can never enter or run a private practice on your own. You will need the services of experts in two key areas of expertise: legal issues and accounting. As has been highlighted, unless you have graduated from law school we strongly suggest that you *never* enter a business arrangement or sign any contract before first consulting with your attorney. Too many practitioners have learned the hard way just how costly a mistake being your own attorney or accountant can be. While their fees may seem expensive, these

professionals will save you a great deal of money, anguish, and legal difficulties in the long run. Speak to experienced practitioners in your local area to find out who they use, if they are happy with the fees charged and services provided, and then use this input to guide you. You may also obtain referrals for attorneys through your local or state psychological association as well as through the local bar association, but be sure to check their references and reputation. Don't rely on fancy advertisements for guiding you in such an important decision. Just to clarify the point made above . . . never sign any contract without first having it reviewed by your attorney who will ensure it is in your best interest and suggest any needed modifications *before* you sign it.

A Certified Public Accountant (CPA) can assist you with numerous important financial aspects of setting up and running your private practice. For a detailed explanation of all this see the book *Financial management for your mental health practice* by Zimmerman and Libby (2015). Additionally, a CPA can assist you in making important decisions such as if you should incorporate your practice and if so, how. Numerous options exist to include incorporating as a Limited Liability Corporation or a Professional Corporation, among others. Each incorporation status brings with it different costs and benefits. Your CPA will be able to guide you to make the best choice for your needs and circumstances. A CPA can also assist you with retirement planning, something you should consider from the outset of your career.

A Certified Financial Planner can be of immense help in offering guidance on investments and retirement planning. Private practitioners need to save money for their retirement and invest it wisely over the long term. Unless one is a salaried employee who works for a company that offers a pension plan, one has to plan for and save for their own retirement. Consulting with a financial expert can make this process easier and more successful.

4.2 Market Your Practice at Every Opportunity

Even if you are an independent contractor in a group practice, but especially if you decide to open your own practice, marketing yourself to the local community and to a variety of possible referral sources is of great importance. Potential referral sources may include physicians in your community, schools, attorneys, other mental health professionals, and a variety of others depending on the type of professional services you offer. It is important that you have a visible and positive presence in-person in your community as well as online.

4.3 In-Person

Possible strategies to secure referrals include:

- Send an announcement of your practice opening. Follow up with a brief letter describing your training, background, and expertise. Be sure to tailor the letters to the perceived needs of each referral source and the specific population they serve. (See Appendix A for an example.)

- Telephone potential referral sources and request a brief meeting to meet and describe the services you offer (and how you can help them and their patients). Especially if you contact medical offices or other practices, determine whether you can offer a service they need and mention that specific service when you call. Let them know that you would be willing to briefly attend a few minutes at the start or the end of their next staff meeting so that you have the chance to meet everyone at once and answer any questions.
- Offer free presentations to the patients of your referral sources. For example, you could offer a seminar on behavior management strategies to the parents of a pediatrician's patients, a presentation on stress management skills to an internal medicine physician's or cardiologist's patients, or a seminar on strategies for working with certain types of learning disabilities for teachers at a school you hope will refer patients to you.
- If you give presentations or seminars, be sure to bring business cards, brochures, and fliers describing you, your practice, and the services you offer. Ensure that all these materials include your e-mail address and the web address for your website. You can utilize marketing professionals and create your own brochure or you can purchase brochures from the APA's Division 42 and then attach your business card to them.
- The APA offers free fact sheets that provide practical information on a wide range of mental health issues and how psychologists can help address them. These are available at www.apa.org/helpcenter/fact-sheet.
- Keep likely referral sources updated on additional training you receive and new types of patients you can treat.
- Some private practitioners write a monthly or bi-monthly newsletter or blog that they send to members of the community. Others write columns in local newspapers or do radio talk shows or podcasts on mental health topics, and some give presentations to local groups such as C.H.A.D.D., the PTA, support groups, or at sites such as the YMCA, senior centers, and schools. These indirect forms of marketing may also be very effective in establishing your reputation as a local expert and can increase your referrals over time. When giving these presentations do not worry about lost billable time; you are making an investment that may pay significant dividends over time through the referrals these presentations may generate.

4.4 Online

- Utilize available professional referral services. Some, such as Psychology Today which at present costs \$29.95 per month and which provides an online listing accessible over the Internet, can be very cost-efficient. If this generates just two referrals per year you will likely be making money on your investment. Other online referral networks exist and each should be investigated to see which best meets your needs.

- Use technology to market yourself as well. Create a website for your practice and link it to a variety of mental health sites. Be sure to keep it up-to-date and include useful information for visitors similar to a brochure or newsletter. If you write a blog or publish podcasts, make them public and sharable via your website so that referral sources can easily get to know you via this source.
- Visit a range of other practitioners' websites to see what you like and dislike about them as well as what you find to be effective and ineffective. You may create your own website utilizing many widely available templates that can be utilized by filling in your information. You also may hire a web designer who can assist you in designing, creating, and managing a customized website that best meets your practice's needs.
- It is also important to have a broader social media presence. This may include the use of platforms such as Facebook, LinkedIn, or Twitter, among others. Being seen as an expert by members of the public can help generate many referrals to your practice.
- You should also market yourself to your colleagues. Utilize your contacts in the State Psychological Association and let them know of your practice and the services you offer. Explore the successful practices in your local area and offer to take the practitioner(s) out to lunch to introduce yourself and meet with them. Many practitioners with busy practices are frequently looking for colleagues to whom they may refer patients they can't fit into their schedule. They also need competent practitioners to whom they can refer patients whose needs fall outside their areas of expertise. They are only likely to refer patients to you if they know you and the services you provide.
- Writing articles in your State Psychological Association's newsletter, giving presentations at conferences and continuing education events, and participating actively on the organization's listserv, each may make you known to your colleagues in a way that highlights your professionalism and areas of professional competence.

4.5 Follow-Up

Keep in mind that only half the work is done when you have received a referral. By nurturing the contact, you will be sure to keep the referrals flowing in. For instance, when a referral is received, always send a letter (or e-mail message) of acknowledgment of the referral (with appropriate consent of the patient). In the case of specific services, be sure to keep the referral source in the loop at pertinent stages. For instance, when doing an evaluation, forward a copy of your report to the referral source; for treatment, provide periodic written updates on the patient's treatment progress. Always be sure to first obtain the patient's written consent before doing sharing records of any kind.

Also bear in mind that your relationship with your referral sources will be best served if you can reduce their workload and help them to solve problems. Ask them,

specifically, what they need and what obstacles they are facing in their practice and market yourself accordingly, if appropriate. Initially, they may send you their most difficult and demanding patients. Satisfied clients and successful treatment outcomes are your most powerful marketing strategies (see Appendix B for a sample letter). Additionally, if a referral is inappropriate for you or your schedule is full, you may want to assist your referral source by offering other appropriate referral suggestions if you know of any. Being helpful in this way can possibly lead to receiving many more referrals from them.

In summary, you must provide high-quality services, give referral sources timely and useful feedback, and market your services both directly to referral sources and indirectly to the community. Actively follow-up all these marketing efforts on a regular basis.

5. Being a Business Person and Entrepreneur

If you are in practice, you are in business. While your goal undoubtedly is to help others in a compassionate and caring manner, if you are not adequately compensated for the professional services you provide you will not be able to stay in practice. Thus, you will need to run an effective business. You will need to create a business plan, understand what your start-up expenses will be and how much financial support you will need to run your practice while working to build it, and know how many patients you will need to have to break even and to then begin making a profit. Stout and Grand (2005) provide an excellent template for a business plan in their book *Getting started in private practice: The complete guide to building your mental health practice*. Using such a template can help ensure that you have a viable and realistic business plan for your private practice and increases the likelihood of being financially successful.

You will also need to address issues such as renting or leasing office space, buying or renting furniture and décor, signing up for utilities and telephone service, and purchasing and maintaining necessary insurance (professional liability insurance, premises insurance, etc.). You will also need to decide which administrative tasks you will do yourself and which ones will be supported by someone other than you. You can either contract out certain services (like insurance billing) or you can hire administrative support staff to do it in house. Depending on who you hire and the agreement you make, support staff can handle everything from billing, collecting, and bookkeeping to scheduling, client relations, and external communications, as directed by you. Finally, with guidance from your attorney and accountant you will need to decide what tax status is most advantageous to you. You may decide to become a professional corporation, a limited liability corporation, a sole proprietor, or some other legal status. Each brings with it certain potential tax and liability costs and benefits.

It goes without saying that as a business person it is essential that you provide patients and referral sources with excellent service. In fact, you should be thinking (at least in part) of your ability to provide high-quality customer service from start to finish, just as any business owner would with their customers. Your patients are

customers who are purchasing a service from you. Customer service can include business practices such as:

- Returning telephone calls, emails, and texts in a timely manner. Thus, you will need to schedule time to check for messages and to return communications throughout the day. Be sure to check for messages evenings, weekends, and holidays unless you have otherwise communicated your availability directly to your patients.
- Have an office that is welcoming and comfortable for patients. Many practices have complimentary water, coffee, and tea available in the waiting room. Comfortable furnishings and a professional atmosphere are important. Consider a white noise machine if you will have clients in a waiting area while you are in treatment. Even if you know that your treatment area is soundproof, your clients do not, and the extra step will give them comfort.
- Ensure that office staff members are warm, welcoming, and professional with patients.
- Be flexible with scheduling. Offering appointment times that are convenient to patients, especially when starting out, is very important. This may include working some early morning, evening, and weekend hours.
- Complete work in a timely manner. For those conducting evaluations, be sure to schedule feedback sessions quickly and have the evaluation report ready for the patient at that time.
- Be available to patients between sessions should they experience a crisis or have questions for you. If you use e-mail or texting, check it often and respond quickly. Be sure patients know how to reach you should a question or crisis arise between treatment appointments. Communicate your emergency procedures clearly and early in treatment, particularly a patient's need to call 911 (or other local emergency services number) if they are in crisis and cannot reach you.
- Return telephone calls from referral sources in a timely manner and periodically provide them with written feedback on the work you are doing with the patient they refer.

One goal is for your patients to feel that they were treated well and that the clinical services provided met all their expectations. However, Berman (2005) takes this one step further, speaking of customer delight, the notion of exceeding your patients' and referral sources' expectations and achieving high standards of excellence in all aspects of their experience with you. The goal here is to provide them with an experience that leaves them so satisfied that they share about their experience with others, thus being valuable referral sources for you.

6. Setting Up Your Practice

If you work as an employee or an independent contractor in someone else's practice, this will be taken care of for you, but if you open and run your own private practice you must consider and address these important issues.

First consider the physical office. The actual office must be set up so that patient privacy is protected. The use of soundproofing, white noise machines, and even insulated ceilings, walls, and doors all help to keep confidential communications private. Secretarial staff should have an area apart from the patient waiting room where telephone calls can be made. A locked room with lockable file cabinets for treatment record storage is mandatory.

Next, consider insurance coverage. At a minimum you will need malpractice insurance. It is typically recommended that your coverage be for \$1,000,000 per claim and \$3,000,000 per year. If you obtain hospital privileges or work on any managed care panels this is typically the amount of coverage they require you obtain and keep in force. You may also wish to obtain disability insurance to provide you with coverage should you be unable to work for a period of time and you should consult your attorney about additional types of insurance for your office and staff. You may purchase two types of malpractice coverage: occurrence and claims made. Occurrence insurance provides coverage for claims made against you any time during your career, even if you discontinue your coverage. Claims made insurance only provides coverage while the policy remains in effect. While occurrence insurance is more costly, many choose it due to the coverage provided. The largest malpractice carrier for psychologists is The Trust (www.trustinsurance.com). Others include the American Professional Agency (www.americanprofessional.com) and Healthcare Providers Service Organization (www.hpsso.com/individuals/professional-liability/malpractice-insurance-for-counselors).

Next, unless you plan to do all jobs (answering the phone, greeting patients, collecting fees, billing, doing insurance paperwork, filing, etc.) you will likely hire staff. Consult with your attorney and accountant and learn about applicable laws concerning interviewing and hiring practices, employment law, taxes, and related issues. Then be sure all persons hired understand both their job duties and all applicable ethical standards. Train your staff about confidentiality and related issues. Have written office policies that you instruct them in and have them agree to in writing. Be sure to supervise them adequately to ensure they do not exceed the agreed upon limits of their roles.

Another important area is fee setting. While you certainly should be paid what you are worth, it is advisable conduct an informal survey of private practitioners in your local area to see what fees they charge. You may either ask them directly, telephone their offices as a potential patient requesting information about their practice, or look for this information on their website. Not only will you learn their fees, but you will also learn about their office policies from the information they share.

You will then need to establish procedures, forms, and documents for informed consent, release of information, payment policies, billing and the use of insurance, the use of collection agencies, intake forms and questionnaires, follow-up letters to referral sources, follow-up letters for patients who drop out of treatment and for those who successfully complete treatment. You may also choose to do some patient satisfaction surveys, treatment outcome measures, and other measures. Rather than

try to develop all these policies and forms yourself, you should request copies of those forms used by colleagues when you meet with them as well as from your mentor. You may also find several resources very helpful in this endeavor.

First, Zuckerman and Kolmes' (2017) book *The paper office for the digital age* is an excellent resource. It includes numerous sample forms, written policies, handouts, and guidelines. The book also includes a CD so that forms may be downloaded and printed for use in your practice. Typical forms include those for informed consent; a practice information form to distribute to patients that includes explanations of such issues as appointments and fees, billing, cancellation policy, emergencies and after-hours contact, the process of therapy, confidentiality, and related issues; a patient intake form; an informed consent to submit insurance form; and an employee agreement to maintain confidentiality form, and many others. They also provide useful information on marketing your practice online to include a web presence and use of social media.

You may also obtain a model informed consent to treatment form on the website of The Trust (www.trustinsurance.com). Additionally, this website provides a sample child therapy contract and a sample forensic informed consent document. You may download each of these and modify them for your use.

An additional valuable resource is the *Clinical documentation sourcebook* by Wiger (2020). This volume provides many useful forms such as those designed for HIPPA compliance, administrative and intake forms, screening and assessment forms, and forms used during the course of treatment, among others. Additionally, several companies market software for tasks such as documentation and patient billing. Many psychologists find the use of such software a great benefit in terms of efficiency and consistency. Examples include TheraScribe (www.therascribe.com) and TherapyNotes (www.therapynotes.com). Finally, practice management software such as therapyappointment (www.therapyappointment.com) and TheraNest (www.theranest.com) provide software that assists in automated client management, scheduling, billing, insurance filing, and related services. Ratings of, and information on, numerous other practice management software products may be easily found by doing an online search.

Finally, supervision is especially important as you begin your career. In addition to individual supervision you may form or join a peer supervision and support group to connect you with other new private practitioners as well as more experienced colleagues. This may be of great help from a clinical standpoint, especially as you develop tools to help you better cope with the many demands of opening and running a private practice. A supervision relationship or group may also become a source of referrals. You should also consult with the information provided in Chapter 4 of this volume for much more detailed suggestions for addressing this important area of our professional development. Commit yourself to lifelong learning and ongoing professional development. It is essential that you keep your knowledge and skills current so you can best meet the assessment and treatment needs of your local community.

Table 17.3 *Checklist for beginning your private practice*

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- Analyze the local community's needs.
 - Select a location.
 - Develop areas of expertise.
 - Develop a comprehensive business plan.
 - Hire an attorney and accountant.
 - Rent or lease office space; ensure soundproofing and handicap accessibility.
 - Obtain needed insurance.
 - Furnish the office, hire needed staff, begin phone service, utilities, etc.
 - Establish office policies and train staff on ethics standards such as confidentiality.
 - Set fees using prevailing community standards as a guide.
 - Develop a multifaceted marketing plan and implement it.
 - Become involved in your community and professional associations.
 - Obtain needed supervision and additional training.
 - Periodically reassess your strategies and practices. Modify as needed.
 - Continue providing high-quality services and never stop marketing your practice.
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In conclusion, the private practice of psychology is an exciting and rewarding endeavor. With adequate advanced thought, preparation, and the use of the resources and strategies described in this chapter you should have a good head start. While a single chapter cannot be an exhaustive reference on all aspects of preparing for and being successful in private practice the information presented above and the checklist in Table 17.3 should be of assistance.

APPENDIX A SAMPLE TARGETED FOLLOW-UP LETTER

Jenny Jones, M.D.
Jones Cardiology Group
Jonesville, MD 21108

Dear Dr. Jones:

I am writing to follow-up the practice opening announcement you recently received. I am a licensed psychologist in your community who specializes in treating stress-related disorders. The enclosed brochures describe my practice and more information is available on my website at www.stressrelief.com

I understand that many of your patients suffer from stress-related disorders and many of them may benefit from several of the services I provide. I recently presented a stress management workshop at the Healthy Hearts Program at Community Hospital. I would be pleased to offer such a workshop to your patients free of charge. I will telephone you shortly to discuss this possibility.

My practice provides a full range of mental health assessment and treatment services. I focus on health and wellness, working to provide patients with the strategies and skills to overcome their difficulties. I know many cardiology patients need assistance with stress management, combating anxiety and depression, as well as with making difficult but crucial

lifestyle changes. I use a full range of evidence-based treatments and will work collaboratively with you to ensure that your patients receive the best possible care.

I look forward to meeting with you to discuss further how I may be of assistance to you and your patients. I will contact your office in the next week to schedule a time to speak.

Sincerely,

Jeffrey E. Barnett, PsyD, ABPP
 Licensed Psychologist
 Board Certified in Clinical Psychology and in
 Clinical Child and Adolescent Psychology

APPENDIX B SAMPLE LETTER TO FOLLOW-UP A REFERRAL

Jane Smith, MD.
 Smith Primary Care
 Smithville, MD 99999

Dear Dr. Smith:

Thank you for your recent referral of Ms. Jen Jones for evaluation and treatment. I met with Ms. Jones initially today and we had the opportunity to discuss her reported difficulties with depression. I began my assessment of these difficulties and will continue this over the next two to three sessions. Once my initial assessment is completed I will be back in touch with you to provide you with my findings, recommendations, and our agreed upon treatment plan. I anticipate having this to you within the next two to three weeks.

(Insert patient's relevant history and mental status examination here)

While no crisis or emergency exists at present, Ms. Jones' depression is a serious concern. She understands that if her symptoms worsen she should contact me immediately. Despite the serious nature of Ms. Jones' depression I am hopeful of being of assistance to her. I utilize a comprehensive treatment approach that will focus on reducing Ms. Jones' distress and provide her with the skills and techniques to help her move forward quickly. I will work closely with you to ensure that Ms. Jones receives the best possible care and will keep you informed of her progress and all significant changes in her functioning as they occur.

I have enclosed several of my business cards for your use along with several pamphlets that may be of use to your patients. I am also separately sending you copies of a stress management tip sheet that I hope will be of value to your patients.

Once again, thank you for this very timely and appropriate referral. I very much appreciate the opportunity to be of service to Ms. Jones. Please feel free to contact me at any time if you have any questions or concerns about her treatment.

Sincerely,

Jeffrey E. Barnett, PsyD, ABPP
 Licensed Psychologist
 Board Certified in Clinical Psychology and in
 Clinical Child and Adolescent Psychology

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Preparation for entering and succeeding in private practice is one vital area that graduate programs typically cannot give adequate attention to due to the long list of “academic” courses and clinical training experiences that must be offered to ensure the development of necessary clinical competence. And it seems that there is never enough time to learn all we need to know to be fully prepared for our professional roles after graduation day. But the preparation specific to having a career as a private practitioner is an important aspect of career growth and planning. This chapter will provide guidance on how to prepare for a career in private practice.

Years ago, psychologists would receive their degree, become licensed, have business cards printed, take out a yellow pages ad, rent an office, and begin treating patients. Unfortunately, the practice landscape has become much more crowded, competitive, and complicated over the years. There are numerous mental health professionals with various amounts and types of training who are all competing for many of the same patients. While clinical proficiency is mandatory, it is not nearly enough to ensure success in private practice. Running a private practice is a business enterprise that requires advanced planning, market analysis, a business plan, targeted marketing, and solid business practices.

1. Preparation for Private Practice

Rather than using a trial-and-error approach and just learning as you go along, it is best if you prepare well in advance to enter private practice. You can begin by using the resources that surround you to explore options that will allow you to become more marketable and better prepared to be a successful private practitioner. Use your graduate school professors, professionals in your community, state and national professional associations, internet websites, and social media networking sites to explore your options as early as possible. Seek out mentors who can assist you to prepare for a successful career as a private practitioner. Refer to the checklist below to familiarize yourself with some of the issues you will want to consider both before and after receiving your degree.

1.1 While You Are Still in Graduate School

- Take elective courses in specialty areas that interest you. Possibilities include group or family psychotherapy, clinical hypnosis, stress management, and neuropsychological assessment.
- Explore specific externship/internship opportunities that will prepare you for the type of private practice you would like to have.
- If your school offers a course in the business aspects of practice, take it!
- Seek out professional continuing education classes that focus on business aspects of practice.
- Join your state psychological association and Psychologists in Independent Practice (Division 42) of the American Psychological Association. Participate in one of their mentoring programs.
- Talk to those professors who also work in private practice and other mentors with experience in private practice and ask questions such as:
 - What experiences should I seek out as a student to better prepare me for a career in private practice?
 - What challenges and obstacles might I face when entering private practice and what are some actions to take to help overcome them?
 - What lessons have you learned over the years that contribute to being successful in private practice?

1.2 After Obtaining Your Degree

- Explore post-doctoral opportunities that will enhance your skills as a private practitioner. See Chapter 23 of this volume for further information on the potential importance and role of post-doctoral fellowships.
- Continue working closely with a mentor who is an experienced and successful private practitioner. There is no need to have to go it alone.
- Research geographical areas that interest you and determine their needs. Consider the following when deciding to practice in a certain area:
 - If there are any groups of potential patients whose needs are not being adequately met.
 - Assess your local area to see if it is saturated with practitioners with a certain specialty.
 - Consider if the region you've selected for your private practice is saturated with managed care or if most private practitioners in that area have fee-for-service practices.
- Determine if you will be able to join managed care panels and if so, how long this process takes and when you can begin.
- Consider how much "unpaid" time you will spend collecting payment from managed care organizations and if it would be worth your while to hire administrative help.

- Determine if you should open your private practice immediately or if you will need to start with other work and build your private practice into a full-time enterprise over time.
- Develop a business plan, including a budget, for establishing and running your private practice. Determine which experts you should consult with to assist you with this endeavor. You might wish to seek out and consult with an attorney or a Certified Public Accountant at this stage to get a feeling for the ways in which you can set up to protect yourself, financially and legally.

1.3 After You Enter Practice

- Continue relationships with current mentors and seek out others who have expertise in areas of relevance to your private practice.
- Continue your relationships with your attorney, Certified Public Accountant, and perhaps add the services of a Certified Financial Planner to further assist you with the legal and financial aspects of private practice.
- Consider using the resources available through The Practice Institute (<https://thepracticeinstitute.com>) for business and marketing consultation, education, support, and assistance.
- Reflect on what successes and failures you have experienced in beginning and running a private practice. Learn from them, build on your successes, and don't repeat the failures – consider them lessons learned.
- Determine the most important things you have learned about running a successful private practice and keep these lessons in mind.
- Consider what impact your theoretical orientation has played on the nature of your private practice and on your level of success. Remember that you can build on what you know to be able to serve your client base more comprehensively. For instance, if you are trained in the use of Cognitive Behavioral Therapy (CBT), you may wish to enhance your competency around the practice of mindfulness meditation, which is often successfully used as a part of CBT.
- Seek out continuing education opportunities that will expand the skills you can offer to the public. Always consider the niche markets in your area that will keep the clients coming.

2. Is Private Practice For You?

A career as a private practitioner is not for everyone. However, for those who are well-prepared and who have realistic expectations, it is an enriching and rewarding career choice. Educate yourself about the realities of private practice to ensure your decisions are not influenced by common myths or misunderstandings about private practice (Barnett & Zimmerman, 2019). Consider if private practice is a good fit for your personality, needs, and professional goals. Personal characteristics such as strong

Table 17.1 *Pros and cons for a career in private practice*

Pros	Cons
Being your own boss	Financial uncertainty and risk with possible periods of low earnings
Ability to decide practice location, hours, areas of specialization	Responsibility for all expenses and overheads
Unlimited earnings potential	Possible professional isolation for solo practitioners
Flexibility	Responsibility for billing, collections, insurance, employee and staff decisions
Control over business decisions	
Full responsibility for success of practice	

internal motivation and an entrepreneurial spirit will certainly play a role in your success in private practice, but these factors alone are not enough. Consider the pros and cons to establishing and maintaining a private practice provided in Table 17.1.

After making the decision to enter private practice and considering the personal characteristics and professional issues above, it is important to start thinking about some of the more practical issues you will face as a private practitioner. For instance, how will you start your practice? Jumping right into full-time private practice is not necessarily a viable option for all recent graduates. Consider the most realistic and beneficial options relevant to your situation. Specifically, find out how much time it takes to build a full-time private practice, assess the financial demands of opening a practice in your area, evaluate how you will make ends meet while you are building your clientele, consider your need for health insurance and other benefits, and make sure you will be able to find sources of professional support, especially early on. When examining the big picture, some recent graduates prefer to start out in another setting and transition to private practice slowly. This is not considered failure or a 'second best' option, and in fact may teach you valuable lessons that will reinforce the success of your future practice as an independent practitioner.

One way to do this is to work full-time in a salaried position and start your private practice in the evenings and on weekends. This will provide you with a full-time salary, benefits, collegial interaction, and supervision. This is a good time to develop competence in specialty areas of practice that you can begin marketing in the local community. You will also have the opportunity to network with other professionals in the local area and to build your reputation while avoiding the potential financial instability that may be a part of your early years in practice. Or, if you have the financial flexibility, you might want to work part-time in a salaried position with benefits and build your practice in the remaining time. While perhaps slightly more risky from a financial perspective, this arrangement gives you more time to build your practice while enjoying the security and benefits of a salaried position.

An additional option is to dedicate yourself full time to the development of your private practice. This choice provides the fastest route to a full-time private practice but carries the greatest financial risk. With each of the first two choices you can decide, based on your success and/or preference, just how much of your time you want to spend in the private practice setting. Some practitioners cut back on the number of hours worked in a salaried position as their private practice grows. Others will find that working part-time in two positions provides them with the best possible combination of financial stability, benefits, varied work activities, and collegial interactions to meet their needs.

Another important decision to make concerns your practice setting. You may choose to open your own “solo” private practice; you may form a group practice with one or more colleagues; or you may join an already existing group practice, whether it be only with other psychologists or with a range of other mental health professionals. When starting out as a solo practitioner you may lease office space on your own or sublet an office in a suite with other mental health professionals. For those who decide to build their practice part-time, subletting space in a larger suite of offices may be the best course of action. Offices may typically be rented quite economically, often by the hour, the half-day, or by the day, and come furnished and offer amenities such as telephone, photocopier, internet access, and even a shared receptionist to greet patients and answer the phone. As your practice grows, you may be able to contract for additional time in the office. Another benefit of this arrangement is the proximity of colleagues. Being in a solo private practice on one’s own may be an isolating experience. Further, not having to pay for office space full time when only using it part time is much more economical. However, when working in a suite of offices with other mental health professionals it is important to ensure that your solo or independent practice is clearly represented to others so that you will not incur any liability from the actions of others in the office suite.

If you choose to participate in a group practice, an additional point to consider is the composition of the group. It may be comprised entirely of psychologists or it may be a multidisciplinary group. Further, as Walfish and Barnett (2008) recommend, “When joining a group practice, choose your associates wisely. These individuals can enhance or detract from your reputation and increase or decrease your liability” (p. 56) and your income! Thus, all potential practice arrangements should be fully investigated and careful consideration should be given before making such a decision. Table 17.2 provides an overview of the benefits and drawbacks of solo and group practice arrangements.

Again, it is helpful to speak with private practitioners in a variety of practice settings to hear about their various experiences. This will help you decide on the best plan of action for you. Keep in mind, however, that many practitioners look for positions, get interviewed, accept an offer, and *then* see how it works. There is only so much we can know in advance; some of it must be learned through experience. However, if you consider all these issues and get a clear sense that one practice arrangement best suits your needs, personality, and comfort level, then that is what you should try.

Table 17.2 *Considerations for a solo practice or group practice*

Solo practice	Group practice
Pro: Practitioner independence. Set your own hours, salary, benefits; decide how to run your practice	Pro: When you have a psychiatrist on staff you will have easy access and ongoing communication about your patients who need treatment with psychotropic medications in addition to their psychotherapy
Con: You must find mentorship and supervision on your own as you need it. This might come at a cost	Pro: Interprofessional collaboration and within-group referrals
Con: No administrative support, you will have to allow time for paperwork and correspondence	Pro: Access to clerical and administrative support
Con: Higher costs of operation unless operating from your home, which has drawbacks of its own	Pro: Lower overheads/sharing of costs
Pro: Absolute authority over all decisions	Con: Sharing of decisions and of profits
Con: Unlimited personal liability	Con: Each member of the group must accept some liability for the actions of all group members

Note: A sole proprietorship is not taxed as a business entity. (Depending on your total income, this can be either an advantage or a disadvantage.)

2.1 Questions to Ask When Considering Joining a Group Practice

- Who owns the group and who makes business decisions?
- How are referrals shared and what assistance will be provided to help me get started?
- What administrative support do I receive from the group?
- What per cent of the income I generate goes to the practice and what per cent to me?
- Does this percentage change over time and if so, by how much and what factors impact this?
- What if I decide to leave the practice; can I take my patients with me?
- What benefits am I provided; malpractice insurance, continuing education, etc.?
- Am I allowed to decide which patients I will treat?
- What supervision and on-call coverage opportunities and obligations exist?
- What are the criteria for evaluation and how does one become an owner or partner?

As you begin to attempt to set yourself apart from the many psychotherapists, counselors, and other mental health clinicians competing with you for a limited number of potential patients, it is important to be able to be more than just another generic mental health professional. This is where your “niche” might come into play. This is not to suggest that providing psychotherapy and assessment services with excellence is not a worthy endeavor, but these skills should be viewed as the foundation for your private practice. Beyond that, consider developing an area of expertise that can be marketed to targeted audiences (and that also are typically

fee-for-service endeavors where you will earn more and not have to hassle with managed care).

Psychologists in Independent Practice, Division 42 of the American Psychological Association, has an excellent series of niche practice guides that provide an excellent introduction to developing a specialty. Each guide provides a detailed description of the specialty area, information on how to enter it, what training is needed, and where to obtain it and training resources available, ethics issues to consider, marketing considerations, and a list of resources to access for additional information. Thirty six niche practice guides are presently available for such diverse areas of practice as health psychology, infertility, psycho-oncology, eating disorders treatment, marital therapy, working with stepfamilies, smoking cessation, ADHD assessment and treatment, geriatrics, sport psychology, treatment of personality disorders, neuropsychology, women's issues, psychologist–dentist collaboration, child custody evaluations, men's issues, and many others. These very useful guides may be ordered through the Division 42 website at www.division42.org. Developing specialty areas is an important step for setting yourself apart from other practitioners in your community. Select areas that interest you, obtain the needed training, and then begin marketing the services you have to offer.

In addition to providing clinical services, you should consider how you might apply the knowledge and skills you already possess to other areas that would augment your clinical practice. Suggestions include business consultation and team building, personal and executive coaching, divorce mediation, school consultations, and forensic evaluations. An additional excellent resource for those starting out in practice is the book by Walfish (2010) that describes 50 different practice areas for providing professional services outside of managed care. While one should only enter specialty and niche areas of practice with supervision from, or consultation with, an experienced colleague, you may be surprised how little additional training and experience you'll need to be competent in these additional areas of practice. Another useful, and hopefully inspirational, resource is Verhaagen and Gaskill's (2014) book *How we built our dream practice: Innovative ideas for building yours*.

3. The Business of Practice

Even the most competent clinician can end up sitting alone in the office waiting for the phone to ring. After assessing your local area's needs, developing a specialty area or practice niche, deciding on group or solo practice/multidisciplinary or all psychologists, purchasing business cards and possibly even developing a website and/or social media presence for your practice, you must now tackle the business of practice; and it *is* a business. Ask yourself the following questions regarding the business of running a private practice.

First, will I work as an independent contractor or an employee? An employee is hired by, and works for, an employer; is directed by the employer which patients to treat, when, and how; and the employer takes out withholding for taxes and pays a portion of the individual's social security tax. IRS Tax Topic Bulletin 762,

Independent Contractor (Self-Employed) or Employee, explains that an independent contractor is defined as an individual who is not an employee, but who works with another individual under a contractual agreement. Independent contractors treat whichever patients they like, and when and how they might like. They purchase their own supplies and set their own hours. They pay quarterly estimated taxes and no taxes are withheld by the other person. For additional information see the Internal Revenue Service's website at www.irs.gov/taxtopics/tc762. Additional important information is provided at the IRS webpage Independent Contractor Defined at: www.irs.gov/businesses/small-businesses-self-employed/independent-contractor-defined.

If you should choose to work as an employee, ask yourself how you will establish your fee structure for services rendered *and* how you will be compensated by the practice. Employees typically receive a specific salary and benefits, based on a certain number of employee billable hours provided in the practice. The employer also pays a portion of the employee's social security taxes. Additional administrative tasks may also be assigned as part of your work duties as specified in your employment contract. As an employee, you have the right to negotiate your employment contract, but do consider the learning and support you will receive as an employee as part of what you are gaining and factor that into your negotiations.

For independent contractors the typical arrangement is to pay the practice owner a certain fee or certain percentage of fees collected for each patient seen. Typically, independent contractors working within an established practice pay the practice owner 40 per cent of all fees collected and keep 60 per cent for themselves. If you are offered a lower percentage of fees collected, such as 50 per cent, be sure your contract stipulates criteria for it increasing over time. Keep in mind that a lower percentage reflects the fact that the practice may be providing referrals and your business will get built-in marketing just by being a part of an established practice with its own reputation. A typical arrangement would be to start with paying 50 per cent to the practice and then having this percentage decrease as you begin generating your own referrals. Should you begin providing referrals to others in the group due to your success, the percentage paid to the practice should decrease even further. All of this should be clearly laid out in the contractual agreement signed upon joining the group. Being aware of these long-term issues when starting out is very important to your success in private practice.

It is essential that you have all contracts reviewed by your own attorney prior to signing them. Without legal training, we are not able to know the implications of every clause that may appear in a contract. Your attorney is your advocate and considers each contract based on your best interests, at present and over the long term. An investment in legal services at the outset is an investment in yourself and your practice. Paying for the services of an attorney can save you tens of thousands of dollars over the years as opposed to trying to do it all on your own. Specifically, your attorney will help you agree to a contract that contains provisions that will grow your earnings in years to come. Failure to consult with your own attorney prior to signing a practice agreement or contract may result in your unknowing agreement to

provisions that promote the best interests of the practice owners over your own best interests, and sometimes even at your expense.

Additionally, as you negotiate the contract, you will need to consider what you are receiving for the percentage of collections you pay to the practice. The practice owner is providing the office space, furnishings, office staff and supplies, and perhaps most importantly, referrals of patients for you to evaluate and treat. Typically, practice owners who are very busy and have more incoming referrals than they can personally treat will take on independent contractors. For the new psychologist just entering private practice this can be an excellent way of starting out. There is a ready stream of referrals, a furnished office with trained staff and infrastructure already in place, and the possibility of supervision and peer support. As mentioned, other contractual arrangements are possible, such as leasing space in another practitioner's or group's office, so consider the options available to you as you find the arrangement that is in your best interest and best meets your needs based on your particular circumstances.

Finally, be sure to educate yourself on certain business principles such as non-competition clauses *before* you sign a practice agreement or contract. This is a major area of concern for independent contractors, especially when and if you eventually hope to leave the practice and branch out as a fully independent practitioner. The non-competition clause will be laid out and agreed upon between you and the practice owner when signing your initial contract. This clause may specify that if you decide to leave you may not practice psychology for a specified period of time within a certain distance of the practice you are leaving. This will protect the practice owner from direct competition from you should you decide to leave after they assist you in becoming established and developing your professional reputation with referral sources in the local area. Unless you have a specialty area not otherwise available in the local area, such contractual clauses are generally deemed enforceable. The practice owner is providing you with referrals and assisting you to develop your reputation and referral sources in the local area. Without such a clause in the contract you could fill your schedule, build your reputation, and then leave and open your own practice across the street or across town. Yet, these clauses can sometimes be negotiated and they do not necessarily need to be included in practice agreements and contracts. This is another important aspect of contractual negotiations where your attorney can prove invaluable.

4. Rules of Business Success

4.1 Consult the Experts

The first thing you need to know, even if you open a solo practice, is that you can never enter or run a private practice on your own. You will need the services of experts in two key areas of expertise: legal issues and accounting. As has been highlighted, unless you have graduated from law school we strongly suggest that you *never* enter a business arrangement or sign any contract before first consulting with your attorney. Too many practitioners have learned the hard way just how costly a mistake being your own attorney or accountant can be. While their fees may seem expensive, these

professionals will save you a great deal of money, anguish, and legal difficulties in the long run. Speak to experienced practitioners in your local area to find out who they use, if they are happy with the fees charged and services provided, and then use this input to guide you. You may also obtain referrals for attorneys through your local or state psychological association as well as through the local bar association, but be sure to check their references and reputation. Don't rely on fancy advertisements for guiding you in such an important decision. Just to clarify the point made above . . . never sign any contract without first having it reviewed by your attorney who will ensure it is in your best interest and suggest any needed modifications *before* you sign it.

A Certified Public Accountant (CPA) can assist you with numerous important financial aspects of setting up and running your private practice. For a detailed explanation of all this see the book *Financial management for your mental health practice* by Zimmerman and Libby (2015). Additionally, a CPA can assist you in making important decisions such as if you should incorporate your practice and if so, how. Numerous options exist to include incorporating as a Limited Liability Corporation or a Professional Corporation, among others. Each incorporation status brings with it different costs and benefits. Your CPA will be able to guide you to make the best choice for your needs and circumstances. A CPA can also assist you with retirement planning, something you should consider from the outset of your career.

A Certified Financial Planner can be of immense help in offering guidance on investments and retirement planning. Private practitioners need to save money for their retirement and invest it wisely over the long term. Unless one is a salaried employee who works for a company that offers a pension plan, one has to plan for and save for their own retirement. Consulting with a financial expert can make this process easier and more successful.

4.2 Market Your Practice at Every Opportunity

Even if you are an independent contractor in a group practice, but especially if you decide to open your own practice, marketing yourself to the local community and to a variety of possible referral sources is of great importance. Potential referral sources may include physicians in your community, schools, attorneys, other mental health professionals, and a variety of others depending on the type of professional services you offer. It is important that you have a visible and positive presence in-person in your community as well as online.

4.3 In-Person

Possible strategies to secure referrals include:

- Send an announcement of your practice opening. Follow up with a brief letter describing your training, background, and expertise. Be sure to tailor the letters to the perceived needs of each referral source and the specific population they serve. (See Appendix A for an example.)

- Telephone potential referral sources and request a brief meeting to meet and describe the services you offer (and how you can help them and their patients). Especially if you contact medical offices or other practices, determine whether you can offer a service they need and mention that specific service when you call. Let them know that you would be willing to briefly attend a few minutes at the start or the end of their next staff meeting so that you have the chance to meet everyone at once and answer any questions.
- Offer free presentations to the patients of your referral sources. For example, you could offer a seminar on behavior management strategies to the parents of a pediatrician's patients, a presentation on stress management skills to an internal medicine physician's or cardiologist's patients, or a seminar on strategies for working with certain types of learning disabilities for teachers at a school you hope will refer patients to you.
- If you give presentations or seminars, be sure to bring business cards, brochures, and fliers describing you, your practice, and the services you offer. Ensure that all these materials include your e-mail address and the web address for your website. You can utilize marketing professionals and create your own brochure or you can purchase brochures from the APA's Division 42 and then attach your business card to them.
- The APA offers free fact sheets that provide practical information on a wide range of mental health issues and how psychologists can help address them. These are available at www.apa.org/helpcenter/fact-sheet.
- Keep likely referral sources updated on additional training you receive and new types of patients you can treat.
- Some private practitioners write a monthly or bi-monthly newsletter or blog that they send to members of the community. Others write columns in local newspapers or do radio talk shows or podcasts on mental health topics, and some give presentations to local groups such as C.H.A.D.D., the PTA, support groups, or at sites such as the YMCA, senior centers, and schools. These indirect forms of marketing may also be very effective in establishing your reputation as a local expert and can increase your referrals over time. When giving these presentations do not worry about lost billable time; you are making an investment that may pay significant dividends over time through the referrals these presentations may generate.

4.4 Online

- Utilize available professional referral services. Some, such as Psychology Today which at present costs \$29.95 per month and which provides an online listing accessible over the Internet, can be very cost-efficient. If this generates just two referrals per year you will likely be making money on your investment. Other online referral networks exist and each should be investigated to see which best meets your needs.

- Use technology to market yourself as well. Create a website for your practice and link it to a variety of mental health sites. Be sure to keep it up-to-date and include useful information for visitors similar to a brochure or newsletter. If you write a blog or publish podcasts, make them public and sharable via your website so that referral sources can easily get to know you via this source.
- Visit a range of other practitioners' websites to see what you like and dislike about them as well as what you find to be effective and ineffective. You may create your own website utilizing many widely available templates that can be utilized by filling in your information. You also may hire a web designer who can assist you in designing, creating, and managing a customized website that best meets your practice's needs.
- It is also important to have a broader social media presence. This may include the use of platforms such as Facebook, LinkedIn, or Twitter, among others. Being seen as an expert by members of the public can help generate many referrals to your practice.
- You should also market yourself to your colleagues. Utilize your contacts in the State Psychological Association and let them know of your practice and the services you offer. Explore the successful practices in your local area and offer to take the practitioner(s) out to lunch to introduce yourself and meet with them. Many practitioners with busy practices are frequently looking for colleagues to whom they may refer patients they can't fit into their schedule. They also need competent practitioners to whom they can refer patients whose needs fall outside their areas of expertise. They are only likely to refer patients to you if they know you and the services you provide.
- Writing articles in your State Psychological Association's newsletter, giving presentations at conferences and continuing education events, and participating actively on the organization's listserv, each may make you known to your colleagues in a way that highlights your professionalism and areas of professional competence.

4.5 Follow-Up

Keep in mind that only half the work is done when you have received a referral. By nurturing the contact, you will be sure to keep the referrals flowing in. For instance, when a referral is received, always send a letter (or e-mail message) of acknowledgment of the referral (with appropriate consent of the patient). In the case of specific services, be sure to keep the referral source in the loop at pertinent stages. For instance, when doing an evaluation, forward a copy of your report to the referral source; for treatment, provide periodic written updates on the patient's treatment progress. Always be sure to first obtain the patient's written consent before doing sharing records of any kind.

Also bear in mind that your relationship with your referral sources will be best served if you can reduce their workload and help them to solve problems. Ask them,

specifically, what they need and what obstacles they are facing in their practice and market yourself accordingly, if appropriate. Initially, they may send you their most difficult and demanding patients. Satisfied clients and successful treatment outcomes are your most powerful marketing strategies (see Appendix B for a sample letter). Additionally, if a referral is inappropriate for you or your schedule is full, you may want to assist your referral source by offering other appropriate referral suggestions if you know of any. Being helpful in this way can possibly lead to receiving many more referrals from them.

In summary, you must provide high-quality services, give referral sources timely and useful feedback, and market your services both directly to referral sources and indirectly to the community. Actively follow-up all these marketing efforts on a regular basis.

5. Being a Business Person and Entrepreneur

If you are in practice, you are in business. While your goal undoubtedly is to help others in a compassionate and caring manner, if you are not adequately compensated for the professional services you provide you will not be able to stay in practice. Thus, you will need to run an effective business. You will need to create a business plan, understand what your start-up expenses will be and how much financial support you will need to run your practice while working to build it, and know how many patients you will need to have to break even and to then begin making a profit. Stout and Grand (2005) provide an excellent template for a business plan in their book *Getting started in private practice: The complete guide to building your mental health practice*. Using such a template can help ensure that you have a viable and realistic business plan for your private practice and increases the likelihood of being financially successful.

You will also need to address issues such as renting or leasing office space, buying or renting furniture and décor, signing up for utilities and telephone service, and purchasing and maintaining necessary insurance (professional liability insurance, premises insurance, etc.). You will also need to decide which administrative tasks you will do yourself and which ones will be supported by someone other than you. You can either contract out certain services (like insurance billing) or you can hire administrative support staff to do it in house. Depending on who you hire and the agreement you make, support staff can handle everything from billing, collecting, and bookkeeping to scheduling, client relations, and external communications, as directed by you. Finally, with guidance from your attorney and accountant you will need to decide what tax status is most advantageous to you. You may decide to become a professional corporation, a limited liability corporation, a sole proprietor, or some other legal status. Each brings with it certain potential tax and liability costs and benefits.

It goes without saying that as a business person it is essential that you provide patients and referral sources with excellent service. In fact, you should be thinking (at least in part) of your ability to provide high-quality customer service from start to finish, just as any business owner would with their customers. Your patients are

customers who are purchasing a service from you. Customer service can include business practices such as:

- Returning telephone calls, emails, and texts in a timely manner. Thus, you will need to schedule time to check for messages and to return communications throughout the day. Be sure to check for messages evenings, weekends, and holidays unless you have otherwise communicated your availability directly to your patients.
- Have an office that is welcoming and comfortable for patients. Many practices have complimentary water, coffee, and tea available in the waiting room. Comfortable furnishings and a professional atmosphere are important. Consider a white noise machine if you will have clients in a waiting area while you are in treatment. Even if you know that your treatment area is soundproof, your clients do not, and the extra step will give them comfort.
- Ensure that office staff members are warm, welcoming, and professional with patients.
- Be flexible with scheduling. Offering appointment times that are convenient to patients, especially when starting out, is very important. This may include working some early morning, evening, and weekend hours.
- Complete work in a timely manner. For those conducting evaluations, be sure to schedule feedback sessions quickly and have the evaluation report ready for the patient at that time.
- Be available to patients between sessions should they experience a crisis or have questions for you. If you use e-mail or texting, check it often and respond quickly. Be sure patients know how to reach you should a question or crisis arise between treatment appointments. Communicate your emergency procedures clearly and early in treatment, particularly a patient's need to call 911 (or other local emergency services number) if they are in crisis and cannot reach you.
- Return telephone calls from referral sources in a timely manner and periodically provide them with written feedback on the work you are doing with the patient they refer.

One goal is for your patients to feel that they were treated well and that the clinical services provided met all their expectations. However, Berman (2005) takes this one step further, speaking of customer delight, the notion of exceeding your patients' and referral sources' expectations and achieving high standards of excellence in all aspects of their experience with you. The goal here is to provide them with an experience that leaves them so satisfied that they share about their experience with others, thus being valuable referral sources for you.

6. Setting Up Your Practice

If you work as an employee or an independent contractor in someone else's practice, this will be taken care of for you, but if you open and run your own private practice you must consider and address these important issues.

First consider the physical office. The actual office must be set up so that patient privacy is protected. The use of soundproofing, white noise machines, and even insulated ceilings, walls, and doors all help to keep confidential communications private. Secretarial staff should have an area apart from the patient waiting room where telephone calls can be made. A locked room with lockable file cabinets for treatment record storage is mandatory.

Next, consider insurance coverage. At a minimum you will need malpractice insurance. It is typically recommended that your coverage be for \$1,000,000 per claim and \$3,000,000 per year. If you obtain hospital privileges or work on any managed care panels this is typically the amount of coverage they require you obtain and keep in force. You may also wish to obtain disability insurance to provide you with coverage should you be unable to work for a period of time and you should consult your attorney about additional types of insurance for your office and staff. You may purchase two types of malpractice coverage: occurrence and claims made. Occurrence insurance provides coverage for claims made against you any time during your career, even if you discontinue your coverage. Claims made insurance only provides coverage while the policy remains in effect. While occurrence insurance is more costly, many choose it due to the coverage provided. The largest malpractice carrier for psychologists is The Trust (www.trustinsurance.com). Others include the American Professional Agency (www.americanprofessional.com) and Healthcare Providers Service Organization (www.hpsso.com/individuals/professional-liability/malpractice-insurance-for-counselors).

Next, unless you plan to do all jobs (answering the phone, greeting patients, collecting fees, billing, doing insurance paperwork, filing, etc.) you will likely hire staff. Consult with your attorney and accountant and learn about applicable laws concerning interviewing and hiring practices, employment law, taxes, and related issues. Then be sure all persons hired understand both their job duties and all applicable ethical standards. Train your staff about confidentiality and related issues. Have written office policies that you instruct them in and have them agree to in writing. Be sure to supervise them adequately to ensure they do not exceed the agreed upon limits of their roles.

Another important area is fee setting. While you certainly should be paid what you are worth, it is advisable conduct an informal survey of private practitioners in your local area to see what fees they charge. You may either ask them directly, telephone their offices as a potential patient requesting information about their practice, or look for this information on their website. Not only will you learn their fees, but you will also learn about their office policies from the information they share.

You will then need to establish procedures, forms, and documents for informed consent, release of information, payment policies, billing and the use of insurance, the use of collection agencies, intake forms and questionnaires, follow-up letters to referral sources, follow-up letters for patients who drop out of treatment and for those who successfully complete treatment. You may also choose to do some patient satisfaction surveys, treatment outcome measures, and other measures. Rather than

try to develop all these policies and forms yourself, you should request copies of those forms used by colleagues when you meet with them as well as from your mentor. You may also find several resources very helpful in this endeavor.

First, Zuckerman and Kolmes' (2017) book *The paper office for the digital age* is an excellent resource. It includes numerous sample forms, written policies, handouts, and guidelines. The book also includes a CD so that forms may be downloaded and printed for use in your practice. Typical forms include those for informed consent; a practice information form to distribute to patients that includes explanations of such issues as appointments and fees, billing, cancellation policy, emergencies and after-hours contact, the process of therapy, confidentiality, and related issues; a patient intake form; an informed consent to submit insurance form; and an employee agreement to maintain confidentiality form, and many others. They also provide useful information on marketing your practice online to include a web presence and use of social media.

You may also obtain a model informed consent to treatment form on the website of The Trust (www.trustinsurance.com). Additionally, this website provides a sample child therapy contract and a sample forensic informed consent document. You may download each of these and modify them for your use.

An additional valuable resource is the *Clinical documentation sourcebook* by Wiger (2020). This volume provides many useful forms such as those designed for HIPPA compliance, administrative and intake forms, screening and assessment forms, and forms used during the course of treatment, among others. Additionally, several companies market software for tasks such as documentation and patient billing. Many psychologists find the use of such software a great benefit in terms of efficiency and consistency. Examples include TheraScribe (www.therascribe.com) and TherapyNotes (www.therapynotes.com). Finally, practice management software such as therapyappointment (www.therapyappointment.com) and TheraNest (www.theranest.com) provide software that assists in automated client management, scheduling, billing, insurance filing, and related services. Ratings of, and information on, numerous other practice management software products may be easily found by doing an online search.

Finally, supervision is especially important as you begin your career. In addition to individual supervision you may form or join a peer supervision and support group to connect you with other new private practitioners as well as more experienced colleagues. This may be of great help from a clinical standpoint, especially as you develop tools to help you better cope with the many demands of opening and running a private practice. A supervision relationship or group may also become a source of referrals. You should also consult with the information provided in Chapter 4 of this volume for much more detailed suggestions for addressing this important area of our professional development. Commit yourself to lifelong learning and ongoing professional development. It is essential that you keep your knowledge and skills current so you can best meet the assessment and treatment needs of your local community.

Table 17.3 Checklist for beginning your private practice

-
-
- Analyze the local community's needs.
 - Select a location.
 - Develop areas of expertise.
 - Develop a comprehensive business plan.
 - Hire an attorney and accountant.
 - Rent or lease office space; ensure soundproofing and handicap accessibility.
 - Obtain needed insurance.
 - Furnish the office, hire needed staff, begin phone service, utilities, etc.
 - Establish office policies and train staff on ethics standards such as confidentiality.
 - Set fees using prevailing community standards as a guide.
 - Develop a multifaceted marketing plan and implement it.
 - Become involved in your community and professional associations.
 - Obtain needed supervision and additional training.
 - Periodically reassess your strategies and practices. Modify as needed.
 - Continue providing high-quality services and never stop marketing your practice.
-
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In conclusion, the private practice of psychology is an exciting and rewarding endeavor. With adequate advanced thought, preparation, and the use of the resources and strategies described in this chapter you should have a good head start. While a single chapter cannot be an exhaustive reference on all aspects of preparing for and being successful in private practice the information presented above and the checklist in Table 17.3 should be of assistance.

APPENDIX A SAMPLE TARGETED FOLLOW-UP LETTER

Jenny Jones, M.D.
Jones Cardiology Group
Jonesville, MD 21108

Dear Dr. Jones:

I am writing to follow-up the practice opening announcement you recently received. I am a licensed psychologist in your community who specializes in treating stress-related disorders. The enclosed brochures describe my practice and more information is available on my website at www.stressrelief.com

I understand that many of your patients suffer from stress-related disorders and many of them may benefit from several of the services I provide. I recently presented a stress management workshop at the Healthy Hearts Program at Community Hospital. I would be pleased to offer such a workshop to your patients free of charge. I will telephone you shortly to discuss this possibility.

My practice provides a full range of mental health assessment and treatment services. I focus on health and wellness, working to provide patients with the strategies and skills to overcome their difficulties. I know many cardiology patients need assistance with stress management, combating anxiety and depression, as well as with making difficult but crucial

lifestyle changes. I use a full range of evidence-based treatments and will work collaboratively with you to ensure that your patients receive the best possible care.

I look forward to meeting with you to discuss further how I may be of assistance to you and your patients. I will contact your office in the next week to schedule a time to speak.

Sincerely,

Jeffrey E. Barnett, PsyD, ABPP
 Licensed Psychologist
 Board Certified in Clinical Psychology and in
 Clinical Child and Adolescent Psychology

APPENDIX B SAMPLE LETTER TO FOLLOW-UP A REFERRAL

Jane Smith, MD.
 Smith Primary Care
 Smithville, MD 99999

Dear Dr. Smith:

Thank you for your recent referral of Ms. Jen Jones for evaluation and treatment. I met with Ms. Jones initially today and we had the opportunity to discuss her reported difficulties with depression. I began my assessment of these difficulties and will continue this over the next two to three sessions. Once my initial assessment is completed I will be back in touch with you to provide you with my findings, recommendations, and our agreed upon treatment plan. I anticipate having this to you within the next two to three weeks.

(Insert patient's relevant history and mental status examination here)

While no crisis or emergency exists at present, Ms. Jones' depression is a serious concern. She understands that if her symptoms worsen she should contact me immediately. Despite the serious nature of Ms. Jones' depression I am hopeful of being of assistance to her. I utilize a comprehensive treatment approach that will focus on reducing Ms. Jones' distress and provide her with the skills and techniques to help her move forward quickly. I will work closely with you to ensure that Ms. Jones receives the best possible care and will keep you informed of her progress and all significant changes in her functioning as they occur.

I have enclosed several of my business cards for your use along with several pamphlets that may be of use to your patients. I am also separately sending you copies of a stress management tip sheet that I hope will be of value to your patients.

Once again, thank you for this very timely and appropriate referral. I very much appreciate the opportunity to be of service to Ms. Jones. Please feel free to contact me at any time if you have any questions or concerns about her treatment.

Sincerely,

Jeffrey E. Barnett, PsyD, ABPP
 Licensed Psychologist
 Board Certified in Clinical Psychology and in
 Clinical Child and Adolescent Psychology

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In a profession that is rich with complexity and virtually boundless in applications, the simplest of facts remains: if you want to practice as a psychologist, you must be licensed to do so. This is true in every state, province, and territory of the United States and Canada. In several states, you may not legally use the title of “psychologist” without a license to practice psychology. Perhaps the most damaging reality is that a license is required by nearly every third-party payer for reimbursement of services and a requisite for employment for most positions at major agencies that employ psychologists (e.g., the VA). Without the ability to independently receive reimbursement for services, there is very little you can do without a license to practice and earn a sustainable income. Although the primary rationale for the license to practice is protection of the public, it can sometimes feel like yet another hurdle to a new psychologist.

Many graduates of doctoral-level psychology programs go on to have full and rewarding careers without ever obtaining a license. University professors and research scientists have no practical need for it (although some will obtain a license to supervise clinical students, conduct treatment outcome studies, or to satisfy accreditation requirements). Nevertheless, if your plan is to rely on practicing psychology as a service provider, then the psychology license represents the first essential requirement for independent practice. You do not become a practicing psychologist when you receive your doctorate; you become one when you obtain your license.

You may have various reasons for wanting a license. You may be training to start a career as a full-time practicing psychologist, or you may plan to work in an academic setting with the hopes of doing some clinical work on a part-time basis. Perhaps you want to train and supervise students to become psychologists themselves. Regardless of your reason for seeking licensure, there are many things that you need to know in order to make the licensure process occur smoothly and expeditiously. This process has changed significantly in noticeable ways in the 20 years since this chapter was first

The views expressed in this article are those of the authors and do not necessarily reflect the official policy or position of Walter Reed National Military Medical Center, United States Navy, Department of Defense, or the US Government.

written for the first edition of this book, as well as since the second revised edition. Prospective applicants at the dawn of the new millennium were still sitting for paper-and-pencil licensure exams, which were only offered on two fixed dates per year. Even the precursor to the iPhone, the iPod, had yet to be invented, and study preparatory kits still offered tape cassettes as part of their materials. Students and post-docs and early career psychologists sought support and answers to their questions on email listservs rather than social networking sites. Nearly every jurisdiction (state and/or province) would not allow a post-doc to take the Examination for Professional Practice in Psychology (EPPP) during their post-doc year and several other licensure laws and statutes had yet to be changed. Since the second edition of this book, there have been further changes for more states allowing newly minted psychologists to become licensed directly after internship (negating the need for a post-doc year). In addition, more recent changes have been the development and piloting of some states to require the EPPP (Part 2 – Skills) for licensure.

In spite of these changes in the past 10 years, the basics for getting licensed have not: obtaining your doctoral degree, completing internship, passing licensure examination(s), providing letters to your state or province's board of verification of completion of educational and clinical hour requirements. This chapter is intended to provide you with the main information you need to plan and execute the process of obtaining your license. As you will discover, there is some variability among states, provinces, and territories that may play a role in your future as you plan your career. Table 18.1 lists a number of suggestions for beginning the licensure application process.

1. Before You Even Get Started: Looking Ahead

Psychology licensure laws are quite different from driver's license laws, in more ways than one. Every state, province, and territory in the United States and Canada has its own unique licensure law. Although the laws are all generally similar, there is enough variability to make some license requirements uniquely different from others (e.g., exam cut-off scores, years of supervised training hour requirements, etc.). To complicate things further, the license for each state, province, or territory applies *only* for that state, province, or territory in any non-federal job. If you have a license to practice in California, you cannot practice in New York unless you have a New York license; your license only applies in California. If you were to move to New York and you wanted to continue practicing, you would then need to also get licensed in New York.

Because of these differences, it is important to know the state(s) in which you plan to be licensed as you begin preparing for the licensure application process. Unfortunately, this requires an assumption that you know in which state(s) you will be living or working within a year or two; an assumption that may not always be realistic. What if you live in the Washington, DC area and you will be considering jobs in Virginia, Maryland, and the District of Columbia? What if you are considering several different states yet have no idea what jobs will be available? What if your spouse or partner will need to relocate to an as-yet undetermined area in the future? What if you decide to relocate to another state many years into your career? One

Table 18.1 *Essential tips for getting licensed****Applying/Preparing (during your pre-doctoral internship year)***

- Review the Association of State and Provincial Psychology Boards' (ASPPB's) website and information on licensing at www.asppb.net
- Review your licensing board's website and review their application documents
- Check if your training makes you eligible for the requirements of your jurisdiction
- Contact supervisors and provide them with necessary documentation
- Organize and prepare any hard-copy typed application, documentation, and transcripts
- Submit your application when you are eligible (usually after post-doctoral year is complete), respecting any deadlines
- Prepare yourself for numerous fees (transcripts, exams, licensure application)
- When eligible, apply to sit for the EPPP exam at a time that allows for adequate study and preparation time

Studying (during your post-doctoral year)

- Purchase an EPPP study program kit; if it is too expensive, share the expense with another applicant or borrow a recently used (i.e., within last two years) kit
- Take your first practice exam no earlier than 12 months, and no later than 6 months, *within* your anticipated EPPP exam date to identify your baseline "pre-study" score
- Begin studying lightly 6 months prior to your exam
- Continue self-administering timed practice exams once or twice per month, reviewing your errors, analyzing weaker content areas, and charting scores and dates
- Focus your study time on the content areas with which you are having the most difficulty
- Increase study time accordingly based on performance on practice exams
- Become familiar and comfortable with the unique style of EPPP questions and multiple-choice answers
- Do not cram

interesting exception to this challenge is the psychologist practicing for the federal government (e.g., VA medical centers). In general, federal service allows for the psychologist to hold a licensure from any state.

There can be a number of reasons why you may not be certain where you will be practicing, yet you will likely only be able to apply for one state license. Because of this, it is a good idea to become familiar with the requirements for the states you are considering; particularly, your top three preferences. Knowing what these states require will be very important as you complete your internship and post-doctoral training. You want to ensure that your training, whether pre-doctoral or post-doctoral, is meeting the minimum eligibility requirements for all of the states you are seriously considering. Most pre-doctoral internships and post-doctoral fellowships will design their training so that your training hours exceed the eligibility requirements for most states.

2. General Eligibility Requirements for Licensure: What You Will Need

Although there is some variability, requirements for licensure involve three main areas: education, training/supervised experience, and examinations. As

noted, each state, province, and territory has its own specific licensure requirements and the wording can often vary. For the purposes of this chapter, eligibility requirements will be described in more general terms.

2.1 Education

All licensure laws for independent practice require a doctoral degree in psychology, usually from a regionally accredited institution. Criteria are usually provided for required coursework. Because each jurisdiction is different, you will want to ensure that your transcript includes the required courses specified. Many states require that the program be accredited by the American Psychological Association (APA), Canadian Psychological Association (CPA), or designated by the ASPPB/National Register Joint Designation Committee. If you do happen to graduate from a non-APA-accredited program, you will need to provide documentation that your program provided all of the required coursework specified.

2.2 Training/Supervised Experience

Each jurisdiction has its own requirement for number of clinical hours necessary for licensure. These requirements have continued to change over the years in several states and provinces. It is generally the standard that at least two years of approved full-time supervised experience are required. Of these two years, one year is usually pre-doctoral (internship) and the other year is post-doctoral (post-doc). However, several jurisdictions have made it easier to become licensed upon graduation, rather than making it legally impossible to be licensed during the first post-doc year. At the time of the first edition of this book, only one state (Alabama) did not require a post-doc year for licensure; at the time of the second edition of this book, 11 US states, 4 Canadian provinces, and 1 US territory did not require that the supervised clinical hours be obtained post-doctorally. As of 2018, now 16 jurisdictions have optional requirements for a post-doc year depending on pre-doctoral hours accrued: Virginia, West Virginia, Kentucky, Indiana, Ohio, Maryland, Pennsylvania, Missouri, Connecticut, Massachusetts, New Hampshire, North Dakota, Wyoming, Utah, Arizona, and Washington.

As the cumulative hours of supervised clinical experience tends to range from 3000 to 4000 per year, the trend toward modifying the requirement that one of these years be post-doctoral has helped prevent the dilemma most post-docs face of being unable to obtain a license during the first year of their career and, subsequently, receive third-party payment for services, be eligible for most clinical jobs, or even legally refer to oneself as a psychologist. Criteria for supervision time, clinical internship, and residency are usually specified. Because of this, it is particularly important to check your prospective state to see what their current requirements are.

2.3 Examinations

A passing score on the EPPP is required by all states, provinces, and territories. The EPPP will be discussed in more detail later in the chapter. Only applicants for licensure are eligible to take the EPPP and eligibility requirements to sit for the exam vary by jurisdiction. The EPPP is most commonly taken upon completion of the post-doctoral year, although some jurisdictions allow post-docs to take the EPPP prior to completion of their post-doc year. Some states also require oral and/or written exams, most often the jurisprudence exam.

Assuming these requirements, it is a good idea to begin contacting any state, provincial, or territorial licensing board for licensure application information before you begin your post-doctoral year. In addition to the application, this should include a copy of the licensure law as well as the rules and regulations of the board. It will be important to determine when you will be eligible to take the EPPP exam, as well as any other required examinations, and to complete any required paperwork prior to the appropriate deadlines. You may find that materials need to be submitted by a deadline that falls during the middle of your post-doctoral year. A list of state, provincial, and territorial psychology licensing board phone numbers and addresses is provided by ASPPB and you can check your jurisdiction's specific board requirements at: www.asppb.net/page/BdContactNewPG/.

3. Considerations of Differences among State, Provincial, and Territorial Requirements

As mentioned, each state, provincial, and territorial license law is different. As a result of this, there are roughly 63 slightly different sets of requirements. Although they are similar in many ways, you will want to be aware of the way in which they are specifically different. As you review the licensure requirements for the state, province, or territory you are considering, there are a number of questions you will need to address:

- Does my degree meet the required criteria?
- Do I have the minimum number of required hours for both pre-doctoral internship and post-doctoral training? Do both training experiences meet the criteria?
- Do I have enough documented supervision time? Is that requirement specified?
- When am I eligible to take the EPPP exam?
- Will I be able to obtain my license during my first post-doc year?
- What is the cut-off score for the EPPP?
- Am I required to take any other examinations?
- What are the deadlines for submitting my application and documentation?
- What are the various fees I will be expected to pay?

The ASPPB offers a full guide of the requirements for each state, territory, and province on their website. Included in this site is an online and interactive version of ASPPB's old Handbook of Licensing and Certification requirements, which lists the

specific educational, clinical, and examinations required by their state or provincial laws. This comprehensive and easy-to-follow resource on all eligibility requirements for a majority of jurisdictions is now available at: <http://psybook.asppb.org/>.

As you review the requirements for your state, province, or territory, it is recommended that you consider the requirements for the other 62 licensing boards. It is ideal to exceed the requirements for all 63 licensing boards should you ever wish to obtain licensure in another state later in your career. For example, while Arizona does not require a jurisprudence exam, California does. If you were considering practice in the Washington, DC area, you would want to know that the requirements for face-to-face supervision for post-doctoral training differ from Maryland, Virginia, and the District of Columbia. It would also be important to know that the most common EPPP cut-off score is a scaled score of 500 (or approximately 70 percent), although a few boards have a different cut-off score for each test administration. A review of the requirements for all 63 licensing boards on the three main areas (education, supervised experience, and examinations) will help inform you.

4. The Examination for Professional Practice in Psychology

The EPPP was developed by the ASPPB to serve as a standardized examination to evaluate applicants for licensure. In 2020, the ASPPB bifurcated the EPPP into two components: EPPP (Part 1 – Knowledge) and EPPP (Part 2 – Skills). The EPPP (Part 1 – Knowledge) is the comprehensive exam that was previously known simply as the EPPP. Its stated intent is to evaluate the broad-based knowledge expected to be gained, following the appropriate doctoral education and supervised training in psychology. All 63 licensing boards require the EPPP for licensure in psychology.

4.1 EPPP (Part 1 – Knowledge)

Since 2002, the EPPP (Part 1 – Knowledge) has become administered entirely as a computer exam and is available at any time. The original paper-and-pencil EPPP was made up of 200 multiple-choice items; the computerized administration is made up of 225 items. For several years, the additional 25 items were used as experimental items to be determined whether to use in future administrations and the EPPP score was based on 200 scored items. This ratio shifted slightly starting August 2011, where 175 items are scored and 50 items are unscored “pre-test” items. This represents the first time that the EPPP score is based on 175 items and not 200, which may slightly shift the margin for error. On a 200-item EPPP, an applicant could miss 60 items and still pass in most jurisdictions; on a 175-item EPPP, the margin of error goes down to 52. However, the computerized administration of the EPPP has a time limit of 4 hours and 15 minutes, which allows for 15 additional minutes over the original 4-hour limit of the shorter pencil-and-paper exam, and it is available year-round.

The content of the EPPP consists of items representing eight weighted content areas. The newest current content areas (effective February 2018) are based on an analysis completed in 2017 examining what licensed psychologists do and what knowledge is required of them. Detailed explanations for each of the content areas are available from ASPPB, and are summarized below with their content percentage as well as the specific subdomains covered on the examination.

- *Ethical/Legal/Professional Issues* (16 percent): Knowledge of (a) ethics code (b) other professional standards, (c) mental health-related legal statutes, (d) identifying ethical challenges, (e) ethical-decision making models, (f) continuing education, (g) emerging ethical issues, (h) rights of patients, (i) ethics in research, (j) ethics with supervision, (k) ethics with technology.
- *Assessment and Diagnosis* (16 percent): Knowledge of (a) psychometrics, (b) assessment theory, (c) strengths and limitations of different assessment methods, (d) appropriate use of assessments, (e) differential diagnosis, (f) assessment in organizations, (g) cultural issues in assessment, (h) diagnostic systems, (i) data interpretation, (j) epidemiology, (k) theories of psychopathology, (l) outcome measurement, (m) technology in assessment.
- *Treatment, Intervention, and Prevention and Supervision* (15 percent): Knowledge of (a) treatment matching, (b) models of interventions, (c) techniques and their efficacy, (d) treatment of special populations, (e) group and organizational interventions, (f) consultation models, (g) vocational models, (h) telehealth, (i) health systems, (j) public health/prevention, (k) models of supervision.
- *Cognitive-Affective Bases of Behavior* (13 percent): Knowledge of (a) intelligence, (b) learning, (c) memory, (d) motivation, (e) emotion, (f) neuropsychology, (g) cognitive-affective processes, (h) social factors in cognition.
- *Growth and Lifespan Development* (12 percent): Knowledge of (a) growth, (b) impact of environment, (c) models of development, (d) identity developmental, (e) impact of family structure, (f) impact of major life events, (g) risk factors, (h) disease across lifespan.
- *Social and Cultural Bases of Behavior* (11 percent): Knowledge of (a) social cognition, (b) communication, (c) group processes, (d) personality theory, (e) cultural differences, (f) diversity, (g) effects of oppression.
- *Biological Bases of Behavior* (10 percent): Knowledge of (a) biological basis of sensation, perception, and mood; (b) psychopharmacology; (c) results of major psychopharmaceutical clinical trials; (d) genetic basis of behavior; (e) neuroimaging methods.
- *Research Methods and Statistics* (7 percent): Knowledge of (a) sampling, (b) research design, (c) data analysis, (d) data interpretation, (e) research designs and their limitations, (f) research evaluation, (g) community research.

The computerized EPPP (Part 1 – Knowledge) can be taken 6 days a week throughout the year. Should you need to retake the examination, up to four exams are allowed per 12-month period; you would only need to wait at least 60 days from

your previous administration. The EPPP is administered at an authorized Prometric Testing Center, for which there are available testing centers in every state, and you need not take the exam in the jurisdiction for which you are applying. After applying for licensure in your jurisdiction, you can then register to take the EPPP online through ASPPB's website at www.asppb.net. Prometric Testing Centers in your vicinity can be located at www.prometric.com.

Another significant difference resulting from the shift to computerized testing is the use of scaled scores. The old pencil-and-paper EPPP utilized a raw score and was reported as a percentage. For example, an applicant receiving 150 correct answers out of 200 would receive a raw score of 150, or 75 percent. With the computerized exams, the raw scores are converted to National Scaled Scores ranging from 200 to 800. This is done in an attempt to allow comparisons of different exams with varying difficulties. A National Scaled Score of 500 is considered the equivalent of a raw score of 140, or 70 percent. A National Scaled Score of 450 is considered the equivalent of a raw score of 130, or 65 percent. Since 2002, all scores are reported as scaled scores.

No computer proficiency is needed to take the computerized EPPP. The program is designed to allow you to skip a question, if necessary, and return to it later on. Upon finishing your exam, results should be received within two to three weeks, although an unofficial score will be given right away at the testing center.

4.2 EPPP (Part 2 – Skills)

Perhaps the most significant change upon the licensure landscape since the publication of the last edition of this chapter is ASPPB's development and introduction of a second component of the licensure exam that focuses on clinical competencies. According to the ASPPB, the impetus for adding a second component to the licensure exam was a need for a standardized assessment of clinical competencies, heterogeneity of the training of psychologists, and unreliable alternative methods of gauging clinical skill.

Development of the exam started in 2016 and a beta version of the EPPP (Part 2 – Skills) launched in late 2021. Currently, EPPP (Part 2 – Skills) is in its "early adopter phase," which means that the jurisdictions who early adopt are now requiring completion of both the original EPPP, now named EPPP (Part 1 – Knowledge), and the EPPP (Part 2 – Skills) in order to be licensed. Currently the early adopters of the EPPP (Part 2 – Skills) are: Arizona, District of Columbia, Georgia, Guam, Nevada, Newfoundland and Labrador, and Prince Edward Island. At the time of this writing, these jurisdictions were set to begin requiring the EPPP (Part 2 – Skills) beginning in late 2020. In addition, beginning in early 2021, Manitoba will also become an early adopter of EPPP (Part 2 – Skills).

Importantly, the EPPP (Part 2 – Skills) cannot be taken without prior passing of the EPPP (Part 1 – Knowledge). The format of the exam is as follows: there are 130 scored questions with an additional 40 unscored questions. Test-takers are

given 4 hours and 15 minutes to complete the exam. The test includes three formats for asking questions: 45 percent are traditional multiple-choice or multiple-response items, 45 percent are scenario-based questions, and 15 percent are identified as “Other Item Types.” ASPPB describes the scenario-based questions as giving the test-taker a clinical scenario with up to five questions based on this scenario. There are up to three different scenarios given to a test-taker. Two other types of question types are described by ASPBB: Point and Click, and Drag and Drop. Point and Click show test-takers a picture and are asked to identify the correct aspect of the image requested. Drag and Drop questions ask the test-taker to match multiple pieces of information to corresponding information on the other side of the screen.

Like the EPPP (Part 1 – Knowledge), the EPPP (Part 2 – Skills) covers a broad range of domains, subdomains, and sub-subdomains. A full explanation is available from ASPPB’s website (www.asppb.net), but major domains and subdomains of EPPP (Part 2 – Skills) are summarized below with their content percentage as well:

- *Assessment and Intervention* (33 percent): Knowledge of (a) application of diversity to assessment, (b) clinical interviewing, (c) test administration, (d) data integration, (e) diagnostic formulation, (f) intervention selection, (g) modifying interventions.
- *Ethical Practice* (17 percent): Knowledge of (a) practice of ethics, standards, and legal statutes; (b) appropriate documentation; (c) ethical practice management.
- *Collaboration, Consultation, and Supervision* (17 percent): Knowledge of (a) working within systems, (b) collaboration, (c) interdisciplinary work, (d) program evaluation, (e) supervisee management, (f) promotion of healthy work environment.
- *Relational Competence* (16 percent): Knowledge of (a) applying research on social context, (b) working with groups and organizations, (c) respect for others, (d) managing professional conflicts.
- *Professionalism* (11 percent): Knowledge of (a) boundaries of competence, (b) self-assessment and feedback.
- *Scientific Orientation* (6 percent): Knowledge of (a) conducting a literature review, (b) proper dissemination of research knowledge.

4.3 Studying and Preparing For the EPPP (Parts 1 and 2)

Regardless of how you performed in graduate school, the EPPP is an examination that requires preparation, review, and practice. Many senior psychologists will candidly remark that, despite their experience and proficient knowledge of psychology, they would have a difficult time passing the EPPP were they to take it today. Yet, the majority of doctoral-level examinees do receive a passing score on the exam. Success on the EPPP will result from many of the same factors relied on in graduate school: a combination of preparation, knowledge, and anxiety management.

If you speak with others who have taken the EPPP, you will hear a variety of strategies to help prepare you for the EPPP. Perhaps the most focused and helpful of strategies are the EPPP study kits/programs often advertised on psychology publications such as the APA Monitor. For years, the two most common and popular programs have been available from the Association for Advanced Training in The Behavioral Sciences (www.aatbs.com) and Academic Review (www.academicreview.com). Both programs offer comprehensive multivolume home study programs with analysis of content areas, full-length practice exams modeled after EPPP exams, multivolume audio programs, computer review programs, live workshops, and other study aids designed to prepare you for the EPPP. Prices are relatively expensive, although different price levels are available and many will argue that the benefits of the program are priceless. Both programs are comparable in effectiveness and reputation.

Perhaps the most integral components of these programs are also the most inexpensive to obtain; that is, the books and practice exams. The designers of the programs do an impressive job of condensing several years of psychology graduate school into books designed purely for study and review. Some academics may bristle at the notion of creating Cliff Notes versions of graduate school in psychology; however, the comparison fits and fits well. Your old textbooks were not designed to be reviewed as efficiently as these books were. The audio files offer another mode of ingesting large amounts of information, particularly in times in which you would otherwise be doing very little, such as commuting or exercising.

The practice exams, probably beyond anything else, are the most integral tool you can use to prepare you for the EPPP. Both AATBS and Academic Review offer over half a dozen full-length practice exams modeled after the EPPP and provided with detailed explanations for each answer. Sample items from former EPPP exams are also available through ASPPB and are quite helpful. There are a few benefits of the practice exams. First, you become more familiar with the often vague or cumbersome manner in which some EPPP items are presented. Second, you can continually monitor which content areas you understand with proficiency, and in which content areas you are under-performing. Continued administration of the practice exams provides you with opportunities to learn from items answered incorrectly. Finally, practice exams demystify the EPPP and condition you to the timing and fatigue variables and facilitate development of better test-taking strategies. ASPPB also offers practice exams, administered at the same Prometric testing centers as the actual EPPP, under similar conditions as the EPPP. The Practice EPPP exams (PEPPPO and PEPPPO2) are available for a fee by going to www.asppb.net/page/Practiceexinfo/.

If you have completed a doctoral program in psychology, then you likely know what study strategies work best for you. Some people prefer to study individually; others prefer to study in groups. Your colleague may prefer to use flash cards, while you never have. Nevertheless, it is best to avoid comparing your progress to that of others preparing for the EPPP; every person is different and you need to focus on the strategy that works for you. Regardless of what that strategy is, you should set aside

Table 18.2 *Studying for the EPPP***Sample study schedule for a 6-month study plan**

- Month 1: 1–3 hours per week; 1 practice exam
- Month 2: 2–5 hours per week; 1–2 practice exams
- Month 3: 4–8 hours per week; 2–4 practice exams
- Month 4: 7–12 hours per week; 2–4 practice exams
- Month 5: 10–20 hours per week; 2–4 practice exams
- Month 6: 10–20 hours per week; 2–4 practice exams

Additional Suggestions

- Make adjustments based on your own study preferences, knowledge of content material, and performance on practice exams
- Do not compare your study schedule to someone else's and panic; everyone is different
- Plan on finding the EPPP challenging
- Expect to get one out of every four questions incorrect (this would still give you an exceptional score)
- Pace yourself
- Anticipate a few questions that will seem impossible to answer correctly
- Guess if you are uncertain; there is no penalty for guessing incorrectly, so do not leave any items unanswered

several months of progressively intensive study to be adequately prepared for the EPPP. Some have suggested 300–400 hours of study time, although that would depend on your study habits. A sample study schedule is provided in Table 18.2.

It is unknown what study materials will be needed to prepare for the EPPP (Part 2 – Skills). The ASPPB website contains a video tutorial on their website as well as sample questions in their EPPP candidate handbook. At the time of this writing, it does not appear that AATBS, Academic Review, or other study preparation companies have study packages specifically available for studying for the EPPP (Part 2 – Skills), but that will most likely change.

Perhaps your best measure of your level of readiness will be reflected in your performance on the practice exams. Because of this, it is a good idea to take an initial practice exam *at least* 6 months in advance of your planned EPPP administration date. Both AATBS and Academic Review study programs should provide corresponding content areas for each question, which allows you to calculate percentage scores for each of the eight content areas. For example, you may find you scored 40 percent of the Treatment/Intervention questions, 51 percent of the Assessment and Diagnosis questions, and so on. Do not be alarmed if your performance on the first practice exam is poorer than you expected. Keeping track of your performance on the eight content areas serves to inform you of the areas on which you need to focus your studies. It also provides you with a barometer of your progress over time. It is a good idea to take at least one, if not two, practice exams per month. It is *ideal* to be scoring above the 75 percent range overall by the time you are preparing to take the EPPP. As you review your scores, take note that the practice tests in both study kits are often more difficult than the EPPP itself. Although it is unlikely you will ever

feel completely comfortable and confident, you should feel relatively prepared by the time you are ready to take the EPPP.

5. After Licensure: Banking Your Credentials

Assuming you have successfully completed all of the requirements for licensure and have obtained your professional license to practice psychology, you should consider banking your credentials (see Table 18.3). This usually involves the process of submitting and verifying documentation to a centralized credentials “bank” for your education/coursework, practica, internship, doctoral degree, post-doctoral training, EPPP scores, license, and other credentials. This can be very helpful and time-saving in the future as you apply for insurance or managed-care panels, jobs, or other credentials. ASPPB offers a Credentials Bank program, which allows you to electronically store your transcripts, exam scores, and documentation of training experience so that it can be sent as needed to future licensing boards. As mentioned, you may find yourself changing jobs and location sometime in the future, whether in the next few years or decades from now. Organizing and submitting documentation can be difficult enough; it can become increasingly difficult years later after supervisors retire, programs modify or close, and addresses change. The Credentials Bank provides a readily accessible archive for necessary licensure documentation. There is an initial fee to set up the record, and then a maintenance fee every 2 years to keep the record available.

In an effort to streamline the mobility of licensure from state to state, ASPPB also developed the Certificate of Professional Qualification in Psychology (CPQ). The CPQ is a credential given to applicants who meet certain eligibility requirements (similar to most licensure requirements), have practiced for a minimum of 5 years, and have no record of disciplinary action. ASPPB recommends to licensing boards that the CPQ be accepted as a sign of eligibility for licensure. At the time of this writing, 43 jurisdictions accept the CPQ as evidence of eligibility for licensure and several others are in the process of accepting or recognizing the CPQ.

The National Register of Health Service Providers in Psychology also provides the opportunity for credential banking. There are similar eligibility requirements, although once listed in the National Register there are additional benefits, such as verifying credentials for applications to insurance panels and the American Board of

Table 18.3 *To-do list after obtaining a license*

Upon Licensure

- Bank your credentials with ASPPB or the National Register
 - Display your license in your main office as required by most jurisdictions
 - Remain current with license fees and continuing education requirements, if required
 - Retain copies of your licensure application information, which will be needed for various applications such as insurance panels or the American Board of Professional Psychology
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Professional Psychology (ABPP). The National Register is available at www.nationalregister.org.

Some states, provinces, and territories will allow an applicant to be “license eligible” if they hold the CPQ, National Register, or ABPP. You would usually only need to take and pass the written or oral local examination, if required, to be licensed in that jurisdiction. Some jurisdictions will also require a certain number of continuing education hours per number of years to maintain licensure.

Throughout the process, obtaining a license can be a difficult, challenging, and even frustrating task. Yet, for the practicing psychologist, it is the most important credential you will ever acquire.

6. Additional Resources

6.1 Websites

- www.asppb.net – Association of State and Provincial Psychology Boards
- www.aatbs.com – Association for Advanced Training in the Behavioral Sciences
- www.academicreview.com – Academic Review
- www.nationalregister.org – National Register of Health Service Providers in Psychology
- www.prometric.com – Prometric Testing Centers

David R. Cox

The focus of this chapter is to help you understand specialty board certification in psychology. Just as medicine and many other professions embrace the recognition of specialty skills, psychology does as well. Indeed, although relatively few psychologists are board certified as compared to physicians, the recognition of the need for specialization and board certification has grown significantly in recent years (Robiner et al., 2012). Within psychology, board certification through the American Board of Professional Psychology (ABPP) is recognized as the “gold standard” and is virtually synonymous with what is being referred to when board certification is referenced in the profession (Nezu et al., 2009). Unlike licensure, which is required to practice and is general in scope, board certification is generally a voluntary process that is completed *after* earning a doctorate, completing internship and a license to practice (Cox & Grus, 2019). It is a means of demonstrating competency in a specialty area of psychology by which the public and profession alike can know that one is competent to practice in one of the many specialties in psychology (Cox, 2010; Cox & Grus, 2019).

Within this context, this chapter will (1) cover a brief history of specialization and board certification in the field of psychology, (2) describe some of the benefits and advantages of becoming board certified, (3) describe the board certification process, and (4) debunk some myths regarding board certification. Hopefully, this all helps to provide some information about how and why to pursue board certification in your chosen specialty area.

If you are a graduate student (or perhaps an undergraduate student) who knows you want to become a psychologist, yet may not know what specialty area you wish to pursue, becoming familiar with the concept of specialties and related requirements is advisable as early as is feasible in your professional development. Don't think, “That is years away, I don't need to learn it now.” On the contrary, knowing about the specialty areas and requirements will help you plan and, more importantly, avoid missteps as you develop professionally. Little can be more disappointing than to spend years preparing to practice in a specialty area yet discover all too late that you failed to meet a particular requirement. Becoming familiar with the process and

applying as early as during graduate school (this will be described later) can facilitate successful completion of the process. Early engagement includes not only learning about board certification and what is required, but also why it is important to you, potential employers, the profession, and the public that we serve. Many psychologists that have gone through the process describe it as having been a growth experience and a means of assuring themselves and others that they are engaged in practice that is focused on competent, high-quality work.

No doubt at various places within this book you will read about the increasing number of people entering psychology, increased interest in providing specialized services, the vast amount of information to learn in the field, and emerging areas of practice that have been developing in recent years. Much of this is directly reflected in the growth of specialties in psychology and the member boards of ABPP. Having started with 3 specialty boards, ABPP includes (at the time of this writing) 15 specialty boards, one subspecialty board, and has two additional specialties and another subspecialty in the process of affiliating as new member boards. Applications to ABPP have doubled in the last decade and now approach 1000 per year.

By way of background to provide you this information, my experience with ABPP is a long one. I was asked, as an active member of the Division of Rehabilitation Psychology of the American Psychological Association, to volunteer to serve on a committee exploring the need and demand for board certification in Rehabilitation Psychology. That ultimately led to establishing the examination process. That work began in 1993; the American Board of Professional Psychology (ABRP) came to fruition and formally affiliated with ABPP in 1997. At that time, I had worked in academic medical centers and hospital-based practices as well as private practice. In 2006, I was hired as the Executive Officer of ABPP. I continue to serve as the organization's first full-time Executive Officer to this date. So, I have been associated with ABPP in some capacity for 27 years. Through all of this I have become quite familiar with each of the specialty areas, the specialty examining boards and a multitude of boards, committees, and organizations with psychology.

Work in the profession regarding specialization is ongoing and has seen strong support in recent years with several "summits" held to address specialty. A highlight for me of this continuing work has been co-facilitating the Interorganizational Summit on Specialty, Specialization, and Board Certification along with leaders of the Council of Specialties in Professional Psychology (CoS) and the Association of State & Provincial Psychology Boards (ASPPB). The four summits that we have held to date (the fifth is in the planning stages) have brought together roughly 30 of the most important boards and organizations within psychology with virtual unanimous agreement that the profession needs to emphasize the importance of specialty education, training and practice within which board certification is a natural, if not expected, step in professional development. These recent developments speak to the growing importance of specialty, board certification, and ABPP in the evolution of professional psychology.

ABPP is increasingly representative of the standards of competence for specialty practice, beyond that required of the generic licensing process. ABPP board certification is to psychology as specialty certification is within medicine, dentistry, law, and other professions. Moreover, you can initiate your application and begin familiarizing yourself with the requirements while early on in your career; I strongly encourage you to do so!

1. A Brief History of Specialization and Board Certification

Board certification of psychologists has a long history that continues to develop. ABPP began in 1947 when there was a desire to establish a means whereby the profession could identify those psychologists that were competent to provide clinical treatment (as opposed to conduct research, for example). Initially, 3 specialty areas were established; that has grown to the current 15 and growing. Comprehensive descriptions of the evolution of specialty and ABPP can be found elsewhere (Baker & Cox, 2014; Bent et al., 1999).

In short, the profession evolved to the point of licensure. However, licensing of psychologists addresses education, training, and experience, and one's ability to pass a knowledge-based test; it does not examine actual competence through review of one's work as does the board certification process (Cox & Grus, 2019). Psychologists that provide health care services to the public are expected to be licensed by the state or jurisdiction in which they practice (with a relatively few exceptions for those working in "exempt agencies"). Licensing of psychologists is based on the broad and general aspects of applied psychology and is *generic*. Licensed psychologists are to ethically practice only in those areas that are within the scope of their education, training, and experience (APA, 2017). This leaves a fair amount of potential uncertainty in determining those psychologists that are competent to practice in a specialty. Consumers may be confused when trying to find an appropriate *specialty* provider if relying solely on licensed, non-board-certified individuals.

Specialization has become increasingly important as knowledge and information in the field increases. What you need to know in a specialty area may well double every 7–8 years (Neimeyer et al., 2012, 2014). Most health care professions provide a peer-review process for the credentialing and board certification of individuals that provide health care services to the general public.

Specialty areas in psychology (Table 19.1) have a formal means whereby they are recognized (APA, 2011b). Representatives of the CoS, Commission on Accreditation (CoA), Commission for the Recognition of Specialties and Subsidiaries in Professional Psychology (CRSSPP; formerly the Commission for the Recognition of Specialties and Proficiencies in Professional Psychology – CRSPPP), and the American Board of Professional Psychology (ABPP) agreed upon and adopted a definition of "specialty" that was acceptable to each of the groups (APA, 2020, p. 23):

Table 19.1 *Specialty boards affiliated with the American Board of Professional Psychology*

Behavioral & Cognitive Psychology
 Clinical Child & Adolescent Psychology
 Clinical Psychology
 Clinical Health Psychology
 Clinical Neuropsychology
 Counseling Psychology
 Couple & Family Psychology
 Forensic Psychology
 Geropsychology
 Group Psychology
 Organizational & Business Consulting Psychology
 Police & Public Safety Psychology
 Psychoanalysis in Psychology
 Rehabilitation Psychology
 School Psychology

The following are in the application process of affiliating with ABPP as of 2020:

Addiction Psychology
 Clinical Psychopharmacology
 Serious Mental Illness Psychology

A *specialty* is a defined area of professional psychology practice characterized by a distinctive configuration of competent services for specified problems and populations. Practice in a specialty requires advanced knowledge and skills acquired through an organized sequence of education and training in addition to the broad and general education and core scientific and professional foundations acquired through an APA or CPA accredited doctoral program.* Specialty training may be acquired either at the doctoral or postdoctoral level as defined by the specialty.

*Except where APA or CPA program accreditation does not exist for that area of professional psychology.

Board certification within a specialty area is *not* a requirement of licensing boards in psychology; in fact, most licensing boards do not recognize specialty practice at all. As with so many other professions, our field has grown in size, scope, and amount of information needed to competently practice. Roberts (2006) wrote about the “essential tension” between specialization and “broad and general training” as has typically been referenced in psychology. Is psychology a singular field or a profession made up of a variety of specialty areas? Specialization is an “inevitable and necessary product of developmental processes in a discipline and a profession” (Roberts, 2006, p. 863). Specialty board certification of psychologists is not required but is a voluntary process within the profession of psychology, overseen by the American Board of Professional Psychology (ABPP). Board certification through ABPP is considered by most psychologists as an advanced recognition of skills, knowledge and competencies (Table 19.2) and continues to be the expected credential for those that hold themselves out as a specialist.

Table 19.2 *ABPP competencies*

Foundational competencies	Functional competencies
Professionalism	Assessment
Reflective Practice/Self-Assessment/Self-Care	Intervention
Scientific Knowledge and Methods	Consultation
Relationships	Research/Evaluation*
Individual and Cultural Diversity	Supervision*
Ethical Legal Standards and Policy	Teaching*
Interdisciplinary systems	Management-Administration*
Evidence-based Practice	Advocacy*

* May not be applicable to all practitioners

At this point, there is general consensus within the profession that while broad and general training remains an essential aspect of psychology education and training, specialty is where we are headed (witness the Interorganizational Summit information above and other descriptors at www.cosppp.org for more information). Clinical neuropsychology is an example of a specialty within psychology that has done a terrific job of enculturating those interested in the area, embracing board certification (Cox, 2010). Success in such enculturation is likely associated with the clear articulation of training and education requirements within a specialty via such means as using what has become referred to colloquially as the “Psychology Taxonomy” (APA, 2012).

Most of us are aware of board certification of physicians in various specialties, yet specialty certification in psychology has grown more slowly. The American Board of Medical Specialties (ABMS) was founded in 1933, the American Board of Professional Psychology (ABPP) in 1947. Probably due to the significant reliance on board certification as a means for qualifying for medical staff privileges in medicine, that profession’s certification process has grown more widespread and become enculturated into the medical profession’s education and training process. Psychology, with less presence in hospital and medical settings, has done so more slowly. However, a recent series of profession-wide meetings – the Interorganizational Summits on Specialty, Specialization, and Board Certification among them – has resulted in a consensus that the field of psychology needs to integrate specialization and board certification much more into our education and training process than has been the case historically (Silberbogen et al., 2018). That work continues and planning for “Summit 5.0” (the fifth such summit) is underway as of this writing.

2. Requirements for Becoming Board Certified

It used to be that in order to even *apply* for ABPP board certification one must have been five years out from receiving one’s doctoral degree. An increased focus on standardization and competency-based education and training led to earlier adoption of specialization of practice for many psychologists; this has also included an increase in

number of specialty postdoctoral training programs (Rodolfa et al., 2005; Silberbogen et al., 2018). Board certification is a natural next step after specialized post-doctoral training. There seems to be increasing momentum regarding competency-based education, training, and board certification (Kaslow et al., 2012). Recognizing board certification as one of the goals of professional training and development, ABPP started the Early Entry Program in 2007 in an effort to reach students early in training and facilitate understanding and acceptance of board certification within psychology.

The Early Entry Program (or Early Entry Option) has been extraordinarily successful and nearly 60 percent of ABPP applicants now come through that program (Edgar et al., 2019). Many education and training programs are encouraging and/or sponsoring students, interns, and post-doctoral residents to participate. Becoming familiar with the process and expectations of board certification early permits one to potentially join discussion groups, identify a mentor for the process and start integrating an identity as a specialist-in-training. Basic in its design, the program allows students, interns and post-doctoral residents to apply to ABPP, file credentials and documents as they complete each step of education and training, and eventually be ready for the formal board certification process. The program does not create any exception to the standard credentials review or examination process, but does provide for a discounted application. All other requirements for ABPP board certification remain the same; the Early Entry Program is not an “easier” path, unless one accepts familiarity with the process as making it “easier.”

Becoming board-certified through ABPP includes multiple steps: credentials review, submission of practice samples, and oral examination. The process is similar for every ABPP specialty board. A written (e.g., multiple-choice) examination is also included in the process for two specialty boards: Forensic Psychology and Clinical Neuropsychology.

ABPP has what are called *Generic Requirements* that are the same for each specialty board. Beyond that, each specialty has its own specialty-specific requirements. The generic and specialty-specific requirements are available online at www.abpp.org. The generic requirements (for those individuals trained in the USA and graduating from a doctoral program in 2018 or later) include a doctorate in psychology from an APA-accredited program, completion of an APA-accredited internship (if the internship is completed in 2020 or later), and licensure in at least one state at the doctoral level for the independent practice of psychology. There are slight variations of these requirements for those trained earlier and/or outside of the USA.

An application that meets the requirements of the generic review is passed on to the specialty board to review the specialty-specific requirements. Specialty-specific requirements are *in addition* to the ABPP generic requirements; meeting the generic requirements for ABPP is a *pre-requisite* for review by a specialty board. An example of specialty-specific requirements might be completion of post-doctoral training in the specialty and/or completion of coursework or training in that area of practice. Completion of a formal residency program and/or supervised experience may satisfy some or all of the specialty-specific requirements; it is always best to review the specialty board’s information on the ABPP website for up-to-date information.

Once one's credentials have been approved by the ABPP Central Office at the generic level and also by the specialty board, most applicants will be requested to submit practice samples; the two exceptions to this are for those applying in Clinical Neuropsychology and Forensic Psychology, each of which require a multiple-choice written examination first. Practice samples are often video recordings of working with a client and/or providing supervision, or written descriptions of one's work. The specifics vary somewhat from board to board and should be accessed via the ABPP website. Two case presentations or other samples of one's work along with a personal professional statement are common types of written practice samples. It is understood that different clinical or employment settings or roles might affect the types of cases or materials. An overview of the practice sample submission process (Davidson, 2009) and other stages of the process can be found in Nezu et al. (2009).

Each specialty board requires an oral examination of approximately 3 hours. The process is expected to be collegial throughout; it is not uncommon to hear that the process was engaging and challenging, yet friendly. The format or model of the oral examination is different across boards, with some being conducted with the examinee meeting with three examiners at once, and others having the examinee spend portions of the time with different examiners. Whatever model is used, the goal is always to assess the competency of the candidate.

The oral examination is most often based in part on the practice sample(s) submitted, and may also include responding to vignettes, fact-finding about cases, or other methods of inquiry. Every specialty board oral examination must also cover legal and ethical issues. That may be examined using the submitted practice sample, or the use of vignettes provided in the examination. The oral examination is an opportunity for a candidate to "think on one's feet" and demonstrate an ability to conceptualize a case and demonstrate competence in the ability to diagnose and/or discuss a treatment plan. Candidates will need to be prepared to discuss the practice samples in detail, present a solid rationale for what was done in the case as well as how it was done. The candidate should be prepared to demonstrate that one is up to date with relevant literature (Kaslow, 2009).

The entirety of the ABPP board certification process is based largely on the concept of professional competency (Rodolfa et al., 2005) and the Foundational and Functional Competencies recognized in professional psychology (American Psychological Association, 2011a; Fouad et al., 2009; Kaslow, 2004, 2009). These are widely integrated into graduate study and used throughout the education and training experiences in the profession.

3. Myth-Busting

Over the years, some misinformation, misunderstanding, and myths circulated and developed that I would like to debunk. I recall hearing of some of these many years ago when I was entering the field, and some have persisted.

First, ABPP board certification is *not* just for the “best of the best” or the “cream of the crop” of the “top 2 percent” of psychologists. This myth may have spread and persisted because only a small percentage of psychologists have historically become board-certified. However, with the advent of the Early Entry Program and dissemination of information clarifying that ABPP expects that most appropriately trained psychologists should expect that they can pass the board certification examination. Indeed, we tend to say that psychologists that are 2–3 years post-doctoral degree are likely to be able to pass and psychologists with 10 or fewer years of experience pass at a rate like those who have been practicing longer (Edgar et al., 2019). That time frame permits for an appropriate, yet not overly lengthy, period of post-doctoral supervised experience; of course, that experience would need to be in the specialty area in which one is anticipating becoming board-certified.

Another myth that persists, and one that is directly related to the above, is that the examination process is grueling and really for academics. The truth is that although the examination is not a “walk in the park” it is based on the very training that one has been undertaking in the years prior to examination. The process is collegial and not adversarial. Many, perhaps even most, board-certified psychologists focus on clinical care and a good percentage are in independent practice. Indeed, the examination process is about clinical practice, not academic psychology.

Finally, some feel that nothing beyond licensure is necessary. Certainly, one *must* (with very few exceptions) be licensed to practice in the field, and board certification is voluntary. As has been described earlier in this chapter, the notion that one need not demonstrate competence beyond licensure is becoming increasingly unacceptable in the profession as well as with the public (Cox & Grus, 2019). The ABPP board certification examination is the single best way of demonstrating to the public, profession, and yourself that you practice at the expected level of a specialist in a particular area.

The ABPP certification process requires extensive but manageable requirements. Preparation for the board certification process from ABPP includes:

- The chance to articulate your own views and perspectives in a more advanced and sophisticated way as part of the preparation and oral exam
- A structure to facilitate self-assessment where the individual gets to set his or her own pace in developing their case study, which facilitates better self-understanding and case conceptualization
- An important continuing professional education opportunity (fulfills, in some states, the continuing education (CE) requirements for the biennium in which board certification occurs; those successful receive CE credits from ABPP, an APA approved CE provider)
- More mobility opportunities as many state licensure boards recognize the ABPP and have a facilitated licensing process
- Highest credential for a psychologist and denotes an advanced level of competence (knowledge, skills, attitudes, and competencies)
- “Final examination” that gives legitimacy to the profession, along with public confidence one gets when being referred to as a board-certified specialist

- Assurance to the public you are a specialist that has successfully completed the educational, training, and experience requirements of the specialty, including an examination designed to assess the competencies required to provide quality services in that specialty
- A credential that is understood by other professionals and the public

(The above points were taken from a presentation at the APPIC 2007 Conference in Baker, J. and Kaslow, N. (2007), “Board Certification for Internship Training Directors”.)

4. In Closing

Specialization in psychology is increasingly becoming important in the profession and gaining more widespread acceptance. In some segments of the profession, it is expected that you will be, or will soon become, board certified. This is particularly true for those of us who work in, or with, hospitals and medical centers, yet it is certainly not limited to those arenas. The public is becoming more aware of the need for expertise and look for board certification. You would likely seek a board-certified neurosurgeon if you needed brain surgery. Similarly, it follows that a specialist in psychology would be expected to be board certified. Rozensky predicts that psychology as a profession is *needing* specialization and that to be accepted in health care arenas, psychologists as individual professionals will *want* board certification.

I hope that the “take-away” from this chapter is that board certification is growing and important in our profession. Starting early is well-advised, and you can be successful in achieving board certification in the specialty for which you train. Good luck as you progress!

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Becoming a Competent and Ethical Clinical Supervisor

Erica H. Wise & Ellen E. Fitzsimmons-Craft

If you are in a professional psychology training program, it is likely that you will be asked to be a clinical supervisor at some point in your career. In fact, based on an extensive survey of the members of the American Psychological Association (APA) division that represents clinical psychologists (Division 12; Society of Clinical Psychology), it was determined that clinical supervision is provided by 55 percent of university professors, 71 percent of hospital psychologists, and 36 percent of independent practitioners (Norcross et al., 2005). For many of you, this is an eagerly anticipated activity, and for others, it may be a source of some uncertainty or even anxiety. The purpose of this chapter is to demystify the idea of *becoming a supervisor* by providing broad theoretical models for conceptualizing the practice of supervision and practical suggestions to guide you through the process of learning to be a supervisor. We will also discuss current competency-based supervision practice and provide suggestions for how to incorporate ethical and multicultural considerations into supervision. Throughout the chapter, we will include the perspectives of an experienced clinical supervisor (E.H.W.) and the perspectives of the second author (E.F.C.) from when she was an advanced graduate student just starting her journey toward becoming a competent supervisor. In this way, we aim to provide you with different perspectives on this learning process.

Most graduate students and interns see learning to supervise as a critical and expected step in their professional development. In fact, the expectation that you will attain a reasonable level of competency in supervision prior to completing your training is now integrated in a step-wise fashion into the accreditation standards for doctoral programs and internships. Doctoral students are expected to “demonstrate knowledge of supervision models and practices,” while interns are expected to “apply this knowledge in direct or simulated practice with psychology trainees, or other health professionals . . . examples . . . include, but are not limited to, role-played supervision with others, and peer supervision with other trainees” (APA Commission on Accreditation, 2015). This means that most of you, in addition to *being* supervised in your training programs and internships, will also be starting the process of *learning* to supervise others. What is it that you will be learning to do in

supervision training? Let's turn next to defining supervision and providing a broader context for this activity.

1. Defining Supervision

Despite the fact that most of us know what *supervision* is and what it means to be a *supervisor*, the terms can be surprisingly difficult to define in a comprehensive manner. A classic and broadly accepted definition is provided here:

Supervision is an intervention provided by a more senior member of a profession to a more junior colleague or colleagues who typically (but not always) are members of that same profession. This relationship is evaluative and hierarchical, extends over time, and has the simultaneous purposes of enhancing the professional functioning of the more junior person(s); monitoring the quality of professional services offered to the clients that she, he, or they see; and serving as a gatekeeper for the particular profession the supervisee seeks to enter. (Bernard & Goodyear, 2014, p. 9)

Let's walk through this definition because the elements capture the central functions of supervision (from the Latin for *oversight*) in contemporary professional psychology. In the first sentence of the definition, it is stated that supervision is an *intervention*. What does this mean? The notion that supervision is an intervention in its own right is somewhat counterintuitive. It is interesting to note that the term is derived from the Latin word *intervenire* or *inter* (between) *venire* (come); to come between. In our field, psychological interventions are, at their essence, intended to alter a negative course or process in order to improve psychological functioning. If supervision is an intervention, then it is attempting to *come between* or alter the behavior of the person in training who is, in turn, attempting to intervene with the client. If supervision is itself a complex and multifaceted process, then it is clear that teaching someone to be a supervisor is even more so. In terms of overarching goals, we are attempting to improve the skills of the supervisor-in-training, improve the clinical skills of the supervisee (usually a less-advanced practicum student), and improve treatment outcomes for the client; that is, we are attempting to intervene on multiple levels. As we will discuss later in this chapter, these levels of interweaving goals and responsibilities tend to become very complex. The definition provided above goes on to clarify that there is an ongoing and evaluative component to supervision that includes overseeing the quality of what is being provided to the clients and *serving as a gatekeeper* for the profession. This last statement reminds us that supervision is not only intended to ensure high-quality treatment for current clients, but for future clients as well. In training programs, it is common to differentiate between *formative evaluations*, which are designed to support the growth and development of the psychotherapy trainee, versus *summative evaluations*, which are designed to assess competencies, determine if adequate progress is being made, and provide a gatekeeping function for the academic program or internship site and the profession. It is clear that this classic definition of supervision quoted above incorporates the full range of these essential supervisory functions.

2. Taking on Your New Role

Becoming a clinical supervisor will involve several familiar roles that are merged into a new context. It will be subtly, but importantly, different from activities you have been exposed to, gained experience in, or mastered in your graduate training or personal life. In addition, you will likely have some key questions, and possibly some concerns, as you contemplate this new role: What will be expected of me? What if I have nothing to contribute? Should I focus on the supervisee or their client? It can be helpful to remember that new roles bring rewards as well as challenges. And, as mentioned above, you will indeed be able to draw from familiar roles. There are sophisticated theoretical and research analyses of the competencies and roles in supervision that you may find helpful to draw from as you begin your work as a clinical supervisor and refer back to as you become more experienced.

3. Social Role Discrimination, Developmental, and Theoretical Models of Supervision

You have likely already learned in multiple contexts that theories and models serve to organize complex experiences. The *social role discrimination* model explicitly describes the familiar roles that you will draw from in learning to be a supervisor. This model was initially developed by Bernard (1979) and has been elaborated by Bernard and Goodyear (2014) in their classic text. In this model, both the *role* and the *focus* taken by the supervisor throughout the course of a supervision session are identified. As supervisors become more experienced, they are encouraged to more intentionally select the *role* that is enacted and the *focus* of the supervisory session that is selected. In this model, the three central *roles* that have been identified are: *teacher*, *counselor* and *consultant*. Here are some examples of the social roles that can be identified in supervision:

- **Teacher:** In supervision, you may be *teaching* your supervisee very basic skills, such as how to schedule an appointment, complete consent forms, or complete progress notes. More complex skills might include learning how to take a detailed family history, conduct a suicide risk assessment, or introduce a mindfulness exercise. In cognitive-behavioral programs, supervisors will be teaching supervisees how to provide psycho-education to their clients regarding the interrelatedness of thoughts, feelings, and behaviors, how to collaboratively engage in a functional analysis, how to assign and analyze thought records, how to conduct behavioral activation, etc.
- **Counselor:** In this role, a supervisor might process with the supervisee the experience of feeling more anxious about particular clients more so than others or how their own experiences might impact their interactions with a client who has a similar concern. A supervisor may also discuss various fears that the supervisee may have about beginning clinical work: What if my client replies to my questions with one-word answers? What if the client asks my age or if I am their first client? What do I do if I don't know what to say? Will my client want to

come back and see me again? It is useful to note that if you are a supervisor in training, these questions from an anxious supervisee seeing their first client might in turn make you a bit anxious in your new role as a supervisor. We will talk later in this chapter about the notion of *parallel process*.

- **Consultant:** In the *consultant* role, the supervisor may push for the supervisee to trust their own insights about their work or challenge the supervisee to think or act on their own. For example, the supervisor might encourage the supervisee to explore and discuss complex case conceptualization issues and how these might impact the treatment plan or discuss how the client's cultural background might necessitate altering an established evidence-based treatment, providing consultation rather than driving these discussions. This more collegial role has been identified as important, but not surprisingly, it tends to be more difficult to define or identify in both theoretical writing and in observational research.

In the social role discrimination model, the focus of supervision may be on intervention skills, conceptualization skills, or personalization skills. Some examples of each are provided below.

- **Intervention skills:** What is the supervisee actually doing in the session? The *focus* may include an examination and discussion of how the supervisee implemented or plans to implement a particular intervention technique or how the supervisee reflected or summarized the client's thoughts and emotions in the session. This may also include discussions of points in the session where the supervisee felt confident in responding, was not sure how to respond, felt that a particular intervention strategy did or did not go as intended or, more generally, had a sense that a session was or was not effective. After viewing or listening to the session, the supervisor may note points in the session related to the considerations described above and may have specific suggestions for modifying intervention strategies.
- **Conceptualization skills:** How does the supervisee understand the client(s) and the presenting problem(s)? In supervision, the *conceptualization* focus might involve the supervisor and supervisee collaboratively discussing factors that contribute to the maintenance of the client's difficulties, such as avoidance, maladaptive thinking patterns, or a lack of emotion regulation skills. Such conceptualization work may also involve the supervisee and supervisor thinking through the ways in which various background factors, such as cultural considerations, may impact the way in which the client is experiencing his or her present difficulties.
- **Personalization skills:** How does the supervisee blend or interface their *personal* style with the therapy that is being provided? This may involve the supervisor and supervisee discussing *how* the supervisee interacts with clients: What is the supervisee's tone of voice like? How does the supervisee's style change (or not) with various clients or with a client's different affective presentations? How much is the supervisee versus the client talking in session? Generally, this skill involves the supervisor working with the supervisee to learn when and how they

may want to adapt their natural therapeutic tendencies for a particular client or client presentation. As with the consultation social role discussed above, this factor is clearly important, but is more difficult to clearly define or identify in a supervision session.

The 3×3 table of the social role discrimination model of supervision provides a useful structure for engaging in a sophisticated process and content analysis of treatment. We encourage you to consider each of the cells as you read the rest of this chapter and to use it as a guide if you are currently learning to be a supervisor or if you are in supervision yourself. Becoming more aware of the social roles and foci we are most drawn to can help us to assess whether we are taking an approach that is well matched to the needs of the supervisee and their client.

In addition to the *social role discrimination* model described above, there are complex *developmental* models for understanding supervision. These models focus on the observation and description of common developmental pathways typically taken by the supervisor in training as they move through the learning process (Bernard & Goodyear, 2014). Some of these models have been extended beyond training and into professional practice. Most useful to consider here is that early in training, supervisors in training tend to prefer clearly articulated structure and may be most concerned about “doing it right.” This same conceptualization applies to a novice psychotherapy trainee. Therefore, we would expect that when you, as a supervisor in training, are supervising a novice graduate student therapist, you will spend relatively more time in the teacher role focusing on conceptualization and intervention skills. In parallel, the novice supervisor may want a bit more specific instruction regarding how to effectively provide supervision. As novice supervisors in training and therapists become more confident (and competent), they will likely spend more time in a consultative role and in the consideration of more complex conceptualization and personalization issues.

Theoretical models of supervision are based on psychotherapeutic models. Because many academic professional psychology programs now endorse a cognitive-behavioral therapy (CBT) model, we will briefly discuss how this model translates in to the practice of supervision.

Table 20.1 *Bernard's (1979) 3 × 3 social role discrimination model*

Focus of supervision	Social roles		
	Teacher	Counselor	Consultant
Intervention			
Conceptualization			
Personalization			

A supervisor using a CBT model would tend to work collaboratively with the trainee in supervision, would be likely to incorporate active agenda setting into the supervisory process, would identify and use role playing techniques to assist the trainee in learning new behaviors, and would be alert to dysfunctional thoughts, underlying beliefs, or schemas that might interfere with optimal functioning of the supervisee. Of course, because this is not psychotherapy, the focus remains on thoughts, feelings, and behaviors that are relevant to learning to be an effective therapist.

4. Parallel Process and Alliance in Supervision

Earlier in this chapter, we mentioned the notion of *parallel process*. What is this? This idea has its roots in psychodynamic theory and a full discussion is outside of the scope of this chapter. For our purposes, it is the recognition that some aspect of the psychotherapy process is being recreated or reenacted (in parallel) in the supervision. For example, a client may be dissatisfied with the psychotherapy and believes that it is not good enough or not sufficiently helping. For the client, this may reflect real problems in the treatment and could also reflect early experiences and associated core schemas in which caregivers or authority figures were not helpful, validating, or supportive. The first parallel might occur when the trainee comes to the supervisor in training and expresses dissatisfaction with the assistance that they are receiving for dealing with the challenging client. In supervision training, we add another level to this parallel process when the supervisor in training becomes anxious that they are not helping the psychotherapy trainee and experiences frustration that is then directed to the faculty supervisor. As mentioned earlier, the complexities quickly escalate in supervision training, and it can be helpful to identify parallel process when it is occurring. This can be a useful perspective to consider, even in the context of CBT and supervision that does not generally tend to focus on transference and countertransference issues.

The role that a positive *working alliance* has on supervision process and outcome has been extensively explored (Bernard & Goodyear, 2014; Ladany et al., 1999). Generally, the elements of *alliance* in both the psychotherapy and supervisory relationship are an agreement on goals and tasks in the context of a trusting (or bonded) relationship. The research regarding the importance of a positive working alliance is more clearly demonstrated in psychotherapy than it is in supervision, as supervision research often lags behind psychotherapy research in general (Kühne et al., 2019). However, there is general agreement that supervisees will disclose more in supervision and experience more satisfaction when there is a strong working alliance with the supervisor. We would therefore encourage the fostering of a relationship in which your supervisee will disclose subtle areas of concern or discomfort. The alliance is also critical to a consideration of multicultural factors in therapy and supervision. Some research in this area suggests that clinical supervision may indeed be associated with greater client symptom reduction (Bambling et al., 2006), but more work is needed.

5. Ethical Considerations

Supervision and supervision training occurs within an ethical and legal context. While state laws vary, it is likely that supervision is addressed in the Psychology Practice Act in your state. In contrast, the APA Ethics Code (APA, 2017) applies to all of us and provides guidance and standards regarding the practice of clinical supervision. The major ethical issues related to clinical supervision include competence and client welfare, informed consent, supervisee rights, the relationship between supervisor and supervisee, and confidentiality. Standard 2 (Competence), 2.01 Boundaries of Competence (a) reminds us that “Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience” (APA, 2017, p. 5). It is a good general rule to not supervise a psychological treatment or assessment that you, yourself, are not competent to provide. Similarly, a faculty supervisor should always be competent in the psychological service that is being provided in a supervision training context. This standard also relates to competence as a supervisor, which we will discuss in the next section. Standard 2.05 Delegation of Work to Others is interesting to consider as it relates to learning to be a supervisor: “Psychologists who *delegate work to . . . supervisees . . . take* reasonable steps to . . . authorize only those responsibilities that *such persons can be expected to perform competently* on the basis of their education, training, or experience . . . with the level of supervision being provided” (APA, 2017, p. 5, excerpted with emphasis added). What does this mean and why is it important? In both learning to be a therapist and a supervisor, if you were already fully competent, you would not need to learn how to do it and this chapter would not need to be written. The faculty or staff supervisors in your doctoral program or internship are responsible for ensuring that you have sufficient preparation and oversight to ensure competent service is being provided to the client and competent supervision to the less-advanced graduate student *while* you are learning. We like to consider this to be your *learning edge*, and it requires careful assessment and communication to ensure that the therapist or supervisor in training is challenged, but not overwhelmed. The ethical standards related to Informed Consent (10.01) remind trainees to inform clients that they are being supervised and to provide the name of the supervisor, when legal responsibility for the treatment resides with the supervisor. The Multiple Relationship standard (3.05) reminds us to be careful about potential conflicts in roles that could impair objectivity or judgment. Therefore, it is critical to inform the faculty supervisor if a personal relationship with the trainee might preclude you from providing effective supervision. This latter issue may be a common occurrence in doctoral programs and should be discussed directly. It is also important to remember that, as a supervisor in training, your interactions with the trainee are protected by educational confidentiality. Finally, Standard 7 (Education and Training) is important; we would encourage you to review it in its entirety as you begin your role as a supervisor in training. Standard 7.06 is so important that it is cited below its entirety:

7.06 Assessing Student and Supervisee Performance

- (a) In academic and supervisory relationships, psychologists establish a timely and specific process for providing feedback to students and supervisees. Information regarding the process is provided to the student at the beginning of supervision.
- (b) Psychologists evaluate students and supervisees on the basis of their actual performance on relevant and established program requirements. (APA, 2017, p. 10)

Faculty supervisors, supervisors in training, and training programs are jointly and mutually responsible for ensuring that evaluations occur as specified in the ethics code and in accordance with their program's policies and procedures.

6. Multicultural Considerations and Competencies

Supervision training can be a bridge to incorporating the knowledge of multicultural and diversity issues that are learned in courses into clinical practice. In a survey of professional psychologists, it was determined that psychologists are more likely to be able to *identify* best multicultural practices than they are to endorse actually *following* these practices (Hansen et al., 2006). In considering the implications for training programs, the authors recommend that in addition to typical multicultural training practices, supervisors might initiate “a frank discussion about why clinicians do not always do what they believe to be important. Identifying and openly discussing these barriers may improve the ability of practitioners to follow through when doing psychotherapy with clients who differ racially/ethnically from themselves” (Hansen et al., 2006, p. 73). The authors recommend that multicultural training include a focus on the behaviors that psychologists endorse as being important but don't practice. In this study, the five behaviors that were found to exhibit the largest discrepancies between what psychologists say they believe in and what they actually practice were: evaluating one's multicultural competence, using culture-specific case consultation, making DSM IV cultural formulations and culture-specific diagnoses, and implementing a multicultural professional development plan. It is clear that supervision provides a key opportunity at many levels for you, as a supervisor in training, to assist the beginning therapist in the integration of multicultural concepts and competencies into clinical practice. In addition to ensuring that what is taught in multicultural courses is incorporated into practice, addressing barriers to the use of this knowledge is an important step in improving the multicultural competence of our profession in the future.

7. The Process of Learning to be a Supervisor

7.1 From the Perspective of Someone When She Was a Supervisor in Training (E.F.C.)

Learning to be a supervisor brought up many of the same feelings that I had when I was first learning to be a therapist: excitement, anxiety, and fear, among others.

As I began this journey, I also found myself having similar thoughts to those that I had when I started with my first clients: Will what I'm saying make sense? Will this person leave the session feeling satisfied? Will I know how to respond to this person's questions/comments? Do I really have anything to offer? Thus, in many ways, this process felt very similar to beginning my work as a therapist – I found myself having a wealth of mixed emotions, as well as a good deal of doubts and worries about my own abilities. However, just as we have familiar roles that we can draw on as we take on our new role as “therapist,” by the time we are ready to become supervisors, we have even more familiar (and likely more comfortable) roles that we are able draw upon (e.g., teacher, therapist). By the time you are a supervisor in training, you will have accumulated a wealth of graduate school experiences that have all likely prepared you for this new role in some way. Although it is probably natural to have some sense of the “imposter phenomenon” when taking on your new role as a supervisor (e.g., “Sometimes I'm not quite sure what to do with my own clients, and now I'm supposed to be guiding someone else in this process?!”), it is important to recognize all of the skills that you *do* have and that you can draw upon in this new role. For me, that was an extremely helpful thought “reframe” to keep in mind.

In my journey towards becoming a competent supervisor, I found “supervision of supervision” to be an incredibly helpful aspect of the learning process. Having the opportunity to bounce ideas off of an experienced supervisor with many years of experience was invaluable, as was drawing from some of my most positive supervision experiences. I often found myself thinking back to my early work as a therapist and what I found most helpful in supervision. What sorts of strategies did my most helpful supervisors employ with me? Thus, in learning to be a supervisor, keep in mind that not only do you have familiar roles that you can draw upon, but that you also have a good deal of experience as a “supervisee” yourself. Some specific suggestions (adapted and expanded from Neufeldt, 1994) are presented in Table 20.2.

1.3 From the Perspective of the Faculty Supervisor (E.H.W.)

I am going to keep my section short because most readers of this book are likely to be graduate students, interns, or early career psychologists. When we began to offer supervision training in our program, I was excited, but also daunted. In my own training, the ability to be an effective supervisor was *assumed* rather than *taught*. My first professional position was in a university psychological services center. As was common practice at the time, I was assigned practicum students, interns, and psychiatric residents to supervise with limited preparation in my own training for how to do so. Therefore, for me, as for many of my professional peers, there were no clear models for either how to be supervisors ourselves or for how to teach others to supervise. Over the years, I have adopted a model that includes formal elements (readings, regular meetings, and videotaping) and more informal discussion of the process and the experience. As described above in the section on parallel process,

Table 20.2 *Key strategies for supervisors in training in working with supervisees*

1. Getting started
 - a. Ask supervisee about experiences they have had that may relate to therapy (e.g., conducting research interviews, being a dorm resident assistant (RA), volunteering at a crisis hotline)
 - b. Elicit areas of concern for the supervisee (with examples; e.g., client asking about level of experience, client responding to questions in a very brief manner)
 - c. Ask about what the supervisee is most looking forward to in beginning their role as a therapist
 - d. Set goals for the practicum experience and for supervision
 - e. Clarify when summative evaluations will occur (generally, these occur at the middle and end of an academic year)
 - f. Encourage the supervisee to share their thoughts, concerns, etc. about supervision throughout the semester (i.e., not just when summative evaluations occur); foster an environment of openness and a willingness to share (this applies to both the supervisor and supervisee)
 - g. Discuss logistics of getting started in the clinic (e.g., how to schedule a session, how to audiotape or videotape sessions, how to get in contact with first clients and what to discuss on the phone with them); be willing to spend time on these issues
 - h. Discuss logistics of a first session (e.g., discuss going over paperwork, discuss assessment areas to cover – including the client's goals for therapy); incorporate role plays into these discussions because they are common areas of concern
2. Things to consider in watching or listening to supervisee therapy sessions
 - a. The supervisee's style (e.g., tone of voice, manner) with the client
 - b. What do you notice about the interactions? Does the client often interrupt the supervisee? Does the supervisee tend to do most of the talking?
 - c. How did the supervisee utilize various intervention strategies in session? Did the supervisee spend enough time introducing a particular concept?
 - d. Points in the session where you (the supervisor in training) have additional thoughts regarding how to intervene, how to respond, etc.
 - e. Points in the session that you thought went particularly well or that seemed particularly challenging, etc.
 - f. How this session adds to the conceptualization of this client
3. Things to consider related to actual supervision sessions and discussing therapy sessions with supervisees
 - a. Establish rapport, including a sense of safety and comfort
 - b. Discuss and evaluate interactions observed between the supervisee and client during the therapy session (e.g., interactions that went particularly well, interactions that were particularly challenging); encourage the supervisee to come into supervision with specific interactions they would like to discuss; watch interactions of note together in supervision and discuss
 - c. Ask supervisee to provide hypotheses about the client and their current difficulties
 - d. Identify appropriate interventions for the next session in light of overarching treatment goals

- e. Encourage the supervisee to provide rationale for their interventions (e.g., “What was going through your mind when you decided to bring up the dialectical behavior therapy technique of opposite action this session?”, “What were your intentions in using that intervention strategy?”)
- f. Encourage the supervisee to apply theory to clinical situations
- g. Teach, demonstrate, or model intervention techniques; also provide resources/references that may be of use to the supervisee in learning a new technique
- h. Explain the rationale behind specific strategies and interventions
- i. Interpret and discuss significant events and/or interactions that occurred in the therapy session (e.g., did something play out between the supervisee and the client in the session that appears similar to interactions that the client has outside of the therapy room? If so, what did this interaction teach the supervisee about the client’s interpersonal style, interpersonal difficulties, etc.?)
- j. Explore supervisee feelings that occurred during the therapy session, including points of confidence, worry, uncertainty, affective responses, etc.
- k. Explore supervisee feelings during the supervision session
- l. Explore supervisee feelings concerning utilizing specific techniques or interventions (e.g., what might be difficult or challenging in introducing the idea of mindfulness to a client?)
- m. Help the trainee define personal competencies and areas for growth
- n. Provide alternative interventions or conceptualizations for the supervisee to consider
- o. Encourage supervisee to brainstorm strategies and interventions to use with the client in moving forward (given their conceptualization of the client, the client’s current level of functioning, how other strategies and interventions have worked, etc.)
- p. Encourage supervisee to consider the client’s current level of motivation
- q. Solicit and attempt to satisfy supervisee needs during the supervision session (e.g., what are the supervisee’s most pressing concerns/questions during this supervision session in particular?); agenda-setting is often helpful
- r. Allow the supervisee to structure the supervision session (e.g., what does the supervisee think would be best to discuss first?)
- s. Help the supervisee to conceptualize the case (e.g., what is maintaining this client’s current problems? What sort of change strategies makes sense given the conceptualization?)
- t. Use parallel process to model appropriate strategies for interacting with clients
- u. Explore supervisee–client boundary issues/questions
- v. Assist the supervisee in processing feelings of distress aroused by the client’s experience
- w. Reframe supervisee’s ideas in a positive manner and build on them
- x. Assist the supervisee in incorporating outcome measures into treatment

I have quickly learned that the responsibility for a client, a novice graduate student therapist, and an advanced graduate student supervisor can be complex – even when things are going well. I have found it useful to balance our consideration of the needs of all parties involved and to be sensitive to the alliance and parallel process at all levels. For faculty supervisors who are considering becoming involved in supervision training, I will share that, for me, the supervision of supervision in an academic doctoral program has been an immensely rewarding and energizing experience. It has provided me with an impetus to read the supervision literature and to be able to notice and articulate to someone else (hopefully with some coherence!) what it is that I do when I supervise. It has become a central and valued aspect of my own professional development. In fact, as another instance of parallel process, writing the original version of this chapter with someone who was an advanced graduate student at the time who was learning to supervise in our academic training clinic pushed me to crystallize my thinking about the process and to familiarize myself with the classic and current supervision literature. In terms of specific recommendations for faculty supervisors, I would encourage the incorporation of direct observation of the therapy sessions that are being supervised by the supervisor in training and, when possible, the direct observation of a supervisory session. It is interesting to note that a survey of internship training directors revealed a stronger consensus regarding supervision competencies than there is on effective training models or methods (Rings et al., 2009), suggesting that while there is theory and research to draw from, as a field we have not yet identified a specific and preferred training model for learning to be an ethical and competent supervisor. Hopefully this chapter will provide useful strategies for you to consider as you begin your training in this realm.

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PART V

YOUR PROFESSIONAL SERVICE CAREER

Getting Involved in Professional Organizations: A Gateway to Career Advancement

Daniel Dodgen & Carol Williams-Nickelson

In the rapidly changing context of twenty-first-century psychology, graduate students and early career professionals have many options for career development. While membership in professional associations has historically been an unquestioned step to career development, that is no longer true. According to the 2019 Membership Marketing Benchmarking Report, the number of membership associations still growing dropped 7 percent in the last 10 years, and about 26 percent saw a decrease in membership in 2019 (Scott, 2019). So, the question remains, should graduate students and early career professionals join membership organizations? The authors enthusiastically answer this question in the affirmative. It is our belief that psychological organizations foster personal and professional development, professional networking, and opportunities to serve the discipline and society at large. Since the late 1800s, psychologists around the world have been organizing themselves into psychological associations to promote clinical, research, or personal interests. The great variety of psychological associations that exist today offer unique opportunities to network, share research, exchange ideas, and learn about critical developments in the field. This chapter will briefly describe relevant aspects of psychological organizations and provide some examples of specific opportunities they offer to graduate students and early-career psychologists.

This chapter is dedicated to our former co-author, Raymond D. Fowler, PhD (1930–2015). We both had the privilege of working with Ray when we were executive staff members under his leadership as the Chief Executive Officer (1989–2003) at the American Psychological Association (APA). Ray was a true champion for graduate students and was committed to creating meaningful opportunities for future psychologists to be actively involved in all aspects of APA's functioning. Because of Ray, the American Psychological Association of Graduate Students was formed in 1988, during his tenure as President of APA, to give graduate students a powerful voice in shaping the association that they would inherit. We will forever be grateful to Ray for the support, mentorship, leadership, and friendship he gave to us.

1. Professional Organizations in Psychology

Professional associations seek to advance the body of knowledge in their fields, keep their members informed of professional developments, and provide a variety of services to their members and to the public at large (Fowler, 1999). Joining an association can be a critical aspect of career development for new professionals. As far back as 1835, Alexis de Tocqueville noted the tendency of Americans to join together to form voluntary associations. “Americans of all ages, all conditions, and all dispositions constantly form associations,” he noted, “They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds” (1835). De Tocqueville’s assessment continues to be true. With over 23,000 national organizations and 141,000 regional, state, and local organizations and chapters to choose from, 70 percent of American adults belong to at least one association, 25 percent belong to four or more, and 20 percent belong to a professional organization (Ernstthal & Jones, 2001; Purcell & Smith, 2011). Psychology contributes its fair share to this proliferation of organizations. Because the American Psychological Association (APA) is the world’s largest psychological organization, many examples will be drawn from that organization, but APA is only one piece of the discussion.

1.1 National and International Psychological Organizations

As early as 1889, psychologists had begun meeting with colleagues from other universities and cities at international congresses (Pickren & Fowler, 2003). By 1892, the first national psychological organization, the APA, was founded. Since then, psychological associations have been founded in every continent but Antarctica, and national organizations for psychologists exist in over 80 countries (Pickren & Fowler, 2003; International Union of Psychological Science, 2021a, 2021b). This expansion created both broadly focused national psychological organizations and more narrowly focused societies specializing in specific professional concerns (see Table 21.1). The latter organizations are comprised of psychologists with similar research interests (e.g., Society of Experimental Social Psychology), applied interests (e.g., Association of Practicing Psychologists), administrative responsibilities (e.g., Society of Psychologists in Management), and employment settings (e.g., National Organization of VA Psychologists) (VandenBos, 1989). Other organizations are based not just on the members’ professional responsibilities, but also on their demographic characteristics and how they identify themselves. These include organizations for students (e.g., the American Psychological Association of Graduate Students, APAGS), ethnic minorities (e.g., Society of Indian Psychologists), and geographic locations (e.g., California Psychological Association, Middle Eastern Psychological Network). Finally, many psychologists participate in organizations whose membership includes other disciplines, such as the American Association for the Advancement of Science (AAAS) or the English Association for Child Psychology and Psychiatry (ACPP).

Table 21.1 *Illustrative list of psychological associations*

Canadian Psychological Associations

Psychological Association of Alberta
British Columbia Psychological Association
Psychological Association of Manitoba
Manitoba Psychological Society, Inc.
College of Psychologists of New Brunswick
Association of Psychologists of Nova Scotia
Association of Psychologists of the NW Territories
Ontario Psychological Association
Corp. Prof. Des Psychologues du Quebec
Saskatchewan Psychological Association
Psychological Society of Saskatchewan
Association of New Foundland Psychologists
Psychological Association of Prince Edwards Island

U.S. Regional Psychological Associations

Eastern Psychological Association
Midwestern Psychological Association
New England Psychological Association
Southeastern Psychological Association
Southwestern Psychological Association
Western Psychological Association

Affiliated State Psychological Associations

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota

(continued)

Table 21.1 (continued)

Mississippi
 Missouri
 Montana
 Nebraska
 Nevada
 New Hampshire
 New Jersey
 New Mexico
 New York
 North Carolina
 North Dakota
 Ohio
 Oklahoma
 Oregon
 Pennsylvania
 Puerto Rico
 Rhode Island
 South Carolina
 South Dakota
 Tennessee
 Texas
 Utah
 Vermont
 Virginia
 Washington
 West Virginia
 Wisconsin
 Wyoming

International Psychological Associations

International Union of Psychological Science (IUPsyS)
 International Association of Applied Psychology (IAPP)
 European Federation of Professional Psychologists Association (EFPPA)
 Interamerican Society of Psychology (ISP)
 International Council of Psychologists (ICP)

Interdisciplinary Groups with Strong Psychological Interface

American Association for the Advancement of Science (AAAS)
 American Education Research Association (AERA)
 Society for Research in Child Development (SRCD)
 Gerontological Society of America (GSA)
 Cognitive Science Society
 Society for Neuroscience
 Human Factors Society
 National Mental Health Association (NMHA)
 World Federation for Mental Health (WFMH)
 Society for Psychotherapy Research
 Acoustical Society of America
 American Pain Society

(continued)

Table 21.1 (continued)

Behavior Genetics Association
 International Society of Hypnosis
 American Correctional Association
 Association for Behavior Analysis
 International Brain Research Organization
 American Psychopathological Association
 American Orthopsychiatric Association
 American Evaluation Association
 Academy of Management
 Society for Clinical and Experimental Hypnosis
 American Association for Marriage and Family Therapy
 Association for the Psychophysiological Study of Sleep
 Society for the Advancement of Field Therapy
 American Society of Group Psychotherapy & Psychodrama
 Association of Business Simulation & Experimental Learning
 Association of Mental Health Administrators
 Biofeedback Society of America
 Comm. On Rehabilitation Counselor Certification
 International Society of Research on Aggression
 International Society for Psychological Research
 International Society for Research on Emotion
 Society for Clinical & Experimental Hypnosis
 Society for Exploration of Psychotherapy Intervention
 Society for Reproductive & Infant Psychology
 Society for the Scientific Study of Sex
 International Society for Mental Imagery Techniques in Psychotherapy & Psychology
 Society for Professionals in Dispute Resolution
 Association for Gifted-Creative Children

Student Organizations

American Psychological Association of Graduate Students (APAGS)
 Psi Chi
 Psi Beta

Education and Training Groups

Council of Graduate Departments of Psychology (COGDOP)
 National Council of Schools of Professional Psychology (NCSPP)
 Association of Psychology Internship Centers (APIC)
 Council of Training Directors (CTD)
 Council of Undergraduate Psychology Programs (CUPP)
 Association of Medical School Professors of Psychology (AMSPP)
 Council of Teachers of Undergraduate Psychology (CTUP)
 Joint Council on Professional Education in Psychology (JCPEP)

Credentialing and Licensing Organizations

American Association of State Psychological Boards (AASPB)
 American Board of Professional Psychology (ABPP)
 National Register of Health Service Providers in Psychology

(continued)

Table 21.1 (continued)

Ethnic Minority Psychological Associations

Asian American Psychological Association
 Association of Black Psychologists
 National Hispanic Psychological Association
 Society of Indian Psychologists

Other Psychological Associations

Psychonomic Society, Inc.
 Society of Experimental Psychologists
 Society for Multivariate Experimental psychology
 Society for Computers in Psychology
 Society for Mathematical Psychology
 American Psychological Society (APS)
 Psychometric Society
 National Academy of Practice in Psychology
 National Association for School Psychologists (NASP)
 American Association for Correctional Psychologists
 Association of Practicing Psychologists
 Society of Psychologists in Addictive Behaviors
 American Academy of Forensic Psychology
 National Organization of VA Psychologists (NOVA Psi)
 Society of Psychologists in Substance Abuse
 Psychologists in Long-Term Care
 Society of Air Force Clinical Psychologists
 Association for Jungian Psychology
 North American Society of Adlerian Psychology
 Society of Psychologists in Management
 Association of Applied Social Psychologists
 Association for the Advancement of Applied Sports Psychology
 Psychologists for Social responsibility
 Association of Women in Psychology
 Association of Lesbian and Gay psychologists
 Society of Experimental Social Psychology

From VandenBos (1989)

1.2 The Function of Professional Organizations within Psychology

All organizations have a mission statement governing their activities. APA's mission statement, for example, is "Advancing psychology to benefit society and improve lives," while the International Association of Applied Psychology (IAAP)'s mission is "to promote the science and practice of applied psychology and to facilitate interaction and communication among applied psychologists around the world" (APA, 2021a; IAAP, 2021). Most psychological associations adhere to a similar mission of advancing the field to benefit science and society. How they pursue these missions, of course, varies tremendously. APA, for example, recently outlined a strategic plan to describe its vision for implementing its mission (Table 21.2).

Table 21.2 *American Psychological Association Strategic Plan* (www.apa.org/about/apa/strategic-plan)

VISION

The change APA aspires to create in the world.

A strong, diverse, and unified psychology that enhances knowledge and improves the human condition.

MISSION

APA's unique role in creating that change.

To promote the advancement, communication, and application of psychological science and knowledge to benefit society and improve lives.

Guiding Principles

The core values that must inform and infuse everything APA does. They apply equally across all areas of psychology including practice, basic and applied research, applied psychology, and education and training.

Build on a foundation of science.

Ensure that the best available psychological science informs policies, programs, products, and services.

Advocate for psychology and psychologists.

Demonstrate an unwavering commitment to promoting the field while supporting and unifying those who make it their profession.

Champion diversity and inclusion.

Further the understanding and appreciation of differences and be inclusive in everything we do.

Respect and promote human rights.

Focus on human rights, fairness, and dignity for all segments of society.

Engage with and deliver value to members.

Provide resources, opportunities, and networks that help all members at every stage of their careers.

Lead by example.

Serve others, model integrity, and demonstrate the highest ethical standards in all our actions.

Operating Principles

How all parts of APA will work together to execute the plan.

Make an impact.

Focus on efforts with the scale and scope to significantly advance the interests of the public, the field, and psychology professionals.

Embrace a global perspective.

Advance psychology globally through international engagement, association efforts, and meaningful collaborations.

(continued)

Table 21.2 (continued)

Build a stronger association.

Collaborate across APA to align resources, decision-making, and the contributions of governance, advisory groups, staff, and the broader membership with the strategic plan.

Increase organizational effectiveness.

Focus on the future, make data-informed decisions, invest in strategic priorities, create capacity for new initiatives, and emphasize outcomes.

Strategic Goals and Objectives

Goals are the high-level descriptions of what APA must achieve to be successful. To some degree, they are aspirational in that they are wide-ranging, complex, and ongoing. Objectives are more specific and address the component pieces of each goal.

Utilize psychology to make a positive impact on critical societal issues.

- Employ psychology to improve population health, increase access to services, and reduce disparities.
- Promote the application of psychological science to the development and adaptive use of new technologies that affect people's lives.
- Use psychology to improve the functioning of public and private institutions, organizations, systems, and communities.
- Increase the influence of psychology on policy decisions at the international, national, state, and local levels.
- Foster the advancement of human rights, fairness, diversity, and inclusion through the application of psychological science.

Prepare the discipline and profession of psychology for the future.

- Attract, diversify, develop, and support the next generation of psychology professionals.
- Protect and increase funding for applied psychology, education, practice, basic, applied, and clinical research, and training.
- Facilitate greater alignment between the science and practice of psychology.
- Promote the adoption of new technologies and methodologies in psychology and guide their integration into the discipline and profession.
- Ensure that psychology functions as a hub of interdisciplinary collaboration.

Elevate the public's understanding of, regard for, and use of psychology.

- Expand the public's perception of psychology to accurately reflect the full breadth of the field.
- Influence educational systems to foster lifelong appreciation and application of psychology.
- Make psychological science accessible and understandable to the public and key decision makers.
- Distinguish psychology's unique contributions in health, health care, and human welfare.
- Become a go-to organization for the public regarding the quality and effectiveness of psychology-related products and services.

Strengthen APA's standing as an authoritative voice for psychology.

- Expand APA's position as a premier provider of science, practice, education, and career resources for psychology.
- Establish, uphold, and embody the ethical standards for the profession and discipline nationally.
- Increase the impact of APA's legislative, regulatory, marketplace, and social welfare advocacy.
- Serve as a leading resource for standards and evidence-based guidelines for the field.

One of the primary means of advancing the profession is through the advancement of knowledge. To that end, most organizations sponsor regular conferences that serve as opportunities to exchange information about recent advances in practice and research. Both IAAP and the International Union of Psychological Sciences (IUPsyS), for example, hold meetings every four years, while the European Federation of Professional Psychology Associations (EFPA) meets every other year (Fowler, 2000). Other organizations, such as APA, hold yearly conventions. During the 2020–2021 COVID-19 pandemic, many organizations experimented with virtual conferences or extended webinar series as a substitute for face-to-face meetings. By and large, these new formats permitted members who might otherwise not have been able to travel to participate in an in-person event to benefit from the rich content.

Journals also advance the knowledge of the field through their role in exchanging information. Nearly every national organization publishes a journal tailored to the interests of its members. These organizational journals are typically available in virtual or print formats with several additional journals being online only. Like conferences, these journals provide an opportunity for members to share their own expertise and to benefit from the expertise of others as well as to contribute to the literature of the discipline. For instance, APA's Division 44, Society for the Psychology of Sexual Orientation and Gender Diversity, publishes *Psychology of Sexual Orientation and Gender Diversity*, a quarterly scholarly journal dedicated to the dissemination of information and research that impacts practice, education, public policy, and social action related to LGBTQ+ issues.

In addition to their journals, many organizations offer hard copy and virtual newsletters containing information in a more succinct and readable format. Whether they take the form of magazines, like the *APA Monitor on Psychology*, a more traditional newsletter format or a topical approach like the Society for Research in Child Development's (SRCD) *Social Policy Report Briefs*, these newsletters serve a vital information-sharing function. Without newsletters, journals, and conferences, no psychologist, regardless of their training, would remain competent in the field for more than a few years after completing graduate school.

Beyond information sharing, psychological organizations serve several other critical functions. As Pickren and Fowler (2003) point out, these organizations serve several "gatekeeping" functions. They may determine who can call themselves psychologists or identify themselves as experts in a subspecialty of the field. Through accreditation of continuing education classes, they can influence what people study after completing their degrees, and what they can get credit for studying. In many countries, membership in the national psychological organizations is a prerequisite for licensure. Their journals and conferences also determine what information is communicated to the field and how credible it will be when it is disseminated. Fortunately, most organizations exercise this power wisely, because they are themselves governed by the psychologists who make up their membership. In addition, most societies have a complex system of checks and balances that help the system function fairly and democratically (Fowler, 1999).

2. Why Join? Benefits of Psychological Organizations for Individuals

2.1 A Professional Home

Professional associations, quite simply, provide psychologists with a way to remain current in the field and to develop their professional identity. Without them, psychologists would function in a vacuum. Beyond those global benefits, however, professional associations provide many less obvious ones. In the first place, they provide a place where like-minded psychologists can come together to focus on the issues of most importance to them. Many associations are organized around the unique characteristics and interests of their members. Examples include the Association of Black Psychologists, the Asian-American Psychological Association, the Association of Lesbian and Gay Psychologists, and the Association of Women in Psychology. The 60 state, provincial, and territorial associations affiliated with APA represent a vital home for many psychologists. Other associations organize themselves around topics of interest, such as the Society of Psychologists in Addictive Behaviors or the Association for Jungian Psychology. APA's 54 divisions also reflect a wide array of interests from experimental psychology to psychological hypnosis to the study of sexual and gender identity. In all cases, people choose to affiliate with these specialized groups to find a professional home. Professional associations and their divisions and affiliates serve that function.

2.2 National and International Cross-Pollination

In addition to providing a professional home, these associations can create unique networks for cross-national and even international collaboration. The APA, for example, has initiated the MOU (memoranda of understanding) Partner Program, which promotes collaborative relationships with national psychology associations around the world to share resources, develop opportunities for discussion and exchange, and foster a productive alliance. This program provides opportunities to build international partnerships and create opportunities for APA and APAGS members to be exposed to organized psychology outside of the US through attending conferences, workshops and other activities hosted by MOU partner associations. In recent years, the program has sent delegations to Colombia, Mexico, South Africa, Ireland, Portugal, England, and Germany (APA, 2020). These cross-pollination opportunities strengthen the field by creating international linkages and compelling psychologists to look at issues from the perspectives of different nations and cultures. The cognitive behavioral approach so dominant in the US, for example, is less-favored in many other countries, so collaboration engenders broader perspectives on methodology and theory as well as application.

2.3 Interaction with Leaders and Potential Mentors

Interaction with colleagues is a vital component of professional development. Professional organizations offer an excellent opportunity for emerging psychologists to associate with other psychologists and develop their own professional identity. Through that interaction, graduate students and early-career psychologists gain access to content experts and potential mentors while developing a sense of belonging within their discipline. Only at national conferences are young professionals likely to interact with renowned researchers and have the opportunity to hear them speak. The leaders in the field, regardless of the specific domain or subdiscipline, typically belong to national organizations. After all, it is primarily through the mechanisms organizations provide, such as journals, conferences, and online interactive webinars, that leaders in the field emerge.

These meetings provide one additional benefit to young psychologists and graduate students. At most of the conferences sponsored by professional societies, students can be part of panels or can present their research at poster sessions. In this way, they contribute to the meetings as well as benefiting from them.

2.4 Resources

Many organizations offer a wealth of resources to their members. In addition to the primary journals that are usually a benefit of membership, many organizations offer additional journals for more specialized interests. In addition to the *American Psychologist*, which goes to every APA member, APA publishes over 60 hard and virtual journals. Publishing with APA, for example, provides a valuable link to a community of hundreds of Editors and Associate Editors, and more than 70,000 editorial board members and reviewers who select and publish approximately 5000 articles each year (APA, 2021b). Other informational resources include newsletters, books, electronic information databases such as PsychINFO, and web-based resources.

The resources offered by these national organizations extend far beyond what may typically come to mind. The Ethics Office at APA, for example, provides guidance through written materials, websites, and staff members who are subject matter experts on ethical questions that arise in research and practice settings, as well as other dilemmas that may occur during graduate school (i.e., harassment or dual-role questions). Several organizations also provide guidance on issues regarding human subjects and animal research. Another resource at APA is the Office of Testing, which serves as a source of information about the use of tests and assessments in clinical, counseling, educational, and employment settings. In yet another example, the APA Center for Workforce Studies conducts ongoing studies that provide timely statistics on students entering and graduating from psychology doctoral programs, psychologists' salaries, employment settings, marketplace trends and more (see www.apa.org/workforce). Other resources available through psychological organizations range from employment assistance to financial assistance for students.

2.5 Fellowships, Awards, Scholarships, and Grants

Many national organizations provide unique opportunities for their members to receive various fellowships, scholarships, grants and awards. For example, each year APA's graduate student group, APAGS, grants competitive scholarships to graduate students in psychology and awards of excellence to graduate students, mentors, and psychology departments (see www.apa.org/apags). Many other student scholarships, grants, and awards of recognition are sponsored by various national, state, and local psychological associations, as well as divisions of larger organizations (for other examples within APA, see www.apa.org/students). In addition, organizations such as APA and SRCD sponsor fellowships for doctoral-level professionals to come to Washington, DC for a year and participate in the policymaking process through work at federal agencies, congressional offices, or a national organization's policy office (www.apa.org/about/awards/congress-fellow). These Fellowships are open, but not limited to, early-career psychologists, who often compete successfully for these positions.

3. Benefits of Psychological Organizations to Society

3.1 National Initiatives

Many individual psychologists have something to contribute to our social welfare and wish to do so, but lack a mechanism for sharing their knowledge or time. National organizations are well positioned to develop initiatives that can impact society at a broader level. Two recent APA projects serve as examples of the kind of initiatives only a large organization can undertake. In 2020 during the COVID-19 pandemic, APA launched "Equity Flattens the Curve." This initiative was "based on the assumption that to combat the pandemic we must tackle the bias, stigma, and discrimination at the root of inequities and ensure that all strategies and solutions are delivered equitably." The initiative focused on four common goals:

1. Reduce bias, stigma, and discrimination related to the COVID-19 pandemic to advance health equity.
2. Connect voices in health equity, public health, and psychology to educate policymakers and leaders about how centering equity can flatten the curve.
3. Promote social cohesion, inclusion, and equity to slow the spread of the virus.
4. Promote policies and practices that reduce inequity and address public health needs of diverse populations now and in the future.

This initiative encompassed many actions including information sharing opportunities for APA members, a virtual resource center, expert working groups, and a networking platform to facilitate community engagement.

In 2020, APA also established a Climate Change Task Force for the purpose of strengthening the role of psychology in addressing global climate change. These kinds of initiatives leverage association resources to address large-scale challenges in

ways that would be impossible for individual psychologists, no matter how talented. Plus, they provide ways for early-career psychologists to engage in topics of national and international significance.

3.2 Advocacy for Psychological Research and Practice

Legislation and regulation have a significant impact on all areas of psychology. Many national organizations have Washington-based policy offices that advocate on behalf of psychological research and practice. Given the constant battle for recognition of the value of behavioral and social science research, these efforts are critical to the field of psychology. Psychologists and psychology graduate students who have received funding for their research from the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), the National Science Foundation (NSF), or other federal agencies probably have the policy staff of a professional organization to thank for their money. National organizations with practitioner members also focus a great deal of effort on issues of interest to clinicians, such as parity in insurance coverage between mental health and physical health. These efforts may also include special attention to the needs of graduate students. In this regard, APA lobbies actively for funding for the Minority Fellowship Program, which supports graduate students of color, and for other loan reimbursement and scholarship programs for psychology graduate students. The voice of national psychological organizations is critical in these efforts, as most of these programs focused exclusively on medical professions and excluded psychology until recently.

Although much of this advocacy provides direct benefit to psychologists and psychology graduate students, that is not always the aim. Some organizations, such as APA or SRCD, also advocate for programs and services benefiting the populations psychologists serve and research. As an example, APA and SRCD have both been highly involved in the reauthorizations of the federal Head Start and Elementary and Secondary Education programs. Although these programs do not necessarily benefit psychology directly, the work of psychologists is critical to the understanding of both social and cognitive development. For that reason, these organizations were willing to allocate resources to inform policymakers about relevant research so that federal policy might reflect current knowledge from the field.

It is not only paid advocacy staff who effect policy change. National organizations provide opportunities for their members to become involved in the process as well. Following the Columbine shootings, for example, nearly a dozen psychologists were invited to testify before the Senate Commerce and Health, Education, Labor and Pensions Committees, the House Judiciary Committee, the Congressional Children's Caucus, and at a special closed briefing for members of Congress and their staff convened by Senator Edward Kennedy (D-MA) and Representative Bobby Scott (D-VA) through the auspices of the APA. In recent years, psychologists representing various national organizations have testified before Congress on issues such as child maltreatment, women's health, terrorism response, and the COVID-19

pandemic. These testimonies can have great influence on the congressional committees developing federal initiatives.

While testifying before Congress is an exciting opportunity, it is also a rare one. Many other opportunities exist, however, for psychology graduate students and psychologists to become involved in policymaking. Most national organizations have electronic listservs, newsletters, and other vehicles for keeping their members informed about current policy issues affecting their work and providing them with information about how to get involved on a particular issue. Many State Psychological Associations also have advocacy initiatives they are promoting at the state and local level. These include parity initiatives, questions about independent licensure, and other issues of local interest. Typically, any member of a society can get involved in these efforts by signing up for an electronic or fax list.

4. Getting Involved

Most of the discussion above focuses on what organizations do for their members or do on behalf of their members. It is important to remember that there is also a great deal that members can do to engage with their organizations. For example, most organizations have multiple opportunities for members to get involved in and influence the leadership of the organizations. The decisions of members, whether expressed directly or through elected representatives, set the policies and direction of their associations. Because organizations need the participation and guidance of their members to function, most organizations have multiple boards, committees, and councils to govern their activities. These groups are made up of members of the association who are elected by the general membership, elected by a subset of the membership, or selected by other members of the association because of the unique contribution they can make. To illustrate further the variety of opportunities and mechanisms for involvement, it may be helpful to examine one organization in more detail. Because of their familiarity with the organization, the authors have chosen to use APA for that purpose.

4.1 APA: A Case Study

Many psychologists find professional organizations to be a vital part of their careers. With over 121,000 members and affiliates, APA is the largest association in the world representing organized psychology. APA members are primarily doctoral-level psychologists, about a third of whom are employed in educational settings, a third in private clinical practice, and a third in other settings such as hospitals, clinics, business, industry, and government (Fowler, 2002), and psychology graduate students. Affiliates include high school teachers of psychology, master's level mental health professionals, psychologists in other countries, and others.

After beginning as an academic-focused organization, APA reorganized in 1945 to incorporate several smaller psychological organizations, evolving into a new organization with a mission that included both professional and scientific issues, as

well as the application of psychology to the public interest (see Table 21.2). Over time, a multifaceted structure that included divisions and state psychological associations developed, reflecting the diversity of the field and APA's members. Today, APA has approximately 500 employees, publishes a number of highly respected journals, has a respected book publishing arm, holds an annual convention attended by 8000–12,000 people, provides a monthly magazine to members, and houses multiple offices to address a variety of issues with the goal of advancing psychology as a science and profession in the legislative, public, academic, and research realms (Fowler, 2000; APA 2021b).

4.2 Divisional Involvement and Officers

Beyond the activities mentioned above, psychological associations such as APA offers many other benefits to its members. For example, students may participate in a variety of meetings and conferences, including the annual APA convention, or join any of APA's 54 divisions, enabling them to associate with psychologists and student colleagues who share similar professional interests. Divisions range in size from 300 to 7500 members, with each focusing on a clinical or research interest, or some personal or other factor. Often the personal and research interests overlap – for example, APA has divisions on school psychology, developmental psychology, and child clinical psychology – so these categories are clearly not exclusive. All the divisions have officers and executive committees (sometimes referred to as boards). These committees provide excellent opportunities to learn about association leadership and to influence the direction of the division. Furthermore, a majority of the Divisions include a graduate student representative on the executive committee, with the depth of graduate students increasing yearly. All Divisions also have newsletters that frequently welcome articles from the membership, providing opportunities for students and early-career professionals to contribute to scientific, although not necessarily peer-reviewed, publications. Some divisions also have divisional journals or other publications that provide information on the domain of interest to the members and provide additional publishing opportunities. Detailed information about APA's divisions are linked through www.apa.org/divisions.

Much of the work of the Association is completed by member volunteers who serve on APA's various Boards and Committees. These groups report to the Council of Representatives, APA's most powerful governance group. Boards and Committees carry out a wide range of tasks as evidenced by their names (see Table 21.3) and may frequently have student members or liaisons. Association activities and interests are not limited to the topics of the various continuing Boards and Committees. APA Task Forces and Ad Hoc Committees are formed to address time-limited or newly identified issues that are important to APA members and to psychology in general. Some examples of recent Task Forces and Ad Hoc Committees include: the Ad Hoc Committee on Early Career Psychologists, the Task Force on Psychology in Early Education and Care, the Advisory Committee on Colleague Assistance, the Work Group on Professional Practice Issues in Telehealth, the Working Group on Children's Mental Health, the Electronic Resources Advisory Committee, the Task

Force on Serious Mental Illness/Severe Emotional Disturbance, the Joint Committee on Testing Practices, and the Task Force on Statistical Inference, just to name a few. Members of these groups can usually be self-nominated or nominated by peers, and graduate students should not be reluctant to nominate themselves for graduate student slots on these committees. Early-career professionals should also consider volunteering to serve on these groups as well.

Table 21.3 *APA boards and committees*

1.	Board for the Advancement of Psychology in the Public Interest
2.	Board of Convention Affairs
3.	Board of Educational Affairs
4.	Board of Professional Affairs
5.	Board of Educational Affairs
6.	Board of Scientific Affairs
7.	Policy and Planning Board
8.	Publications and Communications Board
9.	Elections Committee
10.	Ethics Committee
11.	Finance Committee
12.	Membership Committee
13.	Committee on Structure and Function of Council
14.	Agenda Planning Group
15.	College of Professional Psychology
16.	Commission for the Recognition of Specialties and Proficiencies in Professional Psychology
17.	Committee on Division/APA Relations
18.	Committee on International Relations in Psychology
19.	Investment Committee
20.	Committee for the Advancement of Professional Practice
21.	Committee for the American Psychological Association of Graduate Students
22.	Council of Editors
23.	Committee on Accreditation
24.	Committee on Education and Training Awards
25.	Continuing Professional Education Committee
26.	Teachers of Psychology in Secondary Schools
27.	Committee on Professional Practice and Standards
28.	Committee on Animal Research and Ethics
29.	Committee on Psychological Tests and Assessment
30.	Committee on Scientific Awards
31.	Committee on Aging
32.	Committee on Ethnic Minority Affairs
33.	Committee on Urban Initiatives
34.	Committee on Women in Psychology
35.	Committee on Lesbian, Gay and Bisexual Concerns
36.	Committee on Disability Issues in Psychology
37.	Committee on Children, Youth and Families
38.	Committee on Psychology in the Public Interest Awards
39.	Committee on Rural Health

5. APAGS – The American Psychological Association of Graduate Students

The discussion above only provides a few of the opportunities for involvement that exist at APA. For graduate students, of course, there is a specific avenue for greater involvement. The American Psychological Association of Graduate Students (APAGS) was organized in 1988 and has become the single largest constituency group in the Association (see Table 21.4 for the APAGS mission statement).

APAGS initial membership of 18,000 has grown to approximately 35,000 members in its 23 years of existence, representing one third of the current APA membership. Over the years, the list of APAGS activities has lengthened tremendously and its level of integration into the Association has substantially increased. Through participation in governance initiatives and policies, APAGS provides direct student contact and support, develops resources to meet the information and advocacy needs of students, provides leadership opportunities, and offers special convention programming and other distinct training for students.

5.1 Involvement in APAGS

There are numerous opportunities for students to become actively involved in APAGS and develop their leadership talents. Students can run for an elected position on the APAGS Committee, or on one of APAGS subcommittee. Some of the past subcommittees have included the Committee on Ethnic Minority Affairs; the Committee on Students with Disability Issues; the Convention Committee; the Committee on Lesbian, Gay, Bisexual and Transgender Concerns; and the Advocacy Coordinating Team (ACT), which focuses on national and state legislation that impacts psychology.

5.2 APAGS and Career Development

APAGS offers programs and information on topics such as: the business aspects of psychology; internship; post-doctoral training; completing your dissertation; finding

Table 21.4 *The mission statement of the American Psychological Association of Graduate Students (APAGS)*

The APAGS Committee shall:

- Promote the highest standards in the research, teaching and practice of psychology to further the education and development of all psychology students;
 - Represent all graduate study specialties of psychology, facilitating information exchange between these groups;
 - Promote leadership development to communicate and advocate for students' concerns; and
 - Establish and maintain channels of communication between APAGS and schools, universities, training centers, institutions and other members of the psychological community.
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-

a mentor; balancing work and career; negotiating job offers; presenting and publishing research; and various career paths in psychology. In addition, APAGS information is accessible through the APA website and there is a plethora of resources to help students and early career psychologists prepare for licensure, understand basic business strategies to build an independent practice, get on insurance panels, obtain grants, and pursue the tenure track (see www.apa.org/earlycareer/ and www.apa.org/apags).

6. Conclusions

The authors believe strongly that participation in a psychological organization is a vital part of developing and maintaining a career in psychology. These organizations offer psychologists professional benefits through their journals, conferences, employment assistance, guidance on ethical standards, and other resources. They offer personal benefits through opportunities for networking, finding mentors, and receiving scholarships, fellowships, and other awards. Furthermore, these organizations offer an avenue for psychologists at any stage of their careers to make a contribution to the field. They contribute in a global sense by supporting an organization that is furthering critical national initiatives and advocacy efforts. More importantly, they provide opportunities to contribute at an individual level by becoming involved in leadership positions, speaking or presenting posters at conferences, contributing to journals and newsletters, or becoming an advocate. Different benefits will be most salient to different people, but all of them together provide ample evidence that membership in a psychological organization is an investment that yields rich dividends.

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Advocacy: Advancing Psychology and Public Well-Being

Christopher W. Loftis

Winston Churchill famously declared, “Americans will always do the right thing . . . after they’ve exhausted all the alternatives.” This statement may be even truer in today’s hyper partisan political environment. Churchill’s comment points to the role of advocates in helping policymakers to select and implement effective solutions. Psychologists, as members of a helping profession, are naturally drawn to advocacy on behalf of public well-being and have the skills to succeed as advocates. Yet, many perceive advocacy as “confrontational,” “irrational,” or “unseemly” and, as data presented later will show, psychologists are more averse to political giving than others among health professions.

One of the messages of this chapter, however, is that advocacy takes many forms, most of which are well-suited to the skillsets of psychologists. This chapter gives a brief overview of the motivations and methods of policy advocacy, and helps students and early career psychologists identify ways to engage and integrate advocacy into core professional duties. As professionals serving the public well-being within a representative system, advocacy is one our most important responsibilities to society, the profession, and ourselves.

1. Why Advocate?

Advocacy is the process of influencing policymakers when they make laws and regulations, distribute resources, and make other decisions that affect peoples’ lives. The principal aims of advocacy are to establish, reform, and manage policy implementation. Bruce Jansson (2003) describes three rationales for advocacy that can be categorized as societal values, analytical (or scientific), and political. Given the intellectual underpinnings of psychology training, many psychologists are naturally drawn to societal and scientific motivations, but the political are just as important, if not more so. Ideals and top-notch research are inadequate without action, and political processes (e.g., legislative, regulatory, and other policy-making institutions) are the means to drive change. Integrating societal, scientific, and political considerations toward a common objective can result in powerful contributions to policy

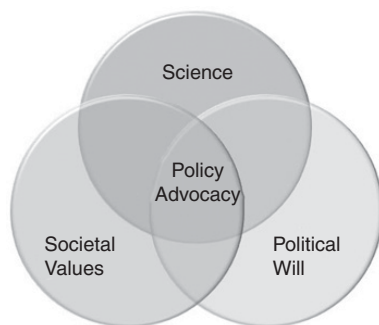


Figure 22.1 Effective policy advocacy combines societal, scientific, and political rationales for change.

making. The societal, scientific, and political rationales are described below within the context of psychology (Figure 22.1).

1.1 Societal Rationales

Psychologists are obligated by professional ethics principles and codes of conduct to protect and enhance the wellbeing of individuals and groups. Principles of beneficence, non-maleficence, justice, integrity, and respect for people's rights and dignity underlie a fundamental responsibility of psychologists to inform and improve public institutions, laws, and cultural influences. Psychologists may engage in advocacy to address issues of individual and professional autonomy, freedom, equality, due process, and societal or collective rights, and to enact visions of a just, humane society.

1.2 Analytical (Scientific) Rationales

Psychologists are trained to evaluate and use empirical data to guide careful and considered decision making. Our ethics code compels psychologists to avoid endorsing or perpetuating assumptions, stereotypes, and falsehoods that harm clients and society. Many psychologists regularly engage in analytical advocacy through research and publishing, as well as debating and dialoguing with others in scientific communities, civic organizations, and the media.

1.3 Political Rationales

Living in a representative government requires an acceptance and awareness that power is unequal and often biased towards special interests groups, corporations, and institutions that have the ability to influence policymakers through large amounts of money and time. Ignoring this reality and failing to engage the political process cedes power to those interests, and allows decision making to be driven by narrow, often short-term, interests that do not support the values and well-being of society.

2. Overview of Advocacy Process

2.1 Identify Problems, Pressure Points, and Solutions

The above rationales provide the foundation to outline and develop an effective advocacy strategy. Societal, scientific, and political considerations should be outlined to evaluate the causes, determine the pressure points, and delineate possible policy solutions. Thinking broadly and flexibly about the causes will help to identify a range of solutions to the policy issue that will be advantageous at different points in the advocacy process. As will be discussed below, opportunities to influence policy making are typically indirect, disjointed, and build upon each other over time to construct a cohesive policy solution. It is critical to thoroughly identify the multitude of factors impacting the policy issue in order to effectively prioritize advocacy activities, and to be prepared for planned and unexpected opportunities (Figure 22.2). Table 22.1 provides a list of questions to consider when outlining the policy problems and needs.

3. Frame the Issue in Simple Terms, then Support with Data

Mark Twain said, “There are three kinds of lies – lies, damned lies and statistics.” Today, it seems we are inundated with another kind of lie: half-truths. Media, interests groups (including professional societies), lobbyists, and politicians abound with half-truths. Debates over policy frequently get stuck on problem assessment and defining the “facts” of the issue. The consequence is that policymakers tend not to move toward problem-solving or proposing solutions when unsure of the facts or key issues to address. Information overload and misuse increasingly overwhelm policymakers and their staff, and paralyze decision-making bodies as interests groups and leaders willfully exacerbate confusion about the problem or the solution. In the meantime, the public suffers the consequences – failing schools; large numbers of uninsured and underinsured; increasing threats to environmental sustainability; and disgust and distrust of public institutions.

Framing the issue, preferably with a human interest angle, is critical to focusing the conversation on the desired policy goal. The above analysis of the policy,

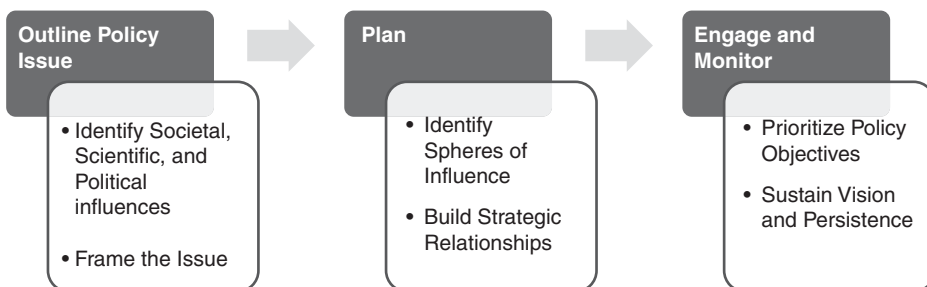


Figure 22.2 Model for developing advocacy plan.

Table 22.1 *Outline policy issues*

Analyze policies and political institutions	<ul style="list-style-type: none"> ● What is the history of the laws and regulations impacting the policy issue? ● Which government and civilian organizations manage or influence the policy? ● Are there conflicts between local, state, and federal policies? ● Are there any major activities planned or underway to change or update the policy?
Understand community concerns	<ul style="list-style-type: none"> ● What is the impact of the policy on key constituencies and stakeholders? ● What is the community’s awareness of the issue? ● Who are key voices of the community for and against the issue?
Understand the political environment	<ul style="list-style-type: none"> ● What are the key political debates, and who represents each side? ● Which interests are invested in maintaining the status quo? ● Which interests are motivated to change, and how do their motivations for change match yours? ● Who are the key policymakers and how do their political objectives match, conflict, or complicate your policy objective? ● Who are respected or powerful groups involved with the issue?

community, and political environments provides important information on the motivations and pressure points of key stakeholders. Interest groups and lobbyists succeed when they focus policymakers on what is and isn’t relevant to the issue at hand, bringing clarity to complexity. A powerful vision of the ideal outcome also helps direct the conversation, constrain misuse of data, and filter conflicting information from interests groups and lobbyists.

Within the legislative setting, research data are rarely the final impetus for decision-making but, instead, are more frequently used to support decisions based on other factors. Understanding this basic difference between the role of research data in science and the policy world is an uncomfortable but very important lesson for many psychologists. If psychologists want to put research findings “into play” for policy deliberation, data need to be introduced, explained, or framed in the context of current political exigencies. Through relationship building and persistent engagement, psychologists can begin to educate legislative and executive branch staff on the importance and long-term benefit of data-based decision making derived from quality data. This is a long-term process that underscores the value of fostering a responsive, credible, and steadfast relationship with legislators and administrators so that they will think of and turn to psychologists for assistance in developing and implementing health policy. Data alone almost never motivates change, but when presented within the right framework or vision, data can provide the reassurance and additional justification to change.

3.1 Identifying Spheres of Influence

Psychologists advocate through multiple levels of government to protect and advance the interests of the profession and the populations we serve. Advocacy at local and state levels can be sufficient to address immediate issues of the community, but it is often necessary to engage federal legislative and regulatory processes to address systemic or long-term policy issues. It is helpful to differentiate between primary and secondary target audiences for advocacy activities. *Primary audiences* include government officials (elected, political appointees, and civilian employees) who have direct decision-making authority, whereas *secondary audiences* are individuals who can influence the activities of the primary audience. Secondary audiences include lobbyists, interest groups, business leaders, friends, family, or anyone who can provide a way to reach the primary audience that may not be directly available to you. Secondary audiences can include policymakers as well, such as members of Congress who lobby colleagues on key committees or an elected official with oversight and strong connections to an Executive agency.

Table 22.2 provides a framework for identifying key individuals at the local, state, and federal levels. Delineating primary and secondary individuals for each of these areas will help prioritize efforts, identify a timeline for known opportunities, and be ready for unexpected opportunities at different levels of government and community engagement.

3.2 Process is Important, but Relationships are Essential

There are an average of 11,000 bills per year introduced in each Congress over the past 45 years, with less than 5 percent becoming law, on average (www.govtrack.us/congress/bills/statistics) and the number of bills passed has declined over the past two decades (Tauberer, 2011), in part because of the increasing use of omnibus legislation to combine multiple measures into one bill. Omnibus legislation is compiled by Congressional leadership in closed-door meetings and the content can be disparate and sweeping. Measures can also be attached as riders to popular or

Table 22.2 *Sample table for documenting key policymakers*

	Local	State	Federal
Legislative branch			
Executive agencies			
Courts			
Allied organizations, foundations, coalitions			
Consumers, public opinion			
Media, PR firms			
Interest groups, lobbyists			
Organized political groups (PACs, unions)			

expedient legislations. For example, the recent *Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008* was signed into law, after a decade of advocacy (Rovner, 2008), when it was attached to the \$700 billion Troubled Asset Relief Program under the *Emergency Economic Stabilization Act of 2008* (division A), which also included the *Energy Improvement and Extension Act of 2008* (division B), and two tax relief acts. In contrast, the number of ceremonial bills (naming post offices and other federal buildings) has risen dramatically, as has the number of bills introduced as a way of establishing a public position on an issue or making a symbolic gesture.

A basic high school civics lesson on how a bill becomes law is clearly insufficient to effect substantive, timely policy change. In fact, most legislators spend a great deal of time finding ways to subvert or work around the process. Psychologists should certainly understand the legislative, regulatory, and judicial processes and timelines (see valuable policy resources below that describe important decision points), but knowing the specific agenda and styles of key policymakers is often more important than the process. Maintaining existing and accessible relationships with legislators is critical to moving policy forward *at the right time and place*.

Policymakers are human beings, not institutions, and accordingly, personal connections are essential to being heard in advocacy. Fortunately, psychologists are uniquely trained to establish supportive working relationships, to work with individuals across a diversity of perspectives, and to understand the need for compromise. However, being a cerebral profession, there is often a failure to appreciate that it is not the intellectual strength of an argument, nor the persuasiveness of a white paper or written testimony, that will carry the day with legislators. Rather, with all politics being local, nurturing ongoing, productive relationships with policymakers is extremely important. Relationships with key policymakers cannot be forged by one visit to the legislators' offices, one appearance before a legislative committee, or only engaging with policymakers during times of crisis and need. For our expertise to be appreciated, psychologists must regularly engage in policy debates, participate in political process, and be active in community and media activities that influence policymakers.

3.3 Vision and Persistence

A vision of your ideal state of affairs serves as a driving and reinforcing inspiration for your advocacy activities. Advocacy is rarely linear, and progress is often experienced as a series of victories and setbacks, or more typically, a series of modifications and interpretations of policies by different levels of government and private-sector organizations. Change can also be unsettling, and advocates should expect resistance from policymakers and institutions, even from colleagues. As a result, advocates cannot always perceive personal or even tangible benefits in the outcomes of their efforts (DeLeon et al., 2006).

In addition to serving as a meaningful framework to make sense of data and how to motivate policymakers, having a long-term vision provides insights on when to apply

Box 22.1: Case Study: Health and Behavior CPT Codes

Psychology has been at the forefront of healthcare integration for decades, well before recent reform initiatives ballyhooed integration as a means to simultaneously improve outcomes and reduce costs. The “health and behavior” (H&B) Current Procedural Terminology (CPT) codes, established in 2002, illustrate the profession’s commitment to advancing the practice of psychologists in service of the public well-being. H&B codes allow psychologists to bill for behavioral, social, and psychophysiological services provided to patients with physical health (rather than mental health) diagnoses. Before these codes were implemented, reimbursement was limited in the general health care sector for psychological work with patients without a mental health diagnosis. Developing these new codes involved the combined efforts of the American Psychological Association and the Interdivisional Healthcare Committee (IHC), representing APA divisions 17, 22, 38, 40, and 54. The number of H&B claims submitted by psychologists to Medicare increased over 625 per cent from 64,000 claims in 2002, the first year they were available, to almost a half million claims for H&B services in 2010, rising from \$1.56 million in reimbursement for these services to \$8.1 million. As a result of many years of advocacy to Medicare and the American Medical Association (which owns and oversees code development for the CPT), these codes constitute a milestone in the recognition of psychologists as health care providers. Further, the codes have positioned psychologists to play a central role in defining and implementing evidence-based practices and integrated care models.

pressure and share expertise. It is also important to develop a vision for both personal and professional activities in order to identify advocacy strategies that can be incorporated comfortably and reliably into professional duties and sustained over the long haul. Advocacy works best when it is integrated into core roles and responsibilities.

3.4 A Note on Political Gift-Giving

Elections are expensive, and getting more expensive every year. Despite promises of cheaper social networking technologies, grassroots networks still require significant financial investment in order to successfully impact elections. Moreover, campaign advertising is an effective and proven method for winning elections, even more so as access to good and bad information has increased exponentially during the internet age. Representatives campaign and fundraise continuously during their two-year terms, perhaps more than they have time to legislate. Many work nights and weekends, sometimes going weeks without seeing loved ones, to fundraise and meet with constituents. As a result, they kindly remember and feel ingratiated to individuals who help elect and re-elect them. This is likely to remain true regardless of fixes to campaign finance reform, redistricting, term-limits, etc. In a free market society, money will always play a large role in elections.

It is an extreme disadvantage, then, that psychologists rank toward the bottom of professionals that support campaigns, even among healthcare professions with fewer members. Table 22.3 compares political gift-giving among healthcare associations (Government Relations Office, American Psychological Association Practice

Table 22.3 Comparison of political giving among healthcare professions

Profession	2018 PAC Contributions ¹	Median Pay
American Psychological Association	\$170,515	\$88,350 ²
American Speech–Language–Hearing Association	\$451,920	\$79,120 ³
American Occupational Therapy Association	\$358,135	\$84,950 ³
American College of Surgeons	\$973,647	\$547,830 ²
American Psychiatric Association	\$483,716	\$306,100 ²
American Physical Therapy Association	\$1,169,679	\$89,440 ³
American Chiropractic Association	\$237,355	\$85,010 ³
Society of Interventional Radiology	\$137,600	\$553,330 ²
American College of Obstetricians and Gynecologists	\$1,240,908	\$233,610 ³
College of American Pathologists	\$432,005	\$351,900 ²
American Academy of Ophthalmology	\$1,130,121	\$203,450 ³
Society of Thoracic Surgeons	\$315,678	\$603,770 ²
American Society of Plastic Surgeons	\$349,737	\$548,070 ²
American Association of Neurological Surgeons	\$434,205	\$882,990 ²
American College of Radiology	\$2,479,437	\$63,120 ³
American Association of Orthopedic Surgeons	\$2,641,958	\$688,370 ²
American Academy of Dermatology Association	\$1,440,651	\$467,350 ²

Source: 1 = Federal Election Campaign data, www.opensecrets.org/political-action-committees-pacs/2018; 2 = 2020 Medical Group Management; 3 = Bureau of Labor Statistics data from 2019 Occupational Outlook Handbook, www.bls.gov/ooh/ (all sites accessed December 15, 2020); PAC = Political Action Committee.

Organization, personal communication, December 20, 2011). Although the American Psychological Association (APA) and the Association for the Advancement of Psychology (AAP) have made significant strides in this area, the table demonstrates that the profession could be a much stronger player if more psychologists donated to political campaigns, and even more so if the average donation increased only five dollars.

Even with the most compelling issues and best data, psychologists first need to get in the room and build the relationship. While legislators certainly value expert input, legislators are more receptive to those who can also alleviate the time and energy devoted to campaigning. Dismissing this reality as corrupt or unseemly is neither accurate nor helpful. Legislators want to make a difference and contribute to society, but first they have to get in and stay in office. Referring back to the three rationales for advocacy, psychologists are widely respected for our academic credentials, science-based discipline, and commitment to the public good, but psychologists do not have a good track record of demonstrating political will.

4. Getting Started

4.1 Partnerships

Although Hollywood glamorizes the power of forceful individuals who change the system, our political system is constructed to respond to groups of people. This is

truer today as policymakers struggle with information overload. A groundswell of public support will always be more compelling than one vocal citizen.

Joining professional associations and interest groups is an ideal way for students and early career psychologists (ECPs) to become active in local and national advocacy. The APA with 54 divisions and 60 affiliated state, provincial, and territorial associations (SPTAs), as well as the Association for Psychological Science (APS), all provide a variety of ways for students and ECPs to engage in advocacy. These associations support grassroots networks; organize Hill Days for psychologists to lobby legislators; host annual leadership conferences that provide advocacy training and facilitate relationships with legislators; and produce e-newsletters to update members on recent policy activities and opportunities to participate. Several societies also offer Congressional and Executive fellowships for ECPs, including the APA, Society for Research in Child Development, and American Association for the Advancement of Science.

APA Divisions and SPTAs are also a great way to participate in advocacy focused on specific issues of direct personal and professional relevance. The APA website provides links to the SPTAs and divisions, as well as regional organizations. APA also supports advocacy networks focused on specific areas of psychology, such as the Federal Education Advocacy Coordinator (FEDAC) grassroots network. In addition, APA, APS, and many SPTAs are affiliated with 501 (c)(6) organizations that can support advocacy networks, engage in fundraising activities, and have expanded capabilities to pursue policy activities (see web resource below for links).

Almost all of these associations also publish online advocacy guides that outline the legislative and regulatory processes relevant to psychology and provides guidance on different advocacy tools. APA has a central advocacy site that lists APA's current priorities and provides examples of advocacy by letter writing, emails, phone calls, and media interviews (www.apa.org/advocacy).

4.2 Student Advocacy

The American Psychological Association of Graduate Students (APAGS) Committee is charged with assuring the "student voice" is heard within the APA governance system. As the world's largest organized group of psychology graduate students, APAGS leadership is comprised of both elected and appointed committee members who are responsible for advocating on behalf of the APA student membership. Its governance structure (see www.apa.org/apags/governance/index.aspx) provides a variety of opportunities for involvement, including a Campus Representative program and an Advocacy Coordinating Team (ACT) that supports graduate student participation in federal and state legislative advocacy through collaboration with the APA Services, Inc., a 501 (c)(6) organization focused on advocating for the profession of psychology.

5. Policy-Relevant Resources

5.1 APA Services, Inc. (www.apaservices.org/advocacy)

A 501 (c)(6) companion organization to APA that advocates on behalf of the entire discipline and profession of psychology, supports candidates who have demonstrated their commitment to psychology and psychologists, and promotes psychology-informed federal policy, legislation and research.

5.2 A Psychologist's Guide to Federal Advocacy (www.apa.org/advocacy/guide/federal-guide.pdf)

This guide, published by the APA, provides general guidelines for advocacy by psychologists, including an overview of the legislative procedures and committees relevant to psychology.

5.3 Bazelon Center for Mental Health Law (www.bazelon.org)

This site is a rich source of information for those psychology students interested in the interface of mental health and the law.

5.4 Directory of State, Provincial and Territorial Psychological Associations (SPTAs) (www.apa.org/about/apa/organizations/associations)

APA Services, Inc. works with its 60 affiliated SPTAs on a broad range of issues affecting the professional practice of psychology.

5.5 National Council for Behavioral Health (www.thenationalcouncil.org)

The National Council represents over 3300 behavioral health organizations (e.g., Community Mental Health Centers) and has an active advocacy agenda supporting recovery and inclusion for individuals with a wide range of addiction and behavioral health disorders.

5.6 PsycAdvocate (www.apa.org/ed/ce/resources/psycadvocate)

Highly interactive advocacy training modules that are available for continuing education credit. Information is in a dynamic learning format that includes interactive Q&A, demonstrations and links to key policy resources.

5.7 Thomas: Legislative Information on the Internet (<http://thomas.loc.gov/>)

The Library of Congress sponsors this site, and it is an invaluable resource for anyone interested in understanding federal legislation. The site contains clear

descriptions of the legislative process, detailed information on roll call votes, listings of the composition of all House and Senate Committees, and easily accessible links to the home pages of all members of Congress. Students can also look up the status of individual bills, searching by number or key words (for example, typing in “Psychology” as a key term will pull up all bills in which the profession and practice of psychology is specifically addressed).

5.8 USA.gov (www.usa.gov)

As the official web portal of the United States federal government, this site is designed to improve the public’s interaction with the US government by quickly directing website visitors to the services or information they are seeking, and by inviting the public to share ideas to improve government.

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Public Education of Psychology: An Interview with Philip G. Zimbardo, PhD

Philip G. Zimbardo

Editor's Note: This interview was conducted in 2000 and edited by Dr. Zimbardo in 2021. Dr. Zimbardo was a pioneer in the field through his work with the media and his commitment to educate the public about psychological science, long before it had become popular to do so. His responses in this interview are still remarkably relevant today.

1. Psychology and the Media

By disseminating findings from psychological research and promoting psychological services to the public, the media serves an important function benefiting the public and our field. Psychologists early in their career can serve an important role as consultants to trade media, community media outlets, or even national/international media conglomerates. We asked Dr. Phil Zimbardo to discuss his vision for the role of the media in psychology, his advice for psychologists who are contacted by the media, and also to discuss his own ground-breaking experiences with the media on behalf of psychology over the years.

2. Importance of Media Involvement among Psychologists

Interviewer (MJP): What do you think is the current public image of psychology as a field?

PGZ: I think that the incident and experiences around September 11th have helped to create a more positive and accurate image of psychology for the public. The public has become more aware of psychologists contributing their services as therapists in New York and Washington and elsewhere. I know the APA website was used very extensively by the general public at this time. The whole concept of posttraumatic stress disorder and the important effects of stress and anxiety in our lives really became salient after 9–11, and I think psychologists have responded expertly and admirably in response to these events.

But, prior to that time, and generally, I think the public has had either a null or somewhat negative image of psychology. I don't think the general public knows the difference between psychiatry and psychology. It has been apparent to me that the media is often unaware of the sub-disciplines within psychology. There is some awareness that psychologists do research and some psychologists do engage in clinical practice, but how the two are related is still often vague. It is rare that the research foundation of practice is apparent to the public. Indeed, it is likely the average person does not know the difference between psychiatrists and clinical psychologists. As a psychologist who has always been concerned with making psychology relevant to the goals of society, it is clear that the media plays a critical role at the interface between what we know, what we do, what we want the public to know, and how to utilize our knowledge and our expertise to help society. So far, this has not really happened in a very productive way. Psychologists and the media could and should have a greater synergy than they currently do.

Interviewer: How does the image of psychology compare with the image of other sciences or related mental health disciplines?

PGZ: I think the public better understands media stories from other sciences such as biology and from medical research, the reason being that newspaper science writers who write about medicine and biology are usually much better trained than the science writers who write about other areas. There are workshops that train journalists in these areas, and those journalists often have had biology or premed courses in college. They want to get the story right. One of the problems with many stories about psychological research is that most reporters don't have a psychology background and they don't get the story right. For example, they don't appreciate what a control group is all about or they will emphasize only one part of a research investigation without understanding its broader context. My feeling is that biology and medicine are better understood and appreciated by the general public than is psychology. I think the media does not clearly differentiate psychology from psychiatry either in terms of practice or in terms of research, or for that matter, from other social sciences. One clear exception can be seen in the articles written by Erika Goode, the *New York Times* behavioral sciences columnist, who studied for an advanced degree in social psychology at University of California, Santa Cruz. She interviews enough of the right people, does her homework, gets dissenting views as well as supporters of the issue being presented, and crafts it all in an accessible style.

Interviewer: How do you think psychologists' involvement in the media could be helpful to the public?

PGZ: Our field offers much of value that can improve everyday functioning and quality of life, with clear implications for preventive healthcare. Our field could have a dramatic influence on learning and training in the fields of education, law, and

business. The media are the gatekeepers between the public and us. It is our job to learn how to open those gates more fully.

In 1969, APA president George Miller startled the American Psychological Association by saying we should give psychology away to the public. It was a startling statement because until that time psychologists gave psychology away to each other. Most psychologists were totally unconcerned about the public. The whole notion of being “relevant” was akin to “selling out” to the proles. We were saying that we’re not pop psychologists, we are serious scientists, and we shun the media because it is part of the commercial establishment. Psychologists did research, and we wrote about it in our journals, and we talked to each other. George Miller was an experimental/theoretical psychologist, so coming from him, this statement was very profound. Unfortunately, not as much has been done since then as might be to actually make psychology relevant to the public concerns.

It is a growing trend among psychologists to say that we ought to be able to demonstrate that what we have done makes a difference in people’s lives. In more recent years, most funding agencies have asked that researchers indicate how their research could conceivably have societal applications. I think that at a deeper level there are more and more psychologists who believe that research – even basic research – could have meaningful application. Now I should say that one of the reasons psychologists have not been interested in giving psychology away is because many psychologists are very modest, saying: “We’re not sure we have anything worthwhile to give away.” Other psychologists go on record saying, “We don’t know *how* to give psychology away.” “We don’t know what of all of our psychology people would want.” And then the question becomes what is the process for any psychologist to give psychology away to the public? And for me, one idea, not addressed by George Miller, is a clearer understanding of how we as psychologists can discover how to share information with the public. The media is the secret to how we can give away what we do and know. The media decides which of the information they will pass onto the public, and in what form.

3. The Future of Psychology in the Media

Interviewer: What do you think are some of the most important messages that we should be giving away?

PGZ: There are many important messages. My primary APA presidential initiative was to help demonstrate whether and how psychological research has made a significant difference in people’s lives. I believe that the answer is of course, “Yes – it has in many ways.” My presidential initiative has started collecting the database, but we will continue doing so for a number of years. We are starting in the United States and it will hopefully be expanded to many other nations’ psychological societies. We have been conducting a survey asking APA members to nominate research that demonstrates a significant impact on individual learning, education, financial behavior, health status, organizational behavior, and more. We are literally

identifying hundreds of individual studies or programs of research that demonstrate how psychology has had an impact, and has been translated into public policy, or practice within schools, hospitals, clinics, and organizations. We are just now collecting that information and ideally, we will have a compendium of psychologists' most valuable impacts compiled within a year or two. We will post this list on the APA website to demonstrate that we have made a difference, and we will make this compendium available to the media, to legislatures, and to the general public. It seems to me that this is something that psychology should have done a long time ago to demonstrate that what we do makes a difference in people's lives. APS has also agreed to collaborate with APA in gathering similar data from its members, one of the first collaborative efforts between the two societies.

We are getting some excellent examples of the impact of psychology in making significant changes. For instance, in the area of safety, researchers in the field of perception have made a difference in airline safety by redesigning commercial airline cockpits to correct for a visual illusion that was causing accidents. Other researchers were instrumental in the decision to change the color of emergency vehicles from red to lime green because you can see lime green in dim light better than you can see red. This is basic psychophysics being applied. Another example pertains to social psychologists and psychologists working in the area of psychology and law. Here, researchers have demonstrated the conditions under which testimonies can be biased or eyewitness accounts are fallible. Psychologists such as Elizabeth Loftus, Gary Wells, and a number of others have had such a substantial impact on the criminal justice system that former Attorney General Janet Reno arranged to have psychologists work with her staff to develop guidelines on reliable and valid eyewitness testimony. This is an indication that basic research on eyewitness identification by social psychologists has had a direct impact on influencing our legal system.

Another example pertains to research on posttraumatic stress. Terry Keane at the Boston VA is one of the pioneering researchers who have identified, diagnosed, and developed various treatment programs for Posttraumatic Stress Disorder – initially with regard to Vietnam veterans before they realized that this was a general phenomenon. Anyone who's experienced extreme trauma – rape victim, victims of various kinds of natural disasters, victims of terrorist attacks on September 11th – have benefited from this work.

One of the potentially most valuable instances of psychological theory making a difference is the application of Al Bandura's social-cognitive theory of modeling. A Mexican TV producer has developed it in creative ways by weaving different kinds of social models into soap operas. These long-running programs are watched by millions of viewers daily and they see powerful examples of the need for family planning, for raising the status of women through education, for safe-sex practices in preventing AIDS, and other vital messages. An international communications agency has extended this approach to develop similar soaps for many other countries worldwide. A critical component of this project is systematic independent evaluation of its effectiveness with solid behavioral outcomes.

Interviewer: Your initiative sounds like an important step towards the giving away of psychology and should be very helpful in educating the public about psychology. Why do you think this has not happened earlier?

PGZ: One problem with the interface between psychology and the public is the ever-present disdain for “pop psychology” – that is, of promoting unscientific psychology for commercial gain. It is important to realize that psychology is unlike any other discipline. Our work in academic psychology spans an enormous range of topics, from the most intricate details of the functioning of the nervous system, witnessed by the current excitement being generated by cognitive neuroscience, all the way to understanding issues such as the cultural construction of the self, conflict and peace, health and spirituality. Psychologists are working at very micro levels of analysis up to the broadest macro level. There is no other academic discipline that has our breadth and range. Moreover, psychology also has an effective, evolving practice component, which is also unique among the behavioral sciences. In addition, we have a built in, intrinsic popular component because we have something to say about virtually every aspect of human nature, how to understand it, and even how to improve it. Because of our breadth of focus, and overlap with yoga, meditation, spiritual awareness, religion, and personal effectiveness, we are the core of the “self-help” industry. Some for the better of society, some for society’s schlock pile. One of the big dangers of psychology, especially among academics and scientists, is that some psychologists have over-popularized it and have pulled it out of the context in which psychology means anything specific to the general public. So we lose our uniqueness and sacrifice what is special, our research foundation, to self-proclaimed gurus peddling contemporary versions of snake oil to the public.

Interviewer: So, it sounds like there might be some ways that our interactions with the media could endanger our reputation or inhibit us from appropriately conveying the kind of work we do as psychologists. Could our involvement with the media also be helpful to the field . . . how do you think this would happen?

PGZ: My strong sentiment is that we need the media and that the media needs us. Psychology is one of the most interesting fields of intellectual inquiry. Psychologists are doing so much that is exciting and interesting to the general public. The media needs our stories and we need the media to convey them to the public. Without the media, the only outlets for people to learn about psychology are through college and high school courses, or by reading our journals. Magazines, newspapers, TV, radio, and now the Internet are really the major outlets to reach what I’m calling the “general public,” that is, the less well-educated public unlikely to read our primary sources of research. If you want to reach teenagers with a message about depression, suicide prevention, or bullying, where else do you go than a public service spot on MTV? We have to become more sophisticated in seeding our important information in media venues most likely to reach the audiences we want to influence.

When I visit congressional offices in Washington during my trips to APA central office, every single office is constantly tuned in to television news; members of congress all have the local newspapers and current magazines available. The point is that legislators have to be tuned into the media. Legislators are the people who vote for funds to support our research, our education, training, and determine how practice dollars will be spent. If our stories get out into the media – such as onto CNN, public television, NPR, and radio talk shows, the New York Times, USA Today – any place where legislators will read or hear about our work, it will help create a positive image of what psychologists do in the minds of those in positions of power. The power to help society work better, as well as the power to provide resources to help psychology function more effectively.

Interviewer: Any risks in working with the media?

PGZ: Let's talk about what the media means. At one level, the media is this huge conglomerate. The media is made up of money-making corporations – ever-larger concentrations of companies dominating multiple media outlets. The bottom line for all of these companies is a profit motive. The media has to present shows on television that will get good ratings, so they can charge more for advertising, which oils the media machine. That's the bottom line. It's the same thing with radio, newspapers, and magazines. If these outlets cover stories that attract more readers or viewers, then the media is going to want more of them. We, as psychologists, have stories to tell that the media will want to report on because people want to see, hear, or read about what other people do, and what they might do differently or better. The popularity of "reality TV" is based on the public's fascination with observing other people behaving in a variety of settings. As an aside, however, there is little reality in these shows because they are so obviously staged, but more importantly, what they lack is some type of psychological analysis of what the behavior means.

Another important aspect of the media is that the decision of what gets accepted, how it gets accepted, and how it gets presented often rests on a single person (e.g., the editor, the production supervisor, or even a higher up). That one person may have a point of view or a particular bias that can affect the story they want to tell, and how they tell it, or reject it. This is one of the dangers of the media. Sometimes a given media source has a prearranged story that they want to get across. They are looking for psychologists that will give them either their expert opinion (without data necessarily) or some supporting data to promote their point of view. This is where psychologists often get trapped – we get misrepresented, misquoted, or quoted out of context because reporters may not be really listening to our whole stories. In some cases, they don't want the whole story; they just want information that will support a particular perspective that they already have in mind. I got trapped once in such a mess, a story I will share with you later on in this interview.

4. Getting Involved

Interviewer: How can psychologists get more involved in working with the media?

PGZ: One important problem is that psychologists have very little training in how to deal with the media. Suppose you conduct a study and reveal very interesting findings with important applications. So, what do you do with that? You can write it up for publication, submit it, and it may take a year to two years before it is published – or revise and resubmit endlessly. Mostly other psychologists will read the research. Now if the research is really “hot,” that is, the research is touching on some issue of national or regional significance, then you want to make sure that the public is informed about your findings ASAP. What do you do?

One thing you can do is to issue a press release. Not many psychologists know how to write a press release. Some major universities have news services that will do it for you or help you write one. APA also writes press releases each week on articles that it thinks could be of media interest, but again, people don't have to wait for APA. Certainly any researcher should be doing this kind of self-promotion if they really believe the research is important. You can work with the news service of a university, if you have one, or if not, you ought to learn how to write one – one page leading with the significance and then highlighting the kind of research foundation for the finding you are promoting.

The second thing you can do – we all should be doing more of – is to write op/ed pieces. An op/ed piece in the *New York Times*, the *Washington Post*, and the *Chicago Times*, *LA Times*, or *Herald Tribune* reaches millions of people instantly. You can have more impact with 500 words in one of these media outlets than you can by writing several books. The Science Directorate of the American Psychological Association has a website (www.apa.org/science/editorial.html) with some examples of good op/ed pieces. Early career psychologists can begin by writing op/ed pieces for the local, city, or regional newspaper, or even for a school newspaper if you're an academic.

You can also write a book. A book has the potential to reach many people in the public. Trade paperbacks are like monographs on a single topic, written for the public in an engaging, accessible style. But, if your publisher or you privately arrange a publicity tour for your book, then it has the potential to reach a much wider audience. There are author's agents who can arrange such tours for a fee. For textbooks, publishers hire sales representatives for promotion. But for trade books, you are the sales representative. It is expected that the author will do an author's tour of self-promotion, if the book is judged to be a potential big seller and the author is personable – marketable. Depending on estimates on how well the book will sell, the publisher will organize a tour for you, or will help to support a tour. You might have to hire your own press agent and spend at least a couple of weeks on the road with the media promoting your book. If you are an academic, this is a huge burden, because it is time away from research and teaching. Whereas if you consider

yourself primarily as a writer, it is delightful because it is two weeks traveling around the country meeting people, friends, making fans. An ideal author tour might include 7–10 cities, including appearances on television networks or guest spots on AM radio. You might appear on some evening program or a call-in radio and/or television program. Several newspapers and/or magazines might interview you. In some cases, you go to a city, do two or three interviews, go to a new city and be in the Green room by 6 am the next morning. Your comments on a radio call-in will be very different than when making a brief presentation on a morning news show. You cannot have any notes; it must all be well rehearsed. In contrast, newspaper interviews can last an hour or two and be very detailed. But you must keep in mind that you are selling a product, your book, the topic, and you.

Book writing and book promotional tours are not activities we usually think about as psychologists. But recently, psychologists doing interesting basic research are now repackaging their work as trade books. This is important for summarizing a body of research in a domain that the public and the media will think is interesting. It can also be a lucrative activity. One of the best ways to earn money as a psychologist these days is to be an author or co-author of a trade book or textbook.

One way to get access to publishers for a possible future as a co-author of a text is to volunteer to do text chapter reviewing for the publisher in your domain, and then write brilliant reviews that will catch their attention. That is how I got chosen to replace Floyd Ruch, author of the best-selling *Psychology and Life* introductory psych text, only they asked me to do the review in hopes I might adopt the edition for my course.

Lastly, you can work directly with television. For this approach, it is important that you utilize different kinds of media in your research that can be used on television. Let's say you do an experiment and you have some interesting results. If you called your local TV station to tell them about your research, the very first thing they are going to ask you is if you have any videotape. If you are doing research on topics that might have popular appeal and might lead to media interest, then you must videotape the sessions. Of course, you need to obtain the appropriate consent and human subjects' approval to do this. As psychologists, we're trained to focus primarily on results, so when you go to a convention and do a talk we often rush through the procedure and simply describe the findings. The media is interested in the procedure, however, and it is important for them to show this to the public on videotape. Process is as important as results for visual media.

This is one of the most important things I have learned about interacting with the media. Two examples: Stanley Milgram's research and the Stanford Prison Experiment. The reason those two studies have had enduring value is because they are on video. Milgram was way ahead of his time in the 60s by filming part of his research, and that film is still being shown now – 30 years later. Incidentally, I believe that the flak he got about the ethics of his blind obedience research was due largely to seeing the participants showing so much stress in deciding whether to continue to step up the shock levels. That does not come across in the same dramatic way from just reading his article or book. I did something similar with the Stanford Prison

study. We videotaped our procedure both as part of our data collection and for future teaching purposes. But because we had this archival material available in a day-by-day chronology of events, the research became more accessible to the media. Thirty years later (the Stanford Prison Experiment was conducted in 1971), NBC will show (in 2002) an hour-long documentary on the Stanford Prison Experiment, partly because we have so much video material available to share with them.

Indeed, the Stanford Prison study, in a way, was a forerunner of Reality TV. I have two strong feelings about Reality TV. On the one hand, it's wonderful because it demonstrates that the general public is fascinated with observing human behavior – and that's what we get paid for – that's what psychology is all about. Observing human behavior, trying to make sense of it, trying to explain it, trying to influence it in a positive direction, trying to predict it. Reality TV is popular because it's fascinating for people to simply observe other people in various settings, as I mentioned earlier. On the other hand, Reality TV does not offer any explanation of the behavior – it is raw behavior undigested. What I would want to add is a psychological component. Psychologists have the understanding of non-verbal behavior, of interpersonal dynamics to explain the significance of people's behavior to the public. Second, because of the media ratings, Reality TV has become more and more corrupted – it is hardly reality. It's all staged, and highly edited and hyped to be more appealing to audiences. The enduring popularity of the Milgram study and of the Stanford Prison study was simply having available a film document of what the experience was like from the perspective of the subject. In essence, that is really what Reality TV is all about. That was the gift of Candid Camera, and the genius of Allen Funt, an intuitive social psychologist.

The best of reality television in my biased opinion was a program called "The Human Zoo." It was produced in 2000, in London by Granada Media, London Weekend Television (in conjunction with Discovery Channel). It was a study of the fundamental psychological principles involved when a dozen strangers meet for the first time in a lodge in the Lake District of England – a remote area where they lived together for a week. It includes essentially the most basic ordinary psychological and social psychological processes. For instance, people making a first acquaintance, people getting to know one another, people forming impressions of others, making their own impressions on others, forming dyads, forming friendships, organizing into groups, groups dominating one another, etc. What differentiates this from other reality television programs is that a British psychologist and I are commenting from time to time on the process while it is happening. We are making predictions about who will be friends and who will be enemies based on the same evidence the audience has of verbal and non-verbal behavior. And then you can see whether or not we are correct. Throughout the program, there are cutaways from the psychological phenomenon exhibited by the 12 participants to mini experiments and demonstrations that illustrate comparable concepts from a psychological perspective. For instance, we see people making first impressions as they initially meet one another, and then there is a cutaway to a demonstration of research on job interviewers' formations of first impressions within the first 15 seconds of a meeting. Unfortunately, the Discovery Channel decided to show only two of the three programs. The last program did not air, and the station is not distributing videos. That is

part of my frustration with the media; in this case, some stupid executive making the decision that American audiences won't appreciate programs with people who have British accents. Do they not know about the popular British shows on PBS?

Interviewer: What would you say to graduate students or early career psychologists who may be interested in working with the media?

PGZ: Psychologists should always be aware of their reputation within their department and their reputation within the field. And departments vary considerably in terms of their acceptability quotient for media portrayals of research. There are some departments that do not like to see young professors quoted in the media, or promoted in the media; in other departments, it's just the opposite. Certainly universities benefit when, for instance, it is reported that findings come from "a study done by a Yale researcher." This instantly gives Yale credit for important work, and the alumni love to see this. But, there is always tension between colleagues who may be envious of you for the media attention. Also, some colleagues may feel somehow that working with the media is commercializing or popularizing psychology inappropriately. After all, psychology should be a basic scientific enterprise – you do not often see theoretical physicists hocking their wares. Many people believe that media coverage cheapens the research, and if senior colleagues hold this position strongly, then working with the media could be held against you. Indeed, one way I have dealt with this tension was to be sure I always had a sound scientific study to balance against my more popular work, to keep my science colleagues happy, and accepting of me.

On the other hand, in terms of promotion of the field, I have always believed from the time I was a little assistant professor without tenure, that media involvement is crucial to help create a positive image of the field to people outside of psychology. If you have something important to say – if you've done something that's meaningful and you want people to know about it – then your colleagues and certainly your administration should be pleased to have you reach out beyond the confines of the traditional academic distribution channels. (If not, send me their names and cousin Gino will pay a friendly visit to them.)

But again, the danger is that no one controls the media. You can't control what the media will say or what the media will do. You can't control it even by giving the media your documentary video – they may elect only to show a minute or two of the video, and perhaps not the most important or cogent part from your perspective. Psychologists are often frustrated because we are used to exercising control over our product – our product is usually an article we're writing, or a book project that allows us to negotiate with the editor before making changes. With the media, once they have the material, they control it – they can change it virtually any way they want. Also if it falls under the heading of "news," then there is no editorial control at all for authors of research.

Interviewer: Given these risks and the loss of control, what advice would you have for early career psychologists who are contacted about their work?

PGZ: Well, you don't want to passively sit and wait for somebody to ask you. There are many sources that can help early career psychologists promote their work. Publishing in *Scientific American* or *Psychology Today* are sources that will help you reach millions with your research. The APA Monitor is another great source. If you have a study that you think is newsworthy and is of interest to psychologists broadly or the public, contact the Monitor staff, and if you can convince them of its value, they may have a staff research reporter do a story on it.

The media may contact an early career psychologist directly, but typically this is because a colleague has mentioned your name. Networking in psychology is very important – early career psychologists should try to know people in different areas of the field. Go to conventions, present posters, give talks, make yourself visible, give constructive feedback to colleagues, give compliments when appropriate, schmooze with your colleagues. But know your limits. You may be contacted for a story that falls outside your area of expertise. Suppose you are contacted by a local reporter to comment on a story pertaining to child molesters or adultery that happens to be in the news at that time. If you are not an expert, indicate that immediately and if possible refer the reporter to colleagues who are. This is important, even if you are asked only for a quote – a single sentence, refuse if you are not comfortable being quoted as The Expert. That is where your colleagues will bristle. Reporters are not really interested in you as an Individual; rather it is you as part of a larger category of relevance to their readers. They will attach your quote to the reputation of your university – for instance, they want to be able to say, “A Stanford professor says . . .” or a “Psychological researcher believes”

Overall, if the media contacts you, it is really important to think about the experience as a negotiation. Most young psychologists are extremely flattered that someone from the local newspaper, radio, or TV station thinks that what they have to say is important. But you must establish guidelines: What is it exactly that they want from you? What is the theme of the piece? What are they searching for? What's the conclusion? How much time or space do you have? Do they just want a quote? You don't want to talk for an hour when, in fact, they just want a sentence or simple conclusion statement. It's the same thing if you appear on a television program. It's critical to ask how many minutes you will be allotted. It is common for psychologists to plan on communicating several important points, but because they were unaware of the length of the edited interview, they talk too long about only the first point and the others never make the final cut. So you start out by saying, “There are three important features of Z: A, B, and C. A is special because” That way, it is clear you have a proper overview of what is important, but have had time only to develop point A. Also, be sure to ask about others that have been consulted on this topic, and always suggest other experts, even after you've spoken.

Interviewer: How did you first get involved with working with the media?

PGZ: My very first experience with the media was when I was a graduate student at Yale University. I did a study in 1957 on the effects of caffeine and chlorpromazine on the sexual behavior of the male white rat. I did it with Herbert Barry, a fellow graduate student and we published it in *Science*. I was the senior author and it was a hot topic. Chlorpromazine had just become available, so this was one of the very first studies on this drug that revolutionized treatment of schizophrenia. What we found simply was that chlorpromazine depressed sexual behavior, and caffeine accentuated and enhanced the sexual behavior of the male white rat. Well, we published it and people were mildly interested.

The next week there was an article in Joyce Brothers' column, which said something like "ladies, if you want to revive your spouse's bedroom vigor, give him an extra cup of coffee." Our research was dealing with the male white rat and high doses of pure caffeine, and she's making this extension completely out of context. It was actually humorous. Dr. Brothers also reported it on the popular Tonight Show, and I was inundated with reprint requests. It highlights the point that the media are looking for a story. Remember, every day the media has to fill thousands of pages of newspapers and magazines, and thousands of hours of airtime on radio and television channels. The media is desperate for stories, and we have stories to tell. That was my first experience learning about the media's interest in stories from psychological research, albeit from a somewhat distorted perspective.

I also got involved in news media from other research I had done as a graduate student at Yale, and published in the first volume of *Psychology Today*. It was an analysis of the psychological tactics used by the police in extracting confessions from suspects – sometimes powerful enough to induce false confessions. I was invited to defend the research at a national law enforcement conference, and it got picked up and distributed by the *New York Times*. I guess I have tended to work on topics that have broader appeal than some of our more typical psychology subjects, like shyness, evil, cults, violence, and madness.

A bizarre incident occurred when I first arrived at Stanford University. I received a call from a *New York Times* reporter, John Leo (who has since become quite famous), on a deadline for a story on women using profanity. I explained that I did not know anything about this topic. Remember, you should make it clear when you are not an expert. But also remember, that they will never give up if they have to meet a deadline. So, this reporter said that he had a tight deadline the next day, and he needed just one quote. I asked about why he was interested in this story, and he said that his editor was cursed out at a cocktail party and he wanted to know whether it is a general phenomenon that women are using more profanity, or whether it was just this woman personally cursing him out. And I said, "Well I can't help you." He asked, "Are there any psychologists who are studying this?" "Well as far as I know there are no psychologists studying profanity in women," I told him, "there are a lot of areas that psychologists just never study, that they're not interested in." He asked, "Can you think of anything in your experience where you've noticed women using

profanity?” “Now that you mention it, yes.” Mistake – he sucked me in to the black hole I should not have entered. I told him, “When I was taking an abnormal psychology graduate student course that met at Middletown State Hospital, we visited the back schizophrenic wards. Women patients were typically more expressive than male patients. That is, they often exhibited themselves, cursed, and did other dramatic things, more so than did males.” This was 1956, before antipsychotic medication, and patients’ psychoses were much more florid. Now obviously these are not controlled observations, I likely noticed women being more overtly expressive because of the greater deviation for the usual baseline of women not being so publicly demonstrative. Regardless, the reporter thanked me and said a cordial goodbye.

Hold the presses. Next day, the *New York Times* felt it was fit to report a new trend sweeping America. A front page article exclaimed, something like, “Women are using more obscenities from swanky cocktail party matrons to mental patients on hospital wards – according to psychological researchers” – only ME! The story was distorted to indicate that I had observed *over many years* that female mental patients were very obscene. Notice the changes in timing and lifting of my restricted observations and the special population that I had casually noticed. The story was picked up by news services and spread literally around the globe. I became a very embarrassed world’s leading expert on female obscenity, but did turn down talk show offers.

What you may find interesting is that I actually used this anecdote in *Psychology and Life*, the textbook I wrote in 1971, as an instance of how research gets distorted and how an instant authority is created and should not be believed just because the *New York Times* says so. Sometimes all the news is not fit to print, even in the *New York Times*.

Interviewer: How did you get involved with the Discovering Psychology Series, Candid Camera, and now NBC News?

PGZ: A PBS station in Boston, WGBH-TV, was interested in doing a series on psychology. Some people at the station had taken a few psychology courses, and realized that despite the limited public perception at the time, psychology was about more than the brain and Freud. And so they approached the Annenberg CPB foundation with a proposal to fund a PBS series on psychology. Annenberg officials agreed, stipulating that the series should be geared towards remote learning/adult education. They did a search for a host, who would also be the chief scientific advisor. They wanted someone who had written a textbook, who was doing current research, and had a good media presence. A number of psychologists were “screen tested.” I gave some lectures at Swarthmore, attended by WGBH staff, and won the job, undoubtedly on charm points.

I essentially created the series. Originally, it was going to be 13 one-hour programs, and I decided that it would be better to have 26 half-hour programs. I wanted to make sure that we would have something that would be good for PBS

viewers, something that would be good for adults and Telecourse learners via videotape, but then also something good for high school and college students to have as an in-class resource. So as not to dominate the 50-minute class hour, I decided the half-hour format would serve best. Essentially I laid out what would be a good introductory psychology course, with one program on each of the major topics in psychology. Then I was in the position of selecting the psychologists who would be interviewed, and I shaped each program. In the process, I essentially trained the entire WGBH production staff in basic psychology. For each program I wrote 25–50 pages of background on the topic, including the basic principles, the historical background of each topic, who were the key research contributors, who were the current people who I thought would be the most interesting on camera. Then I would block out the program, deciding on the format and sequence for each episode. I was aided enormously by a team of 10 advisors that I selected to represent a broad range of psychology and education. We started filming in 1989 and finished in 1990–1991, and the series has been a huge success. It has aired continuously since 1990. The series has been shown in most colleges, virtually all high schools, and 10 different countries worldwide. They have sold thousands of videos; it is one of the most popular series in the Annenberg program. I have just revised the series in 2001. We have three all-new programs – cultural psychology and cognitive neuroscience – that did not exist a decade ago, and applied psychology. For 17 of the original episodes, we have filmed new interviews or revised old material. That project has been my most enduring, and probably most positive impact via the media, because I had a lot of control of the procedure, process, and outcome. I was the chief scientific advisor, as well as co-writer and creator of each series. As the host, I was able to really influence the way that many people teach introductory psychology. Unfortunately, the series never made it to prime time or the basic PBS station. Because it was only a half hour, it was always on the second PBS station, which is really the community college station. It is not reaching the general public as much as it should because it's really a very good series. I should say in passing that I don't receive any royalties or residuals for the *Discovering Psychology* series. I did it only for my love of psychology and teaching. The new program on cognitive neuroscience just won an Emmy for instructional television, as external justification for my efforts.

Candid Camera, in a sense, was kind of the prototype for Reality TV. The show looked at ordinary people in either natural or contrived situations. Years ago, I wrote to Allen Funt saying I would love to have access to his material in order to create videos for teachers and students of psychology. I wanted to prepare a video for introductory psychology and one for social psychology courses. I worked hard to convince him to work together with me on that project. He initially refused, but I was not deterred. As President of WPA in 1983, I invited him to give a keynote address in San Francisco, which he did brilliantly. Then, I invited him back later on for me to do a “pull piece” interview with him for *Psychology Today* magazine. I wined him and dined him, and we became friends. The key, however, was convincing Funt that he was more than an entertainer, he was an educator – that viewers could learn while

they laughed. He finally succumbed to this persuasive pressure allowing me to work with him reviewing hundreds of candid camera episodes. We identified 16 programs that I felt were most interesting for introductory psychology teachers and 16 other programs that were interesting for social psychology teachers. McGraw Hill publishers distributes the videos and laser discs, and I wrote a study guide with Allen Funt to accompany the videos. (I do not receive any royalties from the Candid Camera series or study guides either; more doing it for the love of psychology and teaching.)

Another opportunity to work with the media came from the Stanford Prison study. That has been a big media event; the research itself is a dramatic piece. It is really like a Greek drama – what happens when you put good people in an evil place? There is a stage-like setting, costumes, actors, auxiliary actors (i.e., the police, the parents, a public defender, a Catholic priest). There is deep dramatic focus in the story. Do good people win over evil situations or do evil situations corrupt good people?

I am always thinking about how to communicate research findings in my teaching, so during the study, I took video, audio, and slides as the experiment progressed. Afterwards, I prepared a tape narration synchronized with the presentation of 80 slides that I distributed at cost for many years to teachers and community groups. Now that presentation is available on a free website now (www.prisonxp.org) along with some video clips from our documentary video. This fine website, created with the assistance of Scott Plous, has had more than 6 million unique page viewers over the last two years. This is astounding to me that my little study should reach so many people so many years after its debut.

Then, working with undergraduates at Stanford, primarily Ken Musen (now a film maker), I created a video of the Stanford Prison study using the original black and white archival footage. We updated this with interviews of some prisoners and guards in 1989. It is titled: “Quiet Rage: The Stanford Prison Experiment.” This version has been distributed to colleges, high schools, and criminal justice groups. That video has been influential in a number of ways to help others get a sense of what the experience was like. We distribute it from my office at Stanford, with ordering information in the website.

Recently, a German film company produced a film called *Das Experiment*, which was based on the Stanford Prison study. It was produced with an outstanding cast and one of the leading directors of Germany. Unfortunately, it is a terrible movie for the image of psychology, and I have debated publicly the screenwriter and lead actor and done interviews deploring it. The first part of the movie documents the procedure used in my research, but then the second part is a fantasy sequence with extreme violence and graphic sex scenes that, of course, had nothing to do with the original experiment. Guards kill prisoners and rape the female psychologist-researcher, and prisoners kill guards! Sadly, the movie ends in a shambles with no debriefing, no explanation of why the study was conducted, and no sense of which part of the movie was real and which part was fiction. All the promotion of the film features references to my

study, our website, and to the research publications with Craig Haney and Curt Banks – but then they say it is a fantasy exercise. It is a sad example of the worse kind of exploitation of psychological research for purely commercial purposes. Recent research in Germany shows that viewer attitudes toward psychology are more negative after watching this awful film. And that is very distressing to me.

Lastly, on the prison study, the BBC recently did a recreation of the study with volunteers for a week and shown on prime time over 4 hours. I refused to be a paid consultant on the program because it was now clear the study was unethical and because I felt it would suffer from the Heisenberg effect. A made for prime time TV experiment would alter the behavior being studied by the very act of obviously recording it to get good sound and video close-ups. The participants would be aware at most times of being under surveillance and would want to look good for the home audience when it was all over. And that is indeed what happened. The prisoners wore lapel mikes at all times and often held them while talking to each other. Then there were “confessional” breaks when guards, prisoners and the two British experimenters each spoke at various times to the camera. The essence of my study was creating an intense cauldron of behavioral dynamics that soon lost the sense of being an experiment and became a prison run by psychologists. The BBC experiment was always an “experiment,” and always a TV show to the participants, and so lost the essential intensity created in the Stanford Prison Experiment. Interestingly, in that recreation, the prisoners won over the guards – with hardly any external validity to prisons of which I am aware.

Currently, I am the psychological consultant for NBC News. NBC has asked me to help them develop programming ideas that have psychological content, psychological relevance. As I said earlier, one of the programs is going to be an hour-long documentary of the Stanford Prison study in the fall. We are trying to generate other kinds of ideas for how to get good psychology into NBC programming, into the Today Show, to NBC News. Also NBC Dateline creates programs for other networks, like the Discovery Channel. We just did a pilot show for Discovery, called “Only Human,” that sadly they did not buy for a season series. In large part they rejected further shows because the host-comedian, whom they chose, got terrible ratings. The concept is a good one, that I hope to push further, a series of interesting or funny skits each based on a psychological theme, like compliance, conformity, the burden of keeping secrets, invasion of other’s personal space – but with some psychological analyses after each one, by me or relevant experts. If done right, it can’t miss.

Interviewer: You have certainly been our field’s leader in helping to educate the public about psychology. Was this initially one of your career goals?

PGZ: When I think back now, my primary experience with the media has really come about mostly through my teaching, but also through my research. In my teaching, I’ve always used videos, film, audiotapes, newspaper or magazine articles –

anything to help me breach the barrier between the classroom and everyday life. The media has always been an integral part of my teaching. As I mentioned earlier, my research tends either toward the dramatic or the appealing mundane – as with my research on shyness in adults and children. But mainly, the media has always been part of what I teach. In my first edition of *Psychology in Life*, I included a section on how to be a wise consumer of research. Essentially, this is for the average student who is not going to be a psychologist – 95 percent of students who take introductory psychology are not going on to even major in psychology. However, they will be consumers of our research, as physicians, lawyers, business people, and legislators, so we want them to know what psychology has to offer. My work educating the public about psychology has been an extension of my commitment to teaching.

Aside from the content of psychology we have another unique message – our experimental research message – our focus on controlled observation, systematic variation, and our sensitivity to human bias. No other discipline has this to the same extent. This makes psychology able to talk to the general public about matters of value to them, and to teach them about dangers in misleading advertising allegedly based on “research shows that” Thus, we have an important contribution to make – and young psychologists should be taking over from us old farts and leading the way to promoting psychology, to giving it away to the public in the right ways.

In conclusion, I have enjoyed sharing these random reflections of my career as a media maven, or media buff, and hope the basic message gets through to the next generation of psychologists.

As a fitting ending of this interview, I was just notified today that I would receive a special award from the Council of Scientific Society Presidents for my media and textbook work. It is the Carl Sagan Award for Improving the Public Understanding and Appreciation of Science. It puts me in a rather select group of previous winners, among them: Carl Sagan, E. O. Wilson, National Geographic, NOVA-TV, Scientific American, and the NYT-Science Times. Wow! Now I will have to redouble my future efforts to live up to such an honor, and hope to be able to do so. Thanks for your attention.

Ciao.

Working with the Media – and Getting the Media to Work for You

Kim I. Mills

In his presidential address to the American Psychological Association in September 1969, George A. Miller, PhD, challenged the discipline to do something it had never before attempted:

I can imagine nothing we could do that would be more relevant to human welfare, and nothing that could pose a greater challenge to the next generation of psychologists, than to discover how best to give psychology away. . . . When we have accomplished that, we will really have caused a psychological revolution. (Miller, 1969)

That call has been cited many times since 1969 by psychologists heeding that challenge through the news media. Mainstream media offer psychologists a chance to reach audiences of massive proportions, well beyond those who attend psychological meetings and conventions or who read scholarly journals – and certainly far greater than the number of students in their classrooms. Mainstream media can deliver psychological science to everyday people in language they understand. Having reporters explain psychology to their readers, viewers, and listeners can confer legitimacy, as they are often representatives of respected communications companies or storied newspapers or TV shows.

They also can royally screw up what the research says, as they rarely possess advanced degrees in science, let alone advanced degrees in communications. They may misquote the people they interview or take their ideas out of context.

And yet, when good journalists get it right, the influence can be enormous.

Working with the media “is one of the MOST important things we do,” says Kim Gorgens, PhD, a professor in the Graduate School of Professional Psychology at the University of Denver. “I always think that if you don’t talk about an issue on air, then someone else who is less well-informed, less empathic or less genuine will jump at the chance. In that way, you can see there is a cost to forfeiting the chance to use that platform” (Mills, 2018).

If you aren’t prepared, the experience of working with the media can be harrowing, as it was the first time child psychologist Alan E. Kazdin, PhD, of Yale University, was interviewed by a reporter (Mills, 2016). “The topic was corporal

punishment and it went horribly,” he recalls. “The TV interviewer wanted to chat about his dad and how he was beaten.”

Yet many others describe positive experiences, such as Frank Farley, PhD, of Temple University, who does scores of media interviews a year, which he describes as fun (Mills, 2016), and Mary Alvord, PhD, a psychologist in private practice in Maryland, who says she enjoys speaking to reporters about stress and other everyday psychological issues (Mills, 2018).

“I like speaking with health reporters about stress and psychological issues since they have a good grasp of the material,” she says. “In addition, because I always prepare a few journal articles for the interview, I offer to email those to them if they would like the info. Many are interested” (Mills, 2018).

There are, of course, other more serious reasons for psychologists to engage with the media:

TO HELP: Many psychologists enter the profession because they wish to help people. Conveying evidence-based psychological research results and advice to people who need it is an important task that can be fulfilled through the media.

TO DISPEL MYTHS: Using the media to explain psychological science, practice and education can open the public’s eyes to the reasons for human and animal behavior, demystifying in the process and correcting misinformation.

TO ELEVATE PSYCHOLOGY: While we know through polling that the public has a positive view of psychology overall, they don’t see psychology as a STEM science (Mills, 2009). The more psychologists can describe the rigor that goes into their research, the likelier it is that more of the public will come to understand that psychology employs the same stringent scientific methods as the so-called hard sciences.

TO BENEFIT SOCIETY, IMPROVE LIVES: Psychology offers possible solutions to some of society’s intractable problems, such as violence, poverty, racism, serious mental illness – the list is virtually endless. Working toward these goals is fundamental to the mission of the American Psychological Association and, by extension, all of psychology.

TO RAISE YOUR PERSONAL PROFILE: Despite the pressures on many psychologists to publish in peer-reviewed, scholarly journals and to speak to august societies, being interviewed on CNN or having an essay or op-ed published in *The New York Times* can also be beneficial to your reputation and career.

And it’s never too early in your career to start thinking about how to leverage mainstream media. Whether you are still a student or fresh out of grad school, you can start by building a social media presence, following journalists you like and respect and even reaching out to promote your research or offer story ideas.

1. Who Are The Media?

You might think this is an obvious question, but as the media universe evolves and expands, there may be outlets you’ve never heard of that could be good venues for

you to approach or work with. “The media” are no longer limited to newspapers, magazines, radio, and television, thanks to the information revolution that has occurred since the advent of the Internet (Barthel et al., 2020).

Today’s media include:

- Newspapers – national, local and “specialty,” such those that cater to an African-American, Latino or LGBTQ audience, for example
- News services, such as the Associated Press, Bloomberg and Reuters
- Magazines – on practically any topic you can imagine
- Trade publications – While there are few in psychology, such as the *National Psychologist* or *New England Psychologist*, don’t forget publications covering higher education, such as *Inside Higher Education* and the *Chronicle of Higher Education*
- Television – local, regional, and national
- Radio
- Podcasts
- Internet-only publications – e.g., Vox.com, Mashable.com, Axios.com
- Social media – Reporters extend their reach via social media; psychologists can do so as well.

As you are thinking about media to approach – or if you are approached by reporters – be aware that some outlets are better avoided because they may be too small and not worth your time; too much on the fringe or in a small niche; or too biased, whether leaning to the far left or far right. On the other hand, a niche publication may reach a small but important audience. And just because you may not have heard of the outlet does not mean it isn’t legitimate. It’s important to check into them first.

2. Breaking into the Media

Step one toward becoming a media spokesperson is to have something interesting and relevant to say. If you are a researcher, are you studying an area that would intrigue a general audience? If you are a practitioner, can you offer advice and tips based on your experience (without jeopardizing your patients’ confidentiality)? Think about how your work as a psychologist might apply to the news of the day. There is a psychological angle to almost everything in the world.

Elaine Ducharme, PhD, a licensed clinical psychologist in Connecticut, says more than 10 years ago, she reached out to a local newspaper “and asked if they had any interest in having a mental health column – and they did. So for a while, I wrote, maybe, I think it was probably monthly, a column on something having to do with mental health” (Calkins, 2019).

Ramani Durvasula, PhD, a professor of psychology at California State University-Los Angeles and a private practitioner, became interested in media when she saw a psychotherapist on TV offering inaccurate information on an important topic (Calkins, 2019).

“I thought, who gets to do this? Who even makes this decision?” she said. After she got a chance to appear on a TV show about group therapy after another guest dropped out, she started to get interview requests. Today, she is regularly consulted by all manner of media. She blogs, has a podcast, produces videos, and has become a veritable brand, popularly known as “Dr. Ramani.”

To cultivate relationships with reporters, start by following their work. Read what they write or watch/listen to their broadcasts. That will help you better understand what a particular reporter looks for to create a story. It will also avoid the embarrassment of pitching a reporter on a story that he or she has already covered, or a story on a subject they don’t cover at all. If you see a story or a report you particularly like or admire, leave a comment on the outlet’s webpage saying so. Share the story on your social media channels – you should have a social media presence yourself – and don’t forget to tag reporters in your tweets so they will be notified that you shared their work.

1. *Follow them on social media.* Follow reporters you admire and wish to cultivate on social media. Reporters will often tweet about their work and that of other journalists – which is another way for you to become familiar with their work. Many reporters crowdsource stories on Twitter and other social media channels, which could provide other inroads for you to pitch ideas or offer yourself as a resource. Retweet their good work.
2. *Don’t forget podcasts.* Many journalists have podcasts in addition to the other reporting they do. Listen to the podcasts of those you wish to cultivate. Offer yourself as a guest, if appropriate.
3. *Understand the culture of journalism.* Don’t waste reporters’ time. Most reporters lead hectic, deadline-driven professional lives. They are often working on several stories simultaneously, with calls and emails out to numerous sources. Many of them work different shifts because newsrooms function around the clock. Some reporters have specific beats, or areas that they focus on exclusively, while others are on general assignment. Look up reporters before you work with them to find out what they cover. Check up on the media outlet where they work so you know if it has a political bent. Often, it’s best to pitch story ideas to reporters via email. That way, they can read your idea when they have time.
4. *Compliment good work, correct mistakes.* If you work with a reporter on a story that turns out well, make sure to drop a note letting him or her know you appreciated the piece. By the same token, if you see an error in a story, or if you are misquoted, try to get the mistake corrected during the live news cycle, if possible, but certainly no later than the next day.
5. *Remember that good reporters are always working.* As you become friendlier with journalists, it’s easy to let your guard down. Be careful not to say anything to a reporter that you would not want to see on tonight’s TV news or read in tomorrow’s newspaper. Even if you try to establish a ground rule that what you are saying is off the record, not all reporters will respect that agreement.

3. APA's Media Referral Service

The Public Affairs Office within APA's Communications Department has many longstanding relationships with journalists across the country, and even around the world. Reporters and producers contact APA daily looking for psychologist experts who can comment on or explain a broad range of topics. To assist these journalists, APA keeps a database of several thousand member psychologists who have indicated an interest in talking to media. These psychologists contact APA and fill out a form (www.apa.org/news/press/referrals) on which they indicate their areas of expertise, relevant publications and how much experience they have in working with journalists. This system enables APA to refer literally thousands of psychologists to reporters every year, resulting in news articles that reach a potential audience of billions annually.

4. How to Make an Interview a Success

If a reporter or producer contacts you for an interview, first you need to triage the request. This involves getting some basic information that will help you determine if this is an interview you want to do. You don't need to say yes or no right away. Here's what you need to find out first:

- What is the name of the media outlet?
- What is the name of the reporter? If you have been contacted by a TV or radio producer, find out who exactly would be interviewing you.
- What is the story angle? If a journalist gives a very broad topic, such as, "I want to talk about mental health," dig a little deeper. What aspect of mental health? Is there something happening in the news that is prompting the request to talk to you?
- What is the reporter's deadline?
- If the medium is TV or radio, would you be live or pre-recorded? Will there be other guests and if so, who are they? For radio, is it a call-in show in which listeners can telephone to ask on-air questions? How long will the interview be?
- Who else is the reporter talking to for the story?

Grant a request for an interview only if you want to give the interview. And don't feel pressured to do it immediately; ask for some time so you can be prepared. You should be knowledgeable about the topic; it should be an area where you have professional expertise. Make sure to check into the outlet and determine that it's reputable and has a reasonable audience size.

Your answers to these questions will also help you determine whether you should do the interview:

- What do you want to accomplish with this interview?
- What do you want to say about this subject?
- What do you have to gain by doing it?

It's often a good idea to ask a journalist for questions in advance. Not every reporter will agree to this, but it doesn't hurt to try. For print reporters, you might be able to conduct the entire interview by email. This is often preferable, especially if the topic is complex or controversial. Providing written answers can minimize the chance that you will be misquoted or taken out of context – but remember to keep your answers brief and avoid jargon.

Once you have decided to do the interview, respond swiftly – within an hour, if possible. Reporters – especially in TV and radio – work on very tight deadlines, and they will often have requests out to multiple sources. If you are slow to reply, you are likely to lose the opportunity to be part of the story.

If you decide to decline, let the reporter or producer know this as soon as possible. All you need to say is, “No, thank you.” If it's an area outside your expertise, say so – and recommend a colleague if you know someone who would be better suited for the story. You can also refer reporters to APA's Public Affairs Office at public.affairs@apa.org or 202 336–5700.

4.1 Know Your Message

Before you start an interview, know what you want to say on the topic. Prepare three to five points you want to make – and remember, they need to be succinct. Write them down and practice saying them. You might try them out on a colleague or friend if you have enough time.

Anecdotes or case studies are useful to support a point, but remember to keep them very short.

Put your conclusions first, and then use your supporting evidence. One way to help ensure that your main point(s) get used is to tee them up with phrases such as, “But what's really important . . .” or “What many people don't know about X is . . .”

If there are any controversial or easily misinterpreted aspects of your work, frame your answers in these areas beforehand.

Avoid jargon or terms that would not be immediately understood by a layperson. If you must use a technical term, be sure you define it as part of your answer.

For TV interviews, keep in mind that the average soundbite is about 9 seconds.

5. The Pre-Interview: Working with Radio and TV

Radio reporters will often telephone and want to do an interview right then and there. However, there will be a few minutes of preliminary talk between you and the reporter before he or she actually begins to record your comments (the reporter will let you know when the recording will start).

These preliminary few minutes are your pre-interview. They are your opportunity to find out from the reporter what the questions will be and to think about your answers.

Set up a mutually convenient time for the reporter to call you back and record the interview.

When you receive a call from a television producer, consider your conversation a pre-interview because the producer is effectively listening to hear if you are articulate, succinct and “give good quote.” It’s also important to find out if you will need to go to a TV studio, if the reporter and crew will come to you, or if the outlet wants to conduct the interview online, via applications such as Skype or Zoom.

6. Identifying Yourself

Establish how you want to be identified. If you want to be referred to as Dr. Smith, consistently refer to yourself as that. Most media representatives will try to accommodate you, but understand that some print publications have style rules that they follow (e.g., The Associated Press stylebook excludes psychologists from being identified as “Dr.” on first reference). You may ask the reporter to identify you as a psychologist first and then subsequently as doctor.

For TV appearances, it is fine to ask that the “super,” or “lower third” – which is what they call the on-screen text that identifies the speaker – call you Dr. So-and-so. TV reporters are far more amenable to this request but they might not think of it unless you ask.

7. Ethical Considerations

It is important to use your best judgment and to refer to APA’s Code of Ethics (www.apa.org/ethics/code/index.aspx) in considering interview requests. While reporters have their own ethics codes (https://en.wikipedia.org/wiki/Journalism_ethics_and_standards), they are quite different from the canons followed by psychologists. Following are several common ethical challenges you may encounter in working with media and recommendations for handling:

1. *Requests to interview or discuss your patients.* As a general rule, APA discourages psychologists from engaging in these practices. Among the reasons: you cannot control what the media might ask or be sure the patient understands his/her right to refuse to answer or ability to consent. Even if a patient gives informed consent to participate, how might that affect your professional relationship? Rather than discussing a specific patient, you can speak generally based on clinical experience. Another alternative is to refer the reporter to a consumer or patient advocacy organization such as the National Alliance on Mental Illness or Mental Health America.
2. *Interviews in relation to a high-profile or celebrity story.* As you are presumably not treating the person in question, it’s important not to offer diagnoses or other opinions. (And if you were treating the person, you could not discuss him/her either because of confidentiality and HIPAA rules.) If you decide to do such an

- interview, explain up front that you would be speaking generally on the topic and not about the individual in question.
3. *Appearances on reality TV or requests to record a therapy session.* Similar to challenge 1 above, consider very carefully how this might affect the patient(s) and your professional reputation. If you are seriously considering such a request, it is advisable to consult with your professional liability carrier, as well as the APA Ethics Office and/or Public Affairs Office.
 4. *Paying to appear in print or on TV.* While most media requests come from reporters or producers, you might be approached by the advertising department of a media outlet. If they suggest you buy space in their publication for an “advertorial” or that you will receive editorial coverage as a result of paying for advertising, consider the relevant portions of APA’s Ethics Code: “Psychologist do not compensate employees of press, radio, television or other communications media in return for publicity in a news item” and “A paid advertisement relating to psychologists’ activities much be identified or clearly recognizable as such” (American Psychological Association, 2017, Standard 5.02).
 5. *Radio or TV call-in shows and on-air diagnoses.* This is another area that can veer into danger as it could appear to create a client/therapist relationship during the interaction. In such circumstances, it is advisable to make clear that you are not offering treatment or a diagnosis. You can offer general advice and tips and, where appropriate, encourage listeners or viewers to see a licensed psychologist or other licensed mental health professional.

8. Avoiding Other Pitfalls

8.1 “Off the Record” and “On Background”

It is almost never a good idea to try to go off the record with reporters. The phrase means that the reporter cannot use the information – but he or she is free to go hunting for someone who will confirm what you said on the record. The best advice is to say only what you want to see in print, and keep confidential information confidential.

Information offered on background can be used but the reporter cannot attribute to the source by name. You will often see news stories where facts are attributed to “a highly placed White House source” or “an official with knowledge of the situation,” for example. Again, it is probably best to stick to statements and information that you would be comfortable seeing in print with your name attached as the source. This is particularly true if you are inexperienced in working with the media.

9. Answer the Question You Wish You Were Asked

Sometimes, reporters will ask you questions you don’t wish to answer – not merely because you don’t know the answer, which is fine, but because the topic is sensitive

or controversial or because answering it could create a problem for you either professionally or personally. These are times where you need to bridge away from the topic. In these cases, you can use certain proven phrases to redirect the conversation. These include:

“That’s an interesting thought, but what’s really important is . . .”

“The real issue is . . .”

“The bottom line is . . .”

“Yes, but let’s get back to the main point, which is . . .”

If you do not know the answer to a question, it’s fine to say so. If it’s a print interview and you need to look up the data or other information to answer the question, indicate that and let the reporter know you will get back to him or her with a response.

If a reporter asks you to provide them a client who is willing to be interviewed for a story, you are under no obligation to do so. Let the reporter know that you cannot violate patients’ confidentiality as it would be unethical and a violation of HIPAA (the Health Information Portability and Accountability Act).

Don’t repeat negatives or let reporters put words in your mouth. Reporters will sometimes ask questions in the negative (“Isn’t it true that you falsified the data in this study?”) to get you to repeat their accusation in denying it (“No, it is not true that I falsified data.”). Those types of answers often end up leading news stories and making the interviewee sound defensive. A better approach is to deflect and not buy into the supposition: “I have 20 years of experience doing psychological research and my work has been published in prestigious peer-reviewed journals.”

Don’t nod along or say, “Uh-huh” as reporters ask you questions. If you do, you will appear to be agreeing with something that possibly you don’t. Especially in radio and TV interviews, little sounds of agreement end up seeming like needless interruptions.

Don’t speculate. If you aren’t sure about a fact or figure, don’t guess. Even saying, “I think such-and-such” can get you in trouble. Stick to what you know.

Don’t respond, “That’s a great question.” This phrase is usually a stall for time. It is trite and over-used. A better strategy is to pause for a moment to collect your thoughts. Keep in mind that reporters are supposed to ask great questions, even if they often do not.

Ask to have your quotes read back to you. Print reporters will virtually never let you see their stories in advance, but many will agree to read your quotes to you before publication to make sure they are correct and in context. Especially if the topic is complicated, it can’t hurt to ask the reporter if he/she will run the quotes past you.

Don’t whiff on the softballs. If a reporter closes by asking, “Is there anything you would like to add?” take that opportunity to repeat your main point, or add something of substance. In other words, don’t just say no. Especially with TV interviews, that last question is sometimes the one where you give your most polished answer.

10. Building a Social Media Presence

An estimated two thirds of Americans say they get some or all of their news from social media (Shearer & Matsa, 2018), making social media platforms an attractive option for psychologists trying to get their messages out. Unlike traditional media where you often need to rely on a reporter, editor, or producer to interview you and develop a story that includes your work or viewpoint, social media allows you to speak directly to your audience. The trick to success is to invest the time and effort to build a following and regularly post information that will keep them interested and engaged.

Having a social media presence can also make it easier for reporters to find you. Some general guidelines to keep in mind when using social media:

- *Be brief yet clever.* We live in an age of short attention spans. Make your message stand out with catchy phrases and images or video.
- *Be relevant.* Think about the audience you are trying to reach. Does your message affect them? Tailor your content to appeal to their interests and behaviors.
- *Post often.* Social media sites need to be updated regularly if you wish to build a following.
- *Reach out.* Social media requires socializing, so don't be afraid to engage with your audience, make connections, and network.
- *Be patient.* Don't expect instant results. It takes time to cultivate a network and following.
- *Build the audience you wish to reach.* If you are interested primarily in reaching fellow psychologists, go where they are and talk to them as colleagues. If you want a more general audience, go where they are but tailor your messaging to keep them engaged. Find and use common hashtags to make your content findable by others.

11. Other Options: Op-Eds, Letters to the Editor

Op-ed is newspaper shorthand for opposite the editorial because, traditionally, opinion pieces have been printed on the page opposite the newspaper's editorials. Op-eds are not news pieces, they are the writer's opinion, usually on a timely topic and in an area where the writer has expertise or special knowledge. If you have an interesting opinion to share and can express it clearly and persuasively in about 750 words, you may reach millions of people, change minds, and perhaps even reshape public policy. Keep in mind that timeliness is everything in the news business so try to capitalize on what's happening in the world – or your state or town – right now.

- *Have a news hook.* News outlets are much more likely to accept a piece about a topic that's in the news. Readers want your perspective on something they're already reading about, so try to tie your topic to something already in the public eye.

- *Tailor your op-ed to the news outlet's audience.* If you're submitting to a local newspaper, they're typically looking for op-eds that are relevant to their community, so include local influences on or consequences of the issue. You can also emphasize your personal connections – many op-ed editors prefer authors who live locally or who have other local connections.
- *Consider a range of outlets and read the publications you want to write for.* We all want to be published in *The New York Times*, but the chances of achieving that goal are extremely slim, given the volume of submissions they receive. Consider a range of outlets and get familiar with where good candidates are for you to submit your op-ed. Outlets like Psychology Today and HuffPost are always looking for content. Local or regional newspapers are also looking for diverse voices. Read the outlet to which you're submitting to get a sense of its style, voice, and tone. Most newspapers have op-ed word limits of around 750 words, so you'll have to be concise.
- *How to submit an article.* Almost all outlets post guidelines about how they prefer to receive op-ed submissions. In general, they provide an email address where you can submit the article electronically, but check first. Always be sure to include your contact information, and say whether you have a head shot of yourself available (and to which you have the rights).
- *Write simply and don't use jargon.* Make your points clearly and concisely. Use short sentences and paragraphs. Think about how you would talk to your parents, grandparents, or next-door neighbor. Ask a non-academic friend to critique your draft and make sure it is free of confusing language, abbreviations, or unfamiliar terms.
- *Lead with your main point.* In academia, scientists lay out the groundwork that supports their ideas before they articulate their conclusions. But in an op-ed, that order is reversed. Start with your key point and then unpack it for readers. You have to grab readers' attention from the get-go and convince them that you have something to say.
- *Three points are usually the limit.* Considering the amount of space you have, don't try to cram in too much. By limiting the points you are trying to make, you will increase the likelihood that your work will be used because your writing will be tighter.
- *Finish strong.* In addition to having a strong opening paragraph to hook readers, it's important to summarize your argument in a powerful final paragraph. That's because many casual readers scan the headline, skim the opening, and then read the final paragraph and byline.
- *Don't sweat the headline.* The news outlet will probably write its own headline based on space available. You can suggest one, but don't spend a lot of time worrying about it.
- *Tell stories and go light on the data.* Statistics are OK in moderation, but stories capture readers' attention – most of us remember narratives and colorful details better than numbers. Bring your examples to life. Include details – what something smelled like, looked like, felt like. Embrace personal experiences. Use the

active voice. (Not “Mistakes happened,” but “I made mistakes.”) And remember: You’re not writing an academic article.

- *Tell readers why they should care. Offer specific recommendations/solutions.* Put yourself in the place of the busy person looking at your article. Ask aloud: “So what? Who cares?” You need to answer these questions. If you describe a problem, propose a solution. Don’t be satisfied with analysis. How should your town help those in deep poverty? How can we solve the problem of racism?
- *Make it exclusive.* Don’t submit your op-ed to multiple outlets simultaneously, thinking that this will increase your chances of getting it published. Most newspapers insist on exclusivity. If you don’t hear back from an editor within a week of submitting, follow up with an email asking if a decision has been made because you’d like to submit the piece elsewhere. And don’t get discouraged – it’s not unusual to have to submit to more than one outlet.

12. Increase Your Reach

If your op-ed is published, share it on social media. Consider sending a copy to your legislator and/or other affected parties in your state or town.

One of the most widely read sections of the newspaper is the Letters to the Editor page. A letter to the editor allows readers to express their opinion on a hot topic, add an additional point of view regarding a recent article, or correct or clarify an inaccurate or misleading story. But because letters are so popular, and space is limited, there is a lot of competition to get letters published.

Here are some tips to help you write a good letter that will attract an editor’s attention:

- *Find out your targeted publication’s guidelines.* These are usually posted on the newspaper’s or magazine’s website. Different publications have different rules regarding what they will accept, what contact information they need, and the maximum length. Find the guidelines and follow them to avoid being immediately rejected. If guidelines are not available, shorter is better. Many publications will not run letters longer than 250 words.
- *Be timely.* Your letter has the best chance of being published if it is in reaction to a story or column in the paper. Respond as quickly as you can – the day the story runs is ideal, but certainly within a few days of the story’s or column’s publication. Editors are most likely to run one of the first letters they receive in response to a story.
- *Be specific and brief.* Stick to one main point. If the publication wants no more than 250 words, and you made your point in 150, it’s OK to stop writing. If you want to write something that is longer than a few paragraphs, you will probably need to write a commentary piece, or op-ed.
- *Follow the publication’s style.* Become familiar with the types of letters the paper publishes. If your letter is in response to a specific story, cite the headline and date within your letter. (“While many people admit that they are suffering from

extreme stress, as reported in ‘Americans More Stressed than Ever’ (November 27), we must also recognize that . . .”).

- *All news is local.* Your personal experiences and expertise are often worth adding. So are local statistics or any details to localize the issue.
- *Use your expertise.* If there is psychological science behind your main point, cite it. If your being a psychologist adds heft to your views, note it. If you are responding in a professional capacity – e.g., as a psychology professor or other official – note that, as long as you have clearance from your employer to use your affiliation.
- *Prepare to be contacted.* The publication will want to verify that you are who you say you are and that you wrote the letter. Give your name, address, email address, and phone number. Newspapers do not publish anonymous letters.
- *Remember to proofread.* While editors can and will edit your letter to correct grammar or cut down the length, make sure you catch any typos or other errors before sending it. And don’t be offended if the publication edits your letter; it’s not personal.

And finally, a few words of wisdom from renowned psychologist and media veteran Philip Zimbardo, PhD:

We need to learn how best to utilize the different kinds of media that are most appropriate for delivering specific messages to particular target audiences that we want to reach. Psychologists need to learn how to write effective brief press releases, timely op-ed newspaper essays, interesting articles for popular magazines, valuable trade books based on empirical evidence, and how best to give radio, TV, and print interviews. . . .

“Media smarts” also means realizing that to reach adolescents with a helpful message (that is empirically validated), a brief public service announcement on MTV or an article in a teen magazine will have a broader impact than detailed journal articles or even popular books on the subject. Thus, it becomes essential to our mission of making the public wiser consumers of psychological knowledge to learn how to communicate effectively to the media and to work with the media. (Zimbardo, 2004)

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PART VI

YOUR CAREER AFTER GRADUATE SCHOOL

The dissertation or clinical internship is typically the final requirement fulfilled for the psychology doctorate, and its completion is certainly just cause for both celebration and relief. However, completing the doctorate does not necessarily denote the end of “trainee” status. In many of the settings in which psychologists work, a postdoctoral fellowship is increasingly recognized as a desirable, if not necessary, step in the educational pipeline prior to employment or licensure as a professional psychologist (2018). Academic institutions and university medical centers increasingly prefer job candidates with advanced postdoctoral training, and formal postdoctoral training at an approved program is a requirement for specialty certifications, such as neuropsychology.

The diversification of psychology and the growth of professional practice over the last 70 plus years have prompted ongoing debate about the necessity and definition of postdoctoral training. Supervised experience beyond the doctoral degree prior to psychology licensure was first recommended by the American Psychological Association (APA) in its model acts for licensure (APA Committee on Legislation, 1955, 1967), and today, most state licensing boards mandate some form of supervised postgraduate experience to be license-eligible. Beginning in the 1990s, the nature of postdoctoral training became the subject of several conferences, including the Association of Psychology Postdoctoral and Internship Centers’ (APPIC) national conference on postdoctoral training in 1992 (Belar et al., 1993; Larsen et al., 1993) and the APA-sponsored National Conference on Postdoctoral Education and Training in Psychology (APA, 1995). Recent trends toward greater specialization have been accompanied by a growth in postdoctoral training programs as well as increase in the number of available postdoctoral positions (McQuaid & McCutcheon, 2018). Acknowledging this growth effort, APPIC formed a Postdoctoral Workgroup in 2012 (now referred to as the Postdoctoral Committee) and subsequently spearheaded a number of postdoctoral training resources and activities, including the Postdoctoral Psychology Training Summit in 2016 (Aosved, 2016; Bodin et al., 2018). Greater attention to postdoctoral training within psychology’s professional organizations has been important to reduce the educational

pipeline “leakage” that most often occurs at transition points in training such as the one from internship to postdoc (Kaslow et al., 2018).

Over the past few decades, leaders in the field have sought to move toward more uniform requirements for postdoctoral training and to establish professional organizations, rather than state regulatory groups, as the arbiter of postdoctoral training standards. The APA Standards of Accreditation (SoA) for Health Service Psychology (APA, 2018) include within its scope of accreditation postdoctoral programs providing training in health service psychology (HSP) that provide “major areas of training in health service psychology that are recognized within the scope of accreditation (i.e., clinical counseling, school, and other developed practice areas).” Postdoctoral residency (i.e., those in postdoctoral training) programs meeting APA Commission on Accreditation (CoA) standards must “... ensure that residents attain advanced competencies relevant to the program’s specialty or area of focus (p. 25).” Level 1 includes profession-wide core competencies required of all programs, including Integration of Science and Practice, Individual and Cultural Diversity, and Ethical and Legal competencies (APA, 2018). Level 2 competencies are Program-Specific, guided by the area of HSP emphasized within the fellowship (e.g., assessment, research, intervention, interdisciplinary skills). If a program falls within a recognized and APA-accredited specialty area, then Level 3 competencies are determined based on the education and training guidelines of the recognized specialty area (APA, 2018). Becoming an accredited postdoctoral training program requires a detailed self-study that includes information about the program’s training goals and objectives, program policies/procedures, expected student competencies, and outcome data demonstrating achievement of these competencies. Following initial approval of the self-study, a site visit team involving a group of professional colleagues conducts an on-site review of the program. Finally, the site visit team submits a report to the CoA, which makes final decisions regarding accreditation.

Over the last decade, the number of APA-accredited programs has grown. Whereas in 2010 there were only 59 APA-accredited postdoctoral programs, as of October 2019 the number of programs throughout the United States had grown to 164 APA-accredited programs (<https://accreditation.apa.org/public-notice-programs-database>; APA, 2021). Still, it is noteworthy that institutions offering postdoctoral training are not required to be accredited. The HSP CoA regulations would not apply for individuals pursuing a postdoctoral fellowship outside of HSP (e.g., cognitive psychology). In addition, as of 2015 the APA began no longer accrediting postdoctoral programs in Canada (APA, 2021). Although neither postdoctoral training nor the accreditation of postdoctoral training programs has been mandated, these issues remain actively debated by various professional organizations. Supporters of mandated postdoctoral training contend that postdoctoral training benefits not only new psychologists, but also the field as a whole and consumers of psychological services. Detractors assert that the field has unnecessarily expanded its definition of what students need to know to become competent psychologists. Whatever your position on this issue, it is important when planning your career path

to recognize what we believe is a growing reality: the field of psychology, those employing psychologists, and state regulatory agencies maintain that graduate school and internship alone cannot provide the broad range of knowledge and skills required for the modern practice of psychology. Complicating matters is the current state of postdoctoral training, which exists in a variety of institutions offering a range of different experiences, varying in their duration, amount of supervision, and compensation. So, even if you are ready to pursue postdoctoral training, the lack of uniform training standards and variability in positions raise many questions about what kind of position to pursue.

The goal of this chapter is to clarify the issues described above and assist you with two basic tasks: determining whether postdoctoral training is right for you, and understanding how to obtain a fellowship that meets your personal and professional needs. With regard to the first task, we will explore advantages and disadvantages of postdoctoral training as well as other considerations in the decision to pursue a postdoctoral position. For those who might wish to seek such training, we will explicate the steps for locating, applying, evaluating, and securing a suitable fellowship. Finally, some thoughts and recommendations about the postdoctoral experience are offered.

1. Types of Postdoctoral Training

Before evaluating the potential benefits and costs of postdoctoral training, a brief introduction to the range of postdoctoral training opportunities seems warranted. As previously noted, with the exception of APA-approved fellowships, there are no established requirements to which institutions, mentors, or supervisors must adhere in the training of postdoctoral fellows. Consequently, postdoctoral positions, especially non-APA-approved fellowships, even within a particular domain (e.g., research vs. clinical/applied) or specialty area (e.g., health psychology, forensic psychology) are likely to vary greatly along a variety of dimensions, including funding, training focus, structure, and setting. While such variations should not be equated with a corresponding range in quality, understanding the differences will assist you in determining which, if any, type of postdoc will best meet your needs.

1.1 Stipends

Stipends considerations are critical, as most recent graduates cannot afford to accept a postdoctoral position that offers no monetary compensation. Although there are some informal supervisory arrangements to gather postdoctoral hours toward licensure that are unpaid, the large majority of formal postdoctoral positions are funded. As recently as 2020, there were a total of 224 APPIC-member postdoctoral programs, with a total of 1040 full-time positions (APPIC, 2021a). The three agency types offering the most positions included VA medical centers (386 positions), consortia (139), and medical schools (108). Among APPIC member postdocs, the median salary in 2020 for full-time funded slots was \$50,200

(APPIC, 2021a). However, the range of salaries and benefits varies tremendously and often depends on factors particular to the institution, sector (academic vs. industry), geographical area, and funding source of a given position (Committee on Science, Engineering and Public Policy, 2000). The highest paid full-time postdoctoral trainees, based on 2020 APPIC-member programs, were in military settings (mean salary \$109,800). In contrast, the lowest paid postdoctoral trainees were in psychology department settings (mean \$39,000; APPIC, 2021b). For individuals pursuing a research-focused postdoc, the National Institutes of Health (NIH) sets stipend levels each year for its Ruth L. Kirschstein National Research Service Awards (NRSA) that fund F32 and T32 fellows. At the time of this writing, the 2020 stipend level for a beginning F32 or a T32 fellow is \$52,704 (NIH, 2020).

1.2 Training Emphasis

The training emphasis of a postdoctoral position is one of its most salient features and typically a primary criterion for choosing a particular position. Most postdoctoral programs emphasize either research or applied/clinical training. Fewer offer training in both domains and those that do tend to be more highly structured (see below). In evaluating programs, it will be important to examine the relative emphasis placed on research, academic, and applied/clinical training and the fit with your own training goals, as most positions will prioritize training in one of these areas more than another.

Although funding and training focus may be persuasive features of a postdoctoral position, other factors, including structure and setting, should also be considered. With respect to structure, postdoctoral training programs are frequently distinguished as providing either “formal” or “informal” training. “Informal” training usually occurs when supervision is provided within the context of a traditionally defined job. In contrast to this informal on-the-job training, “formal” postdoctoral training takes place in an organized educational program designed for the expressed purpose of developing advanced competencies and expertise (Belar et al., 1987). In defining formal requirements for postdocs related to professional practice, APPIC recognizes APA-accredited postdoctoral training programs as meeting its formal criteria for professional practice. For other programs, APPIC has designated 14 criteria necessary for meeting APPIC Postdoctoral Membership (see www.appic.org/About-APPIC/APPIC-Policies/Postdoc). Example criteria include: (1) the program is coordinated by a designated psychologist responsible for the integrity and quality of the training program; (2) the program (minimum 1500 hours) may be part-time or full-time but must be completed in no less than 9 months and no more than 24 months (2 years part-time); (3) the institution has two or more licensed psychologists on staff and a training faculty that includes at least one psychologist with expertise in each area of training offered; (4) at least 2 hours of regularly scheduled individual, face-to-face supervision of psychological services per week; (5) at least 2 hours of additional learning activities (e.g., case conference, seminars);

and (6) professional psychological services account for a minimum of 25 percent of the fellow's time.

Looking beyond the clinical focus of some of these characteristics, a more general contrast can be seen in the relative emphasis placed on education and training. This is perhaps the most defining feature of formal postdoctoral programs as compared to the informal, on-the-job, supervised training that may also be pursued to fulfill licensure or other experiential needs. In weighing the merits of formal versus informal training, the trade-off is typically financial. Formal training programs typically offer lower financial rewards, with an understanding that part of the trainee's compensation is the education gained through structured mentoring and training experiences. Because informal postdoctoral training often happens in the context of supervised employment, these positions may offer more financial incentives, but fewer organized educational opportunities, such as seminars and dedicated time for mentoring, supervision, writing, and other professional development activities.

Although survey data suggest that new psychology graduates express a preference for informal over formal postdoctoral training, those who have completed formal programs might be more satisfied with the training they received (France & Wolfe, 2000). In a survey of 117 psychologists who completed formal postdoctoral training, France and Wolfe (2000) found that 68 percent rated their experience "very valuable," 27 percent as "valuable," and 5 percent as "somewhat valuable." None of the psychologists who completed formal programs judged their experience to be "not valuable." In contrast, only 38 percent of 189 psychologists surveyed who completed informal postdoctoral training rated their experience as "very valuable," 34 percent judged their postdoctoral training as "valuable," 21 percent as "somewhat valuable," and 8 percent rated the experience as "not valuable." Given the changes in professional training and practice since the 2000 publication of France and Wolfe's survey, updated surveys are needed to evaluate more recent cohorts' training preferences and experiences.

1.3 Setting

The primary settings offering postdoctoral training in psychology are freestanding hospitals, academic medical centers, and universities, although positions are also available through government agencies and private practice. Differences between the institutional missions of these settings and the type of work they support might affect whether a particular postdoctoral position is best suited for your training needs. For instance, hospitals and some academic medical centers might be more likely to focus on applied aspects of both research and clinical practice, given their primary mission of service delivery. Accordingly, trainees whose interests lie in the treatment of particular types of medical or psychiatric disorders might be better suited for this setting than those whose work focuses on basic theory or other issues whose implications for improving health, development, or quality of care may be less direct.

An informal postdoc within a private practice setting may offer the opportunity to acquire clinical hours toward licensure while potentially also learning about the business-related aspects of a private practice. These types of informal training arrangements are typically initiated by the postdoctoral fellow. Some may be employed positions within the practice that provide the supervision needed by the postdoc while others involve informal arrangements between postdocs and licensed clinicians. Regardless of the setting, the postdoctoral fellow in a private practice setting may need to pay for clinical supervision either through reduced salary or directly out of pocket. Further, in contrast to a hospital or consortium setting, there may be limited exposure to a range of supervisors/mentors and a limited range of client populations. It may also be difficult to integrate research experiences.

Indeed, it is important to keep in mind that the setting of one's postdoc position will likely affect the types of training experiences available. Hospitals and academic medical centers might be more likely to offer hands-on and interdisciplinary training opportunities, such as treatment teams and grand rounds presentations. Although formal classroom-style teaching opportunities may not be included, there may be opportunities for mentoring or teaching in other formats (e.g., supervision or mentorship of predoctoral trainees or research assistants). It is common for more clinically oriented postdocs to be found at sites that provide predoctoral internships (i.e., VAs, private and state hospitals, etc.; Forand & Applebaum, 2011). In contrast, research-oriented postdoc positions (e.g., such as afforded through NIH T32 National Research Service Award institutional training grants) are typically offered in academic medical centers, universities, or VA medical centers (Forand & Applebaum, 2011). Academic medical centers and university psychology departments typically offer more opportunities to teach and mentor, which could be useful for obtaining a university or faculty position. Such institutions may also have greater opportunities for learning skills relating to academic jobs, such as grant writing, manuscript review, or presenting research results at conferences.

Postdoctoral positions in industry are usually geared toward creating marketable and profitable products. They typically offer stricter time limits on duration of training, well-equipped research facilities, exposure to industrial culture, and the opportunity for teamwork. Salaries in these positions may be above the average range. However, industry positions might also offer fewer teaching opportunities, less choice about one's particular placement, and limited ability to take ownership of projects. The work during the fellowship may have an exclusive focus on marketable results as well as restrictions on information exchange for proprietary reasons.

Lastly, training positions in government facilities typically occur in the context of large national laboratories that may be unique in scope of research and size of research group. Like academic medical centers, they might offer more interdisciplinary training, more interactions with other divisions and researchers, and participation in joint decision-making. However, government facilities might offer fewer teaching/mentoring experiences as well as less flexibility in determining the direction of one's work.

Table 25.1 *Summary of likely differences across hospital, academic medical center, university, and industry settings for postdoctoral training*

	Hospital	Academic Medical Center	University	Industry	Government
Professional practice or applied training	✓	✓	X	✓	X
Ability to accumulate supervised professional practice hours toward licensure	✓	✓	?	X	X
Participation in decisions regarding training activities	?	✓	✓	X	X
Cross-disciplinary training and collaboration	✓	✓	?	?	✓
Coursework or teaching opportunities	X	X	✓	X	X
Opportunities to mentor or supervise students	X	✓	✓	X	X
Opportunities to learn and practice grant writing	X	✓	✓	X	?
Opportunities to participate in peer review of papers submitted for publication	X	✓	?	?	✓
Opportunities to co-author publications	X	✓	✓	?	✓
Protected time for research activities (data collection, data analyses, writing)	X	✓	✓	X	?
Opportunities to pursue independent research	X	✓	✓	X	X
Ownership of projects or data	X	?	✓	X	X
Professional-level pay scale	X	X	X	✓	X
Benefits package (medical, paid vacation)	✓	✓	✓	✓	✓

✓ = likely to be present; X = not likely to be present; ? = may or may not be present

A summary of the pros and cons of the various training settings is presented in Table 25.1. It is important to again note that the variations presented above do not necessarily constitute differences in the quality of the training offered, but differences in the types of opportunities or training activities that may be available. In addition, because there is variability within each category of training setting, it is important to take time to learn about unique aspects of each postdoctoral opportunity one is considering. For example, some postdoctoral training experiences within university settings will offer the ability to accrue supervised professional practice hours for licensure whereas others may not. Such differences will arise again later in the chapter when we discuss how to evaluate potential postdoctoral training opportunities.

2. Benefits and Pitfalls of Postdoctoral Training: Is it Right for You?

Both professional and personal factors are important to consider when deciding whether to pursue postdoctoral training. Needless to say, the relative import of these

issues will vary from person to person, and it will be up to you to determine how much weight to give any one of these factors in your decision-making process. Trainees may find the review of postdoctoral training in HSP by Silberbogen and colleagues helpful as they weigh various considerations (e.g., employment versus postdoctoral training, personal considerations; Silberbogen et al., 2018).

3. Potential Benefits of Postdoctoral Training

The overarching benefit of postdoctoral training is the opportunity it provides to develop new or better skills that will advance one's professional goals. This may be accomplished in a variety of ways, including acquiring specialty area training, logging the supervised hours necessary for obtaining licensure, or enhancing professional development as a scientist-practitioner. Although these agendas are not mutually exclusive, they may serve different career objectives. A summary of beneficial functions that postdoctoral training may potentially serve in advancing professional goals is presented in Table 25.2.

3.1 Specialty Training

Postdoctoral training can provide opportunities for advanced clinical or research training in a particular specialty area (e.g., pediatric psychology, neuropsychology, geropsychology, behavioral health, forensic psychology, etc.), with a particular

Table 25.2 *Potential advantages of postdoctoral training*

Potential advantages of postdoctoral training	
Professional practice issues	<ul style="list-style-type: none"> Gain specialty training in an area of psychology or with particular population Accumulate hours toward licensure Fulfill requirements for specialty area certification (if applicable) Increase job marketability Supervisors and advisors can facilitate job search
Professional development as clinical scientist	<ul style="list-style-type: none"> Learn new research skills (grant-writing, statistical analyses, paper review, etc.) Opportunities to integrate clinical and research skills in applied settings under guidance of experienced mentor Protected time for research activities enhances research productivity Publish papers Initiate program of independent research Teaching and mentoring experiences Broaden professional network/networking opportunities, aided by building a relationship with another mentor Increase job marketability Supervisors and advisors can facilitate job search

population (e.g., patients with chronic schizophrenia, cancer, substance abuse, etc.), or a certain age group (e.g., infancy, adolescence, older adults, etc.). Such specialty training may render individuals more marketable for desired jobs. For example, a postdoctoral fellow with specialty training in inpatient pediatrics will likely be preferred over a recent graduate from a more general clinical child internship for a medical center position in pediatric oncology. Specialty training is considered mandatory within some areas of clinical practice: For example, in accordance with the Houston Conference Guidelines, a trainee must complete a two-year postdoctoral fellowship prior to independent practice in clinical neuropsychology. Similarly, academic institutions may perceive a candidate who utilized postdoctoral training to publish papers and begin an independent program of research to be a surer bet for a faculty position that requires obtaining external grant funding in order to sustain the position and advance academically.

Specialty areas of applied practice have been organized into formal specialties and subspecialties through a system developed by APA under the auspices of the Commission for the Recognition of Specialties and Subspecialties in Professional Psychology. These specialty and subspecialty distinctions are particularly important for those who might seek postdoctoral training for the express purpose of training in a particular area of research or practice. As specialty areas define themselves, they have begun to require specific types of training experiences for new psychologists seeking recognition or certification in that area. As of January 2020, there were 18 specialty areas (e.g., clinical health psychology, behavioral and cognitive psychology) recognized by the Commission for the Recognition of Specialties and Subspecialties in Professional Psychology (APA, 2020b). Table 25.3 lists the 18 specialty and 3 proficiency areas recognized by CRSSPP at the time of this writing. A listing of these areas and their related links may also be found at www.apa.org/ed/graduate/specialize/recognized. The APA taxonomy for education and training in professional psychology health service specialties and subspecialties (APA, 2020a) provides a list of terminology that provides a structure with which to label the intensity and type of training in professional psychology programs (i.e., doctoral, internship, postdoctoral). These terms, in order of least to greatest intensity of training and education, include “exposure,” “experience,” “emphasis,” and “major area of study” (APA, 2020a). For example, according to this taxonomy, in order for a postdoctoral program to state that it offers “emphasis” training in a recognized specialty area, the program would need to follow the guidelines established by that specialty *and* at least 80 percent of the program’s time would need to fall within the specialty area of study (APA, 2020a). It should be noted that varied terminology has been utilized to describe depth of postdoctoral training in a particular area. For example, the term “focus area” training has been used to describe postdoctoral training experiences that do *not* fall within a recognized specialty area (APPIC, 2021b). In summary, obtaining formal postdoctoral training in a specialty or focus area is advised if a trainee plans to pursue a career path in which these skills are central (Silberbogen et al., 2018). This may be an important consideration for some trainees weighing the pros and cons of pursuing a postdoctoral fellowship.

Table 25.3 *Specialty and proficiency areas currently recognized by the Commission for the Recognition of Specialties and Subsidiaries in Professional Practice (CRSSPP).*

Specialties	Year of initial recognition
Clinical Neuropsychology	1996
Clinical Health Psychology	1997
Psychoanalysis	1998
School Psychology	1998
Clinical Psychology	1998
Clinical Child and Adolescent Psychology	1998
Counseling Psychology	1998
Industrial-Organizational Psychology	1996
Behavioral and Cognitive Psychology	2000
Forensic Psychology	2001
Couple and Family Psychology	2002
Geropsychology	2010
Police and Public Safety Psychology	2013
Sleep Psychology	2013
Rehabilitation Psychology	2015
Group Psychology and Group Psychotherapy	2018
Serious Mental Illness Psychology	2019
Clinical Psychopharmacology	2020
Proficiencies	Year of initial recognition
Addiction Psychology	2001
Sport Psychology	2003
Biofeedback and Applied Psychophysiology	2019

3.2 Professional Licensure

In addition to providing opportunities for specialized training, postdoctoral positions can provide an opportunity to obtain the supervised postdoctoral clinical hours needed to qualify for clinical licensure. In an informal survey of current and former postdocs, as well as postdoc mentors, acquiring supervised hours and experience for licensure was cited as the most common reason for pursuing a postdoctoral position (Forand & Applebaum, 2011). However, state requirements vary in the type of required experience and changes in licensing laws have shifted such that 14 states now permit entry into the profession following predoctoral internship (McQuaid & McCutcheon, 2018). In addition to the variability in requirement for postdoctoral clinical training, state requirements vary on the minimum number of supervised postdoctoral clinical hours (most programs require between 1500 and 2000 hours), the length of time allowed to complete training, the kinds of activities allowed during training, and the amount of supervision required (1–2 hours per week is typical). Clinicians seeking to work even part-time in professional practice or conduct research with patient populations will likely need to become licensed, and obtaining postdoctoral clinical hours within a formalized training system usually facilitates

licensure in that state and may allow for greater flexibility if one wishes to later relocate and become licensed in another state. Those knowing the state(s) in which they ultimately might wish to practice will want to increase their familiarity with the licensure requirements for those states. Information about individual state requirements can be obtained by contacting a state's psychology board or reviewing the board's website, which will have copies of relevant statutes, rules, and regulations regarding psychology licensure. Alternatively, *The Handbook for Licensure and Certification Requirements* is published by the Association of State and Provincial Psychology Boards (ASPPB) and contains information about specific postdoctoral requirements, such as number of hours and supervision requirements. This and other information concerning professional licensure can be obtained at ASPPB website, <http://psybook.asppb.org/>.

3.3 Professional Development as a Clinical Scientist

For those interested in research or academic careers, the postdoc can be an important training ground for professional development as a scientist-practitioner. More formal programs may provide didactics relating to teaching, research, or grant-writing skills. There are often opportunities to work closely with a mentor in a variety of more advanced professional activities, such as writing research papers, developing professional presentations, assisting with the review of papers submitted to journals, and the development of one's own research studies and grants. The majority of postdoctoral training programs listed in APPIC's Universal Psychology Postdoctoral Directory (UPPD; www.appic.org/Postdocs/Universal-Psychology-Postdoctoral-Directory-UPPD) either make research training an available or required component of the postdoctoral experience. Based on an analysis from the first year of the UPPD in 2017, 43.7 percent of postdoctoral openings stated a research participation requirement and 31.5 percent stated research opportunities were available but not required (McQuaid et al., 2018). At this time, APPIC-member and APA-accredited programs were more likely to offer and require research (McQuaid et al., 2018). For those with applied interests, postdoctoral training can provide a level of in-depth training in applied settings that is often difficult to obtain in graduate school and internship. The guidance of an experienced mentor can provide invaluable opportunities for integrating research and clinical skills as well as for learning to negotiate the politics and hierarchies involved in doing research in interdisciplinary settings composed of individuals with divergent professional backgrounds and interests.

3.4 Potential Drawbacks of Postdoctoral Training

While there are many benefits of postdoctoral training, as part of the decision process it is also important to consider potential drawbacks. Table 25.4 summarizes some of the factors that might weigh against the decision to pursue postdoctoral

Table 25.4 *Potential drawbacks of postdoctoral training*

Potential drawbacks of postdoctoral training	
Personal development issues	Continued financial sacrifices for another one to two years Potential need to relocate for postdoctoral training and then again for a professional position Relationship and family obligations: dual career demands, children, childcare, ability of family to relocate, availability of suitable local training Social stressors of relocation
Professional development issues	Prolonging trainee status and delaying entry into professional position Balance of available training opportunities with clinical service or other professional demands

training. One of the biggest struggles encountered in the decision to pursue postdoctoral training is the one between making the transition to becoming a full professional and prolonging one's trainee status (Kaslow et al., 1992). Personal issues, such as finances and relocation, are often an important part of this decision. Postdoctoral training almost certainly entails a continuation of financial sacrifices for another one to two years. You may also need to relocate for a given type of training and then, perhaps, move again in order to obtain a professional position. Other personal issues such as cost of living, dual career demands, family goals, and relationship commitments need to be carefully factored into postdoctoral training decisions, as these matters can sometimes outweigh the professional advantages of, or perceived need for, additional training.

3.5 Postdoctoral Training Versus University Faculty Position?

Following completion of predoctoral internship, some trainees interested in pursuing research or academic careers may deliberate between pursuing postdoctoral training or applying for university-based faculty positions. This is often a difficult decision, again with pros and cons associated with each choice. In the increasingly competitive job market, one advantage of pursuing research-based postdoctoral training is the opportunity to advance one's research career in a position that offers "protected" research time that may be used to write up the dissertation or other publications, develop a grant application, or make other types of progress in defining your research program. Another concrete advantage to pursuing postdoctoral training is that data collected on a new project during the fellowship will be available to analyze during the first few years in a junior faculty position. For individuals pursuing tenure-track positions, this can be helpful in maintaining a continuous stream of publications and providing new graduate student mentees with publication opportunities, as the first few years in a faculty position are often spent getting one's laboratory up and running and beginning to collect data. This opportunity can greatly facilitate academic productivity by providing manuscripts

that can be written up for publication while establishing one's own research program at a new site. Postdoctoral training programs that offer formal or informal opportunities to develop grant-writing skills may also give the trainee a competitive edge when it comes time to apply for faculty positions, particularly if the trainee submitted their own extramural grant application during postdoctoral training.

While there are advantages to pursuing postdoctoral training, there may also be strong reasons to apply for faculty positions and forego postdoctoral training. One practical consideration is the yearly fluctuation in available faculty positions. Faculty jobs are often filled in the year they are advertised, and it may be worth pursuing an opportunity that is an excellent "fit" in terms of research focus, geographical location, or type of institution. Similarly, given that the market for tenure-track positions is competitive, many trainees give themselves two or more years to apply for academic faculty positions instead of waiting until the end of postdoctoral training. This may mean that the trainee applies for faculty positions in the middle of postdoctoral training. Finally, trainees who have a strong record of research productivity by the end of their predoctoral internship may not need the "boost" provided by additional research time within postdoctoral training. In this case, the financial and other personal benefits (e.g., not having to relocate for postdoc) of securing a faculty position may outweigh the potential benefits of further research training provided by postdoctoral training.

Ultimately, you must decide how each of these factors affects your personal and professional goals. Whatever path you take next will likely entail some level of personal or professional sacrifice. For example, some trainees may be unable to relocate for a postdoctoral specialty training position because of a variety of personal factors, such as limitations in the geographic flexibility of a partner's job, the impact of losing extended family supports, financial obligations, or a need for an income that is consistent with their stage of adult development (e.g., purchasing a home). Yet other trainees may decide to pursue advanced training because their partner's career is relatively mobile or they are less financially constrained. Potential variations of this scenario are endless, illustrating that the particular sacrifice that any one person is able or willing to make is highly idiosyncratic. Those considering postdoctoral training may wish to rate the relative importance and flexibility of their family, social, relocation, financial, and developmental needs/goals and compare these ratings to the perceived importance of postdoctoral training to their career goals, a subject we turn to next.

4. Is Postdoctoral Training Right for You?

The question of whether postdoctoral training is the right thing for any one person depends on their unique constellation of professional and personal goals, needs, and constraints. One strong reason to pursue a postdoc is to obtain specialized training that will make you more marketable in the future. Less ideal, but nonetheless

compelling, reasons include the absence of other job offers or the need to obtain another year of supervised experience to qualify for the licensing exam. It is important to keep in mind how the postdoc fits with your overall training and career goals. Rather than accepting a position simply because of its availability, we suggest using Tables 25.2 and 25.4 to assist with ranking the relative importance of the potential benefits and pitfalls for your particular situation. At this point, you may feel uncertain about your particular motivations for considering postdoctoral training, and this may indicate some uncertainty about your goals. As part of professional development, it is appropriate for trainees to discuss the various pros and cons with mentors. Think broadly when considering possible mentors with whom to consult, as mentors may be available through graduate programs, internships, or professional organizations that offer opportunities to seek guidance from experts in the field. Silberbogen et al. (2018) provide a range of discussion topics and questions that trainees and educators can utilize to guide potential discussion.

5. Identifying the Right Postdoctoral Position for You

If you have made the decision to pursue postdoctoral training, you must next locate, apply for, and evaluate potential positions. Although there has been a movement toward coordination of the psychology postdoctoral application process (i.e., UPPD), there is still considerable heterogeneity in postdoctoral training options and variability in the recruitment and selection process (Bodin et al., 2018). For example, there is variability when announcements begin to appear for various types of postdoctoral training experiences (i.e., grant-funded research-focused positions may advertise earlier than clinically focused positions). It is typical that announcements for postdoctoral fellowship positions often begin in early fall, but they may continue into the early winter months. For applicants aiming to transition immediately from a predoctoral internship to postdoctoral fellowship, it is important to be thinking about postdoc applications shortly after beginning internship. By the time that postdoctoral fellowship advertisements are available, you should already have defined and prioritized your training goals as well as any geographical, institutional, structural, or financial needs and constraints. These considerations will allow you to eliminate positions that do not meet your “must-have” criteria. We advise you to first establish what issues you cannot compromise on, gather the information necessary to assess whether programs meet your most basic demands, and eliminate positions accordingly. Keep in mind that no single position is likely to meet all of your conditions. You may wish to consider investigating and even applying to a range of programs that vary in their fit to your other, less critical, goals to maximize your range of options. Although postdoc positions are posted throughout the year, the vast majority of applications are due between December and March, so it is important to begin the process early (Forand & Applebaum, 2011).

5.1 Locating Potential Positions

There are a variety of ways to locate potential postdoctoral positions. One good starting place may be talking with your predoctoral internship training director and graduate program director of clinical training. In addition, the UPPD, which was developed out of recommendations from the APPIC Postdoctoral Training Summit held in 2016, serves as an excellent resource. The UPPD includes all postdoctoral APPIC members; however, in order to be listed in the UPPD a postdoctoral fellowship site does not have to be APA-accredited or an APPIC member. Currently, the Directory includes over 1000 postdoctoral fellowships, with the ability to search according to a variety of preferences, including emphasis or focus area (e.g., assessment, health psychology) and amount of research time. Applicants should be aware the UPPD does not “vet” programs, so applicants should evaluate the quality of individual programs accordingly. Also, unlike predoctoral internship, the UPPD is not set up to facilitate a matching process. As mentioned previously, not all postdoctoral fellowship opportunities are listed within the UPPD. For example, applicants searching for heavily research-focused postdocs or university-based fellowships may find that some opportunities (e.g., investigator-funded postdocs) are not listed. Information about the UPPD can be found at: www.appic.org/Postdocs/Universal-Psychology-Postdoctoral-Directory-UPPD.

Information about various types of postdocs, including investigator-funded positions, is frequently distributed through relevant professional organizations, such as the American Psychological Association, American Psychological Society, and Association for Behavioral and Cognitive Therapies, or their specialty divisions. Organizations may also advertise for postdoctoral positions in their professional publications, such as the *APA Monitor*, *APS Observer*, and *the Behavior Therapist*, and can be accessed on the organizations’ websites (www.apa.org, www.psychologicalscience.org, and www.abct.org). Neuropsychology focused trainees are advised to utilize the Society of Clinical Neuropsychology (APA Div. 40) website (<https://scn40.org/>) as well as the Association of Postdoctoral Programs in Clinical Neuropsychology (<https://appcn.org/>). Positions may also be posted on job sites such as the Chronicle of Higher Education website (<http://chronicle.com>) or psychcareers.org. There are also other structured and formal training programs that, while not listed in the APPIC directory, may offer comparable experiences. Similarly, professional societies and organizations may be a good resource for postdoc opportunity announcements in your desired area of specialty training. For instance, the Society for Pediatric Psychology or other APA division listservs frequently offer such announcements. Silberbogen and colleagues’ 2018 publication also provides advice on searching for postdoctoral positions.

Although published announcements are an excellent reference, many opportunities are never advertised and are made known through word of mouth or email on professional list serves. For this reason, direct emails to specific persons with whom you might like to work can be a profitable means of identifying potential postdoctoral mentors. This type of networking might include contacting members of your graduate

dissertation committee to see if they can recommend (and potentially even put you in touch with) potential postdoc mentors who would be a good fit for your interests and goals. Don't be timid about using your professional relationships to network! In addition to email, setting up a meeting via videoconference (e.g., Zoom) may be a helpful way to connect with a potential postdoctoral mentor. Similarly, communicating with internship advisers about who they know might also yield additional leads. Several internet groups have also formed for new or soon-to-be new graduates. Some of these member groups offer forums for discussions about professional development and even share announcements for postdoctoral and professional positions. The APPIC "Postdoc-News" e-mail list serves as a source of information about postdoctoral programs listed in the Universal Psychology Postdoctoral Directory and can be joined by sending a blank email to: subscribe-postdoc-news@lyris.appic.org. If looking for an investigator-funded research postdoc, you can search the NIH Reporter website (<http://projectreporter.nih.gov/reporter.cfm>) for researchers who have recently received funding in your research areas and then email these individuals to see if there may be open postdoc positions (Forand & Applebaum, 2011).

Finally, particularly for those applicants interested in a research-oriented position, it may be worthwhile to look into funding your own postdoctoral fellowship through training grants offered by NIH or other professional organization. Information about NIH fellowships, such as the NIH F32 National Research Service Award training fellowships can be found at the following website: <https://researchtraining.nih.gov/programs/fellowships>. Private foundations also serve as a potential source of independent funding. As an example, the American Foundation for Suicide Prevention (AFSP) offers a two-year Postdoctoral Fellowship Research Innovation Grant (see <https://afsp.org/research-grant-information>). Independently funded fellowships require that you write a grant application and be competitively reviewed in order to receive funding. A critical step in this process is to identify a mentor who can assist you in the application process. Further, it is essential to set aside several months to complete the application process and be aware of the individual grant timeline. For example, the AFSP Postdoctoral Fellowship application is due mid-November, which would require identifying a potential mentor and beginning the application process well in advance of this deadline. Additionally, some grant applications may need to go through several review cycles (i.e., revised and resubmitted) before a final decision is made about funding.

6. Diversity-Related Considerations

Trainees who have an interest in working with a diverse clinical or research population or are themselves from a diverse or underrepresented background may also want to consider these factors when applying for and selecting a postdoc position. Broadly defined, diversity in a clinical or research population could include such factors as racial/ethnic minority status, age, socioeconomic status, religion, sexual orientation, disability, or gender. Thus, an individual who is interested in conducting health disparities research with a particular population (e.g., American Indian and

Alaska Native populations) may want to consider applying for postdoc positions in an area where this population can be recruited. Trainees from diverse backgrounds and/or those who are interested in working with diverse populations may be able to locate unique postdoctoral opportunities through the APA Minority Fellowship Program. For example, the Postdoctoral Fellowship in Mental Health and Substance Abuse Services, funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), is geared toward trainees committed to a career in behavioral health services or policy related to the psychological well-being of communities of color. Applicants are not required to come from a community of color; however, trainees from ethnic/racial minority applicants are “especially encouraged” to apply www.apa.org/pi/mfp/psychology/postdoc/index. In addition, the NIH funds competitive Research Supplements to Promote Diversity in Health-Related Research. These Research Supplements are designed to enhance the diversity of the research workforce by recruiting and supporting trainees from groups that have been underrepresented in health-related research (<https://grants.nih.gov/grants/guide/pa-files/PA-21-071.html>).

7. Application Procedures and Guidelines

Application requirements will vary. Some positions may require only your curriculum vitae and letters of recommendation, while others might also ask for a written statement of purpose or job talk. Likewise, interviews can range from informal email and phone correspondence to virtual, videoconference-style interviews to extensive multi-day in-person interviews. For some of the more research-oriented positions, you may be asked to give a presentation (“job talk”) to showcase the progression of your research. This can be an excellent opportunity to begin building your presentation skills, especially if you plan to go on the academic job market. We advise you not to make any assumptions about these matters and to ask each institution about specific application procedures early in the process.

Clinical psychologists should note that the application for postdoctoral fellowships is somewhat different than that for predoctoral clinical internships. Postdoc applications, more than internship applications, should be tailored to specific positions and mentors and should emphasize your most relevant experiences. Those reviewing your application will want to know that you understand how the experiences they offer fit with your career goals, are prepared for this next level of specialization, and have valuable skills to offer. These points should be clearly conveyed in your cover letter and you should tailor your curriculum vitae accordingly. For instance, those applying for a postdoctoral position emphasizing clinical research might want to elaborate on their research experiences (including publications), including their clinical work as experiences that have informed a research agenda. However, those applying for specialty training in particular areas of clinical practice might want to elaborate on the nature of their clinical experiences and list relevant research training and publications toward the end of the curriculum vitae.

Similarly, personal references should be able to speak to the skills that are most relevant for the type of position to which you are applying. You should prepare to have at least three people submit letters of recommendation on your behalf for any position to which you apply. Clinical supervisors and research professors are often asked to write such letters. Although your choice of letter-writers will partly depend on the type of postdoctoral training positions to which you apply, you should be sure that whomever you ask will write a very positive recommendation. If you are uncertain, you should reconsider your choice of writers or, in the absence of other alternatives, discuss this concern with your writer directly. Wherever possible, find writers who not only know you, but who are known and trusted to those reviewing your application, as such letters may carry extra weight. It may also be helpful to ask writers to personally address the director or agency in your letter instead of the generic salutation of “to whom it may concern.” Letter-writers might also be asked to address any circumstances in your application that may be looked upon unfavorably. For example, a letter writer may address a low number of first-author publications by speaking to the applicant’s success in carrying out research independently or contributing heavily to co-author publications. Of course, some potential signals may not be correctable (e.g., incompletes), in which case, you may wish to address these matters directly in your application letter or during an interview. For those applying to APPIC-sponsored programs, there is an online applicant portal that provides coordinated review (APPIC Psychology Postdoctoral Application Centralized Application System, or APPA CAS).

Interviews vary in format, formality, and length, so you should inquire about each position in advance so that you can sufficiently prepare. Whatever the format, interviews provide additional opportunities to convince potential supervisors that you are the person they want to hire. Most sites do not reimburse applicants for travel expenses associated with in-person interviews. However, the experience of remote (i.e., videoconferencing) interviewing that occurred during the COVID-19 pandemic will make remote interviews increasingly common. Consider consulting material which explains how to present yourself optimally when you take part in virtual interviews.

The following suggestions may assist you in presenting yourself as a competent, interested candidate who matches well with the position and program.

- Read the materials sent to you and consider the fit between the position and your career goals so that you may demonstrate your knowledge of the program.
- Be prepared to discuss your work to date in the context of the position you are seeking. For example, if you are seeking training in a new or specialty area, be prepared to discuss ways in which this area is either an extension of your previous work or taught you relevant skills for this new area.
- Prepare a couple of questions that you can ask about the program that were not addressed in the materials sent to you.
- Listen closely to the interviewer and avoid overly personal disclosures.

- As the interview closes, ask whether there are any questions about your application.
- Write a thank you email note summarizing your interest in the program and its fit with your training goals, and include a paragraph that corrects any misconceptions or potential shortcomings that may have arisen during the interview.

7.1 Evaluating Potential Postdoctoral Opportunities

As previously stated, the needs and goals of various postdoctoral training positions may range from well-funded programs at institutions committed to training and high-quality services to sites where postdoctoral fellows are little more than inexpensive labor and clinical service is prioritized over training needs. It is your job as the applicant to assess where on this spectrum a potential position falls. The following considerations may be helpful in making this determination:

- Is the position organized around the trainee's or institution's needs?
- What are the clinical demands in terms of billable hours or direct patient care required?
- What is the supervisory structure?
- How satisfied are current postdocs?
- Are there formal didactics in place?
- How many hours are dedicated to individual and group supervision?
- Are there a sufficient number of clinical hours built in to meet licensure requirements?
- How much time is protected for research activities? (One-year postdocs are not ideal for individuals interested in improving their research portfolios, as there is a relatively small amount of time to collect data and publish prior to beginning a job search.)
- How many licensed psychologists are available for training and supervision?
- What is the stipend?
- Is medical insurance offered and at what charge to the postdoc? Are spouses and children eligible for coverage?
- How much time is allowed for vacation, sick leave, parental leave, and professional leave?
- Is there a possibility of being hired within the institution after completion of postdoctoral training?
- Does the site offer access to your specific population of research/clinical interest? For example, if you are interested in studying/treating mental health sequelae of trauma/immigration, it would be helpful if the institution is connected to a refugee center.

Information relevant to these questions may be obtained in a variety of ways. Read all program descriptions on the website carefully, attending to the stated training goals and agency mission (Koocher, 1997). Take note of whether the

program and agency promote themselves as a training site or talk about their educational mission. Review all listings of supervisory staff, their interests and career paths to assess their fit to your particular training interests and needs. For example, a program staffed by well-published, faculty-appointed psychologists will probably offer different training than a staff of experienced direct-service providers. Although one is not necessarily better than the other, one may provide a better fit to your training needs.

7.2 Evaluating Potential Postdoctoral Mentors

Most postdoctoral fellows work with a mentor who takes primary responsibility for the postdoc's training program and with whom the postdoc works most closely. Choosing a mentor can be an important part of the decision process. For applicants interested in further developing their scholarly skills, it is especially important to seek out a postdoctoral fellowship that includes identification of a research mentor and structured mentorship plan, as this has been shown to increase the likelihood of success in outcomes, such as submission of peer-revised manuscripts (Williams et al., 2018). Both the mentor's prestige and mentoring abilities should be considered in balance. Ideally, you should select a mentor who is an expert and productive in your area of interest. It is desirable to arrange a personal meeting with a prospective mentor, or at least a series of phone/virtual conversations. It is important to consider the potential mentor's management style and how this style may fit with your own needs and preferences. Talking with current or former postdocs who have worked with that person and organization can also be quite helpful. Your communications with potential mentors and other informants should answer most, if not all, of the following questions.

- What are the mentor's expectations of the postdoc?
- Will the mentor or the postdoc determine the content of the training program?
- How many postdocs has this mentor had? What positions did they obtain after the postdoc?
- What do former and current trainees of this mentor think about their experience?
- Will the mentor have sufficient time for mentoring or will it be necessary to seek out other mentors?
- How many others (grad students, staff, postdocs) now work for this mentor?
- How many papers are being published? Where are they being published?
- What are the mentor and institution's policies on travel to professional meetings? (e.g., Is the trip only paid for by the institution if you present a paper? If so, how many trips are covered?)
- What is the mentor's policy on authorship and ownership of ideas?
- If you value a collaborative approach to research, does the mentor share this view? Does the mentor have lasting productive collaborations with other

faculties? Will the mentor support you in developing new collaborations within the department?

- Is there time and opportunity to develop skills in grant writing, teaching, oral presentations, manuscript preparation, manuscript review?
- Can you expect to collect data or be a part of data analyses or manuscript preparation after completion of the postdoc?
- How are issues of authorship negotiated for projects where data collection extends beyond the postdoc's tenure?
- How long is financial support guaranteed? On what does renewal depend?
- Can you count on assistance with locating and obtaining your next position?

Finally, it is important to acknowledge that there are numerous ways that mentors can provide guidance. In addition to primary research or clinical content areas, these domains may include: scientific methods and publication, professional development, funding, identification and development of goals, work/life balance, specific skills (e.g., how to give a talk), prioritizing and time management, strategizing for promotion and advice on relevant departmental/institutional policies. Another important role of mentors, senior mentors in particular, is sponsorship (i.e., using one's position to intentionally influence the advancement of mentees). For example, contacting other professionals to advance the research ideas of mentees or connecting them with a nationally known researcher to advance their research. It is likely that no one mentor will be able to provide guidance in all of these potential areas. Thus, there may be advantages to postdoctoral training structures that provide opportunities to work with more than one mentor, even when a primary mentor is clearly identified.

7.3 The Final Decision

If you are considering several postdoctoral options, your final decision may not be an easy one. The APPIC Postdoctoral Committee's Postdoctoral Selection Guidelines (APPIC, 2021b) serves as a helpful guide for both programs and applicants by setting forth a timeline for the notification/selection process, including a Uniform Notification Date (UND). In addition, the APPIC Postdoctoral Committee has made available several resources, including graphic timelines for postdoctoral selection with different timelines for clinically focused, neuropsychology, and research-focused programs (www.appic.org/Postdocs/Selection-Resources/Timelines-for-Postdoctoral-Selection). A growing number of clinically focused programs appear to be adhering to the UND. As recently as 2019, 85 percent of clinically focused programs within the UPPD said they would adhere to the guidelines (APPIC, 2021a). However, it is important to be aware that not all programs adhere to the APPIC UND for postdoctoral positions. For example, research-focused positions may be less likely to adhere to the UND. This may occur for a variety of reasons (e.g., the postdoc may be grant funded and the grant cycle may not align with the UND). It is also important to keep in mind that although the UPPD is meant to be a "go-to" place to find psychology postdoctoral fellowships, many postdoctoral training

opportunities are not listed in the UPPD and thus may not follow the UPPD UND guideline. In addition, within neuropsychology, many but not all postdoctoral training fellowships participate in the Association of Postdoctoral Programs in Clinical Neuropsychology match. The variation in notification dates may lead to applicants feeling that they should accept an expiring offer from a lower-choice program when they are waiting to hear back from a more preferred program. APPIC has recently provided guidance to applicants who receive an offer, before the UND, from a postdoctoral training program that is not their first choice. In this situation, APPIC's (2021c) *Reciprocal Offers: Dos and Don'ts for Applicants and Postdoctoral Training Directors* document advises applicants that they can "Request to hold the offer from the program that made the early offer until the UND or a shorter hold period" and "Request a reciprocal offer from (their) top ranked program." Applicants may find it useful to review the APPIC website (www.appic.org/Postdocs) for additional guidance on the subject of navigating the reciprocal offer process (APPIC, 2021b).

When making a final decision, it may be helpful to revisit your prioritized list of benefits and drawbacks in light of the specific positions you are considering, although you may find that some of your priorities have changed. Be sure to gather enough information to adequately assess what you and your potential mentor(s) each expect from one another and the experience of working together. You should have a rough "roadmap" of expectations and goals that seem appropriate to your position and overall career objectives. Once you accept a position, use this roadmap as the basis for outlining a more specific training and work program with your new mentor/supervisor.

7.4 Accepting a Position

Although it is typically difficult to negotiate aspects of a postdoctoral fellowship, such as salary and benefits, there may be aspects to the fellowship that can be modified. For example, a trainee accepting a research-focused position may desire to accrue clinical hours toward licensure and may wish to clarify whether this opportunity exists. Before accepting a position, many applicants also wish to ask about factors, such as sick/vacation time and parental leave. Information about these can sometimes be found on the human resources website. After accepting a position, you should expect to receive an appointment letter stating the basic contractual framework for your appointment, including your title, the sponsoring institution or department, the beginning and ending dates, stipend level, and benefits received.

8. What to Expect During your Postdoctoral Fellowship

Postdoctoral positions vary widely along a number of different dimensions; however, there are some underlying similarities in the experiences encountered and the responsibilities taken on. The primary intention of the postdoctoral experience should be to provide a period of apprenticeship for the purpose of gaining professional skills that advance one's professional career. Because the primary function of the postdoctoral fellowship is educational, you have the right to expect mentoring

that includes oversight, feedback, consultation, and periodic evaluations. Ideally, you will have ample opportunity to learn relevant skills that will further your career. The mentoring relationship can be important to helping you understand the context of your work and the requirements of your chosen career path. However, both the postdoc and mentor share the responsibility for making this relationship work through frequent and clear communication.

In order to maximize the training experience, new postdocs should arrange to meet with their mentors early on to further clarify the “training roadmap” discussed during the application and interview process. The postdoc and mentor should come to some agreement about the work products or experiences that will further your training goals, the timeline for these accomplishments, the extent of collaboration between fellow and mentor, the form that collaboration will take, and the type and frequency of supervision. You and your mentor should jointly appraise this roadmap, especially your professional goals, once or twice yearly for the purpose of evaluating your performance and updating your goals as you develop in your position.

For many, the postdoctoral training period serves as a developmental transition period from “professional adolescence” to “professional young adulthood” in which the developmental task is to create a more coherent and integrated sense of professional self that is separate from one’s mentors and supervisors (Kaslow et al., 1992; Talmi et al., 2015). Early in this process, postdoctoral trainees must create and define their roles within their new position and fulfill their new responsibilities with increased autonomy. Those in more structured programs may focus more on their responsibilities while those in less-structured programs may expend more effort in defining their experience. According to Kaslow et al. (1992), the most common difficulties encountered by postdocs at this early stage are associated with role functioning in multidisciplinary settings and negotiating autonomy and status issues. Training practices that help obviate or overcome such difficulties include the creation of individualized training plans that outline key professional competencies to be fostered in training. Working with mentors to track professional development across multiple domains and promote developmental progression within domains allow postdocs to develop, evaluate/course-correct, and internalize the necessary confidence and skills to become increasingly autonomous in their roles (Drotar et al., 2015; Palermo et al., 2014; Talmi et al., 2015).

In the middle phases of postdoctoral training, professional identity solidifies and commitment to one’s work deepens. Having resolved concerns about where they fit in, postdocs at this phase begin to carve out their own unique role in their setting. More aware of their professional strengths and weaknesses, postdocs often begin to pursue their professional goals more actively and with greater commitment. The end of postdoctoral training signals a move toward greater independence and the termination associated with both the postdoc and the end of one’s formal training may give rise to a new set of professional concerns. Concerned mentors can be helpful not only by supporting the postdoc find the next position but also by supporting the postdoc through this termination process.

9. Final Words

The goal of this chapter was to provide information on the various issues related to determining whether postdoctoral training is right for you and understanding how to obtain a fellowship that meets your personal and professional needs. Toward this end, we reviewed advantages and disadvantages of pursuing postdoctoral training as well as other considerations in the decision-making process on whether to pursue a postdoctoral position. For those who might wish to seek such training, we articulated steps for locating, applying for, evaluating, and securing a suitable fellowship. Navigating the postdoctoral search and decision-making process is complex, and we hope that this chapter provided a sufficient overview of postdoctoral training such that readers will be able to better weigh personal and professional considerations and arrive at the best decision for their situation.

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1. Introduction

If you are pursuing a graduate degree in psychology, you probably know about job opportunities for practitioners or psychology faculty. Indeed, these are among the most common occupations for psychology graduate degree holders. What you may not know is the versatile range of jobs beyond health care and academia available to psychology degree holders. Psychology knowledge is important across many occupations (National Center for O*NET Development, 2020), even those that are seemingly unrelated to psychology, such as video game designers, real estate sales agents, and chief executives.

This chapter provides an overview of employment trends in the field of psychology. First, we address employment characteristics, such as top occupations, work activities, and how related the job is to the field of psychology for those who hold doctorates and master's degrees in psychology. We provide more detailed information for the health service psychology workforce, the academic psychology workforce, and a brief description of salary benchmarks. Second, we discuss skills and traits used in psychology jobs, such as communication, leadership, and teamwork. We give examples of "essential" skills, the broad set of skills that are common to the performance of all jobs. Third, we explore demographic characteristics of the workforce as a whole with attention to shifting trends that will better position psychology to respond to the needs of diverse communities. We also include special analyses on early career health service psychologists, those within 10 years of earning their doctorates. Fourth, we address future directions, such as an anticipated greater role of technology, opportunities for applied psychology, and opportunities to address equity issues. Finally, we conclude with resources and recommendations to use in the career exploration process.

2. Employment Characteristics

One of our main data sources is the National Survey of College Graduates (NSCG), a nationally representative survey of individuals in the United States with at least

a bachelor's degree. NSCG is conducted every two years by the National Center for Science and Engineering Statistics at the National Science Foundation. Using data from this survey, we analyzed major employment characteristics of individuals holding degrees in psychology by level of their highest degree, including occupations, employment rates, primary work activities, and more.

2.1 Doctorate Degree Holders

In 2017, 82 percent of psychology doctorate holders were employed, while 15 percent were not in the labor force (for reasons such as school, illness, or retirement) and only 2 percent were unemployed (APA, 2018a). Of those who were employed, 79 percent were employed full-time while 21 percent were employed part-time. Psychology doctoral holders worked in 61 of 129 occupational categories (APA, 2018a). About half (47 percent) of psychology doctorate holders were employed in two occupations: psychologists (including clinical and counseling psychologists, school psychologists, industrial/organizational psychologists, and other types of psychologists) and postsecondary teachers of psychology/psychology professors. The remaining half was employed in a range of occupations (Table 26.1, Figure 26.1).

There are two clusters of occupations worth highlighting. The first cluster is leadership or management occupations, such as top-level managers, executives, and administrators, education administrators, medical and health services managers, other mid-level managers, and other management-related occupations. The second cluster is professors or postsecondary teachers in fields other than psychology, such as education, mathematics and statistics, computer science, business, other social sciences, and health and related sciences. Collectively, these postsecondary teacher categories represent the third most common occupation for psychology doctorate

Table 26.1 *Top 10 occupations of psychology doctorate degree holders*

Occupation	Estimated count	% of total estimated count
Psychologists	89,200	39
Postsecondary teachers: Psychology	17,700	8
Counselors	7,600	3
Top-level managers, executives, administrators	7,500	3
Other management related occupations	7,300	3
Postsecondary teachers: Education	6,100	3
Medical and health services managers	5,200	2
RNs, pharmacists, dieticians, therapists, physician assistants, nurse practitioners	3,500	2
Personnel, training, and labor relations specialists	3,400	2
Other service occupations	3,200	1

Source: APA. (2018a). *Careers in psychology*. [Interactive data tool.]

holders; they also represent about one third of psychology doctorate holders who work as professors.

To take a broader look beyond occupation titles, we also analyzed primary work activity and work sector to show the types of work psychologists do in their day-to-day jobs. The majority of doctorate degree holders performed professional services as their primary work activity (52 percent; APA, 2018a), a category which includes health care, counseling, financial services, and legal services. Professional services was followed by research (15 percent), teaching (15 percent), and management (12 percent) as the other top primary work activities. The most common work sectors were educational institutions (35 percent) and self-employment (30 percent). Smaller percentages of individuals with psychology doctorates reported working in private for-profit (14 percent), private non-profit (11 percent), and government (10 percent) work sectors. Many of these work sectors are ones you may expect (self-employed private practitioners or academia), while others are less obvious. Within these sectors, psychology doctorate holders may find employment at a variety of organizations, such as pharmaceutical companies, tech companies, organizations that provide social and community services, private research centers, policy-related organizations, and federal agencies.

You may suspect that being employed in such a wide spread of occupations, work sectors, and work activities would result in less use of psychology in their jobs. On the contrary, the vast majority (97 percent) of psychology doctorate degree holders reported that their job was related to psychology (APA, 2018a). Furthermore, 85 percent reported that their job was closely related to psychology (85 percent). These findings suggest that there are many ways to use psychology education at work.

2.2 Master's Degree Holders

In 2017, 76 percent of psychology master's degree holders were employed and only 3 percent were unemployed, while 21 percent were not in the labor force (APA, 2018a). Of those who were employed, 74 percent worked full-time and 26 percent were employed part-time. Psychology master's degree holders worked in 74 of 129 occupational categories (APA, 2018a). The top occupations form a cluster of practitioners, including counselors, psychologists (by occupation and not necessarily by licensure status), and social workers. Collectively, these three practitioner occupations represented about one third (35 percent) of psychology master's degree holders (Table 26.2 and Figure 26.2).

As expected, the most common primary work activity was professional services (49 percent; APA, 2018a). A notable finding was that the second most common activity was management (21 percent), further supporting the role of psychology in leadership. Work sectors for master's degree holders varied, with most working in educational institutions (33 percent), followed by private for-profit (20 percent), self-employment (20 percent), private non-profit (17 percent), and government

Table 26.2 *Top 10 occupations of psychology master's degree holders*

Occupation	Estimated count	% of total estimated count
Counselors	138,200	22
Psychologists	61,300	10
Social workers	28,300	5
Teachers: Special education – primary and secondary	19,900	3
Personnel, training, and labor relations specialists	16,700	3
Other management related occupations	15,000	2
Teachers: Elementary	14,100	2
Accountants, auditors, and other financial specialists	13,600	2
Other service occupations	13,200	2
Top-level managers, executives, administrators	12,500	2

Source: APA (2018a). *Careers in psychology*. [Interactive data tool.]

(10 percent). Similar to psychology doctorate holders, psychology master's degree holders work in a wider variety of organizations than you may expect.

A high proportion of psychology master's degree holders reported that their master's degree was somewhat or closely related to psychology (89 percent; APA, 2018a). Furthermore, 70 percent reported that their jobs were closely related to psychology. Given the breadth of occupations, work settings and work activities performed by psychology master's degree holders, this demonstrates the versatility and broad application of psychology in the workforce.

2.3 Trends in the Health Service Psychology Workforce

Approximately 102,000 individuals in the United States hold doctoral-level psychologist licenses (Lin et al., 2020). The 2015 APA Survey of Psychology Health Service Providers (APA, 2016a) explored the employment characteristics of licensed psychologists. Most psychologists worked in private practice as their primary employment setting (45 percent), hospitals and organized human service settings (24 percent), and education settings (19 percent; APA, 2016a; Figure 26.3). In terms of work hours and work activities, licensed psychologists reported a mean of 36 work hours per week in their primary position with a median of 40 hours per week (APA, 2016a). They spent the most time on direct services (mean = 18.4 hours per week, median = 20 hours per week; APA, 2016a). This indicates that about half of health service psychologists' work activities fall under health services. The most common primary specialty areas included clinical psychology (45 percent), clinical child and adolescent psychology (16 percent), and counseling psychology (9 percent; APA, 2016a). In looking at trends over time, most practice patterns in the 2015 survey were comparable with those found in the 2008 survey of health service psychologists (Michalski & Kohout, 2011).

The health service psychologist workforce exhibits differences in primary work setting by career stage. Career stage was defined as early career (1–10 years

Architects
 Diagnosing/treating practitioner
 Postsecondary Teachers: Education
 Teachers: Pre-kindergarten and kindergarten
 Civil, including architectural/sanitary engineers
 Sales: Commodities except retail
 RNs, pharmacists, dieticians, therapists, physician asst, nurse practitioners
 Other engineers
 Medical scientists
 Architects
 Other health occupations
 Transportation and material moving occupations
 Postsecondary Teachers: Education
 Marketing and sales occupations
 Construction and extraction occupations
 Computer support specialists
 Other teachers and instructors
 Other religious workers
 Teachers: Elementary
 Other mid-level managers
 Clergy and other religious workers
 Postsecondary Teachers: Art, Drama, and Music
 Accounting clerks and bookkeepers
 Other administrative occupations
 Postsecondary Teachers: Mathematics and Statistics
 Web developers
 Top-level managers, execs, admins
 Teachers: Special education - primary and secondary

Psychologists Counselors
 Other computer information science occupations
 Computer system analysts
 Other social scientists
 Sociologists
 Sales engineers
 Postsecondary Teachers: Psychology
 Sales- retail
 Software developers - applications and systems software
 OTHER OCCUPATIONS
 Social Workers
 Personnel, training, and labor relations specialists
 Accountants, auditors, and other financial specialists
 Other service occupations
 Computer engineers - software
 Teachers: Secondary - other subjects
 Medical and health services managers
 Teachers: OTHER precollegiate area
 Teachers: Secondary - social sciences
 Writers, editors, PR specialists, artists, entertainers, broadcasters
 Education administrators
 Secretaries, receptionists, typists
 Food preparation and service
 Protective services
 Teachers: Secondary - computer, math or sciences
 Precision/production occupations
 Installation, maintenance, and repair occupations
 Postsecondary Teachers: Computer Science
 Postsecondary Teachers: OTHER Social Sciences
 OTHER mathematical scientists
 Health technologists and technicians

Figure 26.2 Occupational categories for psychology master's degree holders.
 Source: APA. (2018a). *Careers in psychology*. [Interactive data tool.]

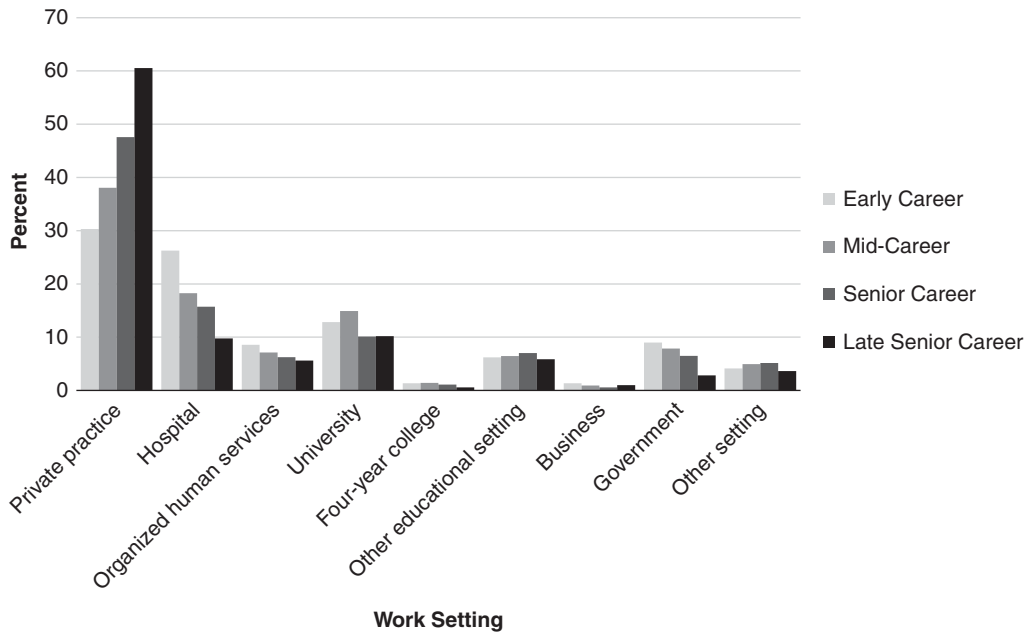


Figure 26.3 Primary position work settings by career stage.
 Source: APA (2017). *Career stages of health service providers: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*. Copyright © 2017. American Psychological Association. All rights reserved.

post-doctorate), mid-career (11–20 years post-doctorate), late career (21–30 years post-doctorate), and late senior career (more than 30 years post-doctorate). Generally, earlier career psychologists were more likely to work in hospitals and organized human service settings, whereas later career psychologists were more likely to work in private practice (APA, 2017). It is uncertain whether these shifts represent typical career pathway patterns in which psychologists start out in hospitals and organized human service settings and then move into private practice at later career stages or whether the shifts represent differences in employment patterns corresponding to the changing nature of healthcare delivery and an increased emphasis on integrated care. It is probable that both patterns influence these shifts; further research will continue to address this topic.

2.4 Trends in the Academic Psychology Workforce

In 2019, approximately 29,300 psychology research doctorate holders worked in faculty positions (APA, 2019a). The majority (70 percent) worked in four-year colleges, and top primary work activities included teaching (45 percent) and research (33 percent). For those working as postsecondary teachers/professors, the majority (69 percent) were psychology professors, while the remaining 31 percent worked as professors in other fields such as education, other social sciences, and health fields.

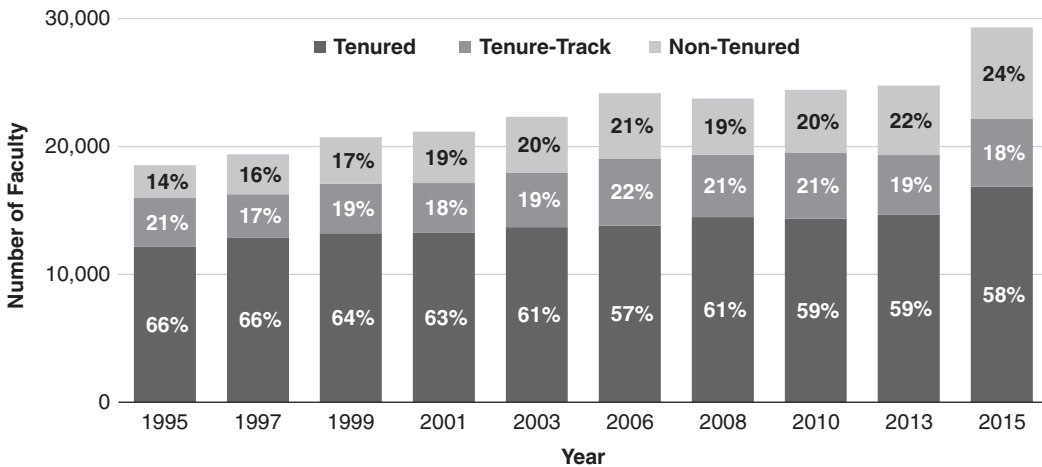


Figure 26.4 The academic psychology workforce by tenure status, 1995–2015.

Source: APA. (2019a). *The academic psychology workforce: Characteristics of psychology research doctorates in faculty positions (1995–2015)*. Copyright © 2019. American Psychological Association. All rights reserved.

Note: Percentages may not add up to 100 percent due to rounding.

This finding is important because it highlights that psychology is interdisciplinary and connects to many other fields. About 4600 (16 percent) faculty worked in leadership positions (e.g., provost, dean, chair). Between 1995 and 2015, female representation among faculty increased from 37 percent to 53 percent, and racial/ethnic minority representation among faculty increased from 8 percent to 22 percent.

The proportion of tenured/tenure-track positions has been shrinking during the past two decades. In 2015, approximately 76 percent of the academic psychology workforce held tenured/tenure-track positions and 24 percent held non-tenured positions. Over the last two decades, the number of faculty in tenured/tenure-track positions increased by 39 percent, whereas the number of faculty in non-tenured positions increased by 179 percent. The proportion of tenured/tenure-track positions decreased from 86 percent to 76 percent between 1995 and 2015, while the proportion of non-tenured positions increased from 14 percent to 24 percent (Figure 26.4).

2.5 Salary Benchmarks

Not surprisingly, median salaries increase as degree level increases. Using the 2017 National Survey of College Graduates (NSF, NCSSES, 2019), we identified salary benchmarks for psychology master's and doctorate degree holders. In comparison to the median salary for psychology bachelor's degree holders (\$50,000), psychology master's degree holders earned a median salary of \$60,000, representing a 20 percent increase above the median salary for psychology bachelor's degree holders. The salary premium was larger for psychology doctorate holders, who earned a median

salary of \$86,000. This represented a 72 percent increase above the median salary of psychology bachelor's degree holders and a 43 percent increase above the median salary of psychology master's degree holders.

3. Skills and Traits in Psychology Jobs

In general, jobs require both deep expertise in a specialized area (that may correspond to a psychology subfield, a specialized population, specific technical knowledge, or some other narrowly defined area) and a broad set of essential skills. What exactly are essential skills? Essential skills are universally required in the performance of every job across labor markets. Typically, these skills include communication, leadership, and teamwork, among other areas. Essential skills are common to all jobs, and these skills can carry over from one job to another. They are also inherently human and based in behavior; by extension, essential skills have a foundation in psychology. Although the exact combination of deep expertise and essential skills needed for a job will vary depending on the specific requirements of the job, the universal nature of essential skills is important to recognize. For example, in jobs posted during the COVID-19 pandemic from March to July 2020, the top six essential or "human" skills included: communication, management, leadership, problem solving, teamwork, and critical thinking (Emsi, 2020). In fact, 84 percent of these job advertisements included at least one of the top six "human" skills listed above (Emsi, 2020). When skills were broadened to a more expansive list of all "human" skills, 100 percent of job advertisements included at least one "human" skill.

To understand skills specific to psychology jobs, including the essential skills that are valuable to performing these jobs, we conducted a series of analyses on multiple data sources in an effort to assess both the skills that psychology degree holders use in their jobs, and the skills that are most in demand among employers. The key findings are that psychology knowledge is important across a wide range of occupations, including some occupations that may be unexpected, and that essential skills like teamwork, leadership, and communication are among the most in demand on the job market.

We used three years (2015 through 2017) of job advertisements from the APA *psycCareers* job board to answer the question (APA, 2018b): What skills and traits are most important to the psychology job market? Major job types, such as health service and faculty positions, were analyzed independently, as well as in aggregate. Overall, the skills most frequently requested by employers were leadership skills, cultural awareness, and teamwork skills. The traits most frequently requested were adaptability, ethical conduct, and compassion/empathy (Table 26.3).

For health service psychologist job advertisements, which represented 48 percent of job advertisements posted, the most frequently requested skills and traits were consistent with the overall patterns, with leadership, cultural awareness, and teamwork as the top skills, and adaptability, ethical conduct, and compassion as the top traits (APA, 2018b). The second largest group of job advertisements, those for

Table 26.3 *Top skills requested in psychology job advertisements, 2015–17*

Skill (rank)	Type of job advertisement			
	Health service psychologist	Faculty	Researcher	Applied psychologist
1	Leadership	Cultural awareness	Analytical skills	Communication
2	Teamwork	Leadership	Leadership	Leadership
3	Communication	Teamwork	Communication	Teamwork
4	Cultural awareness	Analytical skills	Teamwork	Organizational skills
5	Specific language/multi-lingual	Communication	Organizational skills	Computer skills

Source: APA (2018b). *Overview of psychology job advertisements: Characteristics of psychology job advertisements on the APA psycCareers platform.*

faculty positions (37 percent of job advertisements), placed the greatest emphasis on cultural awareness, leadership, and teamwork as the top skills and ethical conduct, adaptability, and positive attitudes as the top traits. Job advertisements for researcher positions, representing 6 percent of job advertisements overall, mentioned analytical skills most frequently, followed by leadership and communication skills. The traits most frequently mentioned in job advertisements for researcher positions were independence, adaptability, and motivation. Finally, job advertisements for applied psychologists, which represented 4 percent of job advertisements overall, emphasized communication and leadership skills the most, followed by teamwork. Adaptability, ethical conduct, and independence were the most frequently mentioned traits in applied psychologist job advertisements.

In addition to our investigation of skills in job advertisements, we were interested in the skills used on a day-to-day basis, and the importance of psychology skills across occupations. We analyzed a collection of informational interviews conducted in APA's How Did You Get That Job webinar (APA, 2019b), as well as data from the O*NET database (Fleishmann et al., 2019) to answer the question: What skills do psychologists use in their jobs?

The How Did You Get That Job data set consists of text from 18 interviews with psychologists in uncommon psychology occupations (APA, 2019b). Based on the responses, the most common skills cited as being useful in day-to-day work included communication, analytical skills, and critical thinking. This was further supported by an analysis of jobs in the O*NET database, which rated the importance of psychology greater than average (2.38 out of 5). The analysis found that these occupations ranked communication skills like active listening and speaking as most important, followed by critical thinking, reading comprehension, and social perceptiveness (Fleishmann et al., 2019).

Very few data sources provide glimpses into the skills that psychology degree holders use in their jobs. Each data source has both strengths and limitations. Although the How Did You Get That Job webinar series has the strength of

targeting less-obvious career pathways, the webinar series is a small sample with a large proportion of applied psychology occupations. Similarly, although the O*NET database has the strength of including all jobs across labor markets, it does not separate occupations by degree level or type. Therefore, isolating and analyzing occupations that specifically require a degree in psychology, and the associated skills needed to perform those occupations, is not possible. Additional research is necessary in order to form a robust and complete idea of what skills psychologists use in their careers and how well their educational programs provided those skills.

Ultimately, these analyses highlight the key point that essential skills such as communication, leadership, and the ability to work on a team are critically important both on the psychology job market and in the day-to-day performance of jobs.

3.1 Examples of Essential Skills

Your psychology education is a learning experience for essential skills. Perhaps you have never thought about your education as work experience. For example, you may have gained the ability to create hypotheses, design study methods, analyze data, lead teams, synthesize literature into cohesive writing, apply science to practical problems, and generate future directions with measurable outcomes. Similarly, theses, dissertations, independent research projects, teaching, internships, practica, and graduate assistantships are all examples of relevant work experiences that build essential skills. You should give yourself credit for the essential skills you develop through those experiences. You may take your essential skills for granted or not recognize their value. You may not have learned the language to describe your essential skills. As you go into the workplace, having concrete examples that demonstrate essential skills are critical to a successful job search strategy. Indeed, essential skills are the most in-demand skills in the workplace and are highly valued by employers.

One example of an essential skill is behaviors that influence others. This is one view of leadership. For example, a leader could use individual- and situation-specific approaches by making decisions about whether to direct, coach, support, or delegate someone on their team. Leadership can also be demonstrated by serving as an informal mentor, which could happen by serving as a peer mentor, working closely with team members in any kind of work environment, informally supervising someone without having formal supervisory responsibilities, or serving in a leadership position in a student organization or professional association. It is also important to consider leadership potential, especially if you are a student or are at an early point in your career. Given where you are in your career, you might not have many demonstrated leadership examples, but you may have examples of these informal mentoring experiences that could demonstrate leadership potential.

These next two examples of essential skills are similar and highlight two slightly different skills. The ability to identify actionable insights in data demonstrates critical thinking skills. Identifying actionable insights could also draw in data literacy

skills and making judgments about how to use those data appropriately. As a related example, the ability to describe actionable insights in data demonstrates communication skills. This skill brings insights to the people who need them for informed decision making.

Another example is working on a group project. This demonstrates teamwork or collaboration. You may not have enjoyed these projects, and it may be difficult to see how these projects relate to the real world. However, they are learning experiences for teamwork skills that will serve you well in your future workplace. Group projects can teach you about how people work together, effective (or sometimes ineffective) strategies for collaboration, and how to set goals and meet deadlines. It is especially important to learn how to work with people from different kinds of backgrounds who may have different skills, expertise, and contributions to make.

An additional example is teaching. The skills used in teaching, such as planning and organizing a course schedule, presenting information, and leading discussions, apply beyond the classroom. The ability to effectively engage in a classroom discussion, especially if it involves differing viewpoints, translates into the ability to facilitate effective meetings. Keeping discussions respectful, productive, and on topic happens every day in both classrooms and in the workplace.

A final example is the ability to use the scientific method. This could demonstrate research management as well as project management. Project management is a skill that does not always show up specifically, in part because it overlaps with many other skills. Project management involves taking a complex task and breaking it down into more manageable, smaller pieces. This is an essential skill for completing a research project of any kind, such as a thesis, dissertation, or independent study. The way to achieve the goal is to focus on the smaller pieces and make steady progress toward those individual pieces.

This list of examples is not exhaustive. If you have a particular job in mind, you could identify the essential skills that are required to perform that job and generate examples of essential skills that you have demonstrated through your own experience. You could probably think of many additional examples of essential skills to add to this list.

4. Demographics of the Psychology Workforce

What are the demographic characteristics of those who become psychologists, how do new entrants impact the field of psychology as a whole, and how do the demographic characteristics of the psychology workforce compare to those of the US population as a whole? We examined the psychology workforce across various demographic categories, including gender, age, and race/ethnicity (APA, 2019c). Since 2008, the psychology workforce has become more racially/ethnically diverse. Racial/ethnic minorities made up about 12 percent of the psychology workforce in 2008; that proportion increased to 16 percent in 2018. Furthermore, the percentage of women has increased from 60 percent in 2008 to 71 percent in 2018. Finally, the

Table 26.4 *Demographic characteristics of the psychology workforce, 2008 and 2018*

Demographic characteristic	Year	
	2008 (%)	2018 (%)
Gender		
Female	60	40
Male	71	29
Race/ethnicity		
Asian	2	4
Black/African American	4	4
Hispanic	4	6
White	88	84
Other	1	2
Total	100	100

Source: APA (2019b). *Demographics of U.S. psychology workforce*. [Interactive data tool.]

Note: “Other” racial/ethnic groups included American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and people of two or more races. Totals may not sum to 100 percent due to rounding.

average age of the psychology workforce has gone up slightly to 50.1 years from 49.9 in 2008 (Table 26.4).

The psychology workforce is becoming more racially/ethnically diverse because new entrants to the workforce have a higher proportion of racial/ethnic minority groups (APA, 2019c). In 2018, racial/ethnic minorities represented 29 percent of psychologists aged 26–30 and 25 percent of those aged 31–35. In comparison, psychologists in older cohorts had lower proportions of racial/ethnic minorities. Generally, although not always, the proportion of racial/ethnic minorities decreases as age increases. For example, racial/ethnic minorities represented 13 percent of psychologists aged 51–55, 4 percent of psychologists ages 56–60, and 7 percent of psychologists ages 61–65.

In terms of gender representation, younger cohorts of psychologists contribute to the higher proportion of women in the workforce overall (APA, 2019c). Younger cohorts have a higher proportion of women than older cohorts, with women representing 85 percent of psychologists aged 26–30, 82 percent of psychologists aged 31–35, and 82 percent of psychologists aged 36–40. In older cohorts, women represented 76 percent of psychologists aged 51–55, 61 percent of psychologists aged 56–60, and 57 percent of psychologists aged 61–65. Generally, as age increases, the proportion of women in the workforce decreases.

With an increasingly racially/ethnically diverse workforce, how does the psychology workforce compare to the US population overall? Based on the 2018 American Community Survey (US Census Bureau, 2019), 40 percent of the US population is racially/ethnically diverse with 60 percent of the population being White. This indicates while the psychology workforce is improving on metrics

of racial/ethnic diversity, the field has a long way to go to achieve equivalent representation across racial/ethnic groups. This holds implications when considered in the context of workforce projections, which suggest increases in demand will occur from older adults and Hispanic populations (APA, 2018c). Research on the health service psychology workforce indicates that the current workforce is not adequately prepared to meet the needs of diverse populations. For example, few psychologists specialize in geropsychology (Moye et al., 2019), which suggests a lack of supply to respond to the unique needs of older adults. As another example, only about 5.5 percent of licensed psychologists can provide services in Spanish, and only 4.4 percent of psychologists are Hispanic (APA, 2016a). This is far short of the 18.5 percent of the total US population represented by Hispanic populations (US Census Bureau, 2020), indicating that the current health service psychology workforce may not meet the needs of diverse populations.

4.1 Characteristics of Early Career Health Service Psychologists

Early career psychologists, defined as those within 10 years of earning their doctorates, have greater racial/ethnic diversity than the workforce as a whole. For example, when looking at health service psychologists, racial/ethnic minority groups represented 22 percent of early career psychologists, compared to 14 percent of health service psychologists across all career stages (APA, 2019c; Table 26.5).

Early career psychologists also reported a higher level of cultural competency in working with diverse groups of populations. When asked to rate how well their graduate training prepared them to provide services to diverse populations (on a 5-point scale where 1 = not at all prepared and 5 = extremely well-prepared), early career psychologists scored a mean of 3.88 (APA, 2017), much higher than psychologists in later career stages. Early career psychologists also reported higher knowledge ratings for working with most population groups compared to psychologists in later career stages (APA, 2017). One notable exception was older adults, in which psychologists in later career stages reported higher knowledge ratings for working with

Table 26.5 *Demographic characteristics of health service psychologists by career stage, 2015*

Demographic characteristic	Career stage			
	Early career	Mid-career	Senior career	Late senior career
Median age (years)	37	48	59	67
Gender (%)				
Female	77	72	59	38
Male	23	28	41	62
Race/ethnicity (%)				
White	78	84	89	91
Racial/ethnic minority groups	22	16	11	9
Total	100	100	100	100

Source: APA (2017). *Career stages of health service psychologists: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*.

older adults than psychologists in earlier career stages. The health service psychologist workforce is not only becoming younger and more diverse but also more culturally responsive to the ever more diverse US population (Figure 26.5).

5. Future Directions and Opportunities

In light of the intersecting and ongoing crises impacting the US today, we anticipate a wide range of applications of psychology in society. First, we anticipate a larger role for technology. The role of technology in day-to-day life has transformed overnight as a result of the COVID-19 pandemic. While it is uncertain whether shifts will become permanent, it is also unlikely that the use and perceptions of technology will return to pre-pandemic patterns. For example, research on telepsychology patterns prior to the COVID-19 pandemic found that only 21 percent of practitioners engaged in telepsychology (Pierce et al., 2020). Yet the COVID-19 pandemic has demonstrated that undertakings thought to be impossible are, in fact, possible. Whether technology is used to deliver telehealth services, to engage in distance learning, or to hold virtual meetings in place of in-person events, there will be lasting effects on the future of work.

Second, we anticipate opportunities for applied psychology. This is an area of psychology that translates psychological research into the real world. Now more than ever, psychology is needed to make important contributions to everyday life. The field of psychology is well situated to respond to demand for research on human technology interaction, conducting business in a virtual environment, and the range of psychological side effects resulting from extended stress. Examples of applied psychology questions include:

- What are best practices in telehealth?
- How do students learn and how do teachers teach effectively in online education?
- How do teams function in a virtual environment?
- What are the effects of long-term social isolation?
- How do organizations manage change?
- How can psychology inform the future of work?

Finally, we anticipate opportunities to address equity issues. The COVID-19 pandemic brought existing health, education, and economic disparities to the forefront, especially in the context of a combination of factors that disproportionately affect certain groups. The “digital divide” created by increased reliance on technology further exacerbates these disparities. As a field, psychology has a responsibility to address critical societal issues, such as systemic racism, police violence, the lasting psychosocial effects of the COVID-19 pandemic, and other real-world issues.

6. Resources and Recommendations

For students, those who are early in their careers, and anyone seeking a job or career change, many resources are available to guide you through the career exploration

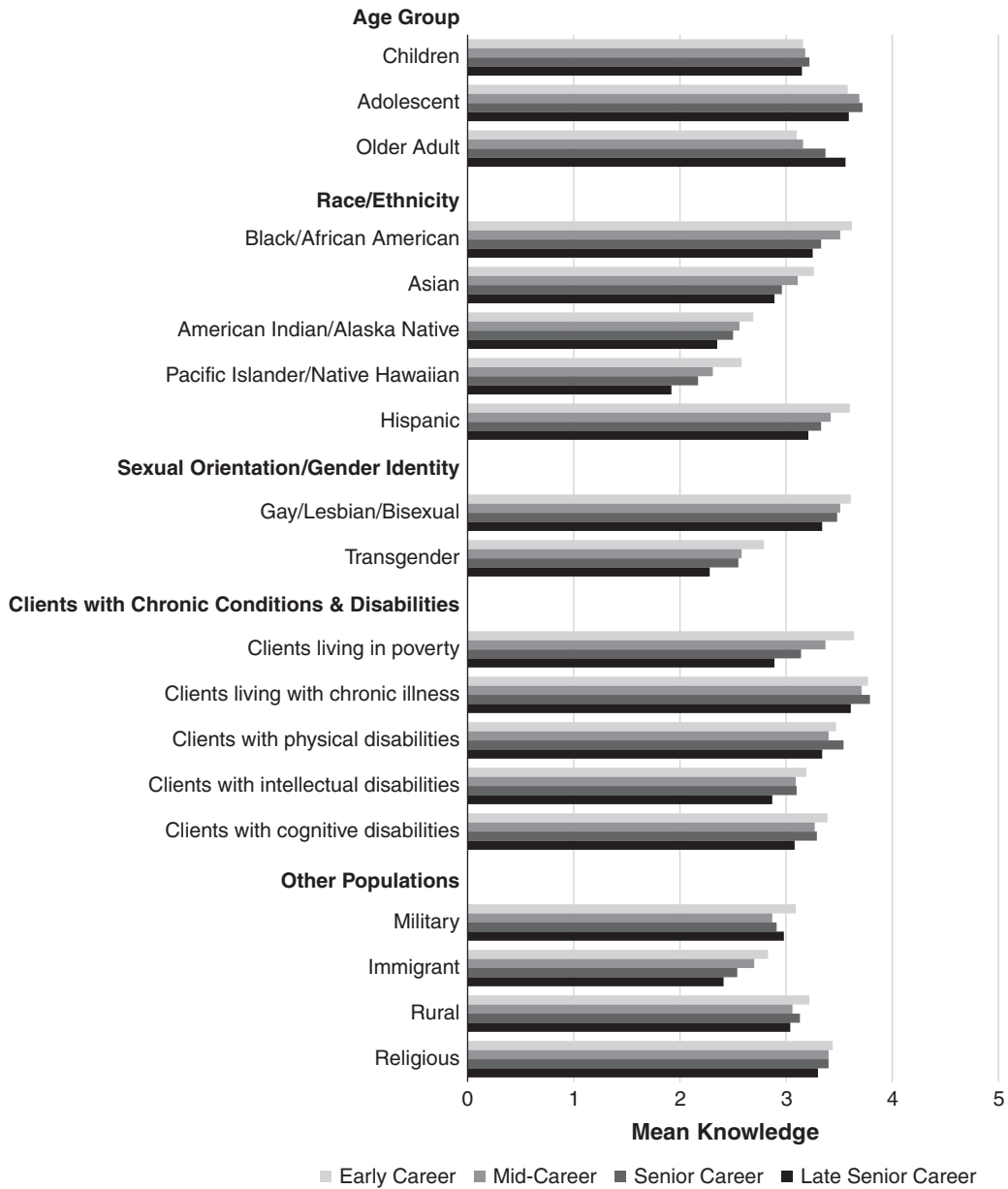


Figure 26.5 Knowledge ratings for working with specific populations by career stage. Source: APA (2017). *Career stages of health service providers: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*. Copyright © 2017. American Psychological Association. All rights reserved.

process. As you journey through career exploration, it is entirely possible that your goals may change. This is a normal part of the process.

Explore data on career options. The APA Center for Workforce Studies has a series of interactive data tools that address workforce and education pathways topics. The Careers in Psychology data tool (APA, 2018a) shows occupations, work activities, work sectors, relatedness of the job to psychology, and other employment characteristics by level of psychology degree. The section of this chapter on employment characteristics for psychology doctorate and master's degree holders was entirely based on the Careers in Psychology data tool. Another resource is the O*NET occupational database (National Center for O*NET Development, 2020), which contains profiles on over 1000 jobs and can be searched by skills, knowledge, industry, career clusters, and other employment characteristics. O*NET also includes tools for assessing interests.

Be planful. The APA Individual Development Plan (IDP; APA, 2016b) is a five-step plan to help you explore your interests and career goals and generate a plan to achieve those goals. It is important to recognize that your career goals may shift. It is okay to change your mind. As you gain experience, you may learn that there are some things you don't want to do. Sometimes insights about what you *do not* want to do are just as valuable as learning what you do want to do. The IDP is built on knowing yourself. Indeed, self-reflection is an important tool in the career exploration process. An informal way to begin self-reflection is ask yourself, "Where have you been? Where are you now? Where are you going?" Another way to do this is to examine the skills you have and the skills you need. If the skills you have match the skills you need, then use that knowledge to look for career pathways that will allow you to use those skills. If the skills you have do not match the skills you need, then look for opportunities to acquire new skills or further develop the skills you already have. In either situation, look for job descriptions that would enable you to use those skills and interests. Look carefully at the duties, responsibilities, and qualifications for those jobs. Start to think about your own experiences and generate language to describe your background. You can try to mimic or mirror the language in the job descriptions. You can begin looking at job descriptions at any point in your career exploration process, even if you are not actively seeking employment.

Use career services. For current students, career services at your institution may have a broader range of career resources than faculty. For alumni, you may be eligible to use careers services at an institution from which you recently graduated. Psychology professors will be good resources for how to navigate the academic job market. This makes sense as their own career pathway included going to graduate school (most likely in psychology) and then becoming a psychology professor. This is a sizeable pathway in the psychology workforce, but it is a fairly narrow pathway. Similarly, psychology professors in health service areas will be knowledgeable about the behavioral health job market. Your faculty mentors and advisors may be less knowledgeable about the broad range of job options available to individuals with psychology backgrounds. This is where career services may be able to fill in a gap by providing realistic career planning information.

Keep in mind, however, that not all career services have relevant resources for graduate students. For example, career services may provide guidance on how to write a résumé but less guidance on how to write a curriculum vitae (CV). On the other hand, many career resources are broad enough that they can be adapted to the unique needs of graduate students.

Learn about career options through informational interviews. These are interviews where you ask questions about people's careers. They typically cover education pathways, the type of work activities they engage in on a daily basis, the skills they use, and strategies for obtaining a similar job. The purpose of an informational interview is to learn about career options rather than to solicit a job offer. Do not be surprised by a lack of response to a request for an informational interview, especially if the request was a "cold call" to someone you do not know personally. Try tapping into career services, alumni networks, mentors, and other channels to find people in careers you find interesting.

Build relationships. Some jobs are advertised through informal channels. Let your network know about the types of career pathways you are interested in pursuing. The more information you share about your career goals, the better able others are to guide you toward appropriate opportunities to reach those goals. You can leverage your relationships for possible informational interview connections. Also remember that you can and should have more than one mentor. Mentors with differing backgrounds can provide guidance for specific aspects of your career pathway, such as one person for clinical advising, another person outside of academia or psychology, or any other person with relevant expertise.

Keep learning. People who can adapt to change, be flexible, and learn new things will have an advantage in the future of work. Learning is a continuous lifelong process. Your education does not end when you earn a degree. Your formal education may not provide you with all the career-relevant skills you need, such as skills related to operating your own business (whether this is a private practice, consulting organization, or another type of self-employment), how to serve as a constructive journal article reviewer, or how to write bias-free recommendation letters. You may have opportunities to learn these skills on the job or by working closely with a mentor.

7. Conclusions

Throughout this chapter, we provided data on career versatility for people with graduate degrees in psychology. Remember that your degree is not your destiny; what you do on a daily basis in your job may be very different from what you trained to do in your graduate program. We hope that we challenged the myth that the only career pathway you can pursue is to become a therapist or a professor. These are common career outcomes and they are certainly not the only ones in which it is possible to use psychology at work. Having a keen awareness of your own skills, abilities, and interests will serve you well in identifying and pursuing a satisfying meaningful career pathway.

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Career Possibilities with your Doctorate in Psychology: Stories from Inspiring Leaders

Antonio A. Morgan-López, Brett Major, Muniya Khanna, Katie Rosanbalm, Karen Gavin-Evans, & Ilyse Dobrow DiMarco

Editor's Note: As illustrated in this chapter, a doctorate in psychology is a remarkably versatile degree. Once a verboten in academic circles, graduate programs now routinely discuss non-academic careers with the knowledge that an education in psychological science can offer a terrific impact to improve human lives in so many ways that extend beyond traditional teaching and academic research. No chapter could cover the entire range of potential career paths, of course, but this chapter used an interview format to feature careers from doctorates in psychology that include a scientist at a research institute (Dr. Antonio A. Morgan-López); a researcher at Facebook (Dr. Brett Major); a private practitioner, researcher, and author (Dr. Muniya Khanna); a senior research scientist at a university-based policy center (Dr. Katie Rosanbalm); a scientific review officer at a federal funding agency (Dr. Karen Gavin-Evans); and a freelance author (Dr. Ilyse Dobrow DiMarco). Each interview is posted below.

1. Antonio A. Morgan-López, PhD, Scientist at a Research Institute

I earned my PhD in Quantitative Psychology from Arizona State University (ASU) in 2003 under the mentorship of Dr. David P. MacKinnon; I was originally admitted into the Clinical PhD program, receiving my MA in Clinical in 2000 and then formally reapplied/readmitted into the Quantitative program between my second and third years at ASU. My initial substantive interests were primarily in substance use etiology and prevention among racial and ethnic minority youth, while my interests in quantitative methods centered around parametric and non-parametric confidence interval estimation methods for conditional mediation models. I currently hold the position of Fellow in Quantitative Psychology in the Community Health Research Division (CoHRD) at RTI International, an appointment made by RTI President and CEO Dr. E. Wayne Holden in 2018. Prior to this appointment, I've held the positions of Senior Research Quantitative Psychologist (2003–2009) and Principal Scientist (2012–2018) at RTI. Between 2009 and 2012, I served as Associate Professor of Quantitative Psychology in the University of North Carolina at Chapel

Hill Department of Psychology (now Psychology and Neuroscience). My current program of research, funded by NIAAA and NIMH as PI, centers around advances in within- and across-study variation in using advanced factor analysis and Item Response Theory (IRT) approaches to symptom weighting in psychiatric assessment.

1.1 What Are Your Primary Job Responsibilities?

My primary job responsibilities are twofold. First, my original position specifications were to serve as an in-house quantitative methods consultant and data analyst, focused on the application of advances in latent variable methods and random coefficient/multilevel modeling methods without the expectation that I develop my own program of research, lead papers of my own or secure my own grant funding or any criteria that are typically associated with independent investigatorship; this part of my job remains unchanged from when I originally began my career at RTI in 2003. The second part of my position has evolved into that of an independent investigator who leads my own grants (I've had five NIH grants as PI since 2006 including two currently active R01 grants), publishes in peer-reviewed journals, reviews grants for NIH study section, and all of the obligations (minus teaching) that are typically associated with a tenure-track or tenured professorship at a major Research I university.

1.2 What Does a Typical Day or Week Look Like – What Do You Work On and How Is It Different From a Traditional Academic Position?

A typical week would find me working on leading a new and/or revised manuscript, conducting data analysis for manuscripts I may be leading or are being led by co-I's on my grants, mentoring my co-I's postdocs virtually on training in advanced data analysis methods or supervising Masters-level data analysts on grant and/or contract projects that I am a co-I on. I also have service obligations such as manuscript reviews, study section review, etc. Much of my week looks very similar to an academic, but with mentoring loads of my choosing and no teaching or course prep. If you strip away what is common to academic and *grant*-focused research institute (RI) settings for a quantitative psychologist (e.g., publications, grants, service to the field), the primary difference boils down to trading teaching for internal statistical consulting. For prospective candidates in other areas (e.g., Clinical, Developmental) there would be the use of their skill sets in study design, study implementation and interpretation of study findings, etc. much like my quant skill set would be used for data analysis – not much different than what you may be doing as graduate students in your mentor's lab, just with a different salary structure.

1.3 What Are the Biggest Benefits to This Type of Position?

This type of position offers pretty good professional and personal flexibility. I've been able to move my schedule around at a moment's notice due to illness,

appointments, etc., particularly necessary when raising small children. So long as the work I pursue funding for is under the general umbrella of Behavioral Health, I feel like I have sufficient freedom to pursue that work and submit that work for publication to the audiences I feel are most appropriate to my interests. This is in contrast to my experience in academic settings where there was considerably less “academic freedom” regarding what and where I published my work.

1.4 Any Drawbacks Compared to Academia?

Within RIs, both small and large, there is a pressure that comes with securing external funding that is literally existential in ways that are not as immediately salient in academia (although they, of course, exist in academia too). Often, when one begins their career outside of academia in a RI, the initial projects that they are brought in to work on can set the tone for what type of career trajectory a person will have. If someone begins their career on contract projects, particularly those that do not offer opportunities for publishing, it can make it virtually impossible to be competitive for grant-focused funding mechanisms at NIH, CDC, FDA, etc.; as an aside, contract projects do have a more immediate impact on policy than do grants. It can also make it impossible to move back into an academic setting if one is not careful to ensure their CV remains competitive; leveraging the work you may have been doing in graduate school into additional papers and small grant applications/funding will be key to that.

Doctoral students sometimes feel pressure to enter traditional academic positions, focusing on research productivity. When did you realize that you could have an impact in other important ways and what was that decision like for you?

My pursuit of a non-academic position was the cause of department-wide consternation among the plurality of faculty of my department, not only from the faculty in Quantitative and Clinical but from faculty housed in other areas of the Department (e.g., Social, Developmental). I speculate that this was because I had offers for one tenure-track position at major R1 universities and two advanced quantitative methods postdocs that I was essentially walking away from. My decision to take my original position at RTI was fairly easy despite external pressure: (a) my teaching experiences during my graduate training were not enjoyable, (b) I enjoyed statistical consulting and wanted to get credit for it at an RI in ways that a quantitative psychologist in academia never will (see discussion of this in Aiken et al., 2008), and (c) I still felt that, despite the “pitfalls” of taking a non-academic position and its potential negative impact on publication/grant productivity, I could develop a program of research that could resemble that of someone in an academic lab. I also had personal parameters coming into play, as my then wife was expecting twins when I was in the middle of my job market cycle.

In many ways, I can have my “impact” cake and eat it too. I’m still able to have an impact on science that may be equivalent to someone who would be going up for Full Professor at an R1 university in the not-too-distant-future, but I’ve also seen my work on projects that were never publishable have an impact on State and Federal policy, particularly on legislation in local educational settings and juvenile justice contexts.

1.5 How Are You Using Your Education in Psychology? How Do Your Skills Apply in Important and Impactful Ways?

There has been a continual feedback loop between how my quantitative methods training influences the ways in which I ask questions regarding the diagnosis and treatment of posttraumatic stress disorder (PTSD) and other psychiatric disorders. That same feedback loop has used my clinical training to identify problems that have come up in noticing issues and problems with the way we think about psychiatric disorder measurement and how there may be solutions to those issues in other areas (e.g., survey methodology, educational testing). For example, PTSD – and every other DSM disorder for that matter – requires a count of symptoms to meet criteria for a disorder, with no regard to specificity of combination of symptoms that make up the symptom count. But this makes little sense clinically, nor does it make much sense psychometrically. Clinicians know that certain symptoms “matter more than others” in the manifestation of an underlying psychiatric disorder. Psychometrically, we generally find that “mattering” can manifest itself in variation in factor loadings/discrimination parameters across symptoms of a disorder in using advanced factor analysis (FA) or IRT methods. Generally, these scoring methods are generally eschewed for total scores or symptom counts that assume every symptom of a disorder has equal weight. So, much of my current work uses FA/IRT to illustrate the consequences for this disconnect on errors in assessing overall treatment outcomes, individual-level clinically significant change, and potential errors in making a psychiatric diagnosis in-and-of-itself – with the eventual goal of incorporating symptom weighting in diagnostic criteria within the DSM.

1.6 Any Resources or Advice You Have for Someone Who Would Like to Pursue a Career in This Employment Sector?

I’d encourage those interested in working in or hearing more about RIs, particularly early in their graduate training, to employ multiple strategies. For example, one can take notice of investigators who are doing work they are interested in during conference presentations/symposia who are not housed in academic departments. At many conferences, RIs will have recruitment tables that may be embedded among other tables for book sales, assessment tools, etc. that may not always be obvious. Many RIs will advertise for positions within society- or conference-specific listservs, so connecting with these early can help. Wikipedia has a pretty handy listing of RIs as well: https://en.wikipedia.org/wiki/Category:Research_institutes_in_the_United_States

2. Brett Major, PhD, UX Researcher at Facebook

I earned my MA in Psychology at Wake Forest University and my PhD in Social Psychology at the University of North Carolina at Chapel Hill. In graduate school, my research focused primarily on topics like: how positive emotions facilitate emotion regulation after negative experiences and how moments of positive social

connection promote health and well-being. Currently, I'm a User Experience (UX) Researcher at Facebook, where I've worked for the last two years.

2.1 What Are Your Primary Job Responsibilities?

My primary job responsibilities are designing and launching surveys to better understand the experiences (and problems) people have on Facebook. I analyze the data, write up results, and present insights to different teams.

2.2 What Does a Typical Day or Week Look Like – What Do You Work On and How Is It Different From a Traditional Academic Position?

In a typical week, a lot of the work I do is very similar to the types of things I did in grad school. I spend a lot of time writing up research plans, guiding projects through a process very similar to IRB review, conducting surveys, writing up results, and making presentations to different teams. Even the topic of my research is not too different from what I worked on in grad school. I work on a team called *Community Integrity*. The mission of our team is to minimize bad experiences for people on Facebook. We conduct rigorous, ethical research on the definition and application of our community standards to build safe, inclusive experiences on Facebook. Given the nature of this work, our team is actually filled with other academics, most of whom have MAs or PhDs in the social sciences (primarily psychology, survey methodology, or political science).

The thing that's different is the pace of the work. In grad school, I often got bored of my projects because it took so long to complete a project, especially the publication part. In my current position, the entire cycle of a project from beginning to end is usually closer to a month or two (or six months maximum) rather than a year or two. While that pace probably would have sounded stressful to me right out of grad school, I actually really like it. I love that I can move on from a project once I've reached the point of diminishing returns instead of getting into the weeds running a bunch of extra (and probably inconsequential) analyses to appease Reviewer 2.

2.3 What Are the Biggest Benefits to This Type of Position?

This may come as a surprise to some, but work-life balance is one of the biggest benefits of my position. In grad school, there is a culture where it's normal to work nights and weekends. Many grad students (myself included) felt like no matter how hard we worked, the work was never done. And many of us felt guilty if we weren't working overtime. In my current position, I almost never work on nights or weekends. I close my computer at the end of the day and I don't feel guilty about it. There is a misconception about working at a big tech company: that the reason they have snacks and ping pong tables is so you won't be as mad when you have to work nights and weekends. That has not at all been my experience or the experience of my colleagues.

Another huge benefit of my job is the opportunity for collaboration. In grad school, collaboration always felt relatively asynchronous (e.g., you write up results, share a document with a colleague for feedback, the colleague makes updates to the document and sends it back to you, and so on). It often felt like everyone was working in a silo to advance their own separate body of work. That's not because we didn't care about each other (my peers and mentors in grad school offered an abundance of guidance, feedback, and support!), it's because academia rewards based on publishing your own papers and not much else. In my current position, the reason collaboration feels so different is because my teammates and I are all working together toward common goals. We set our goals together as a team each half and work together to achieve them. When we encounter problems, we brainstorm solutions together and each tackle different aspects of solving the problem. While this is sometimes also true in academia, it doesn't feel the same when only one person reaps the full benefit of first-authorship.

Last, I have to mention salary. Industry jobs often pay much better than academic jobs. It's not necessarily the most important benefit, but it's certainly something I appreciated after living for six years on a graduate stipend.

2.4 Any Drawbacks Compared to Academia?

A common thing you'll hear former academics say about industry jobs is that you don't have much freedom in setting your own research agenda. That's definitely a drawback depending on where you land in industry. For me personally, I've found that I still have quite a bit of freedom on what research projects I take on within the scope of the team. Thankfully, I found a team whose mission aligns with topics I care about so I've generally been pretty happy with the level of autonomy I have.

2.5 Doctoral Students Sometimes Feel Pressure to Enter Traditional Academic Positions, Focusing on Research Productivity. When Did You Realize That You Could Have an Impact in Other Important Ways and What Was That Decision Like For You?

The realization that I didn't want to go into academia was gradual for me. I think I was in my third year when I finally made the decision to talk with my advisor about my plan. The conversation went really well and my advisor was supportive. I was lucky to have other students in my program who were also interested in non-academic jobs and we were able to support each other in figuring it out. In my last couple years of grad school, my program also started inviting speakers who had transitioned to industry.

I think the realization that I could have an impact outside of academia came when I realized how many people I could reach by applying the things I learned to make change in the world. My first job outside of academia was with a small start-up non-profit with four employees, all with a psychology background. The organization worked with progressive organizations and start-up civic-tech companies to improve

political participation through empirical research. We worked with organizations to experimentally test interventions designed to help people do things like vote, join a march, or call their elected officials. Realizing that I could have a tangible impact like that was really exciting to me and a big reason I left academia.

2.6 How Are You Using Your Education In Psychology? How Do Your Skills Apply in Important and Impactful Ways?

The most important things I learned from grad school are survey methodology, statistical analysis, and data visualization. I'd recommend investing heavily in these skills during your time in grad school because they're skills that will pay off regardless of whether you go into academia or industry.

2.7 Any Resources or Advice You Have For Someone Who Would Like to Pursue a Career In This Employment Sector?

Yes! I put together a document (<https://docs.google.com/document/d/15IpwOnxmfzOOtaE4WAvWMKHqQpy633WoEMqxIGSKjc/edit>) with some resources for psychology students who are interested in transitioning to the tech industry.

3. Muniya Khanna, PhD, Private Practice, Researcher, and Author

I received my PhD in clinical psychology from Temple University, where I worked under the mentorship of Dr. Phil Kendall and became focused on the study and treatment of childhood anxiety disorders with an interest in internet-based interventions. Following a T-32 postdoctoral fellowship at Columbia University with Dr. Anne Marie Albano, I served as faculty at the University of Pennsylvania working alongside Dr. Martin Franklin running the Child and Adolescent OCD, Tic, Trich, and Anxiety Group ("COTTAGE"). Together with Dr. Kendall, I developed and evaluated *Camp Cope-A-Lot* (Khanna & Kendall, 2010), the first internet-assisted CBT program for child anxiety and *Child Anxiety Tales* (Khanna et al., 2017), an internet-based parent-training program for parents of children with anxiety. These programs are now being used in homes and schools across the country and internationally. I feel privileged to also have been involved in some of the most important research trials in the field of child anxiety in the last 15 years, including the Pediatric OCD Treatment Study (Franklin et al., 2011), Family-based Treatment of Early Childhood OCD (Freeman et al., 2014), Child and Adolescent Anxiety Multimodal Treatment Study (Walkup et al., 2008) trials.

In 2013, my husband's decision to leave his job to start his own company led to my decision to leave academia and pursue my own private practice. I saw it as an opportunity to support my family financially while also being able to continue to pursue my career goals. I started The OCD & Anxiety Institute, a specialty clinic for children and adults with anxiety, OCD and related disorders. I was determined to continue my research, so I converted from a PI to a consultant role on all existing and

upcoming grants. Together with Dr. Ricardo Eiraldi at the Children's Hospital of Philadelphia (CHOP), I have completed three, have two ongoing, and two upcoming large-scale clinical trials focused on the dissemination and implementation of evidence-based treatments for anxiety in urban public schools. I also serve as consultant to organizations and agencies looking to use technology as part of training and/or treatment. I have been focused heavily on writing these last two years, and am excited for my next book to be launched later this year. I continue to consult, train, write, conduct workshops, webinars, and serve on professional committees and boards to support training, study, and dissemination of evidence-based mental health care.

3.1 What Are Your Primary Job Responsibilities?

I wear many hats. I see patients in my private practice. I serve as part of the leadership team and provide guidance on study design and support training and supervision at CHOP on ongoing grants. I consult with private and public organizations. I continue my writing and blogging on *CopingCatParents.com*, *Psychology Today*, and *Thriving Mind*, now focusing primarily on finishing up my most recent book to help parents build resilience and enhance stress management in their children.

3.2 What Does a Typical Day or Week Look Like – What Do You Work On and How Is It Different From a Traditional Academic Position?

Every day and week is different as I juggle the many roles and responsibilities. I keep blocks of time dedicated to each role – clinical days, writing days, consulting days, etc. and try to shift as different deadlines approach. I am also a mother of two active tweens, so to say I'm always juggling is an understatement! Even though I stay very busy, I feel noticeably less stressed than when I was in an academic position because I know my "funding" is in my own hands and that I can turn on or off the flow at my own discretion.

3.3 What Are The Biggest Benefits to This Type of Position?

The biggest benefit to working in private practice is that I get to be my own boss. I don't have to attend meetings unless I choose, write grants unless I choose, see clients unless I choose, teach . . . you get the point. I also feel grateful for the financial stability and flexibility the practice offers that allows me to pursue a variety of interests as well as giving me peace of mind that I can be available for my family when things come up (as they do!). My husband is no longer in start-up mode, but I am very happy to stay on this "uncharted" career path I've chosen.

3.4 Any Drawbacks Compared to Academia?

I wouldn't be in the position I'm in if I hadn't started in academia. I love research and teaching. I think I would have missed it if I had gone straight to private practice.

I also feel more confident in my expertise having learned from and worked alongside academic researchers and pioneers.

3.5 Doctoral Students Sometimes Feel Pressure to Enter Traditional Academic Positions, Focusing On Research Productivity. When Did You Realize That You Could Have an Impact in Other Important Ways and What Was That Decision Like For You?

I had been “raised” in a culture of research and academia and really intended to stay for my entire career. When it became a necessity for my family the choice was already made. Now seeing what can be done outside of academics makes me want to share with doctoral students the possibilities available to make an impact outside of research. In many ways research cycles hinder dissemination. Working with organizations, agencies, schools, hospitals, and the private sector directly to implement evidence-based programs has been highly rewarding and often comes with more immediate results.

3.6 How Are You Using Your Education in Psychology? How Do Your Skills Apply in Important and Impactful Ways?

My work, research, writing all are 100 percent based on the clinical and research training I received and continue to receive in psychology. I feel pride and fulfillment in seeing children, adults, and families improve the quality of their lives after having been in treatment or in a research trial. It also gives me immense joy and satisfaction to see my books, manuals, and online programs being used in schools, hospitals, clinics, and in homes and hearing about the benefits that people have felt from the content.

3.7 Any Resources or Advice You Have For Someone Who Would Like to Pursue a Career in This Employment Sector?

Become an expert – listen, watch, read, learn as much as you can to become an expert in your area. Once you have the skills and knowledge, many options become available to you.

4. Katie Rosanbalm, PhD, Senior Research Scientist at a University-Based Policy Center

I entered the doctoral program in child clinical psychology at Ohio University with the goal of studying child abuse prevention. I began by planning an evaluation of a school-based child sexual abuse prevention curriculum, but just as I was beginning my research, the program I was to study lost funding. Changing gears quickly to stay on track with my degree, I shifted to a meta-analysis of existing studies in the field. This shift proved fortuitous, as I discovered a love of methodology and statistics in the process of learning about and ultimately conducting three separate meta-analyses (without all the

great software now available!). With an extra year of coursework, I added a quantitative psychology concentration to my PhD in child clinical psychology.

My clinical internship brought me to Duke University for an intense year of practice, but I quickly recognized that I preferred work at the systems and policy level to work as a child clinician. Happily, I discovered the Center for Child and Family Policy at Duke, where my interests in systems initiatives, methodology, and child welfare came together in the role of Research Scholar. I began this position assisting on an ambitious multi-pronged project to reduce child abuse rates in Durham, NC, serving primarily in the role of statistician. After a few years and considerable grant writing, I was able to transition to a Principal Investigator role, pursuing program development and evaluation for child-related interventions and policy initiatives. With more than 17 years at the Center for Child and Family Policy, I now serve as a Senior Research Scientist, leading four grant-funded initiatives in the areas of self-regulation development and trauma-informed care.

4.1 What Are Your Primary Job Responsibilities?

Similar to those in many academic positions, I am fortunate to have the freedom to pursue my own line of research – as long as I am able to procure 100 percent of the funding to cover my own salary, the salaries of my staff, and the related program and research expenses. As a result, grant writing is my constant companion. With that comes budget management, report writing for funders, and the many administrative tasks that are part of leading project implementation. These are the necessary parts of my work. The fun parts are all the rest! I focus on community engagement, so I always partner with community-level organizations and non-profits to define the needs, barriers, and questions that I seek to address. We work together to identify, implement, and evaluate solutions. I never stop learning, discussing new ideas with these colleagues, and collaboratively integrating cutting-edge findings into program development and improvement. With partners in early childhood, K-12 education, and child welfare, I work to develop training modules, coaching models, and intervention components that support the well-being of all children, but are particularly critical for those who have experienced significant adversity in their lives.

4.2 What Does a Typical Day or Week Look Like – What Do You Work On and How Is It Different From a Traditional Academic Position?

One of the best – and hardest – parts of my job is the unending variety of tasks across each day and week. I spend time reading, thinking, and planning for project improvements or future initiatives. In collaboration with community partners, I develop curricula, deliver interactive trainings, and spend time observing in schools and early childhood settings. I develop research plans, implement evaluations, supervise data collection and cleaning, and conduct analyses to assess outcomes and improve processes. I collaborate with community providers and state-level systems to

integrate lessons learned into existing infrastructure. Finally, I deliver talks and write reports, policy briefs, and academic papers to share what we are doing and learning with a broad variety of stakeholder audiences. I believe that those in traditional academic positions also engage in many if not all of these tasks. The biggest difference lies in the task prioritization, or the proportion of time spent with this community-based participatory research. I have far fewer administrative or teaching responsibilities and more freedom to pursue action and dissemination at the stakeholder rather than purely academic level.

4.3 What Are the Biggest Benefits to This Type of Position?

For me, the largest benefit of this position has been the freedom to structure my time and work to focus on community-level engagement and action. My office is based in the community rather than on campus, and much of my time is spent traveling the state to visit schools, early childhood centers, and departments of social services. This immersion in the community has greatly improved not only my understanding of practical issues with implementation and evaluation, but also my ability to speak in plain English and translate science to practice. Perhaps more importantly, it has enhanced my ability to *listen* to the experiences and perspectives of those in the field. My academic assumptions are regularly challenged by those out there doing the work – and let's be clear, the on-the-ground professionals are the ones who know the real issues at hand! Without these constant reality checks, and the relationships that come with two-way discussions and respect for experience, I would certainly miss key elements of partnering with professionals to promote authentic and sustainable change for children and families. I have been greatly, and rightly, humbled by this work.

4.4 Any Drawbacks Compared to Academia?

The role of Research Scientist certainly comes with drawbacks as well. Foremost among them is funding: as I mentioned, 100 percent of my salary (and that of my staff) is based on soft money. This means that none of it is guaranteed or underwritten by the university. Funding relies on my continued ability to procure support from federal grants, state contracts, corporation philanthropy, and foundations. This means considerable investment in grant-writing and maintenance of relationships with funders of all types. In essence, I am an entrepreneur supporting a business, albeit with phenomenal access to university colleagues, infrastructure, and resources. I cannot downplay the importance of the university setting for providing accounting, grants management, administrative support, and a general atmosphere of multidisciplinary inquiry and scholarship. My colleagues keep me energized and focused, while always challenging me to think critically from new perspectives. And my relationships both within the university and across the state, along with my focus on answering questions important to the *community*, has kept the value of my team's work visible to funders.

4.5 Doctoral Students Sometimes Feel Pressure to Enter Traditional Academic Positions, Focusing on Research Productivity. When Did You Realize That You Could Have an Impact in Other Important Ways and What Was That Decision Like For You?

I always knew that I wanted to focus on applied work rather than basic research. Although both are critical to progress in the field, I have always been driven to get my hands dirty and wallow in the nuances, uncertainty, and messiness of community-level research. I want to see what it is like to put the theoretical ideas into action, to see the changes in adults and children with my own eyes, and to wrestle with the challenges of promoting and sustaining change. Rather than doing this on a micro level as a clinician, I opted for working at the macro level with systems and organizations, but it is no less gratifying to watch the change in action. For me, the only question was, “where do jobs like this exist?” In graduate school, I had no exposure to positions or roles like the one I have ultimately adopted, but now I see them everywhere: research directors at non-profits or within school systems, investigators at child-focused research organizations, or employment with the many university-based policy centers. These roles are out there, and finding one was the perfect fit for me.

4.6 How Are You Using Your Education In Psychology? How Do Your Skills Apply in Important and Impactful Ways?

I am not sure I can even begin to list all the ways in which my education in psychology supports my current work. In brief, I see four key areas: content knowledge, clinical skills, research design, and statistical skills. In terms of content, I am constantly applying my understanding of developmental psychology, neurobiology, group dynamics, and behavior change to my work on self-regulation and trauma-informed care. My clinical focus taught me to listen, probe, communicate, read reactions, and prioritize relationships and empathy. My many courses on research design constantly guide my selection of sample, methodology, and measurement. Finally, my statistical training enables me to plan answerable questions and carry out analyses to answer them, as well as to interpret the findings of others in the field. The combined training I received in clinical and quantitative psychology has been invaluable in supporting my community partnerships and actionable research plans.

4.7 Any Resources or Advice You Have For Someone Who Would Like to Pursue a Career in This Employment Sector?

These jobs are out there, don't worry that academia is the only road available to you! First, carefully consider both your passions and your specific skills and strengths to decide both the topical area(s) you wish to pursue and the job tasks that you want to undertake. Then explore the groups doing this work now: are there state- or national-level non-profits pursuing this research and practice agenda, funders or think-tanks taking up this calling, independent consulting groups working on community-level change in this area? Find a few projects that excite you and talk to the people involved. Even if they don't have open positions, they very likely have ideas

and connections that can guide you. Begin building relationships, share your enthusiasm and ideas, join task forces or local advisory groups. These are the connections that keep my projects and funding alive, and keep me both grounded and energized for the next big idea.

5. Karen Gavin-Evans, PhD, Scientific Review Officer, Federal Funding Agency

I earned my PhD in Clinical Psychology from the Child Clinical Program at the University of Miami at Coral Gables, Florida in 2000. Upon acceptance to the clinical program, my goal was to establish a private practice; however, the graduate program emphasized a heavily research-oriented career route. My research interests and research assistantship were born out of my desire to work with students of color struggling with low self-concept and academic challenges. The most pivotal graduate experiences took place in the public schools and communities where I worked for my assistantship. By the time I completed my master's degree in Clinical Psychology, I knew I no longer wanted to pursue private practice, and I was not wholly sure whether academia was the right fit for me. Later, the Child Clinical internship at Baylor College Medical Center allowed me to work with children, youth, and families in various service sectors. The training reinforced an interest in maternal and child health-related research and fostered a desire to pursue a postdoctoral position at the Juniper Gardens Children's Project at The University of Kansas, where I was committed to working with children with disabilities. Working in early childhood settings and schools ignited my research interest, but I was not as keen on the "publish or perish" pathway of my graduate school mentors. Unsure how to progress, I accepted a faculty position in the School of Education at Indiana University. Although I enjoyed working with graduate students and conducting school-based research projects, I quickly realized that academia was not for me.

In 2002, my husband and I moved to the Washington, DC area, thus providing me the opportunity to pursue new career path. I accepted a research scientist position at a private health communications company, which allowed me to conduct behavioral health and education research. My main job entailed writing research grants, engaging in business development activities, and supervising a staff of researchers, technical writers, and subject matter experts. After several years of conducting federally contracted research leading a research department, I needed a change from 80+ hour work weeks. Interested in returning to my clinical interests, I accepted a position as a Scientific Review Officer at the National Institute of Mental Health (NIMH), where I still work.

5.1 What Are Your Primary Job Responsibilities?

As a Scientific Review Officer, my responsibility entails organizing scientific peer review meetings to evaluate grant applications and contract proposals submitted to the NIMH. I identify and recruit scientific and technical experts, domestically and internationally, to evaluate applications and proposals submitted for review. In addition, as a federal official at the meeting, I am also responsible for generating summary statements, the official documentation of the discussion at the review meeting.

5.2 What Does a Typical Day or Week Look Like – What Do You Work On and How Is It Different From a Traditional Academic Position?

I spend my time reading grant applications, reviewing current literature, and identifying scientists and industry stakeholders to participate in peer review meetings. In a four-month cycle, I facilitate two to three review meetings that may include up to 50 reviewers for a single review panel. Thus, in a year, I may reach out to more than 500 people worldwide to secure the expertise to cover all of the applications in my review meetings. In addition, to my daily and weekly duties, I attend professional conferences, symposia, and workshops to keep current on the field and identify potential reviewers.

5.3 What Are the Biggest Benefits to This Type of Position?

After leaving the 10+ hour-work-day of private industry, I needed more control over my time. The pace of my day and the scheduling of my review meetings are based on my calendar. I can plan review meetings around family demands and professional events. I especially enjoy being at the forefront of new ideas in the field. Review meetings allow me to listen to researchers and stakeholders discussing new ideas and approaches to significant public health issues facing children, youth, and families. Although federal positions are not as lucrative as private industry, financial stability and predictability are quite nice.

5.4 How are you using your education in psychology? How do your skills apply in important and impactful ways?

My education is in play, whether I am reading a journal article or grant application, identifying the expertise I need to build a solid review panel, or facilitating a “lively” discussion during a review meeting. Specifically, my breadth of knowledge in research methodology, quantitative and qualitative research, psychopathology, and clinical psychology are significant to my position. To ensure that I can build the most appropriate peer review panel, I must stay current with psychology literature and pursue trends in the field.

5.5 Any resources or advice you have for someone who would like to pursue a career in this employment sector?

The federal government has numerous careers opportunities for individuals with a psychology degree. While people may not consider the federal government exciting, it offers much. There are research, clinical, and administrative careers. Government positions abound, from bench science to field-based work in our Nation’s communities and neighborhoods. The federal government is vast; so narrow your search to federal agencies aligned with your interests, skills, and personal mission. With any career pursuit, you should keep an open mind, seek guidance, and continue to explore.

5.6 Doctoral Students Sometimes Feel Pressure to Enter Traditional Academic Positions, Focusing on Research Productivity. When Did You Realize That You Could Have an Impact in Other Important Ways and What Was That Decision Like For You?

It took a while to consider that there are multiple avenues to achieving my goals. However, once I was comfortable with my decision to leave academia, pursuing a career in a “non-traditional” psychology position was the obvious choice. In addition, the awareness of the versatility of my degree afforded me the push I needed to understand that my goals could be obtained through many different pathways.

6. Ilyse Dobrow DiMarco, PhD, Private Practice and Freelance Author

I graduated from Rutgers, which is a research-focused Clinical Psychology PhD program. Initially, I had hoped to work at an academic medical center, where I could contribute to others’ research without having to be a PI myself. But after four years of hardcore academic writing (capped off by reading 200+ journal articles for my qualifying exams) I was burned out on academic work and turned to what I thought was my only other option, private practice psychology. Ten years ago, I started my own practice near my home, which made sense from a practical standpoint (I was also having/raising my two sons at the time). I marketed myself as a provider who specialized in CBT for anxiety but gradually (and somewhat accidentally) developed a sub-specialty: helping new moms like myself use evidence-based tools to help them manage the stresses of motherhood. I recognized that new moms benefited greatly from the use of these skills and decided to start writing about them in posts for popular parenting websites and my own blog. Writing short popular press pieces and blogging eventually became a “side hustle” for me, and led to me getting a deal to write a popular press book, *Mom Brain*, which was published in May 2021.

6.1 What Are Your Primary Job Responsibilities?

As a private practice psychologist, I provide individual CBT (and other evidence-based treatments) to adult patients, most of whom have anxiety, and many of whom are new parents. As a writer, I compose diverse types of pieces, including books/book chapters, articles for popular parenting websites and my personal blog, and social media posts. My aim is to translate evidence-based CBT/Dialectical Behavioral Therapy (DBT)/Acceptance and Commitment Therapy (ACT) strategies for new parents who are struggling to cope with the myriad stressors of raising babies and small children.

6.2 What Does a Typical Day or Week Look Like – What Do You Work On and How Is It Different From a Traditional Academic Position?

I split my time evenly between clinical work and writing/speaking/media work. Three days per week, I work at my own private practice where I treat individual adults using

CBT and other evidence-based approaches. I have an office in a town near my home. The other two days per week, I work on my own material – mostly writing, but also doing other tasks like preparing for talks, posting on social media, and making videos. Like a true CBT therapist, I set an agenda and goals for myself on the days I write.

This differs a great deal from what a typical academic does during the day. I don't teach or supervise/mentor or sit on any committees. While most academics carve time out to write, like I do, they write very different types of things (journal articles, treatment manuals, scholarly book chapters, grants). Also I am able set my own schedule, whereas academics' schedules are often dictated by their teaching times, meeting times, etc.

6.3 What Are the Biggest Benefits to This Type of Position?

Flexibility! As I mentioned, I make my own hours, and decide how much and when I want to work. This has been a godsend for me as a parent.

I also appreciate that the only work pressure I feel is self-imposed. I don't ever have to worry about whether I'm publishing enough to make tenure, or what senior faculty think of me, or whether I'm billing enough hours as a member of a group practice.

Related to not feeling pressured by others is the freedom I feel to do exactly the type of work I want to do. Many of my friends in academia are stuck doing some things they don't like – serving on committees, for example. But I have the freedom to choose what I do and do not want to do. For example, if a potential patient approaches me for treatment, and I do not feel they are a good fit for my practice based on my specific skills, I can refer them elsewhere.

6.4 Any Drawbacks Compared to Academia?

I don't feel this way now, but early in my career, after I'd decided to jump off the academic track, I struggled with the fact that I'd chosen the less-prestigious career route. My graduate program highly encouraged careers in academia, and for years I felt like somewhat of a failure because I didn't pursue a tenure-track job. Unfortunately, this also contributed to self-doubt early on in my writing career. I felt that because I wasn't on faculty at a prestigious university or hospital, no one would see me as an "expert" or care at all what I had to say. That turned out not to be true, but it took a number of years for me to realize it.

Another thing that frustrated me early in my career was that I didn't feel like I was putting many of my specialized skills (writing, extensive training in evidence-based treatments) to use. Once I started writing, this changed, but early on I was seeing "all comers" in my practice (as everyone who is trying to build a practice does) and didn't get the opportunity to flex clinical and writing muscles that I knew I had.

Also, being affiliated with a large research institution affords you instant "street cred." If someone sees that you work at a well-regarded hospital or university, they immediately view you as an expert. But if you're a private practitioner, you really have to earn that "street cred," by treating a number of people successfully and/or producing content that other people respond to. It takes time for this to happen. Because I attended a prestigious undergraduate university and graduate program, I grew used to the instant "street cred" that came with that. When I started my

practice, I had to adjust to being just another one of the countless private practice therapists in my area. It took time for me to distinguish myself.

Also, starting your own practice is a far more risky financial proposition than working in academia. You alone are responsible for bringing in clients and therefore dictating your salary. Tenured faculty don't have to worry about that. Although there are also potentially greater rewards (i.e., a higher salary than you'd have in academia) if your business does well.

6.5 Doctoral students sometimes feel pressure to enter traditional academic positions, focusing on research productivity. When Did You Realize That You Could Have an Impact in Other Important Ways and What Was That Decision Like For You?

Honestly, the realization that I did not want to pursue a research career came before the realization that I could have an impact in other important ways. I had a phenomenal research mentor in graduate school who inspired me to craft a really interesting dissertation study. I felt like I could work on studies with him for the rest of my career. But I also realized that I didn't want to be the PI myself and didn't want to work on research projects without him as a mentor. I knew this by the time I was finished with graduate school.

As I mentioned earlier, I pursued private practice work because I believed that it was the only non-academic career option available to me. When I started my practice I felt like I was having an impact on my individual patients; however, I longed to have a larger impact. That desire to have a larger impact and reach more people was what inspired me to start writing about CBT for popular parenting websites. Once I started doing that, and getting responses from people all across the country, I realized that I could make an important contribution without having to be an academic.

6.6 How Are You Using Your Education in Psychology? How Do Your Skills Apply in Important and Impactful Ways?

I use it every day! In my clinical work and my writing I'm committed to evidence-based practices, which I first studied in graduate school and continue to study to the present day. I continue to consume psychology research, and it informs my clinical work and writing. I have remained active in professional organizations, like the Association for Behavioral and Cognitive Therapies (ABCT), which enables me to keep tabs on the groundbreaking work of the foremost clinical psychology researchers. I have always endeavored to be "research-adjacent," even though I no longer participate in research myself.

6.7 Any Resources or Advice You Have for Someone Who Would Like to Pursue a Career in This Employment Sector?

A few tips, in no particular order:

1. Get yourself on social media, including Facebook, Twitter, and Instagram. Social media is a great way not only to promote your writing to your audience but also to connect with fellow psychologists and other people working in your space.
2. And speaking of connecting with other people working in your space, take time to see what other successful popular press psychology writers are doing. Don't hesitate to reach out directly to these people – if my experience is any indication they will be happy to help you and share advice.
3. Don't get discouraged! As I mentioned above, it takes some time to develop a career in popular press psychology writing and to develop your voice as a writer. The same is true of building a private practice – it's a process. Don't let early rejections stop you from putting things out there.
4. Try to put out a variety of content. So while you're writing longer pieces, consider writing super-short pieces (tweets, etc.) as well as making short videos about key concepts. And make sure to have a great website where you can house all of this content. Investing in a professional web designer is one of the smartest things I did when I was starting out.
5. I think it helps to view writing as a "side hustle," for two reasons. First, as I mentioned, it takes a while to build a career in popular press psychology writing. And second, there's very little money in writing! So you'll want to be doing something else to actually make a living wage.

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Professional Women in Psychology: Integrating Your Values into a Full Life

Vicki DiLillo, Le Ondra Clark Harvey, Andrea Hussong, Barbara Kamholz, Elizabeth Lloyd-Richardson, & Monica Rivers

Editor's Note: Drs. DiLillo, Clark Harvey, Hussong, Kamholz, Lloyd-Richardson, and Rivers are highly successful psychologists, with multiple other passions and responsibilities that include their roles as mothers, spouses, adult children, activists, and more. They each are award-winning leaders within their respective fields, and admired role models by colleagues and students. Collectively, they have experience with a wide array of appointments in departments of psychology and psychiatry and in university, hospital, liberal arts, clinical research settings, and government sectors. Over the years, each has navigated transitions through various professional and personal roles. They each note that juggling priorities and navigating transitions are complex and personal, with no "finish line." I am very grateful that each agreed to participate in this chapter by sharing their personal reflections on their multiple roles and priorities.

Given that the majority of graduate students in psychology are women, and society continues to place heightened expectations of perfection on women as compared to men, it is very helpful to hear advice on juggling a multidimensional life from six successful women in psychology. A series of six key questions, with responses to each from all six psychologists, is presented below.

1. How Would You Describe Your Current Position?

1.1 Dr. DiLillo (Liberal Arts College)

I am a professor of psychology at a small liberal arts college in the Midwest. I was hired as an assistant professor at my school 16 years ago and have since worked my way through the tenure and promotion process. Additionally, I recently finished a term as department chair. Prior to my current position, I spent about 6 years as an assistant professor at an academic medical center in a non-tenure track position that was 100 percent extramurally supported. I left my previous position because the political climate was becoming less hospitable to non-physician faculty members.

Although it varies from school to school, most psychology faculty members in institutions like mine spend the majority of their time in activities related to teaching, including classroom teaching, supervision of independent projects, and advising. In my department, faculty members teach three courses per semester, every semester. We do not have TAs or the opportunity to buy out a course with grant funding, although faculty members in part-time administrative roles (e.g., associate dean) receive course reductions. We each have about 20–25 advisees as well. A program of productive scholarship is also typically very important to success as a faculty member at a liberal arts college, although activities that constitute “scholarship” may be more flexible than at a Research I university. For example, at my institution extramural funding is highly encouraged, but not mandatory for promotion and/or tenure. Furthermore, publications in high-quality peer-reviewed journals are emphasized, but other types of publications (e.g., book chapters, monographs) are seen as respectable as well. In addition to teaching and research, liberal arts faculty members are expected to engage in departmental and university service. At my institution, these opportunities range from service on elected committees, to appointments on ad-hoc committees, to participation in admissions events, and advising of student groups on campus. Depending on the particular service activities in which a faculty member is involved, these responsibilities can be quite time-consuming. University-wide, faculty evaluations at my institution are based 60 percent on teaching, 30 percent on scholarship, and 10 percent on service. I believe that this breakdown is fairly typical for liberal arts schools. It is relevant to note that, although faculty evaluations are based on the 60/30/10 formula described above, the actual proportion of time spent engaging in these activities is rarely consistent with this breakdown; it varies from semester to semester and year to year, depending on individual, departmental, and university priorities.

1.2 Dr. Clark Harvey (Behavioral Health Advocacy Organization)

I am the Chief Executive Officer of a statewide advocacy organization that represents mental health and substance use disorder clinics that collectively serve over 500,000 clients. I am often asked about what attracted me to a career in advocacy and public policy. I share the story of how I felt “restless” during graduate school. I was never appeased by the thought that I was training to be a “scientist/practitioner”; the idea of having to pick between science, practice, or a combination of both seemed limiting. I wanted to get a PhD so that I would be afforded the platform to do whatever I wanted to do; I just could not figure out what that was. After leaving the Midwest to return to California to complete my internship and postdoctoral training, I reflected on the common thread throughout my research and clinical work: everything I did centered around being a voice for vulnerable communities. That is when I decided to explore careers that would allow me to utilize my training and impact systems and structures that many of my clients interacted with on a daily basis. I moved to the state capitol and worked as a fellow in a Senator’s office. From there, my career in public policy took off

and I was quickly promoted to being a Chief Policy Consultant. I made history as the youngest, first female, and first Black Chief Consultant for the policy committee I led. After 6 years at the capitol, I was recruited to be the lobbyist and Policy and Legislative Affairs Director for the organization I now lead. It has proven to be a perfect way to merge my clinical training, research, policy experience, and passion for advocating for behavioral health agencies and the vulnerable communities they serve. When I am not being CEO or “Dr. Mom” to my two toddlers, I volunteer on community and national boards.

1.3 Dr. Hussong (Research Intensive University)

I am a tenured professor in a Psychology Department at a research-intensive university; the same department in which I began my academic career in 1997. My responsibilities include research, teaching, and service such as serving on committees in the department and university and working with national organizations like the National Institutes of Health. For seven years, I worked in an administrative position, directing a research center and training program. Over the years, what constitutes my workload and day-to-day activities has changed. When I started this position, I spent most of my time on research and teaching. Post-tenure, my service commitments began to grow as I said yes to more invitations. For example, when I was an assistant professor, before I had children, I probably averaged 60 hours a week in the office during the academic year, taught four classes, and spent probably 40–60 percent of my time on teaching, mentoring, and training activities, 30–40 percent on research, and the remainder on service. In my mid-career years when my children had entered school, I used grant funding to buy-out of some of my teaching commitments and taught one course, directed two research projects, mentored 3–4 graduate students and served as the Director for Undergraduate Studies. I probably averaged 40 hours a week in the office during the academic year and spent 10 percent of my time on teaching, 50 percent on research, and 40 percent on service.

1.4 Dr. Kamholz (Hybrid – Academically Affiliated VA Plus Small Business)

Revising this chapter seven years after its original publication, I’m struck by how much my career has changed, and also by guiding principles that have remained constant.

For many years after I completed my postdoctoral fellowship, I worked exclusively at one academically affiliated VA Healthcare System. Eight years ago, I opened a very small private practice, while maintaining my full-time work at the VA. Over the last several years, my work has shifted so that I now split my time across an academically affiliated VA (half-time) and a small business that includes direct clinical care and consulting/contract work for a variety of groups and causes that are important to me. For lack of a better term, I consider this a hybrid career, comprised of elements I have the luxury of choosing. It’s one I never thought I wanted, but now find incredibly meaningful.

At the VA, I serve as Associate Director for Outpatient Mental Health Services, which is part of the leadership team for a large Mental Health Service that includes over 300 Mental Health employees across three major medical centers and six community-based outpatient clinics. Across these geographic sites, Mental Health includes Inpatient, Residential, and Outpatient Services. My role is primarily administrative, with some time allocated to training. Crucially, when I shifted to half time, I made sure that my scope of responsibilities was explicitly and concretely downsized to match the new schedule. This is critical to avoid doing the same job for half the compensation.

Administrative tasks include a range of activities, from those that are obviously central to patient care and well-being, to mundane details that leave me wondering why I spent over 20 years in school! Most interesting and satisfying are the former, and they include projects such as redesigning services at a small community-based outpatient clinic to maximize efficient and effective care; developing systemized processes to facilitate transitions in care from Inpatient to Outpatient Mental Health Services; and centralizing and overseeing key processes that inform Veterans' evaluations for benefits. Of course, all such projects involve the efforts and collaboration of many people. Working with smart, dedicated professionals is another favorite aspect of my position. In addition to large projects, other administrative responsibilities include overseeing specific programs within Outpatient Mental Health Services (e.g., Suicide Prevention), developing resource requests to procure new (or backfill existing) positions, contributing to decisions about allocation of clinical resources, staff workload, and clinical duties, completing annual employee performance appraisals, serving on hospital committees, and participating in recruitment, interviewing, and hiring of new Mental Health staff.

Although I have opportunities to contribute to psychology training, my academic and training efforts are focused on training psychiatry residents and contributing to the missions of several mental health organizations. I oversee a 4-year cognitive-behavioral training curriculum for psychiatry residents, and provide some limited mentorship for other trainees. I also have served on various committees and governance teams of organizations such as the Association for Behavioral and Cognitive Therapies and the Anxiety and Depression Association of America.

Within my business, I divide my time across direct patient care, and consulting/contract work. At this point, I consider "consulting" to be any work for a group or organization that is based on the mental health expertise that has been my bread-and-butter for over 20 years (e.g., training in healthy coping for the stressed staff of a large research project, educational programming for a professional mental health organization). I consider "contract work" to be any work for a group or organization that is informed by my behavioral expertise and related skills, but represents a newer application of them (e.g., organizing or communications for an advocacy group). The distinction is mostly in my own mind! But it's useful for me as I consider my level of expertise, the nature of my potential contributions, and the associated fee structure.

My professional life provides many, varied opportunities to collaborate with interesting, knowledgeable colleagues, including trainees, junior professionals, and

experts in their respective fields. The combination of different types of work and collaborators is engaging and challenging, and allows me to be an expert/teacher in some domains, and a newer learner in others. I once considered a hybrid career to be a chore, or a (problematic) sign that there wasn't a job that would meet all my needs. I now experience it as a luxury of flexibility and freedom, allowing me to shift mindsets and methods of contributing to the community at large, learning from different people and experiences, and enjoying financial stability with creativity and excitement.

Of course, there are challenges. Different types of work (and the continual shifting set that goes with it) can be exhausting. "Swerving" (as Michelle Obama would say) into new areas mid-career can leave me uncomfortable or embarrassed by things I don't yet know. In addition, many opportunities mean that time management is always a challenge, and I'm chronically just a little (or more) behind where I want to be. (My former self judges me harshly on this point. My husband routinely jokes that my epitaph will read, "It's later than I thought." More on this later.)

1.5 Dr. Lloyd-Richardson (Masters Granting University)

I am a tenured professor of psychology at a masters granting university in the northeast. I was just recently promoted to Full Professor and have been at this university for nearly 12 years, coming here from a non-tenured research faculty position at an academic medical center. I left this position when I was pregnant with my third child (all very close in age) and realized that I wanted a less time-demanding position that offered more financial stability. My institution is a Research I university, with just under 10,000 students enrolled in more than 40 undergraduate and 25 graduate degree programs. Psychology is one of the largest majors on campus, and our department has three graduate masters programs (Clinical, Research, and ABA).

My contractual responsibilities are threefold: teaching and advising, scholarly and professional activities, and service. While a typical teaching load is three courses per semester, course releases are available for grant-funded research and supervision of master's theses, so teaching two courses per semester is more common for research active faculty. I am responsible for providing academic advising to about 35 students each year, in addition to the students that I supervise on their individual research. While there is no documented requirement of grant funding for tenure and promotion, there is a clear expectation that faculty will seek and obtain grant funding. Scholarly and professional activities are wide-ranging, from peer-reviewed publications to books, book chapters, monographs, and presentations. Faculty are expected to contribute service to the department, university, and local community. In my early, pre-tenure years, my time was generally broken down to approximately: 40 percent teaching, 50 percent research, and 10 percent service. Since tenure and promotion, it is worth noting that expectations for service have increased significantly, due in part to increased expectations to take on service roles as one becomes more senior in the department and field of study, but also increased

demands from the university (perhaps due to changes in the financial landscape of many universities, which have led to a corresponding increase in demands on faculty time for service expectations). What was acceptable before is often no longer considered enough service work in the current climate, and yet it's never quite clear how much service is enough to be considered "acceptable." At present, my workload during the academic calendar year is typically 55–60 hours per week. I commonly teach two graduate-level courses per semester, supervise 2–3 graduate students on theses and various research projects, submit 2–3 grant applications per year, and have 3–5 manuscripts being worked on at any one time. I actively collaborate with an international research group in my field of study. While my position is a 9-month contract, scholarship work really continues throughout the summer, as does development of course materials and service work.

1.6 Dr. Rivers (Leadership Consulting and Executive Coaching Private Practice)

For the past 10 years, I have led a leadership consulting and executive coaching private practice. The portfolio of my work has been quite varied based on the needs of an individual client or partnering organization. I have developed and facilitated training modules, written curricula, and helped individual clients align organizational missions, strategies, and processes, enhance their influence across their organizations, lead cross-functional and globally dispersed teams, and navigate change initiatives. My executive coaching clients have ranged from newly appointed managers to seasoned, senior-level executives from diverse sectors including healthcare, entertainment media, government, financial services, manufacturing, non-profit, and higher education. I have also integrated my research and experience in health psychology and neuroscience to support executive coaching and development initiatives designed to enhance resilience and improve workplace climate.

After years of walking alongside leaders and organizations as an external consultant, I became curious about using my consulting skills from within an organization. An opportunity emerged for me to gain the internal perspective I desired when a coaching colleague invited me to join her in the Human Resources division of a highly ranked private university. As a Human Resources leader, my tasks and responsibilities are also quite varied. I have served as the chief architect for strategic initiatives designed to improve engagement and belonging and integrate equity, diversity, and inclusion best practices within the Human Resources function and across my organization. I also lead the university's professional development strategy through the design and delivery of open enrollment and custom leadership development experiences and the provision of organizational development consulting and professional coaching services.

Whether working externally or internally, I frequently draw upon the analytical and clinical skills that my PhD training in psychology afforded. Most importantly, I love that I am able to leverage my competencies in ways that strengthen the

vocational trajectories of my clients and contribute to the health of the organizations in which they serve.

2. What are Common Misconceptions About Your Type of Position?

2.1 Dr. DiLillo (Liberal Arts College)

It's not unusual for me to talk with someone who assumes that life as a college professor at a small liberal arts college is not terribly time-consuming or demanding. I've heard more than one graduate student comment, usually in the throes of qualifying exams or the hundredth revision of a manuscript, that someday they want a "cushy" liberal arts job. They seem to imagine that the only responsibilities of a liberal arts faculty member are teaching classes and keeping office hours, and that the rest of our time is "free." In reality, of course, formal classroom teaching is only one of a wide range of responsibilities (some of which I mentioned above) in the academic life of a liberal arts faculty member.

Another misconception I've heard expressed is that faculty positions at liberal arts colleges do not require any particular preparation and are relatively easy to obtain. In my experience, a successful candidate for a job at a liberal arts college has, in addition to a productive program of research involving undergraduates, significant teaching experience with evidence of teaching excellence (e.g., a teaching award). Many search committees also look for formal training (e.g., completion of a certificate program) in college teaching. Most liberal arts faculty I know engaged in very intentional training and sought out specific experiences to prepare them for this type of position. I don't think it would be accurate to view a job at a liberal arts college as an easy "fall back" position or a safe bet.

2.2 Dr. Clark Harvey (Behavioral Health Advocacy Organization)

When I worked at the state capitol, some colleagues were curious about why a psychologist would pursue a career in public policy. Most of my peers had a background in law, policy or politics. I think there is a common misconception that psychologists are prepared to only teach, research, or provide clinical services. This is held by those outside and within the field as well. I often explain to colleagues and students that we have sought-after skills that can be utilized to impact and transform systems. Our unique training has equipped us to teach, counsel, supervise, and lead within various sectors.

2.3 Dr. Hussong (Research Intensive University)

Often when I speak with graduate students about career planning, they offer the unintentional dig, "Oh, I don't want a position like yours. I want to have a life. I want to have a family and to see my children." This response reminds me that we shouldn't make assumptions about what people do outside of the office. Just because all you see

me do is work does not mean that this is all that I do. I think the flexibility of an academic position can be incredible and has many of the same challenges and rewards as running your own business. Once you are clear on what is expected from the university, the rest of your responsibilities are the commitments you make. I value being able to craft a schedule that clears late afternoons to share in my children's activities or summers where we can spend more time together. A second misconception comes when students sometimes fail to see the journey involved in academic (or other) careers. Although some women take on both roles – mother and academic – at the same time, most take on one and then the other. The path to doing both together is often more gradual. Students who judge the position by those established in the role may misperceive the journey. This is akin to the third-year student who declares her graduate career a failure because she isn't achieving at the same level as her mentor, a senior full professor. Well, of course that mentor was not achieving at that level either when he or she was a third-year student. So, my advice is to stay open to possibilities, trust that you will adjust to the circumstances in which you place yourself, and know that you will have more information when you need it.

2.4 Dr. Kamholz (Hybrid – Academically Affiliated VA Plus Small Business)

Many people assume that there's no flexibility in a VA system, and that a sole business would be extremely flexible but lonely. In the broadest sense, large federal organizations do lack the ability to quickly shift to accommodate individual needs. However, my experience is that this is also quite variable depending on the specific organization, and the type of position within the organization. Different VA facilities have different cultures (including the extent to which they support staff having multidimensional lives), and this influences interpretation and implementation of policies. In addition, the VA has multiple missions – clinical care, research, and teaching. Professionals most heavily involved in direct clinical care may have the least flexibility because patient schedules dictate those of clinicians. There seems to be more obvious flexibility in the research, teaching, and administrative arenas. That said, the issues of who you work with and how hard you work have a huge influence on this, irrespective of your type of position.

Ironically, I experience my business as less flexible than the VA in many ways. Similar to clinical work at the VA, the clinical work in my business is largely dictated by patient schedules. Clinical sessions are more difficult to reschedule than meetings with colleagues. In addition, in the newer contract work that I'm pursuing, I'm typically the person with less experience and/or political capital. That means I'm working around others' schedules. This relative lack of flexibility is offset by not working full-time in this area. As for possible loneliness, I haven't had that problem. I imagine that's partly because my clinical work is small (6–8 hours/week), and partly because my consulting/contract work is highly collaborative.

2.5 Dr. Lloyd-Richardson (Masters Granting University)

When I moved to my current position, I was told by a few in administration that my eight years in the academic medical center and the work that I had done there counted for very little on the road to tenure. They were right. It was at that time that I realized that medical schools and universities may not always speak the same language. Each of these institutions thinks “the grass is always greener on the other side.” Medical school staff may envision university professors as teaching an occasional class and then having hours on end to discuss theory or research problems and design with students eager to learn and engage. What they don’t consider is the amount of time it takes to teach a large course, or advise 35 students (yes, that’s right – advising 35 students on their course selection, career considerations, and how to get along with dorm roommates!). University faculty, on the other hand, imagine medical school-based research psychologists as devoting all of their time to the creative and exciting process of writing grant applications, and fail to consider the near daily struggle to maintain soft-money funding, and balancing clinical caseloads with research responsibilities. Truth be told, there is much more to both, with neither position being easily completed in a standard 50-hour work week.

2.6 Dr. Rivers (Leadership Consulting and Executive Coaching Private Practice)

As opposed to having misconceptions, individuals who learn that I am a leadership consultant and executive coach often respond with curiosity and additional questions. Of course, there are some who hear the word “consultant” and immediately think of the stereotype of hourly billing or high-dollar retainers for “cushy” work. The concept of “executive coaching” tends to be even more elusive because of the more recently popularized role of “life coach.” Thankfully, questions regarding my work are often entry points to conversations in which I can more fully describe my vocation. At some point in the dialogue, I usually refer to my training in clinical psychology and how my work has allowed me to integrate my understanding of individual differences and systems thinking in service of leadership and organization development as opposed to clinical problems. The intrigue often deepens when I add that I am also able to use my psychological assessment training in service of normative, lifespan developmental, and vocational issues and that my therapeutic and counseling skills provided a helpful foundation for my training and credentialing as a coach (although the work is distinctly different). If there are any misconceptions, they most often center around the hard work, diligence, and full range of relational, technical, and business management skills that are needed to successfully lead a consulting practice.

3. How Did Motherhood Impact Your Job, If At All?

3.1 Dr. DiLillo (Liberal Arts College)

My son is now 14 and was born after I had been in my current position for two years. Because of my previous faculty position, I was considered for tenure and promotion early. As a consequence, I was tenured at the end of my third year, and was promoted the following year. (At the time, promotion and tenure were not linked at my institution, which is quite unusual.) Although I would have preferred to be a bit more established in my position before having a child, I was also very aware of the risks and potential complications I could encounter if I waited significantly longer (I was in my mid-30s at the time). I knew that the timing of my pregnancy could be stressful in relation to the tenure and promotion process, but I don't think that there ever is an ideal or particularly low-stress (ha!) time to have a child.

I do not think that the transition to motherhood substantially changed the quality or amount of work I accomplished, but it did require me to restructure my work habits. As a true morning person, I learned to make good use of the early hours while my son was sleeping to answer emails, prepare for class, and write. I intentionally left work a bit earlier, but learned how to be more efficient while I was physically at the office. I've also become more intentional about my institutional service commitments, choosing to serve on committees that do not routinely meet during evening hours. Additionally, I am very fortunate to have several colleagues across campus who are also trying to juggle academic life with parenthood. Through the years, we have provided social support to one another and have come up with creative ways to resolve some tricky parenting challenges. For example, on some unexpected snow days when elementary schools were closed, but our college was open, we took turns supervising kids in an empty classroom so that none of us needed to cancel class. This group of colleagues certainly enhances my work-related quality of life, which in turn helps me maximize my effectiveness and productivity.

3.2 Dr. Clark Harvey (Behavioral Health Advocacy Organization)

I have two sons ages 2 and 4. Unlike the plans I made to prepare for my education and career, I have never been one to dream about or plan my future personal life. I always believed that things would fall into place when they were supposed to. I remember when my husband proposed to me, my first words were "I thought I told you my plan wasn't set yet?" Of course, moments later I was full of excitement, but my first response illustrates how I have always put "career first." After eight years of marriage, we still laugh about my initial response to the engagement. What I did not anticipate was the difficulty we would face when I was finally ready to explore starting a family.

After two years of fertility treatments and the loss of one of my twins, we were blessed with our first son. Almost two years later, we welcomed our second son. Both

of my pregnancies were high-risk, but my work pace did not decrease. I remember confessing to an older woman in my family that I was nervous about how I was going to handle a high-powered career and also be a mom. Her response was interesting, “Well, it depends what kind of mother you plan to be. You can be the type that moves forward as if nothing happened, or you can be the type that talks about her kids all the time.” This response told me a lot about her, the expectations of working mothers in her generation, and the perception that being transparent about your motherhood/career journey was perceived as a weakness by some.

The benefit of being established in our careers was that we were financially prepared for the costs of raising children. However, the cost of being a “Supermom” began to surface after having my second child. Although I did not change anything about my work pace after having my first son, and in some ways I think I was trying to live up to the bad advice I received from a family member, I realized that I needed to reprioritize everything once I had two children. I had to become skilled at graciously declining invitations to serve on boards, speaking opportunities, etc. It was time to pay it forward. I began sharing opportunities with mentees and colleagues who were establishing their professional careers. It was also time to focus inward. I realized that I needed to get better at asking for and receiving help. I hired a nanny to assist with my second child, I let friends and family cook meals for me during my maternity leave, and started working from home on Fridays. I continued my leadership positions, but sometimes brought my baby with me to meetings. I decided to be transparent about my challenges with “balancing it all” as a mother and career woman, and as a result, numerous women and men began to reach out to me echoing similar struggles. It was liberating to share the realities, the successes, and moments of challenge being a working mom.

All in all, I challenge the sayings “lean in” and “achieve balance.” Balance is illusive – we all have times of great productivity when we lean in to complete a task, but it is important to build in a break to rejuvenate yourself too. Earlier this year, I was diagnosed with pre-cancerous cells that, in combination with my family history, indicate that I may develop an invasive breast cancer during my lifetime. I will continue to work, mother, and enjoy my life. I know that the lessons I have learned – working hard, reprioritizing and leaning on others – will now be tested more than ever. I hope breast cancer does not ensue, but if it does, I look forward to announcing that I beat it while working, mothering, and advocating for vulnerable populations.

3.3 Dr. Hussong (Research Intensive University)

More than one graduate student has complimented me on the seemingly impeccable timing of my entry into motherhood *vis-à-vis* my career trajectory. But like many career development stories, things are not always what they seem. Three years into my tenure-track position, my husband and I decided that we were ready to have children. It took another three and a team of endocrinologists before those children emerged, one year after I was granted tenure. I now have twin girls – who turned 16 the year in which I’m authoring this essay. The three years in between our decision to

have children and our having children were challenging, but I am thankful for them. They are a reminder to be open to the opportunities around me and to hold in check my strivings for control over things that I do not control. I have to credit one of my students for summing this up when we talk on this subject. She writes about academic motherhood, “you can’t plan for it and there really is no ‘perfect time’ to have kids, but your job and lifestyle will allow for it whenever it happens.”

3.4 Dr. Kamholz (Hybrid – Academically Affiliated VA Plus Small Business)

I have one child, who is 12 years old. We welcomed her to our family when I was at the VA full-time and in the “acting” version of my current VA role. I accepted the permanent position when she was six months old. The transition to motherhood while also transitioning to the new professional role was a little tricky. My administrative position was far more public than my previous one. The rookie mistakes that I made at the office (partly due to learning the ropes, partly due to sleep deprivation) were more noticeable and frankly embarrassing than they might have been under different circumstances. In addition, as a new mother, it’s challenging to be questioning yourself on both the work and home front simultaneously.

On the positive side, I felt lucky to be navigating an enormous transition at home under what felt like very safe circumstances at work. I had been with this VA for over eight years, and was a known entity. Although the challenges of my promotion were certainly present, in general I didn’t feel like I had to prove myself. My colleagues and supervisors knew me well, and could readily contextualize bags under my eyes or word-finding difficulties. The VA in which I work is a family-friendly one, which also contributed to my feeling broadly supported. I was (and remain) grateful for that, and also for not being brand new to my career or this particular workplace when I became a parent. Although it can obviously be more difficult to start a family in your 30s or 40s, I felt the professional benefit of having done so. (An important note on this: I did not postpone having a family to focus on my career. It was a happy coincidence that I was in a more established place professionally when I wanted to start my family.)

In terms of my business, it is no coincidence that I started it when my daughter was around four years old. When she was younger than that, I wanted my work life to be as circumscribed and predictable as possible. Being at the VA full time (with no outside venture) fit that goal perfectly. But as my daughter got a little older (and she understood more and was, frankly, awake and interactive for longer each day), I felt comfortable being away from her a couple of evenings each week. My business expanded further when my daughter was about eight years old. As she’s gotten older and has more independent activities herself (and isn’t interested in spending as much time with me!) I’m more comfortable with less-predictable hours and a varied schedule that includes periodic weekend work and travel. She is also now old enough to understand how I value and juggle multiple priorities.

3.5 Dr. Lloyd-Richardson (Masters Granting University)

Looking back, I can see a clear correspondence between my children's arrival and my career decisions. I was a junior faculty member at an academic medical center when I became pregnant with my oldest. I am extremely lucky to have had healthy pregnancies that allowed me to accomplish a great deal at work. Indeed, I found myself working on preparing a career development award up until the final hours of my first pregnancy. Receipt of that award allowed me 5 years to devote to this research agenda, and it was during this time that I also had my second child (16 months after my first). Upon finding out that I was pregnant with my third, I realized that, while I enjoyed my work setting and cared for my colleagues, I found it hard personally to divide my attention between the care I wanted to give my young children while also devoting the necessary and significant amount of time my work demanded (not to forget the 2-hour daily commute which ate into my work and family time). These issues became the catalyst for my searching for a meaningful, satisfying academic career that would not deprive me of the time I wanted to spend caring for my young children. I began applying for area Psychology department-based positions and accepted my current position while I was on maternity leave with my third child. It's been 10 years since the first edition of this chapter was written, and my children are now 17, 15, and 13 years old. Holy cow, how did this happen?! They aren't babies anymore, but they still need and want me to be involved in their busy teenage lives. No matter how busy my hours can get with my current position, I am continually grateful that it affords me the flexibility I need and desire to be active in my kids' lives. I am mindful of how much I work at home around my children, because I want them to see me aspiring to juggle career with my family life and my own personal goals. But I also hope to set an example for them of how their mother can also be a competent professional helping to educate and improve people's lives.

3.6 Dr. Rivers (Leadership Consulting and Executive Coaching Private Practice)

Immediately after having my first child, my family relocated because of my spouse's work. We were ushered into a welcoming community, and I was quickly recruited to become an adjunct professor at one of the local colleges in the area. In light of the transition and my love for teaching and training, I thought the part-time position would be a great fit and accepted the offer. After the first semester, I was invited to become a full-time visiting professor and later accepted a tenure-track position. I knew that I wanted to shift my career toward organizational psychology and consulting, but I recognized that the professorship provided a platform to establish greater credibility in the community, network and build relationships that would be crucial to building a practice, and have greater autonomy over my schedule than a traditional 9 to 5 role. In order to align my academic efforts with my future goals, I elected to teach organizational psychology courses and manage my department's

outward facing co-op and internship programs. Eventually, I connected with others who were involved in leadership development and coaching initiatives at a neighboring university medical center and was invited to train and serve in their leadership coaching cadre. I had my second child 2 years later, and it became clear that I would no longer be able to juggle mothering two small children while managing my academic responsibilities and a growing consulting and coaching practice. After a period of soul searching and discernment, I decided to take a leap of faith and leave the professorship behind – despite the financial uncertainty and risk that this change would impose. Thanks to a remarkably interesting series of events, I found myself interviewing to become an adjunct coach with one of the most respected and consistently ranked global leadership education organizations in the world within a few months of my formal departure.

The breakthrough opportunity that I had been seeking had finally emerged and also offered the flexibility I needed at that time to fulfill my chief priority, which was serving my family. My children are now 11 and 15, and their increasing maturity has afforded the opportunity to take on additional roles and challenges. My goals and priorities are still the same, however. I want to be present for my children and to model authenticity and the ongoing pursuit of a meaningful and fulfilling life.

I witnessed an important mentoring conversation about work and family between a wise and gregarious banking executive and a somewhat younger group of professional women. She reassured her audience in the face of questions regarding “balance,” by stating “you can have it all, just not all at the same time.” While there might be some who would disagree, I appreciated the perspective. Once we identify and gain clarity on our “anchors” – those values, beliefs, and imperatives that ground us and serve as guideposts – we can clarify our paths, choices, and the timing of when we elect to pursue particular goals. That said, we must embrace even this idea with self-compassion and acknowledge the inherent uncertainty of life.

4. Many Women in Graduate School Wonder What Type of Position Will Offer Them the Best Experience for Both Their Work and Personal Lives. What Aspects of Your Position Facilitate a Satisfying Experience of Work and Personal Life?

4.1 Dr. DiLillo (Liberal Arts College)

The aspect of my job that helps me effectively manage responsibilities at both work and home is the control I have over my activities and day-to-day schedule. This control allows me some flexibility in terms of scheduling classes so that I can make it to my son’s soccer game, take him to a doctor’s appointment, or chaperone the occasional field trip. I work as many hours and as intensely as I did when I was employed at an academic medical center, but the increased autonomy and flexibility I currently have translate into less stress and an overall higher quality of life. I also have significant flexibility during the summer months. While faculty members at my institution are on 9-month contracts, most of the psychology faculty spends

a significant amount of time in the office during summer months on research activities that are difficult to accomplish during the school year when classes are in session. However, the summer atmosphere is quite relaxed, and the absence of teaching responsibilities enhances flexibility, which in turn facilitates my ability to manage both work and home responsibilities.

An additional factor that greatly facilitated my transition to motherhood was my institution's generous maternity leave policy. As a rule, new mothers are granted a one-semester paid maternity leave during which they are free from all regular faculty responsibilities, including teaching, advising, and service activities. Research activities are a little trickier to manage given that it may not be feasible or desirable to truly hit the pause button on a program of research for an entire semester. I had the good fortune of giving birth to my son at the beginning of the summer and took maternity leave the following fall. As a result, I was able to spend about 7 months at home with him before returning to work full-time. It's notable that both departmental and institutional support for this policy are quite strong; I was assured that I was in fact expected to take maternity leave. In my experience and observation this type of maternity leave policy eases the adjustment to parenthood and ultimately enhances productivity upon return to full-time work.

While I have benefited enormously from the flexibility and autonomy in my job, it is not without challenges. The professional life of a faculty member at a liberal arts college is not confined to the classroom, and it is important to be actively involved in multiple aspects of the campus community. Consequently, many work-related activities take place outside the confines of a typical 9 to 5 workday. For example, faculty members at my institution frequently participate in evening faculty meetings, admissions events, departmental activities, and functions related to student organizations across campus. This assortment of activities can complicate childcare arrangements and may make it challenging to plan for quality time at home.

Another issue that poses a challenge is the fact that many aspects of academic work have no clearly defined end or limits. Of course, this can be said of many other types of work (including stay-at-home parenting) as well. While certain activities do terminate when a semester ends, most (research, course development, advising, committee work ...) are ongoing. As a result, the work can easily expand to fill whatever time I allow. This characteristic of academic work, combined with the fact that technology makes me highly accessible to students at almost any hour of the day, can make it more difficult than I would like to keep some degree of separation between work and family life. I consistently strive to set reasonable limits for myself at work (and at home) to avoid burnout while maintaining both my productivity and my sanity.

4.2 Dr. Clark Harvey (Behavioral Health Advocacy Organization)

When you dream about your future, dream big and do not compromise. Women can do so much, and if you have the opportunity to shatter the glass ceiling, and this is what you dream of, then do it. I do not mean to sound simplistic or naive about the real life

dilemmas many women face, but I have watched many short-change their professional dreams out of fear that they would not be able to swing work and motherhood.

While our country lags behind others in providing appropriate paid leave to mothers and fathers, I encourage every mother to take full advantage of the leave afforded you by your employer. If there is room to negotiate, do it. I remember having a boss who changed the medical policy in our handbook, because he needed extra medical coverage for a procedure. When I became pregnant, I went to him, reminded him of how flexible he was with his own medical needs and asked him to revise the maternity leave policy, and he did. I also negotiated professional development days so that I would not have to use my paid time off to cover my time volunteering at board meetings (many of which I brought my infant to). Last, I requested to be able to work from home one day a week.

In sum, if you do not advocate for yourself, who will? If there is flexibility to negotiate for your future personal needs up front, then build this into your job offer. Although we are “super women” we also have families who rely upon us. You cannot turn time back so the more you can do to create a work schedule and culture that will afford enough flexibility that you can attend to multiple aspects of your identity, the better.

4.3 Dr. Hussong (Research Intensive University)

In the introduction to *Mama PhD*, you will find the following veracious words written by Elrana Evans and Caroline Grant (2008):

Balance, as every working mother knows, is not a static state, perfectly still like an old-fashioned scale. The dancer in arabesque or the yogi in vrksasana are both perfectly balanced, every muscle aware or engaged. Their bodies are vibrantly alive as they continually assess and shift their poses, working and changing to hold a position that gives the illusion of stillness. This version of balance, this constant, alert, focused negotiation, is the lifelong process of mothers in the academy, and everywhere – working out as we go along how to be whole people.

Their words strike a chord with me. On the whole, across the semesters, contexts, pauses, and challenges, I enjoy my experience of a life that includes both an academic career and a family with children. My own personal definition of balance then is that enjoyment.

I believe that academic positions are highly flexible and compatible with parenthood for many, although not all, individuals. True, there are really many versions of the academic position, and I have been fortunate to work in a supportive environment. When I left my twin four-month-olds at home to go back to work regularly, I decided that there must be a reason for doing so, and I set out to define what that reason was for me. In the academy, I've often been able to create the job that would hold my interest, a job that I would like most of the time and even love some of the time. This is a key ingredient to me in juggling the responsibilities of the *Mama PhD* life.

In my opinion, many of the challenges that academic mothers face are common to working mothers everywhere and simply revolve around not having enough hours in the day for managing the lab and the household, writing the manuscript and the grocery list, and consulting the statistician and the babysitter. I am certainly more likely to be late on deadlines than I was pre-kid, but I care less. Other challenges that await the academic mother may differ from pre-tenure to post-tenure status. The pre-tenure academic job holds performance to an external standard, requires a certain level of productivity, and provides the challenge of doing many things for the first time and at the same time. These factors mean that pre-tenure positions often feel less flexible and perhaps more overwhelming than post-tenure positions. Then there is perhaps the more demanding part of the job, defining and meeting our own standards and figuring out how to deal with external feedback when those standards clash with those of the academy. This second part of the job does not change post-tenure for most of us and indeed begins far before that first tenure-track position.

But I'd be remiss if I didn't address one of the core challenges of an academic position – the unending and seemingly limitless bounds of the work an academician does. When am I done writing the talk, preparing the course, advising the student? How many talks, courses, and students do I take on? Because it can be difficult to know exactly when we are done, it is vital that we work hard to avoid over-committing at work or at home. This relates to one of the most important skills to master as academic mothers; that is, saying “No.” I often hear from my junior colleagues that they believe that they cannot say no to requests to contribute to their departments or fields because they fear for their tenure. I am not sure that this fear is always well-placed and I strongly encourage women to check out that belief with senior colleagues before they pile on the commitments. But again, learning to set those boundaries, to un-commit to commitments that turned out to be something else, and to leave work aside to play are all challenges for any working mother, and perhaps even more so for the academic mother.

4.4 Dr. Kamholz (Hybrid – Academically Affiliated VA Plus Small Business)

This is the million dollar question, and I don't believe there is an easy or one-size-fits-all answer. I would argue that it's incumbent on each of us to identify our own values and priorities, and to try to act in ways that are consistent with those. We need to be our own barometers.

The guiding force of values and values-based behaviors has received lots of attention over the last two decades, highlighted by the work of visionaries in acceptance- and mindfulness-based approaches to mental health, such as Marsha Linehan, Steve Hayes, Liz Roemer, Sue Orsillo, and others. The importance of values in job and career choices is an important application of these ideas (e.g., Yu & Wright, 2015), and several work-related values exercises have been developed, accordingly (e.g., https://media.capella.edu/CourseMedia/CPLU1100_CPL5100/WorkValuesCardSort/wrapper.asp). My dear friend and colleague, Dr. Risa

Weisberg, and I have also spoken on the topic at various conferences (e.g., Kamholz et al., 2016; Weisberg et al., 2016), and it would be hard to overstate her influence on my thinking here. Although I can't offer an easy or universal answer to this question, I can highlight the ways in which certain values have influenced my own choices at different times (as I've alluded to previously), as well as their dynamic nature.

Just some of the professional values relevant to my choices (and my satisfaction with those choices) are: the importance of doing "good," autonomy, influence, enjoyable relationships, financial stability, clear boundaries between my work and personal life, and status. Throughout my career, I have placed a premium on being able to "do good," have meaningful autonomy over my work while also enjoying relationships with colleagues, and maximizing financial stability. (I have a remarkably low threshold for fiscal risk.) In the earlier years of my career (from finishing postdoc until my daughter was about 5 years old), it was also very important to me to have influence within an organization, have clear (rigid?) boundaries between work and personal time, and to have a certain amount of professional clout or status. My then-full-time VA leadership role matched those priorities extremely well.

As I became more senior in my traditional psychology career and my daughter got older, my priorities shifted. Now mid-career and feeling like I've "proven myself," status is no longer a significant consideration. As I mentioned elsewhere, I'm also more comfortable with more permeable boundaries across work and personal domains. Although consistent across my career, my perspective of doing "good" broadened considerably as the landscapes of politics and social justice shifted dramatically leading up to the 2016 elections and beyond. Perhaps more accurately, my understanding of reality shifted, and I wanted to take action on a larger scale. Similarly, although my value on influence remains, its focus has broadened and become less self-referential. In addition, as I achieved a certain amount of mastery in my work, I sought new and exciting challenges. Expanding my professional life to include my own business has allowed me to have the best of many worlds, continuing meaningful work at the VA while exploring exciting new ventures in areas that matter to me.

Of course, all choices have consequences, and it's important to understand them as you make decisions. I have made values-based choices that "cost" me professionally. For example, my ascent through academic promotion was significantly slowed by both my professional focus (e.g., shifting from soft-money research to a hard-money position as early as possible for many reasons, including financial security) and personal priorities (e.g., how much time I wanted to spend with my family). I became an associate professor long after many of my peers were promoted to full professor (an academic rank that I will never achieve). I have also made values-based choices that "cost" me personally. For example, spending hundreds of hours on political work that took me away from family, friends, sleep, good nutrition, and exercise!

Values-based choices are complicated, deeply personal, and change over time. We can't achieve a perfect state, but we can work towards what matters to us.

4.5 Dr. Lloyd-Richardson (Masters Granting University)

I find it important to allow myself freedom and flexibility and to not put too much emphasis on “balancing” work and personal demands. “Balance” assumes that we ultimately have more control over our environments than we may actually have. To that end, my current position allows me great flexibility. Aside from my being expected to teach my assigned courses and hold regular office hours, nearly half of what I do can be accomplished on my own schedule, and in my home office if I choose. As long as I plan accordingly, I can build in daily morning exercise and time for chores on our farm, transport kids to various activities in the evenings, and any other demands that may arise. Of course, the downside to this arrangement is that work demands may always feel like they are lurking and needing attention. Technology makes it all too easy to access and engage in work, making it nearly impossible to set clear boundaries between “work” and “home.” Here are a few things that I find helpful in sorting out how to keep my internal compass aimed in the right direction:

What are your core values? How do these define the expectations you have of yourself?

This isn't a single conversation to have with yourself, but one that (hopefully) continually occurs over the course of your life, serving as a touchstone for how you choose to live your life and focus your efforts, attentions, and behaviors. It's not surprising to me that many of us writing in this chapter echo similar sentiments.

Be careful about saying yes to requests. It's easy enough to think of what you might gain from accepting a request, but it's also worth considering what you are potentially losing or giving up by committing to the request. When you're a junior faculty member, it's often expected that you'll be available and willing to participate in anything offered to you. But, as you become more established, I would encourage you to thoughtfully consider each request and how it fits in with your professional and personal values, and what you (potentially) need to give up in order to fit in this new demand on your time.

To-do lists are helpful, but don't expect to complete them. If there's one thing I learned from the COVID-19 pandemic, you could literally work around the clock and still not meet all of the expectations placed on you. Meetings can easily take place 12–14 hours of each day, with room for little else. It's so easy to feel pressured to fit more into your schedule, but my experience is that this usually backfires and leads to feeling stressed or burned out.

Carefully choose your partner . . . and your collaborators. It goes without saying that juggling motherhood, work demands, and personal interests requires a caring, considerate partner. Remember that you are a team. Don't underestimate how much you can help each other with the day running smoother and being more enjoyable! Consistent with this, choose collaborators who you enjoy spending time with, who are like-minded with respect to work habits, and who appreciate the competing demands on your time as clinician, scientist, parent, etc.

4.6 Dr. Rivers (Leadership Consulting and Executive Coaching Private Practice)

As described in a previous response, having control and autonomy over my schedule informed several of my career choices after having children. Serving as a professor and independent consultant allowed me to carve out time that I needed during traditional business hours to run errands, volunteer at my children's school, work from home when needed, and care for my children when they were sick. A consequence of these choices was that I often found myself at my desk at night working late to meet deadlines and finish tasks that could have been completed earlier if I had kept regular business hours. Despite the late nights, having the additional control and flexibility reduced my stress and allowed me to be present in ways that were meaningful to me. I also believe in delegating the things that are either not important to me, I am not good at, or that are simply not efficient uses of my time. I happily order take out and family meal packages, hire sitters, and engage housekeeping services when possible.

It is important to acknowledge that these options are not always affordable or otherwise feasible for some, but need often creates amazing opportunities for novel solutions and partnership. I had a friend with a full-time nanny that she wanted to retain. After my friend's son entered preschool, she began to have trouble offering the number of hours her nanny desired. I had been searching for a reliable sitter but only needed a few hours of care per week. Our quite different circumstances created the perfect opportunity for us to share a nanny. The caregiver was fully engaged and satisfied through this partnership, and we were both relieved.

At times, simply acknowledging or asking for help can be a barrier to greater satisfaction. The "superwoman complex" and false and misleading images that "strong" women can "do it all" should be deconstructed. I would encourage readers to honestly assess their circumstances and unique needs and to then draw upon their resources to create the support structures that they uniquely need, without apology or guilt.

5. You are all Extraordinarily Successful at What You Do. What Guidance Have You Relied On to Find Ways to Engage in the Dynamic Art of Juggling Many Roles?

5.1 Dr. DiLillo (Liberal Arts College)

There are a few things I try to keep in mind as I attempt to juggle my responsibilities and roles at work and at home.

First, I rely heavily on planning, organization, and the maintenance of a schedule. For example, I have learned that I can be particularly productive during the early morning hours when I am the only one awake, and I regularly use this time to make progress on preparations for class, writing projects, etc. I also maintain a master calendar in the kitchen with commitments for both work and home

(including “appointments” for fun activities with my family) so that I can keep the time frames for various goals and activities in mind from day to day. This strategy helps me prioritize so that I can use my time most efficiently.

Second, I have to frequently remind myself that, in spite of all the efforts I make to plan effectively and control my schedule, many things happen (often at the last minute) that I cannot even pretend to control . . . my son gets sick, a critical meeting is called, the carpool cancels, etc. In my experience, many of these changes result in work–child care conflicts that require significant flexibility, not to mention a sense of humor. Although it certainly did not address all the complications that arose from unanticipated changes, when my son was younger, I did try to plan ahead by keeping some toys and snacks at my office. I also maintained a list of students who expressed an interest in babysitting in the event that my son unexpectedly needed to spend an hour or two with me at work.

Third, I think it’s important to discover what helps you manage stress most effectively, whether it’s yoga, meditation, or making time to read something other than journal articles. For me, both regular physical activity and active solicitation of social support are key. In particular, I find it helpful to maintain a system of social support involving friends both from within and beyond academia. I have found that having a range of supportive people in my network facilitates creative problem solving, reciprocal logistic support, and the ability to look at potential stressors from a different, often humorous, angle. Whatever your preferred stress management strategies, don’t forget to implement them.

Finally, I often remember what a good friend once told me. She said that it isn’t really fair to compare yourself now to the “you” you were before having kids in terms of energy, efficiency, productivity, priorities, etc. I use this sentiment as a reminder to strive for realistic expectations of myself both as an academic and as a parent. Could I supervise yet another research project? Sure. Could I spend even more time prepping a lecture? Very likely. Could I produce a handmade Darth Vader costume for my son? Probably. But there isn’t enough time in the day to do it all, or to do it all perfectly. It’s a matter of discovering what is meaningful and reinforcing for you, what is consistent with your values and work ethic, and what works best for your family. I see that process as a challenging, constantly evolving, and very worthwhile journey.

5.2 Dr. Clark Harvey (Behavioral Health Advocacy Organization)

The concept of balance is overrated in my opinion. The way we have been socialized to believe that there is some magical state that we must reach where all is in order and harmony is achievable is unrealistic, limiting for many, and can be more damaging than helpful. It was during a leadership retreat that I heard the words that helped me drop the guilt for being lopsided in my priorities, and better understand that having so-called balance between my social, personal, spiritual, and professional aspects of my life could look different.

The speaker shared a study of some of the most successful people in the nation. It showed that not one of them had equal amounts of energy focused on these four

aspects of life. Instead, there were times when these individuals had a task that required almost all of their energy. They poured energy into a task – skipping sleep sometimes to complete it. Importantly, what they all also had in common was some sort of pre-planned hiatus or sabbatical built in. This looked different for each person, but it served as a respite and time of recharge to look forward to. In essence, there should be no guilt about burning the candle on both ends to complete a project, but there should be time planned to reconnect with yourself and with your family and celebrate your hard work.

Over the years, I have picked up a few tips that serve as guiding principles for my professional and personal life. Someone once challenged me to articulate my mission statement for my career. A mission statement is a reflection of one's values and passions. I encourage this activity as it can help one think about the purpose and meaning behind their professional pursuits.

Passion is a critical element. Once you have determined what your mission statement is, let your passion guide your decisions. If you do not believe fully in something, or you are not energized by it, it will either eventually fail, or you will become complacent and ineffective.

Seek out mentorship and support. Who you choose as a mentor is a critical decision. First, they must want to mentor you, must be invested in your personal mission and willing to keep you accountable to it. It is important to discriminate who you share your dreams with – not everyone needs to know them – some things should be kept close to your heart until they mature and only shared with those who believe in your dreams and are willing to push you further than you thought you could go. And, always have someone in your mentorship circle who is older and wiser, and younger and smarter.

Your career is a team sport. No one arrives where they are at by themselves. Community is critical in helping you advance in your career. Once you have gained some success, remember to develop protégés and cultivate your replacement. Pay it forward – success should be shared.

Be careful how you use your power. Power comes in many forms, and is not eternal. As such, understand your power, the political ramifications of it, and use it wisely. Your influence can build a person up or tear them down completely and you never know when you might need that person's help.

Handle mistakes gracefully. Remember that mistakes are a part of life – it is how you recover that says the most about you.

Engage in self-care. While balance is illusive at best, self-care is not. It is a critical aspect of being successful, and it is oftentimes the most difficult thing for professional women to integrate into their lives. I was listening to a motivational speaker during a board retreat years ago. She created a “Self-care bill of rights.” I still have the note card on my desk today which reads:

- You have the right to say no

- You have the right to prioritize your mental, physical, emotional and spiritual well-being
- You have the right to make decisions about your time without guilt
- You have the right to adequate sleep
- You have the right to define success for yourself
- You have the right to serve your community in a way that makes you come alive

5.3 Dr. Hussong (Research Intensive University)

I believe all the sage advice I have to offer has already been said. Nonetheless, here are my thoughts on home–work balance. This balance is a striving, rather than a state of being. When we judge it relative to a set of “oughts,” rather than our internal standards, we are bound to feel failure. When we assess it within the moment, rather than over the long haul, we are bound to feel failure. When we focus on our downfalls, rather than our successes, we are bound to feel failure. And when we attribute our life challenges repeatedly to the pressure of “achieving balance,” rather than the many other sources of challenge present in our lives, we are bound to feel failure.

So what is my advice? Define your own standards for performance and criteria for judging how you are doing. Think about striving toward balance as a process over time, rather than something to achieve in each day, week, or month. Celebrate your successes, no matter how small the party. And then, there is the wisdom of the otters . . .

Two quotes posted on the walls of the Otter House at the High Desert Museum in Bend Oregon await you outside the cage of Thomas, the river otter. I never thought of myself as identifying with otters before, but after reading these quotes, I see that Thomas gets it. Attributed to Ed Park, the first quote is simply, “If an otter can’t have fun doing something, it simply won’t do it.” As much as possible, work and teach on topics you care about, with people you like being around. Have fun doing your job as much as possible. Do the same thing at home. There is time for this. Not all the day, all the time, but there is indeed time for this.

The other quote is attributed to G. Maxwell and reads “Otters are extremely bad at doing nothing . . . they are either asleep or entirely absorbed in play or other activity.” As contemporary psychologists, we recognize the element of mindfulness in this attitude. Be where you are as much as possible, and be absorbed in it. Know when you are working and when you are mothering.

Despite these brave sayings, I do often find myself caught up in the struggle of finding time to make it all work. I look up from packing sandwiches for school the next day as I simultaneously review therapy tapes for clinical supervision at 10pm on a Tuesday night. For this reason, posted in my living room are two Brian Andreas prints that partner to comfort me. The first speaks to my sometimes unrealistic standards for parenthood, and reads “She asked me if I had kids & when I did she said make sure you teach them what’s right. & I said how will I know? & she nodded

& said, good point, just don't teach them any obvious wrong then." The other speaks to the time pressures we all feel, and reads "Everything changed the day she figured out there was exactly enough time for the important things in her life."

For me, family is first. But I remain devoted to my job. Right now, in this part of my career, they feed one another. It is a constant struggle, though, to remember why I do what I do and to make sure that I am making choices and rewarding myself according to the values and standards that I set for myself. Having a partner who gets it and lives it right along with me is the key to making this work for me.

5.4 Dr. Kamholz (Hybrid – Academically Affiliated VA Plus Small Business)

For me, guidance can be divided into philosophical approaches and practical strategies. Philosophically, I try to focus on my values as much as possible (within the parameters of reality, like financial responsibilities, priorities of the people and institutions for whom I work, etc.). I have addressed that philosophy earlier in this chapter, so I'll address more practical issues here.

Find a great partner. Perhaps the single most important factor in my ability to juggle many roles is the fact that I have a great partner at home. Science backs me up on this, indicating that a supportive spouse has positive effects on a person's willingness to pursue opportunities and career success (Jakubiak & Fenney, 2016; Valcour & Ladge, 2008). This seems particularly relevant for women married to men, given that women's careers and professional goals are traditionally seen as secondary to their husband's careers and potentially to domestic work as well.

In addition to the joys of a good relationship, sharing responsibilities, dividing up tasks, and playing to each other's strengths is critical. When I feel guilty because my daughter is sick and I need to be at an important meeting, my husband gently reminds me that our daughter has two parents and that nothing dictates I have to be the one who is home. (With that said, I make sure he's not always the one who is home with her!) In addition, as I've embarked on new challenges and shifted the focus of my work, my husband has not only been encouraging and supportive, he has adjusted his own schedule to ensure that he is available to our daughter during evenings or weekends, if I am not. I also appreciate that he is as quick as I am to roll his eyes if someone applauds his equal responsibility in household tasks or childcare. We are a team, and we both work to elevate the other and be as flexible as possible to fulfill our many roles (and have fun along the way).

Choose your colleagues carefully. Most of my career choices have been determined not by what I would be doing, but by who my colleagues would be. The people you work with (both at the organizational level and at the level of daily interactions) are critical in determining your level of career satisfaction and the extent to which you can juggle multiple roles and demands. This is true whether or not you have children, as other family responsibilities, interests, life events, and even national events will affect your priorities and how you juggle your roles. Carefully evaluating the culture of an organization, and the perspectives of the colleagues and supervisors with whom

you work directly, is critical to assessing how challenging it may be to honor your values and juggle your priorities.

Work hard. Organizations and supervisors (at least good ones) reward employees who work hard and contribute to the mission(s). They are more inclined to be flexible and accommodate requests for flexibility if you work hard, are a team player, and have a good attitude. Make yourself valuable, and you'll have more people willing to support your priorities and help you juggle. As one example – I recently requested a month of leave from my VA position to work full-time on a political project. The Director of Mental Health agreed to the request on the spot, explicitly noting the value I bring to the organization and his belief that it is smart for the organization to be flexible in return. Of course, this is also a credit to this Director's own values and strengths as a leader.

My goal as a supervisor is to help others live by their values and successfully juggle their roles as well. To my mind, this is simply the right thing to do. From a business perspective, it's also the smart thing to do – happy employees are productive employees.

Buy time. When I was a psychology intern, I took public transportation to the clinic where I worked because there was no parking there. I later learned that the site training director (a mother of young twins) drove and paid the high Boston parking rates every day (saving more than an hour each day, but spending hundreds of dollars each month on parking). When I asked her about it, she told me that she had more money than time. That will not always be the case. But when it is, use it to your advantage.

I pay for things that save me time – I drop clothes off to get pressed rather than ironing (though this is win-win, as I'm exceptionally bad at ironing), I pay someone to clean my home, etc. When I have free time, I want to spend it on things that are important to me (and working as I do has afforded me the luxury of spending money to gain flexibility).

Don't be a hero. This is the corollary to buying time. You can't do everything. Share tasks with your partner. Once you can afford it, outsource things you can (like cleaning the house).

Watch everyone. They will all have something to teach you . . . how to implement empirically supported treatments in the most palatable and effective manner, how to find the critical mistaken assumption in a research study, how to manage staff, how to lead a meeting, how to motivate people, how to juggle different roles (or how not to do some of these things).

Collaborate. Whether at the office or at home, collaboration typically leads to the best (and most efficient) ideas. It also increases your productivity across the board, making you more valuable, and your supervisors/organizations more likely to accommodate your needs.

5.5 Dr. Lloyd-Richardson (Masters Granting University)

Career success requires hard work, combined with passion. The work that we've chosen to pursue is born out of a need to help make a difference in people's lives. Whether this work involves writing a book or a research grant, teaching classes, working with clients, supervising trainees, or advocating for mental health, passion is key to the success of these activities. But, how do we find our own "ideal" balance? How do we realistically make this happen on a daily basis? A weekly basis? This is where carefully aligning our actions with our values is critical. As others in this chapter have also referenced, regularly reminding ourselves of our core values and assessing our thoughts and actions for how they match up will help us stay grounded and true to our own ideals.

Career success also requires the ability to handle frustration and failure. Many of us have heard this advice with respect to rejection of scholarly articles or research grants. But have you considered your ability to handle frustration and failure with respect to balancing career and family? Life has a way of twisting and turning, whether related to career or family. Learn to trust yourself and to listen to what feels right when it comes to making decisions involving your career, your family, and your own passions. Don't be afraid to change course when you feel you're heading in the wrong direction, as you'll often find that some doors may close, but many others will open for you. Trust your instincts!

5.6 Dr. Rivers (Leadership Consulting and Executive Coaching Private Practice)

When considering this question regarding the "dynamic art of juggling," I think it is important to acknowledge my complete rejection of the construct of work-life balance from the start. I prefer to lean more heavily on the concepts of resilience and sustainability. Informed by Tony Schwartz's integrative work on energy management, Kate Rademacher's writings on rest and sabbath, and numerous neuro-leadership researchers, my approach to sustainability is grounded in the continuum of activities across the many domains of my life. I have made it a practice to notice how I am experiencing different aspects of my work, avocational interests, and personal life in order to increase the intentionality of selecting those activities that are going to help maintain my energy and vigor, while also being conscious of those activities that deplete my energy. With this deliberate focus, I can better regulate my thoughts and actively cope with more challenging or difficult situations. To put it simply, there are aspects of my work that are incredibly energizing while some are draining. Similarly, I find that some aspects of my personal and family life are energizing, and others are draining. If I were to try to balance the hours spent focused on both areas without a deeper understanding of self and experience, I would likely feel very out of sorts and quite "imbalanced."

While not perfect, this overall strategy informs choices about time off, vacation, sabbatical experiences, and perhaps most importantly, my daily choices. With

conscious awareness, I have crafted a “menu” of self-care practices and habits that I have found to be helpful. I then experiment with and deploy options from my “menu” based on my circumstances, tasks, and to-dos on a given day. For example, one simple best practice for me is to ensure that meetings are adequately spaced in order to allow for reflection, renewal, and appropriate planning for any needed follow up tasks between appointments. If I cannot achieve the desired spacing due to constraints outside of my control, I build recovery time into my schedule that allows me to decompress and complete necessary follow-up tasks. If I can successfully deploy this practice, I am often able to end my workday with a sense of calm and move on to my more family-focused “second shift” with greater resolve. Although this one strategy may sound like a small thing, sometimes the additive benefits of seemingly small gestures or behaviors can have a big impact on overall well-being and sustainability.

While I may always be a planner at heart and rely on my analytical skills to come up with efficient routines and approaches to managing responsibilities, I have learned through experience that these approaches are not fail-safe and can even lead to distress or “performance guilt” in some instances. Learning to integrate thinking and planning with more emergent approaches that incorporate elements of mindfulness has enabled greater adaptability and agility in the face of the all-too-common “curveballs” and uncertainties of work and family life.

6. What Should Early Career Women Ask About, and Look Out For, When Searching For Their First Job?

6.1 Dr. DiLillo (Liberal Arts College)

I would suggest looking for an environment where a healthy commitment to work and other activities is modeled. Because most interviews last a couple of days, you might get a sense of the general atmosphere by listening to what current employees talk about during some of the less-formal interactions. For example, does anyone mention family, hobbies, volunteer work, or children? Is information about activities outside of work volunteered? Additionally, if I were applying to a college or university, I would seek out the institution’s faculty handbook (which can frequently be found online) to investigate the family leave and other relevant policies. I might also investigate whether there are institution-affiliated childcare facilities on campus. Finally, if you receive a job offer, I would be certain to assertively negotiate. Women are often hesitant to ask for a higher starting salary, more start-up funds, or something else that could impact their future success. Do not hesitate to seek out advice from a trusted mentor about this process if you need it. You only have one opportunity to negotiate for these important resources; don’t miss it!

6.2 Dr. Clark Harvey (Behavioral Health Advocacy Organization)

The job hunt after graduate school can be a difficult exercise for many. After years of following a script for success outlined by educational institutions, students are

thrown to the professional world, and expected to figure out how to navigate the transition. No matter how many mentors you have, or how clear cut you believe your path to professional success will be, the change from student to full-time professional is something no one takes an academic course in. This is because there is no syllabus or script for your path. Everyone's journey is different, and you must learn to navigate it for yourself. Many will turn to their mentors in specific settings eager to learn about their career path and seek to emulate it. While mentorship and being inspired by others can be helpful, I challenge students to be open and flexible as they think about their future.

When you land that first job, there are a few items I suggest women consider. First, where you start is important. Too many women are reticent to ask for more during job negotiations. This can be a higher salary, additional benefits or time off. Here are some suggested questions to consider asking:

- Ask if there are policies around professional development activities. For example, if you are serving on a board that requires you to be present for meetings during the week, or if you plan to take time to study for a licensure examination, request time outside of your allotted vacation time to participate in these activities.
- If you are thinking about starting a family, make sure to ask about policies around maternity leave and childcare credits/allowances.
- Inquire about opportunities to advance. If you are going to continue to grow, then understanding the potential for advancement within a workplace is critical.
- Also, inquire about opportunities for mentorship from other women at the organization. Remember, no one gets where they are at alone. Having professionals who have navigated the path ahead of you will help you get a sense of what is possible within the workplace.

6.3 Dr. Hussong (Research Intensive University)

Often, students making the transition of applying from undergraduate to graduate school have to change their criteria for selecting programs from university rankings to person–environment fit. In my experience, those individuals who are most satisfied with their graduate training are the ones who chose their institution because it offered what they wanted, rather than what someone else wanted or because of the reputation of the institution. This is harder than it seems, of course, because you first have to know what you want. What type of environment best fits you?

The same challenge presents itself in looking for the first job. Knowing how important it is for you to work in a women- or family-friendly environment, relative to other criteria for job selection, is a personal decision. Your goal is to optimize the fit between what you want and the opportunities and demands of the work environment. That said, there are a variety of guides that help women think about what is important to consider in identifying work settings that are women- and/or

family-friendly. Without reviewing those here, let me highlight just a few questions you might ask to make this assessment:

- Do you see women in positions of authority in the department (tenured full professors, area heads, chairs, deans)? Are there supportive role models?
- What is the history of women getting tenure in the department? Is that any different for women who are also mothers?
- Are there a lot of demands on your time at night or that require travel that are non-negotiable or that would negatively impact you if you chose not to attend?
- Do any of the faculty members ever bring their children into work for a few hours in a pinch? How do other faculty members respond when that happens?
- What are maternity and paternity leave policies? Is there an option to delay the tenure clock because of maternity leave or extended family leave?
- Is there a women's faculty center on campus to support the development of female faculty?

And where do you get the information? Read the personnel documents that lay out employment policies (e.g., leave, sick time). Talk to women and men in the workplace (students, staff, and faculty). When possible, talk to people who have left this work site to see if any of these issues was part of the reason. You may not always get reliable and valid reports, but I would suspect that the reports would be as good as you might expect to get on most topics you might ask about the worksite.

6.4 Dr. Kamholz (Hybrid – Academically Affiliated VA Plus Small Business)

As it was explained to me by a colleague years ago, the degrees of freedom that most strongly influence job searches are typically location, job type/duties, and salary. I would tweak that model to subdivide one variable (that is, dividing job type/duties into structure and content), and add one more factor – the people with whom one works. For a first job, most people will have to prioritize one factor. The very lucky individual enjoys two out of three. It's up to each of us to decide what's most important to us.

Beyond the basics (mentioned above), I think a key aspect of any job are the people you work with (including opportunities for mentorship). Related to this is the tenor of the organization. Do people talk about their lives outside of work? Have friendships with each other? What is the leadership like (at all levels)? Do they have outside interests, families, hobbies? Those personal and interpersonal characteristics will be mirrored in the organization and in your own position.

Finally, remember that your starting point in an organization will significantly influence the trajectory of your position (and, potentially, career) in terms of both responsibilities and salary. Regarding salary in particular, that cuts both ways – if you start out underpaid, that is likely to continue (or you'll spend a lot of energy catching up). If you start out at a very high salary, you'll end up building a life based on that income (e.g., mortgage), and it may be very difficult later to pursue opportunities that pay less.

Across all variables, it is important to ascertain what will be expected of you and what is valued in the system, to best evaluate your likelihood for happiness and success in the position. Be sure to understand opportunities for advancement and salary structure, and don't apologize for wanting appropriate compensation for your efforts.

While sorting through everyone's advice, remember there's no easy ticket. Whether you want to cultivate a multidimensional life, or you want to focus on only one aspect of things and get on the fastest track, you will have to work hard, be flexible, and collaborate if you want to succeed (however you choose to define success).

6.5 Dr. Lloyd-Richardson (Masters Granting University)

Responses by my co-authors provide many helpful suggestions and questions to ask when searching for that first job. I wish I'd had access to all of this in my early career days! My advice comes from a slightly different angle, and pushes you to consider from the beginning how to ensure that your "ideal" includes time for you to explore your personal passions and be your authentic self. During my postdoc years, I noticed that my friends who had not pursued advanced degrees had thriving personal lives, replete with healthy non-work-related interests (i.e., "hobbies"). My friends pursuing advanced studies, on the other hand, had for so many years given their time, energy, and "down time" over to their studies, their profession. Perhaps necessary at the time, at a certain point, I found myself asking "Is this all there is?" When is a good time to pursue these other interests that add to the richness of life? There's no better time than the present, I would assert. So when you find yourself looking for that first job, ask questions not only about the work environment, responsibilities, etc. . . . but ask about what people do for fun. Do they have time for creative outlets or non-work interests? Can they tell you about some great venues around town for music or outdoor recreation? Or do they let you know that there's little time outside of work? I think that part of being a successful psychologist is being a happy, healthy, balanced individual.

A primary reason that I chose the position I am in now was for the "quality of life" – what does this mean? The flexibility the job offered, the ability to have more time available in the summers, to pursue passions that sometimes diverge and sometimes overlap with my academic career. When I received my tenure and promotion, I expanded our farm and got my horses. I'd tested the waters and decided that I could indeed build the full, well-rounded lifestyle that I was aspiring to. Over the years, we've expanded to include goats, chickens, and a miniature donkey. Everyone in the family rides, some of us competitively. This has led to a separate line of clinical research involving animal-assisted interventions and my certification as an equine-facilitated therapist. What began as an effort to create a well-rounded lifestyle for myself and my family has also led to very rewarding professional service and a new line of intriguing research.

As others have commented, this is a matter of goodness of fit with a particular position, at a particular time in your life. Women – and men – will obviously want to consider whether that position will allow them the flexibility to enjoy their families, personal time, etc. . . . It's also important to be realistic about the amount of work that will need to be completed in order to earn a desired salary. I think it's important to consider ALL of the options available to you, whether clinical, academic, or administrative. The perspectives offered here in this article are diverse and honest. I hope they will help to raise questions and flag concerns as you consider your next career steps.

6.6 Dr. Rivers (Leadership Consulting and Executive Coaching Private Practice)

It is never too early or too late to begin to practice Stephen Covey's second habit, "Begin with the End in Mind." Former tech CEO Shellye Archambeau illustrates this point in her book *Unapologetically Ambitious* (2020), noting that people often "take opportunities they [find] right in front of them, instead of strategizing to create their own options." With these insights in mind, I challenge you to envision your career trajectory and imagine the long-term opportunities that you want to create for your future. Having some understanding of where one ultimately wants to land and thinking strategically before one begins to review job postings and announcements are crucial precursors to a successful search. Therefore, engaging in a season of deep reflection regarding one's life vision and sense of purpose and vocational calling is a perfect first step of preparation.

Begin with the following questions: What impact do you want to make and what populations do you feel called to serve through your work? Reflecting on prior educational and professional experiences can also be crucial to this mindfully strategic approach. What tasks or roles have you found to be life-giving? What aspects of your training and work have you found to be draining? In addition to helping identify longer-term career objectives, the answers that emerge from your reflection can help you gain insight on focus areas or specializations that provide meaning and fulfillment and nuances regarding how or in what settings you prefer to work. Similarly, thinking about values that inform lifestyle choices like where you want to live (e.g., city vs. rural, population size and diversity, cultural affordances of a community) or proximity to family, friends, and loved ones are also important.

Once these broader variables are identified, I recommend that you pay close attention to the culture of the institutions you are vetting. If growth and development are a priority, select organizations that provide support for promotion and advancement and have a demonstrated history of investing in their people. Prioritize conversations with potential peers and colleagues to get a sense of how institutional values are really operationalized. Stated views and values are not always reflected in practice. Finally, invoke your mindfulness skills and notice how you feel during the interview process and on in-person visits. Moving from tracking the analytical score

card of a position or institution to one's experience of community and connection (or the lack thereof) can also serve as a crucial measure of fit.

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Robert J. Sternberg

Just a few years ago, one could obtain almost any product or service one could imagine through the Internet. One could buy pets or pet food, order food to be delivered to one's house, buy clothing from an astonishing array of manufacturers, and much, much more. Today, some of these Internet services remain, but many others are gone. New products and services have replaced some of the old ones. At any given time, it is difficult to imagine which products and services will last and which will be barely remembered, or even entirely forgotten, almost as though they never existed. No doubt there are many lessons to be learned from this transformation of society through the Internet, but certainly one of the most powerful is that, before investing in the creation of a product or service, one needs to ensure a market will be there, ready to buy, and that the market will be there for enough time to make the investment in the product or service worthwhile.

This lesson is perhaps the fundamental lesson that aspiring psychologists need to keep in mind, whether they plan to pursue an academic job, a practice job, or any other kind of job: You need to establish a durable market for your skills. Who will want what you provide? And for how long? Will you be flexible in the future, realizing that what works in your career at one point in time may not work at another?

I recommend to my own students that they start thinking about job prospects pretty much from the very beginning of their graduate-school career. Graduate school training is qualitatively different from undergraduate school training. Unlike college, graduate school is pre-professional in character. It is designed, of course, to enrich students' knowledge, understanding, and application of psychology; but most of all, it is designed to prepare students for a career. Because a career largely begins with one's first job, getting that job can be one of the most important steps a psychologist ever takes. And because one's first job often contributes substantially toward shaping both one's professional possibilities and even the future jobs one may obtain, it is important to devote substantial resources to getting the best job one can. At the same time, it is important to remember that a first job is just that – a first job.

If your first job is not the job you ideally wanted, you still have plenty of time to seek out something more desirable in the future. I had a friend some years back who applied for academic jobs only at what he believed were the “top places.” He did not want to bother working at a place he would consider second-rate. He did not get any of the jobs he applied for. And he ended up especially throwing away his doctoral training. He never quite found himself. He set an unreasonable goal and paid for it his whole life, never finding anything that was quite good enough for him.

1. What is the “Best Job”?

Before talking about how to get the “best job,” it is important to talk about just what the “best job” is. People have different priorities in searching for jobs. Among the characteristics they look for are (a) geographic location, (b) prestige, (c) salary, (d) benefits, (e) teaching load, (f) research opportunities, (g) congeniality of colleagues, (h) opportunities for advancement, (i) levels and kinds of expectations of employer, and (j) general working conditions, such as the condition of the building or office where one will spend much of one’s time. These things all matter, but they beg the question of what is most important of all.

In my experience, by far the most important consideration in targeting that first job is “fit” – the extent to which the institution or people with whom you will work match your own system of values, motivations, and expectations. The more their expectations are congruent with what you wish to offer, on average, the happier you will be. That is true for your first job and it will be true for all the others as well.

I have seen students take jobs that, on paper, looked wonderful, only to find that, when they arrived, what they had to offer was a poor fit to what the institution wanted to gain from them. So, in my experience, the most important question to ask is the same as that you would ask in any kind of marriage, that of compatibility. If you and the institution in which you go to work are not compatible, you may find that little else matters: You will be miserable despite everything else. For example, you could be the best teacher in the world, but if you take a job at an institution that values research, but, at best, pays lip service to teaching, you may find all of your best-developed skills unappreciated by the people in your environment. Or you might be a wonderful researcher, but if you are required to teach four or five classes a semester, you can expect to have relatively little time to exercise those wonderful research skills.

I know about the importance of fit from personal experience. I have worked in five universities throughout the course of my career. One job, I felt, was a perfect fit for me. I was happy there and being there made my whole life happy. At the other extreme, another job was about as terrible a fit as I possibly could have found. I was professionally miserable and it made my whole life miserable. It probably also made the lives of others miserable as well. I got out as quickly as I could. A wise decision. If you don’t fit, little else matters. You need to find somewhere else to work, as soon as you can.

2. The Variety of Jobs

A doctorate in psychology can lead you to a wide range of jobs (Sternberg, 2016, 2017a, 2017b). Among these jobs are (a) teaching and research in a college or university psychology department, (b) teaching and research in a university school of education, (c) teaching and research in a university business school, (d) teaching and research in a medical school, (e) teaching and research in a school of public policy, (f) teaching and research in a department of human development, (g) academic administration, (h) psychotherapy administered in private practice, (i) counseling in a clinic or private practice, (j) outreach through community services, (k) psychotherapy administered in a hospital setting, (l) government service, (m) service in a school setting, (n) service as an industrial/organizational psychologist, (o) work in a consulting firm, (p) work in the military, or (q) work in product design, where you specifically deal with consumer acceptability and perhaps safety of new products. Of course, this is not a complete list. What it shows, however, is the wide range of careers available to people who specialize in psychology.

More and more jobs these days are adjunct positions. One is employed on a fixed contract to teach particular courses. Typically (but certainly not always), one is paid by the course. These jobs are not tenure-track and may have limited or no benefits. The question some job applicants have is whether to take an adjunct position or, if it is possible, to wait until a future time and then start applying all over again.

There is no one answer to this question that is right for everyone. The advantage of taking an adjunct position is that you gain teaching experience, some money, and a possible “in” for future tenure-track positions. The disadvantage is that some people look down on adjunct jobs, and if you are in one too long, it may be hard to get out, especially because opportunities for research typically are very limited or non-existent. If an adjunct job is what you want, so as to have more flexibility for the rest of your time, you are in luck. But if such a job is not what you want, keep in mind that as the years go by, it becomes harder and harder to get out of these positions and to enter any kind of tenure track.

3. Preparing from “Day 1”

You may not literally start preparing for your job search on Day 1 of graduate school, but the sooner you do so, the better. By the time you are nearing the end of graduate school, you should already have set much of the scaffolding in place upon which you will construct your job search. I include in the job search postdoctoral positions, because these are jobs, much like any other, where you have certain expectations you must meet and are paid to meet those expectations.

Some postdoctoral positions can lead to higher research positions, such as associate research scientist, research scientist, senior research scientist, research professor, and so on. Such jobs are usually soft-money jobs, so keep in mind that they typically last only as long as the grant-funding does. In medical schools, even regular tenure-track positions may be partly or even fully funded by soft money.

What kinds of preparations do you need to be making?

- *Courses.* There are many reasons to take courses. For example, you may wish to learn how a particular professor sees the world, or you may wish to acquire specific statistical, laboratory, or therapy techniques. In a clinical or counseling program, your courses may be largely prescribed. But whatever program you are in, be sure to take courses that you will need to get employed in the kind of position you will seek. The appropriate courses will differ as a function of the kind of job you want, so you need to consult with your advisor, other faculty, and advanced students regarding what courses will serve you best.
- *Research.* Most graduate programs have a major research component (although some PsyD programs may not particularly emphasize research). Doing research that will distinguish you from others applying for similar jobs can be one of the best ways to prepare yourself for the job search. In academia, the expectations for research relevant to first jobs have increased greatly in recent years. Many doctoral students apply for postdocs because they will not only be competing with postdocs for first jobs, but also with assistant professors who want to move, and with adjunct faculty who want to get on a tenure track.
- *Teaching experience.* If you are interested in a teaching position after your studies, make an effort to get teaching experience during your graduate training or possibly even during postdoctoral study (which may or may not fit with the expectations of your research supervisor – you need to check). Academic institutions would rather hire someone who can get a running start teaching than someone who has no clue as to what teaching entails.
- *Service.* Many graduate students do not think of service to their advisor's lab group, or the department, or the university, as an important aspect of graduate training. Indeed, it probably is not the most important. But when it comes to hiring people, many institutions would rather have someone who will be willing to help others than someone who cares only about him- or herself. Showing you are willing to contribute to others is an important step in getting yourself hired. At the same time, you do not want to drown yourself in service activities so that you have little time for everything else.
- *Letters of recommendation.* You probably will need three or even possibly four letters of recommendation. You therefore have to start thinking early about ensuring that at least three, and possibly four, individuals (usually, faculty members) know you and your work well. One of these recommenders will almost certainly have to be your main advisor. Another might be a secondary dissertation advisor, and a third, someone for whom you have been a teaching assistant. Or, if you are going into practice, you will probably want to have a clinical supervisor write you a letter. Do *not* wait until near the end of your graduate career to start thinking about recommenders. It will be too late. Start thinking about them early, and then get to know them sooner rather than later.
- *What not to do.* In current times, there is a focus as perhaps never before not only on what to do, but also on what not to do. Of course, there are so many not-to-dos

that no list could be complete. But here are three critical no-nos. First, don't blow it in your research. Show unquestionable integrity in your research conduct. Scholars are paying much more attention than they once did to issues of transparency and ethics in research. Make sure that what you claim matches what you did. Second, be extremely careful about issues of personal conduct. A sexual or other harassment claim against you can be a surefire career killer, and many people today do not wait for adjudication to shy away from hiring someone who merely is accused of harassment. This may be unfortunate, but it seems to be the way things are – institutions are understandably risk-averse and do not want to risk their reputation for someone who later will turn out to be problematical. Similarly, stay out of trouble with the law. Most legal claims can be found on the Internet. Third, be very careful of what you post on social media and do not assume that anything you write is undiscoverable. A lot of job candidates have learned too late that their “undiscoverable” postings were anything but.

4. Preparing your Materials

Different institutions require different kinds of materials. But, on average, there is a core of stuff that most institutions require, regardless of the kind of job for which you apply.

4.1 The Vita

The vita, also called the “curriculum vitae” or “CV,” is a summary of your main accomplishments. Often, it is the document that hiring institutions look at first. If your vita does not fit the profile of the person they wish to hire, they may look no further. Hence, a strong vita is essential to your success.

The most basic elements of a vita are your (a) name; (b) contact information (postal address, phone number, e-mail address, fax if you have one); (c) present status (e.g., graduate student, postdoctoral fellow); (d) degrees (including anticipated ones), listing what they are, where they are from, and when they were conferred; (e) job experience, including consulting; (f) honors and awards, including scholarships and fellowships, if any; (g) publications, if any; (h) talks you have given and where you have given them; (i) teaching experience, if any; (j) special skills, such as in foreign or computer languages or in specialized techniques of laboratory work; (k) clinical experience, if any; (l) relevant volunteer experience; (m) reviewing you have done for journals, if any; (n) teaching interests; and (o) research interests (where relevant). Many people also list family information (such as whether they have a spouse and/or children), although this information is optional.

Do not list your social security number or birth date. Such information can be stolen and used against you. Also, do not list recognitions from before your college years, such as that you were valedictorian of your high school class or that you won a prize for an essay you wrote in middle school. Do not list irrelevant skills, such as

that you sail or ski. Such listings might suggest you are less than serious. If you want, bring up such skills in the interview, perhaps in passing during the course of a conversation at dinner.

When you list publications, you should list both published and in-press articles. If an article is submitted for publication you may wish to list it, but do not say to where it has been submitted, as you may later be embarrassed if the article is rejected. Make sure that anything you list you can produce. Listing a paper that you cannot provide on demand marks you as deceptive. And listing things on your vita that are not true (e.g., phony degrees, papers as accepted that are not accepted, and so forth) can be grounds for you to be terminated from a job if the falsifications later are discovered. Hence, put yourself in the most favorable light, but *never* fabricate.

A strong vita is an important basis for getting a job. Hence, you should start building up the vita as soon as possible. Keep in mind the categories above, and try to fill them in. But remember that quality will usually be more important than quantity. A few good publications often are worth more than a smattering of not so good ones. Hiring institutions look at the quality of the journal in which the articles are published and are likely to be less impressed with publications that appear in weak or non-peer-reviewed journals. At the same time, not all your publications have to be in top journals. Sometimes, specialized journals are simply more appropriate for a given line of work.

Google analytics publishes statistical information on scholars, such as (a) total number of scholarly citations; (b) *h*-index – the number of publications, *h*, that have been cited at least *h* times; and (c) *i10* index – the number of publications that have been cited at least 10 times. Normally, for a first job, such statistics would be of little relevance. If you are significantly past the date of conferral of your PhD, however, you might want to consider setting up a Google Scholar page and listing the three statistics above (number of citations, *h*, *i10*). It is an unfortunate fact of contemporary life in academia that some search committees are paying more attention to statistics than they are to reading the publications on which the statistics are based.

4.2 The Personal Statement

Although some job candidates integrate the personal statement with the vita, I recommend keeping them separate, as they serve somewhat different functions. For academic jobs, one generally should have separate teaching and research statements. For clinical jobs, one may wish to prepare a statement regarding one's clinical experience and aspirations.

The personal statement is important, because it helps define who you are both as a professional and as a person. A good statement tells a story. It might tell about how your teaching or research interests developed, or it might tell how your various projects tie together. It is worth putting a lot of time into the statement and getting feedback on it from multiple faculty members and other colleagues. Be sure the statement shows a sense of purpose and represents a coherent research program.

Although there is much to be said in many respects for being a dilettante, academic institutions tend to prefer candidates who have a clear, focused, and scientifically important research program.

Whereas a strong statement can generate interest in you, a weak statement can kill that interest. Statements may be weak for several reasons. Probably the most foolish thing you can do is not proofread what you write. Who wants to hire someone who turns in a statement with spelling, grammatical, or capitalization errors? An unfocused statement is also not likely to help you. Hiring institutions like to see focus, clarity, and coherence, not a stream-of-consciousness approach that seems incoherent to the reader, however coherent it may seem to you. Also, do not just say what you are interested in. Say what you have done about your interests. Make clear, to the extent you can, what is special about you. Why should the institution hire you and not someone else? What do you uniquely have to offer?

When and if you write a research statement, keep in mind that a major factor in hiring for a research-oriented institution is that you will have a research program that will keep you busy for the next several years, not just one that kept you busy in graduate school. So be sure to spell out in some detail not just what you have done, but also, what you plan to do. It also helps if you can show how the research you are doing does indeed form a coherent program rather than consisting of isolated bits with little relation to each other. Professionals making hiring decisions want to see that you have both a set of goals for where your research is going and a sense of how you are going to reach those goals.

It is especially helpful if you can draw connections between your research and the research currently being done at the potential hiring institution. How do you fit in with the people and programs of research already at the institution?

When and if you write a teaching statement, keep in mind not only your own interests, but also the needs of the institution. Almost all teaching institutions expect new faculty to teach some service courses, such as Introductory Psychology or Introductory Statistics. You are also more desirable to an institution if you can teach lower-division courses. So, when writing about your teaching plans, be sure to list lower-division (basic) courses as well as more specialized seminars. Also, I recommend you mention that you make clear that you are flexible with regard to teaching responsibilities – that the courses you are listing are only examples of what you would be willing to teach. You generally do not know when you write your teaching statement exactly what the hiring institution's teaching needs will be. They may not yet know either!

4.3 Letters of Recommendation

Letters of recommendation are required for almost all jobs. You cannot directly control what your recommenders say, of course. What you can do, however, is choose your recommenders carefully. Choose people who know you well and who, to the best of your knowledge, have a positive view of you – the more positive, the better, of course.

In the real world, it also matters who the recommenders are. Chances are that a recommendation from a person of distinction will carry more weight than a recommendation from someone who is unknown or, worse, who has a bad reputation. Sometimes, in choosing recommenders, you have to trade off how well known the person is with what you think the person will say. But given the choice between a more well-known recommender and a better letter, I would advise you to go for what you believe will be the better letter.

Most important is that the person really knows you. No one is impressed to read a letter, even from a well-known person, when it is obvious that the person writing the letter has only the faintest idea of who the person is for whom he or she is writing the letter of recommendation. Also, people who knew you a long time ago but have not kept up with you tend to be poor choices as recommenders. It usually is obvious from their letters, even if they do not explicitly say so, that their knowledge of you is not up-to-date.

If you are more advanced, perhaps a postdoctoral fellow, you may want to include recommenders who know your work even if they do not know you well personally. Later in your career, many recommenders will know you only through your work.

Sometimes job applicants wonder whether they should include “political letters.” Such letters might be from actual politicians (e.g., a Senator or a member of the House of Representatives) or might be from people who are supposedly “connected,” such as a member of a Board of Trustees or a major donor. In my experience, such letters are much more likely to backfire than to have a positive effect. Unless you absolutely know that such a letter will be received warmly, do not arrange to have it sent. It sends a message about the kind of person you are, and probably not the message you want to send.

Also, do not send letters from people who are experts but in irrelevant fields. For example, if you took a course in a far-flung topic, perhaps just out of interest, and did exceptionally well in it, avoid the temptation to seek out a recommender whose professional expertise is far away from that of the area in which you work. For example, it may be great that you excelled in an art or English-literature class, but ask yourself whether the expertise of the letter-writer would have any relevance to the job you seek.

Sometimes, letters from people not directly in the field but whose work is relevant can be helpful. For example, if you are applying for a job in cognitive psychology, letters from professors in allied fields such as philosophy, computer science, neuroscience, or linguistics may be viewed with great interest.

4.4 Publications

For academic and even many non-academic jobs, you may be asked to provide sample publications. If you do not have any, of course, publications are not at issue. These days, it is increasingly difficult to get hired for serious academic jobs with no publications; it is not impossible, however, especially for jobs that

emphasize teaching. If you do include publications, be sure to include them with appropriate citations. If you have the luxury of having produced a number of publications, you may wish to select only those you and your advisors consider to represent your best work. You can also send in-press and submitted or even to-be-submitted papers with your credentials. But do not send anything that seems half-baked.

A question of contemporary interest is whether to send material that is Internet-based, such as blog posts or articles that have been published by online outlets, such as medium.com. In general, I would use as a principal criterion whether the material has been professionally refereed. Many psychologists are active on social media these days. Probably, no hiring institution will tell you completely to stay away from social media. But hiring institutions may be reluctant to hire candidates who believe that social media postings are a substitute for publication in rigorously refereed journals. When applying for a first job, you want to show that you understand the coin of the realm in the hiring institution, whatever it is. Of course, if you are seeking a job at a company that specializes in social media (such as Facebook or Twitter), your Internet work may seem extremely relevant. You have to judge what to include, based on the hiring institution.

5. Finding out about Job Openings

How do you even find what jobs are available in the first place? In my experience, there are several major options:

- *APA Monitor on Psychology*. This monthly magazine, published by the American Psychological Association, publishes a list of almost every job opening in psychology in the United States, and some abroad. It lists jobs by universities within states.
- *APS Observer*. This monthly magazine, published by the American Psychological Society, contains a somewhat more limited selection of jobs. It specializes in academic jobs.
- *Chronicle of Higher Education*. This weekly newspaper contains a number of academic jobs but is especially useful in finding administrative jobs.
- *Electronic bulletin boards*. There are many electronic bulletin boards that post job listings. For example, many of the divisions of the American Psychological Association have listservs that post selected jobs. A popular source of jobs is Psych Wiki: <http://psychjobsearch.wikidot.com/>.
- *Newsletters of specialized organizations*. Many specialized organizations have newsletters that occasionally post jobs. You should therefore look at newsletters of special interest organizations that are relevant to your own professional interests.
- *Letters and phone calls to advisors*. Sometimes, faculty members receive letters or phone calls advising them of the availability of jobs. Thus, it is always a good idea to check with faculty members regarding possible job listings.

- *Word of mouth at meetings and elsewhere.* Sometimes news about jobs is passed by word of mouth. For this reason, networking can be an excellent way of finding out about jobs. Think about all the possible contacts you have and use them. Talking to others on the job market or individuals who work for organizations that you might be interested in working for may inform you about jobs that are not yet posted, or even that will not be posted.
- *Creating jobs.* It doesn't happen much, but it happens. Three times in my life I had an idea for a job and spoke to high-level managers in the relevant organizations about what I thought I could do for them. In two cases, the jobs were summer jobs, and in one case, a part-time job. In all three cases, it worked: A job was created for me. You cannot count on jobs being made to order for you, but you never know until you try.

Today, many jobs for psychologists are outside of mainstream psychology departments. Therefore, be sure to check out relevant listings in the particular area in which you hope to work.

There is one thing you should be aware of. It is more a problem in academic administration than in teaching/research jobs, but it can happen anywhere. Some jobs are what I would call chimeras – essentially, they are fakes. They can be fakes for different reasons.

One reason a job proves to be fake is that the funding for the job is expected but never comes through. The institution posted the job for fear of not having applicants, lest the funding indeed came through. Sometimes institutions are transparent in saying that funding is pending, but other times they are not. Some jobs will never come through.

A second reason for a chimera is that the job *was* real but then gets pulled. A dean or other higher administrator may change their mind, perhaps deciding to reallocate the job or cancel it altogether. In these cases, people may even come for interviews and receive various kinds of feedback, only to find out afterward that the job has been deauthorized.

A third reason for a fake job is that the job is real but not for you – it is already filled or promised but the job ad “forgets” to mention it. Usually, that means there is an internal candidate who already has the job or the promise of the job, but sometimes it can be an external candidate who has been pre-screened. It may be that, legally, the institution is required to advertise the job, but they are merely going through the motions. Applying for such a job is literally a waste of time, unless you are the inside candidate. The problem is that usually the other applicants do not know that the opening is phony unless they have an inside source.

6. Kinds of Jobs

A degree in psychology opens up many different kinds of jobs – so many, it is not possible to list all of them in one short book chapter (but see Sternberg, 2017a).

Different kinds of careers require different kinds of preparation, so the earlier you can decide on the kind of career you are interested in pursuing, the better off you are likely to be in preparing yourself appropriately. For example, if you wish to become a practicing psychologist, you will need to prepare for an internship. If you wish to prepare for an assistant professorship, you will need to get your publication record in order. You also may wish to consider a postdoctoral fellowship before going on the market for assistant professorships. These days, many jobs are filled by candidates at the postdoctoral rather than the doctoral level.

The best thing you can do to prepare is to be flexible. Many graduate students do not know exactly what they want to do when they start. Therefore, acquiring a broad range of skills will serve you well later on. For example, courses on statistics or on research methods will probably serve you well in almost any career. Many psychologists, even those in practice, teach at least part-time, so gaining teaching experience also will be useful for a wide variety of jobs. Acquiring experiences that will be useful in a variety of jobs can enable you to delay a bit your zeroing in on exactly what kind of job you want.

A good source of information on different kinds of jobs is *Career Paths in Psychology* (Sternberg, 2017a), which describes different kinds of careers, including (a) what the career is, (b) how to prepare for the career, (c) typical activities people pursue while they engage in the career, (d) the approximate range of financial compensation for people in the job, (e) the advantages and disadvantages to the career perceived by people in the job, (f) personal and professional attributes desirable for success in the career, and (g) opportunities for employment and advancement in the career. The book covers academic careers (in a psychology department, a school of education, a business school, a school of public policy, a medical school); careers in clinical, counseling, and community psychology, both within and outside hospitals; careers in diverse organizations (government, schools, organizations, consulting, etc.); and careers in diverse areas of psychology (human factors, military, and health, etc.). Social media providers are opening up new sources of jobs that many graduate students never would have thought of when they were starting out. The book also contains references suggesting other places one can seek information about careers.

7. The Job Interview

Regardless of the type of job you pursue, one of the most important events in getting a job is the job interview. If you are fortunate enough to be called for a job interview, the chances are that your performance in the interview will determine, to a large extent, whether you become merely one of a number of candidates who are interviewed or, instead, the candidate who is (first) offered the job. Thus, you wish to prepare assiduously for the job interview.

7.1 The Job Talk

The job interview may have many elements, but the central element almost always is the job talk. There is no one formula for a successful job talk, but there are elements that are common to many successful job talks.

- *The job talk is a performance.* Remember that when you speak you are performing. Good performances always require a great deal of preparation. If you give the talk off the cuff, it will show. And you most likely will not get the job. Some professionals appear very spontaneous. In fact, it is their enormous amount of practice that enables them to *appear* to be spontaneous.
- *Keep your audience in mind.* You may know the meanings of all the jargon-words you use in the talk. Typically, though, the audience for a talk is quite broad, including many people who have only a vague knowledge of the area in which you work. Therefore, prepare for a general audience. Usually, the audience will have good background in general psychology, but not necessarily in your specialty. On the one hand, you don't want to insult the audience by being too elementary. But you are much more likely to lose the audience than to insult it. Therefore, explain all terms that are not generally known and make sure the talk is comprehensible to almost everyone.
- *Motivate the talk.* Don't expect your audience to know why your work is interesting or important. You need to motivate your talk up front by explaining why you are doing what you are doing and why anyone in his or her right mind should want to learn about it! Starting off your talk with a concrete example of the phenomenon about which you will be talking often helps. Often, speakers get or lose their audience in the first minute or so. Therefore, start strong.
- *Be clear on what question or questions you are addressing.* Always be clear about what question or questions you are addressing. If you are not, your audience is likely to be confused about what you are trying to do, and why.
- *Rehearse, rehearse, rehearse.* I generally encourage job candidates to give the job talk at least three times before presenting it for real. Virtually no one gives their best presentation the first time they present. The more similar your audience is to the audience to which you will present your job talk, the better. Often, lab groups scheduled research meetings provide a forum for practice talks.
- *Time yourself.* It is embarrassing to finish a job talk with too much time to spare. You look underprepared. It is no better to have much too much material, and either to stop in the middle of the talk or to start rushing at the end. Rushing does not work. And remember to allow time for interruptions.
- *Organize.* A good talk is like a story, with a beginning, a middle, and an end (at least, the end up to wherever you are in the story). Say what you are going to say, say it, and then, at the end, say it again. Make sure that anyone in the audience can follow your talk. Disorganized talks often bespeak disorganized minds, and given the choice, most institutions would prefer to hire people who think in an organized way.

- *Be enthusiastic.* Enthusiasm often is contagious. If you are enthusiastic about your work, others may well be. But if you sound bored, others are likely to be bored, no matter how intrinsically interesting the work may be.
- *Cite relevant work, especially of people in the audience.* Audiences expect you to be aware of the relevant literature in your field, and of the intellectual antecedents of the work you have done. Therefore, be sure to cite near the beginning of the talk past work that led up to yours. If someone in the audience has done work that is relevant, it is essential that you cite that work. It makes no sense to insult someone who might have a potential say in your being hired!
- *Be prepared for questions.* Sometimes, job candidates give a good talk, only to blow their chances of getting the job during the question period. By rehearsing your talk, you can get a sense of what kinds of questions you are likely to get. Have answers prepared to the tough ones. But there may always be questions that are unexpected. Therefore, you need to be prepared for the unexpected. It is very rare that a question demolishes a talk. (It has happened to me once in my career, and it was truly a drag.) Chances are no one will demolish you. But some people may try. Never respond defensively; it makes you, not the questioner, look bad. But do not feel like you have to agree with everything everyone says, just because you are on a job interview. People who capitulate too easily appear to lack spine. Give an honest, constructive response. If you just cannot answer a question, tell the truth. People usually can tell if you are faking it. You may be able to think of an answer later, and then respond. I often start off my talks by saying that, during the talk, I welcome questions of clarification, but prefer that questions that go beyond clarification wait until the end. If people ask whatever comes to mind during the talk, the risk is that you will finish very little of what you prepared, no matter how well you timed the talk in advance.
- *Never demean or insult a questioner or give a flip answer.* Inevitably, you will sometimes receive questions that undermine your faith in humankind. How could anyone ask a question that stupid? Never, ever demean or insult a questioner. There are several reasons for this. First, you probably do not know who the questioner is. I'm sorry to say that when I applied for my first job, I got a question from a member of the audience – who looked like a graduate student – that I thought was quite silly. I gave a flip answer. Unfortunately, the questioner was a senior faculty member in the area to which I was applying for a job. I didn't get the job. Second, what for you may seem like a stupid question may not seem to be a stupid question to the questioner or others in the audience. A flip or insulting answer may therefore be viewed as quite inappropriate. Third, you portray yourself in an unflattering light when you react in a flip or insulting way.
- *Do not be a slave to your audiovisuals.* Over the course of a career, almost everything that can go wrong will. There will be PowerPoint projectors that do not work. There will be problems with lighting and microphones. There will be rooms that are too small or too large. You need to be prepared for all eventualities. I usually try to make sure I have backup. So, if PowerPoint does not work,

I have handouts in reserve. Or I can manage with no audiovisuals at all. One would like to believe that major screw-ups never happen during job talks because the talks are so important, but they happen with some frequency. You can lose valuable time if you are not prepared. So be ready for the unexpected and don't be totally reliant on one source of audiovisual aids.

- *Get the level of detail right.* The right level of detail for a talk is a sometimes hard-to-find middle ground. When you go into great levels of detail about your participants, materials, procedures, and so forth, you bore people; but when you give insufficient details, you lose them. In a talk, it is important to distinguish the forest from the trees, but to make sure that you tell enough about the trees so that people can understand the nature of forest.
- *Have a clear take-home message.* Make sure that, at the end of the talk, people leave with a clear take-home message regarding what you tried to show, what you did show, what it means, and why they should care.

What are the principal mistakes candidates make in their talks? There are many possible mistakes, but I would highlight five:

1. *Too much content.* The candidate wants to show everything he or she has ever thought of and done. The talk is over-packed. People can't follow it. Usually, the talk ends up being rushed, ensuring no one will understand it. They are not impressed. You need to be selective in what you present.
2. *Lack of motivation for the work.* The candidate does not make clear why he or she did the research, and why anyone should care about it. They think the research will sell itself. It doesn't.
3. *Too technical.* The speaker wants to show how expert or technically sophisticated they are. They are talking only to the most technically sophisticated in the audience. The rest have no clue what is going on.
4. *The candidate gives irrelevant, incoherent, or nonsensical answers to questions.* The result is that the talk seems to have been written by an advisor rather than by the candidate.
5. *The candidate does not say and show where the work is going.* The audience is unclear as to what follow-ups there will be, if any.
6. *The candidate is boring.* They read, or speak in a monotone, or speak too softly so people can't hear, or don't seem interested in the work, so the audience isn't either.
7. *The candidate can't admit to a mistake or to not knowing something.* It happens during talks that the speakers make mistakes or show that they cannot answer a question. If you make a mistake, admit it and say you will look into it and correct it as necessary. If you can't answer a question, say you will look into it and get back to the questioner if they would like.
8. *The talk is too narrow or too broad.* If the talk is too narrow, it just does not appeal to people outside the field of the work. If the talk is too broad, it may sound like the candidate knows a little about a lot but a lot only about a little.

Sometimes, especially at institutions that emphasize teaching, there will be two separate job talks, one a research talk and the other a teaching talk. In these cases, you must prepare appropriately, making sure that each talk is geared to satisfy the purpose for which it is given.

7.2 Informal Conversations

Although the center of the job interview is the job talk, another important aspect of it is the series of informal conversations one typically has with potential future colleagues, such as faculty members or practicing psychologists, sometimes with graduate students, and sometimes, with administrators outside the unit in which one is to work. These conversations, almost as much as a job interview, can make or break a job offer. Therefore, keep in mind some important tips about the conversations:

- *Find out about your potential future colleagues in advance.* People almost inevitably are flattered when you know about them and their work; some people, especially more senior ones, may be insulted when you do not. Before you go to the interview, learn as much as you can about the people you are likely to talk to, and then show your knowledge (unobtrusively) in your conversations with them.
- *Show your interest in the work of the people with whom you speak.* One of the worst but most frequent errors of job candidates is to appear self-preoccupied and interested only in their own work. Egocentric people make bad colleagues and are not prime candidates to be hired. By showing an interest in the work of others and in what you can contribute to it, you not only paint a flattering portrait of yourself, but you also open yourself up to learning experiences you might otherwise never have.
- *Show your interest in the institution.* You want to show that you know the institution to which you are applying, and that you would be thrilled to receive a job offer. Communicating the message that you do not really want to go to a place is a pretty good way of not getting a job: No institution wants to be turned down!
- *Be modest but not self-effacing.* No one likes a show-off. So maintaining an appropriate level of modesty helps show that you have a perspective on yourself and your work. But do not belittle yourself: If you do not have confidence in yourself, you may find that others will not either.
- *Disagree if you must, but don't lose your cool.* Most likely, one or more of your conversational partners will challenge some of your work, especially if you talk to people after the job talk. Conversations during job interviews are terrible places to lose your temper. You do not have to be disingenuous and pretend to agree with others when you do not.
- *Be yourself.* People can tell when you are faking it.
- *Watch out for your non-verbal signals.* When you are in a job interview situation, you are likely to be nervous. You also are likely to leak non-verbal signals

showing how you really feel, regardless of what you say. Be wary, therefore, of any non-verbal signals you may leak.

- *Do not speak negatively of others.* People who interview you may dump on their colleagues, administrators, or others. They also may ask you about colleagues in your own institution about whom they are curious. People often share gossip, particularly negative gossip, in order to strengthen connections with others. But, even if you are invited to speak negatively, a job interview is not the place to tell what you really think either about your colleagues back in your own department or in the hiring department. You simply never know what will get back to whom. Negative comments are far more likely to hurt you than to help you.
- *Do not be defensive.* If your meetings are after your talk, or even perhaps if they are before, some interviewers may use the opportunity of a personal conversation to see how you take criticism. A job interview is definitely not the place to be defensive. Accept feedback gladly, even if it is negative, and show you value the feedback you get.
- *If there is a cocktail hour or a dinner, minimize your drinking of alcohol or don't drink any at all.* The interviewers may actually want to see what you are like when you have had a few drinks. It's up to you, regardless of what you are like after drinking, not to let them find out. You cannot afford to lose normal inhibitions and perhaps say or do something you later will regret.

8. The Perspectives of the Search Committee

It would be nice if there were secrets that would crack open the deliberation process of the search committee. There are no such secrets, because different search committees value different things. Moreover, hiring decisions typically go to a faculty vote, at which point anything can happen. However, I think the main issues are these, with different weights for different search committees.

- *General fit to department.* Departments want someone who will fit in – who shares their values, who meets their teaching and research needs, who will be a good colleague. A candidate could be strong on many dimensions, but if the individual does not seem to fit with the department, the candidate is likely not to get hired. If you want to know what people are looking for, you might try simply asking them what is important to them. If what they value is not what you value, you probably are in the wrong place!
- *Specific fit to job.* Beyond general fit, departments typically have a search image in mind. It might be limited to an area (such as social psychology) or even to a particular specialty within an area (such as social cognition). If you do not do what the department is looking for, you have a tougher sell ahead of you.
- *Potential for research.* Especially at the entry levels of the academic job market, you are selling not so much who you have been but who you will be. You need to convince the committee that you are someone with a wonderful future in front of you.

- *Teaching.* Departments vary greatly in how much they value teaching, but almost all departments want someone who is at least a good teacher, if not necessarily a great one. Typically, your job talk and letters of reference are the main information departments get regarding your teaching.
- *Willingness to give as well as to take.* It is surprising how many candidates appear to be focused only on themselves and their own research. Showing interest in the work of others and in other people, more generally, can make a big difference to a final outcome.
- *Professional charisma.* Departments want people who will make them proud – who will make them stand out from the pack. Professional charisma is different from personal charisma – the department is not hiring a future political leader. They want someone who will stand out from the pack professionally – as a teacher, researcher, or clinician.
- *Professional ethics.* Departments want people who will not get into trouble.

9. Questions to Ask on a Job Interview

The questions you ask on a job interview will vary with the issues that concern you. You should consult the department's web site for general information. However, here are some questions that candidates often ask (see Table 29.1). Often, the most appropriate person to ask is the Chair or Dean, although it sometimes is interesting to obtain a variety of perspectives.

10. Negotiations

If you are fortunate enough to get a job offer, there is room for negotiation! Here are the things that are most commonly negotiated:

- *Salary.* At the junior level, there is often some but not much room for negotiation. Sometimes having a competitive offer helps. But you should be very low-key in such negotiations.
- *Start-up funds.* Many universities will give start-up funds. You should find out the range of start-up funds available, if any are available at all. Then you may wish to prepare a budget.
- *Employment opportunities for significant others.* Many, but not all universities are willing to help find employment for significant others.
- *Lab space.* Many universities will provide lab space if you wish it.
- *Teaching load.* Some universities will negotiate a reduced teaching load in the first year. But they will generally not make a special arrangement beyond that.

My advice is to keep demands modest. When you are senior scholar, you will have more negotiating room. For a first job, asking for too much can put off the people you most need to support you later on. I also would not ask about the university policy on consulting when you are seeking a first job. The message you

Table 29.1 *Sample questions to ask on a job interview*

General Questions

- What is the size of the department?
- What is the structure of the department (different tracks, disciplines, etc.)?
- What is the number of faculty at each rank?
- What are the department's future expansion (or contraction) plans?
- What is the department's standing within the university?
- How are graduate students matched with faculty?
- How are graduate admissions handled, in general?
- How long does it typically take for graduate students to finish the program?
- Does the graduate program have both masters and doctoral students, or just one or the other?
- For clinical psychologists, what is the relative emphasis on research versus clinical work?
- What is the relationship between subdisciplines or areas within the department?
- What is the relationship between psychology and other departments?
- Are any of the faculty in private practice? Are there any guidelines with respect to private practice or consulting?

Responsibilities

- What is the teaching load?
- Is there any reduction in teaching load during the first year?
- Is there any reduction in teaching load for departmental service? For grants?
- Can you buy out of teaching with grants?
- Is summer teaching expected?
- What is the proportion of junior faculty that is tenured?
- What are the expectations for tenure?
- What are the expectations with regard to committee work?

Resources

- How much lab space can you expect? Where will it be?
- How are research assistants and teaching assistants assigned?
- How are resources like secretaries, photocopying, postage, long-distance calling, and parking handled?
- What kinds of computer equipment and support can one expect?
- What library services are available?
- What kinds of mentorship are available for junior faculty?

Benefits

- What kinds of travel funds are available from the department?
- What kinds of medical, dental, and retirement plans are offered by the university?
- Are there opportunities for summer funding?
- What is a typical starting salary?

Grants/Research

- What are the university's expectations with regard to obtaining outside grant funding?
- What kinds of internal grant funding are available?
- What kinds of participant populations are available? Is there a subject pool?
- Is there an office of sponsored research in the university or college?
- How much time is typically available for research?
- What is the quality of the students, and might they reasonably become involved in research?

(continued)

Table 29.1 (continued)

Location

- What are the real-estate opportunities available?
- What is the cost of living?
- Is there any university assistance with mortgages?

Faculty Relations

- Are relations between junior faculty and senior faculty cordial?
- Is collaboration among faculty encouraged (or discouraged)?
- Why do people decide to come to the university? Why do some people not decide to come?

send may be that you are not serious about the job but rather care about using it as a springboard to earn extra money on the side. This is not the message you want to send.

11. Conclusions

You cannot guarantee yourself the job you want, or even a good job. But there is a lot you can do to improve your chances of getting the job you want. Preparing early for your eventual foray into the job market will improve your chances of effectively marketing yourself. By following the suggestions in this chapter, you will find yourself a step ahead in getting your ideal job. But if you do not get that job, all is not lost. Many people start off with jobs that were not what they hoped for, and either find that they are much happier than they expected they would be, or that, within a few years, they can move to a job that represents a better match to what they want. So, if you are patient, chances are quite good that sooner or later, you will end up in a position that makes you happy.

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30 Balancing Career and Family

Paula J. Caplan

Even the most experienced psychologists have trouble balancing paid work and family, whether their work is in academia or in clinical practice, so undergraduates, graduate students, and interns have no reason to feel incompetent and inadequate if they have trouble doing the balancing act. We feel we are shortchanging our loved ones when we spend time on our studies or work, and we feel we are being insufficiently productive as students or workers because of spending time meeting family responsibilities – and even more when we notice that we are actually having fun with our partners, parents, or children. Spending any time meeting our other needs, such as going for a swim or reading a book of poetry or just sitting quietly and thinking, often makes us feel we are shirking both of our other sets of duties. This is the case for people regardless of sex, but is more common for women and for others who are not white, heterosexual, able-bodied, or doing what is considered to be “mainstream” work (Caplan, 1994).

It is even more pressing to be aware of the balancing difficulties and to find ways to deal with them when we consider the increasing proportions of women among students and faculty in psychology, as well as in the profession outside of academia (Enns, 1997; Snyder et al., 2000). According to an American Psychological Association report (Kohout & Wicherski, 2010) based on the association’s 2008–2009 study of graduate departments of psychology, women represented 46 percent of full-time faculty in traditional academic settings and 45 percent of full-time faculty in professional schools for psychologists, whereas, according to Gehlmann et al. (1995), the percentage of women among full-time faculty in graduate departments of psychology in the United States had only been 22 percent in 1984.

In 2013, the ratio of women to men who were active psychologists in the workforce was 2.1:1, with an even wider gender gap for racialized groups (APA, 2015). In addition, according to Willyard (2011), women earning doctoral degrees in psychology outnumbered men 3:1. However, adding to the burden for women in the

Acknowledgments: Many thanks to Professors Kathryn Morgan and Sandra Pyke for getting me involved in writing about women in academia in the first place.

field, women have continued to be paid less than men for the same work (Willyard, 2011). And in academia, the split for tenured positions was 61 percent men and 39 percent women (Willyard, 2011).

In 1984, racialized people and members of ethnic minority faculty accounted for about 6 percent of all full-time faculty, and that number had increased to 13 percent in 2008–2009 (Kohout & Wicherski, 2010; Gehlmann et al., 1995), but although Canadian staffing patterns were similar with respect to sex distribution, racialized people and members of ethnic minorities represented only 3 percent of their Canadian full-time faculty in graduate programs of psychology (Kohout & Wicherski, 2010). On their own, these percentages suggest the special pressures that come from being in the minority as a faculty member, or as a graduate student who is a woman or a member of a racialized group or ethnic minority, from seeing few people from one's own group assignments on the faculty. But what makes the pressures and membership in devalued groups even more clear is the following: women in the US currently represent 75 percent of students in doctoral programs in psychology and 77 percent of those enrolled in master's programs in psychology, and those numbers have been steadily increasing for many years (Hart et al., 2010). The 31 percent of first-year enrollees who are members of racialized or ethnic minority groups also represent a steady increase, and a similar pattern is seen in Canada (although racialized people and members of ethnic minority groups account for only 8 percent of first-year psychology graduate students there: Kohout & Wicherski, 2009). The fact that these increases have filled the pipeline with members of marginalized groups who are highly qualified to teach in graduate programs and yet all of these groups still account for a minority of psychology faculty in such programs testifies powerfully to the continued presence of intense bias and oppression in academia (and see Caplan, 1994). It is clear, therefore, that the workplace part of the double load includes the necessity of coping with this bias and oppression.

The Second Wave of the feminist movement beginning in the late 1960s and early 1970s called attention to the difficulty of the balancing act, but social changes to make it easier both for women and for men have been exceedingly slow in coming. Women have been expected to be Superwomen, to balance career and family with ease and aplomb, not complaining, not asking for help and certainly not expecting it from any quarter, and feeling grateful for the opportunity to obtain university degrees and to work as psychologists (Caplan, 2000, 2001). Media stories about "Mr. Moms" or even about men shouldering more of the household and family responsibilities have given a false picture of reality, for recent research shows that women still do far more housework and childcare than do men (Bureau of Labor Statistics, 2010; Dush et al., 2018; Pleck, 1986, 1997; Sullivan & Coltrane, 2008). What has been difficult for men has been confronting the conflicting forces: a pull from their families and progressive elements of society to spend more time with them and do more of the caretaking, a push from traditional elements to consider themselves masculine for doing paid work, and less than manly when feeding babies or vacuuming carpets at home.

Increasing the burden for parents has been the crazy-making pair of messages our society gives:

- (A) One is that the welfare of children matters desperately and is overwhelmingly the responsibility of parents, especially mothers (Caplan, 2000).
- (B) The other is that children's welfare is not important enough for our governments to spend much energy or money on it.

This leaves parents, especially but not exclusively mothers, working frantically and tirelessly to meet all of their children's needs while knowing that that work is shockingly undervalued (Caplan, 2000).

Despite some changed expectations about both sex roles, there has been no let-up in pressure, not the pressure on graduate students to do well in courses, the pressure on early- and mid-career faculty to publish and to take on committee work and advising duties, the pressure on clinicians to maintain heavy case loads (in private practice, in order to earn a living, and in hospitals and clinics, in order to be seen as a team player who does one's share of the work), or the pressure on parents to produce perfect children (Caplan, 2000). In fact, if anything, all of these pressures have increased and show little sign of abating. To do good work as a graduate student, a therapist, or a teacher requires focus, concentration, energy, and persistence. Furthermore, being a graduate student can be emotionally draining, because you have far less power than do the people who grade you and write (might refuse to write) letters of recommendation, as well as because it can be hard to find out when the work you've done on a thesis or dissertation is enough, so time and energy are spent in trying to divine the wishes of your supervisor (Caplan, 1994). Being a conscientious therapist is draining because of the demands placed on one's time, energy, and patience by suffering or difficult clients. Being a good, caring teacher is draining because of the energy and time that go into responding to students' learning, emotional, and mentoring needs and because of the worry about how much publishing will be enough to obtain tenure or promotions. Canadian feminist psychologist Cannie Stark has wisely pointed out that, in jobs in which one is supposed to think creatively, one doesn't just stop thinking – whether about teaching, research, or therapy patients – just because one arrives back at home, and these thoughts are likely to pop up or continue while one is changing diapers, cooking, or doing other household tasks (Stark-Adamec, 1995). Based on her own research about women in academia, Stark reports that women bring home an average of 71.6 hours of workplace work per month, partly because of their love for work but partly because of the enormous numbers of demands to which women have to respond while at work and partly because, unlike some 9-to-5 work, it is never clear when this work is done (Stark-Adamec, 1995). Stark also reports that at home, women spend more than 102 hours a month taking care of household activities assigned to women and, as a result of all of the above, women get an average of only 210 of the 240 hours of sleep per month they feel they need. And in 2003, Suzanne Bianchi found that three years before that, mothers with paid jobs were

actually doing an hour more per week of childcare than were stay-at-home mothers (Porter, 2006).

In the early 1970s, I had my first post-PhD job, a full-time position as a psychologist in a clinic. I spent 40 hours a week there and often took work home as well, and at home I had a husband, two biological children, and two stepchildren. I tried to work efficiently in order to make everyone happy. One day, a clinic administrator took me to task because I did not “seem available to the staff.” I replied that I was bewildered, because I always attended every meeting, finished my work on time, and quickly carried out psychological assessments when they were requested by non-psychologists in the clinic. The reply was, “Well, but, um, you don’t . . . hang around in the hallways or the coffee room.” I didn’t know whether to laugh or cry at that, but that was the moment I learned that every workplace has unwritten rules that employees and students are supposed to figure out and follow.

1. What Makes It So Difficult

Standards and expectations make finding the right balance impossible for people regardless of sex. For women, the standards are simply unmeetable. At home, you are supposed to do the lion’s share of the work. As a student or employee, you are supposed to do as much as or even more work than the men; if you do not do more, you may well be perceived as doing *less* (this has happened to me). And as a student or employee, you will be expected to do not only what is defined as “work” but also the very real work of nurturing, such as listening to troubled people, maintaining a sunny, supportive demeanor. If you fail to do the latter, you risk being disliked because you are insufficiently womanly, but if you *do* the latter, you risk acquiring an image of “motherly person” rather than “good student or worker” (Caplan, 1994, 2000). Even today, the two are often considered mutually exclusive. A senior psychologist in a research institution who was married and had four children told me this: She worked diligently until 5:00 every day, and one day as she was leaving the office, a male colleague called out, “Could you help me? My grant application has to be postmarked before midnight tonight, and I need to pick your brain.” Obliging, she spent the next hour trying to help him, and near 6:00 he looked at his watch and said, seriously and judgmentally, “You should be home cooking dinner now!”

For men who are committed to doing their fair share of household work, the standards are somewhat different. In spite of the women’s movement, our society has not yet decided either how much housework and childcare a man *should* do or how much he can do and still be considered a real man (whatever that is) who is presumably doing conscientious work as a student, instructor, researcher, or therapist.

Due to increases in the numbers of women, racialized people, and openly gay, lesbian, bisexual, and trans people among graduate students, faculty, and practitioners in psychology, combined with the increasing preponderance of women on campuses and in the workplace, one might expect these sites to be welcoming for people who are not white, straight, cis-gender men doing mainstream work. However, women account for the majority of undergraduates, support staff, cleaning

and food service staff, and faculty in low-level and part-time positions, and members of other marginalized groups are more commonly found in those positions as well. Harvard University, for instance, continues to have a disturbingly low percentage of women in tenured positions (Lewin, 2010). The “academic funnel” is the term based on the findings of fewer women as status and salary increase (Caplan, 1994). The university campus was never intended to educate women or hire women faculty (Sheinin, 1987), and many of its organizational and procedural aspects still reflect this. For instance, junior faculty aiming to publish enough to get tenure typically need to do this during the very period in their lives when women are of childbearing age; and early attempts to allow for this, such as programs granting an extra year to apply for tenure because of having a new child, have been of limited use. Reasons they have not been more useful include: the fact that it takes far more than one year to care for a baby and young child; the irony that expectations about women’s publishing productivity are often increased because “they’ve had a whole extra year to write,” when during many years starting with the birth or adoption of a child, they spend a great deal of time meeting the child’s needs, not hanging out in libraries and coffee shops, thinking and writing in an unconflicted state; the tendency of administrators and peers to look down on men who ask for that extra year so they can co-parent; and the criticism and marginalization of people of any sex who use flextime, do workplace tasks at home, or work part-time.

Other reasons the balancing act is so difficult include:

- The rarity with which those at the top in academic and clinical settings have altered values and norms to reflect the extensive documentation from our own field that the “double load” (e.g., Greenglass, 1985, but even more than a decade into the twenty-first century, stories about the absence of such alterations and improvements remain common) occasions enormous stress, even desperation.
- The difficulty of finding women mentors to help show the way, because mentors for anyone remain too rare, but women mentors because they are overburdened by their own balancing attempts within the workplace (e.g., meeting expectations that women will carry the lion’s share of advising about personal problems, and serving on many committees because without them, they will be all-white and all-male).
- The difficulty of finding male mentors who have made sustained attempts to share equally with women the household and childcare tasks.
- The scarcity of affordable, high-quality daycare.
- The socialization of people to feel that, for somewhat different reasons depending on their sex, they should hesitate to ask for help.
- The tendency for part-time students to receive reduced financial aid, even proportional to the percentage of time for which they are enrolled to study.

In addition, many factors make the balancing act more difficult for women, including:

- The tendency for increasing percentages of part-time employees to be women, who are sometimes working part-time by choice because of their family responsibilities,

although they virtually never receive benefits such as health insurance. This is a dramatically increasing concern, because in the mid-1970s part-timers accounted for 22 percent of undergraduate teachers but in 2005 and a decade ago, 48 percent (American Federation of Teachers, 2010; Monks, 2009).

- The tendency of students and employees to evaluate female faculty and supervisors more harshly than they do males (Caplan, 1994, 2000); thus, for instance, women are expected to do more household work but are then criticized for not publishing enough.

Together, the many impediments to finding ways to balance career and family benefit a status quo in which the most powerful people keep the less powerful scrambling, overworking to try to meet the impossible standards for mothers to do virtually all the childrearing on their own (the philosophy in Hilary Clinton's *It Takes a Village to Raise a Child* remains outside the mainstream) and to keep paid workers striving to produce nonstop (Caplan, 2000).

2. What Can Help (Can, not Will)

2.1 In Your Head and With Others

Start by realizing this: It is almost certain that you will never feel that you are successfully balancing family and work (Caplan, 2000). So what can you do (see Table 30.1)? You can assume community, or at least commonality. Know that, no matter how calm and secure other people may appear, anyone doing that balancing act is struggling. Long ago, I presented at a conference a paper about what I considered bizarre, unique problems at work that I figured must somehow be my fault. I was so ashamed that I introduced each example by saying, "One psychologist had the following experience" or "Another psychologist told this story." I was so astounded to see people sitting up in their chairs and nodding vigorously that by the time I got to the third example, I felt more courageous, took a deep breath, and said, "Here is what happened to me." As a teenager, I had the typical adolescent's belief that my feelings and experiences were weird and probably proof that I was abnormal. Later, I came to consider that any feelings and thoughts I had were invariably shared by at least a few, perhaps carefully chosen people. Then finally, I realized that I come closest to guessing the truth if I assume that my feelings are virtually universal. My taking the plunge and being the first one to express confusion, fear, or a particular perspective has nearly always elicited sighs of relief from others who had considered themselves strange, stupid, or both. Simply acknowledging feelings of puzzlement and vulnerability can create a community as you speak about them.

Try to find work that you love, an aim whose importance cannot be overestimated:

- Graduate students can choose paper and dissertation topics they find compelling rather than routine, and if they fear that their committees will regard their

Table 30.1 *Strategies that can help balancing career and family*

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- Assume community, or at least commonality.
 - Try to find work that you love, an aim whose importance cannot be overestimated.
 - Assume, and help create, community with people from various levels and in various realms.
 - Talk and talk and talk about the obstacles to finding balance between career and family.
 - Guard against blaming or pathologizing yourself.
 - Ask senior people for “clarity” about what is expected of you on the job.
 - Try to clarify with other adults, as well as older children, in your household the way you will distribute household responsibilities, time for work, and leisure time with each other and alone.
 - Keep in mind this apparent paradox: *Give yourself permission* to take more time to do things in any realm, so that you don’t feel so pressured, *but* aim to do them more quickly than you can imagine doing them once you get started.
 - Never forget that, in an ideal world, changes that make balancing between family and career a task of human scale would come from the top down, through policies *initiated, implemented, and evaluated* at the highest levels of administration. So maintain the perspective that the people with the greatest power should be doing this work by keeping in mind that no less a body than the American Psychological Association has said that “administrators, especially department chairs and deans, must be held accountable for gender equality and climate in their units. Those who fail to make the corrections necessary for gender equity should be given feedback, and their effectiveness in correcting these problems should be reflected in compensation. If necessary, ineffective administrators should be replaced” (APA, 2000, p. 1).
 - Create initiatives for change if you want, or can afford, to take the risks that such initiatives would involve; but if you do this, try to maintain low expectations about the speed and magnitude of change.
 - Begin initiatives for change by choosing strategically which ones are most important to you or seem most doable, first making or finding a list of policies and practices that have been helpful at other universities or workplaces for psychologists.
 - Remember that the best, time-tested antidotes for burnout are ongoing contact with people who share your dilemmas and aims; an ability to remember that every step in a long struggle is important; and a whopping appreciation for irony and sense of humor.
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preferred topics as unacceptable, they can brainstorm with other students or trusted faculty members about ways to design research that is likely to be approved by committee members while retaining their fascination for the students.

- Faculty members can design or modify courses in ways that suit students’ needs but are interesting and enjoyable to teach (e.g., if you’re told your department needs you to teach the introductory developmental psychology course and you find the textbook to be rather dry, you can teach it from a critical thinking perspective).
- After reaching a more secure employment level, such as a tenured position, you can design new courses based on what you most love to read, think, and talk about, then see if they can be added to the list of your department’s course offerings.
- If you are a clinician and have any say over what patients you see, try to refer to other people any prospective patients with whom you are unlikely to make

a good, human connection, to be a solid, working “fit.” This is both good practice as a therapist and a way to maximize the interest factor in your work life.

Assume, and help create, community with people from various levels and in various realms – for instance, graduate students connecting with secretaries, faculty with cleaning or food service staff, psychology faculty with any of the above as well as with faculty from other departments or with psychology professors in other institutions. Breaking through these kinds of class and other barriers increases opportunities for everyone to present their different perspectives, offer different kinds of useful information about how the department or workplace is really run, and provide support for each other. It also brings members of different groups down or up to human scale, making distance and stereotyping of group members harder to maintain and humanizing campuses and other workplaces.

Related to the above, talk and talk and talk about the obstacles to finding balance between career and family. Know that by bringing up dilemmas and fears in conversation, you will help free others to do so, but you will also make some people exceedingly uncomfortable, even belligerent. The latter is all the more reason you need to reach out to others, give and receive support (see Caplan, 1994, for specific suggestions).

Guard against blaming or pathologizing yourself if you are not balancing work and family with grace and aplomb. Make a mental note that you’d be unlikely to blame or pathologize others who are having that trouble. Keep coming back to the current systemic ills (see previous section) that make balancing so hard. This, too, becomes easier, the more you discuss it with other people.

Ask senior people for “clarity” about what is expected of you as a student or employee, a crucial practice in light of the power and number of unwritten rules, as mentioned earlier. The relevance of this point to the balancing dilemma is that, in the face of unclear expectations, many of us strive mightily to do far more than is acceptable. Because asking for clarity can make one feel extremely vulnerable, this is another instance in which it can be terrifically helpful to brainstorm with other people, whether in your field or outside of it, about how to word requests or suggestions in ways that reduce that feeling of vulnerability and help you maintain your dignity. It’s often good to include script-writing in the brainstorming because, when one is very worried and/or angry, one can get mental blocks, either making one feel paralyzed and completely silenced or making it impossible to think of anything to express other than in the forms of demands, threats, complaints, or intense anger.

Try to clarify with other adults, as well as older children, in your household the way you will distribute household responsibilities; time to do paid work, coursework, or dissertation work; time for fun together; and leisure time on one’s own or with others. Be aware, however, that these advance plans are often jettisoned, due to several factors:

- Most people have been subjected to intense social pressures to divide family responsibilities along traditional sex-typed lines.

- The continuing disparity in women's and men's salaries helps shape the decision in heterosexual families that, if only one adult will maintain full-time paid work while the children are young or when any family member is chronically ill or disabled, it's the man who will keep his job, because his income will probably be higher than hers would be, so it makes economic sense for the woman to stay home and do the caretaking there.
- Men's intelligence and achievements are often still likely to be assumed to be greater than those of women.

Keep in mind this apparent paradox: (A) *Give yourself permission* to take more time to do things in any realm, so that you don't feel so pressured, *but* (B) aim to do them as quickly as possible. These two suggestions may seem to work at cross-purposes, but in fact they don't, because both are ways to minimize pressure that comes from the impossible standards imposed on us from all around. This is reflected, for instance, in the raising of the bar in recent years: Workers spend significantly increasing amounts of time at work, hence the constantly heard complaint, "I am *so* busy, never have a moment to myself or to relax with my partner." To explain part (B) a bit, in more than 20 years of teaching, I found that students and colleagues tended to overestimate the amount of time many tasks would take . . . and even assumed they were *supposed to* spend unduly extensive periods of time doing such things as writing dissertations or grant proposals. When I suggest to anyone that they try to do such projects in a single day or even one hour, they initially tell me that that is absurd and impossible. I then explain that of course they cannot finish the project in that time, but that they will undoubtedly be amazed by how much they can accomplish if they take seriously the suggestion to finish in a day or an hour. They invariably report back to me that this experiment showed them that they can work much more efficiently than they had realized. I also point out that they will have plenty of time to go over their work and fill in gaps, make alterations, or reorganize the material, but that all of that is easier once the most important material and the bulk of the structure are written or sketched out in that short period of time. The other function served by this advice is to remove some of the heavy emotional load that "Writing A Dissertation" or "Writing A Grant Application" tends to carry, a load that significantly impedes the process of completing the task. Once you discover that you *can* do some parts of your work in less time than before without losing its quality, you will know that you don't have to work constantly under intense time pressure (see A above).

2.2 Change from the Top Down . . . Or from You

Never forget that, in an ideal world, changes that make balancing between family and career a task of human scale would come from the top down, through policies *initiated, implemented, and evaluated* at the highest levels of administration. *You* should not have to make this happen. Top administrators should set a tone of respect for all and warn that reprisals against those who take parental leave or use flextime or

job-sharing will not be tolerated. Administrators should sponsor seminars for managers, other employees, and students about difficulties of the balancing act, and they should set a tone of compassion and support for those who are attempting it. Top administrators should initiate and fund studies of steps their universities or clinics could take to decrease these difficulties, such as pushing for adequate maternity and paternity leave for all. In fact, the authors of an American Psychological Association report hold that “administrators, especially department chairs and deans, must be held accountable for gender equality and climate in their units. Those who fail to make the corrections necessary for gender equity should be given feedback, and their effectiveness in correcting these problems should be reflected in compensation. If necessary, ineffective administrators should be replaced” (APA, 2000, p. 1). Despite this strong statement, however, few colleges and universities have yet taken steps to make this kind of thing happen. And of course, outside of academic settings, those same changes should also come from the highest levels.

Although change should come from the top, so that those who are already disproportionately burdened and oppressed need not take on the additional, onerous tasks of initiating and campaigning for change, some of you will feel you want, perhaps can afford, to take risks by creating initiatives for change. Ideally, you would take such action working with your peers and possibly more senior, supportive people. Trying to make change happen can be empowering precisely because it involves taking action rather than waiting passively, hoping needed changes will take place but feeling powerless. One example of such an initiative would be for graduate students who are becoming increasingly anxious about forthcoming comprehensive examinations to form a group and ask the faculty to make available examples of questions from past comprehensives. They may refuse you, but they may not, and making the request as a group will minimize the risk to each student insofar as that is possible.

If you choose to work for change, expect powerful resistance from those at the top or in middle management, and know that you may suddenly feel even more powerless than before. I cannot emphasize enough how much it helps to be prepared for resistance, setbacks, and even reprisals; it is crucial to consider what risks you may be taking. Similarly, assume that change for the better may come slowly. Of course, if you ask for change, you may be accused of being belligerent, demanding, or – an increased danger in arenas increasingly populated by women – needy, immature, or oppositional. As Canadian Flora McGrath said decades ago to her daughter, Maude Barlow, when Maude became a political activist and was first criticized, “Serious people have serious enemies.” Maude went on to become a prominent social and environmental justice advocate and never forgot those words, telling them to me at a time when I was being roundly criticized for my activism.

It is important to try to gauge the risk-versus-benefit situation and to make sure you document everything you have done, as well as the responses, so that there will be an accurate record in case you are accused of wrongdoing. Furthermore, be aware that change for the worse may come abruptly and unexpectedly, perhaps due to the visibility of your activism, such as a sudden reduction in the number of hours for which an assistant is signed to you or the announcement that a promised salary

increase will not be forthcoming. Investigate whatever legal or other protection you might have in your setting against retaliation. Awareness of the risks can not only minimize the disappointment you may feel if change comes slowly but also keep you from setting a standard for change that is so high that you don't notice small steps toward your goal along the way.

If you choose to push for changes, begin by choosing strategically which changes are most important to you or seem most doable, first making or finding a list of policies and practices that have been helpful at other universities or workplaces for psychologists (Caplan, 1994, includes such a list, pp. 161–172). Actions can range from being on the lookout for discouragement of cooperative work and encouragement of malicious competitiveness, to establishing study groups for students and support groups at work for people struggling with the double load of family and workplace or student responsibilities, to systematic gathering of questionnaire data in order to identify and document the struggles and wishes of those who are juggling family and career. Other examples of specific actions include advocating for benefits for part-time workers such as health insurance, reasonable workloads, and clearly specified expectations would be helpful, as would fair and proportional financial aid for part-time students. If there is an existing union with which to join forces, that is of course helpful. If there is not, you may want to help organize one.

Above all, remember that for the major institutions of universities and mental health settings, it is simply not a priority to help ease the double load for anyone, and because the struggle for change will be long and exhausting, it will be tempting to give up. As the insightful, caring Dr. Patch Adams has written, the best, time-tested antidotes to burnout are ongoing contact with people who share your dilemmas and aims; an ability to remember that every step in a long struggle is important; and a whopping appreciation for irony and sense of humor. For the humor and humanity, read every word Patch Adams (1998) writes.

Additional Resources¹

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¹ Many of these references were published in the 1970s, 1980s, or early 1990s; they are included here because, unfortunately, the issues to which they are addressed and the patterns of data reported therein still apply. Also, please see references in Section A of the Bibliography in Caplan (1994).

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