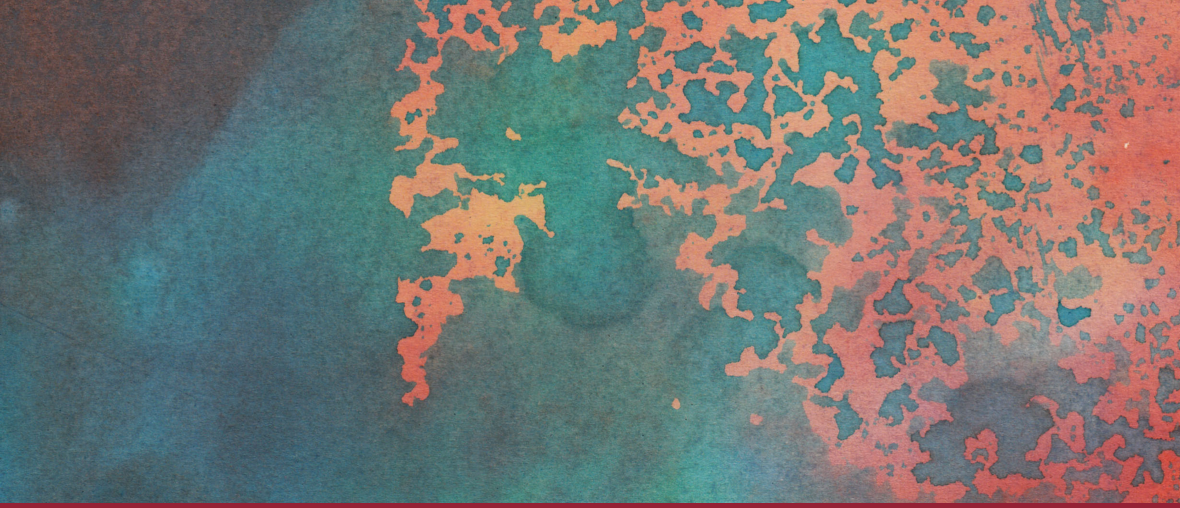
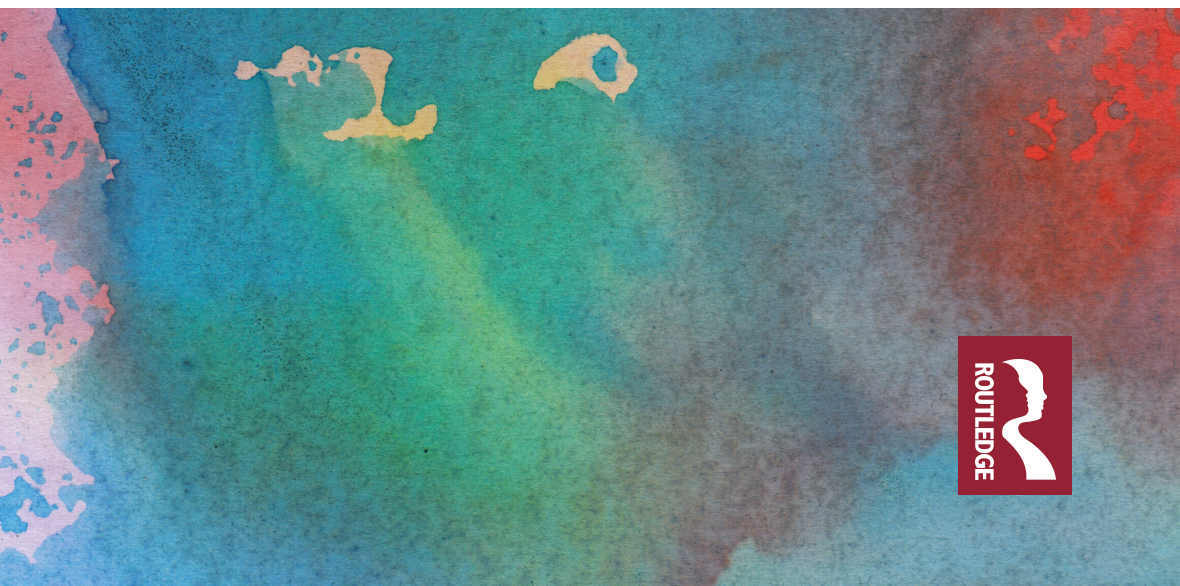


CULTURAL SPORT PSYCHOLOGY AND ELITE SPORT IN SINGAPORE

AN EXPLORATION OF IDENTITY AND PRACTICE

Nicholas de Cruz



Cultural Sport Psychology and Elite Sport in Singapore

Guided by the principles of cultural sport psychology (CSP), this book explores the psychosocial issues surrounding elite sport and psychological practice in Singapore. CSP recognises the importance of understanding people as individuals, rather than objectifying and interpreting psychological processes independent of the socio-cultural context in which they stem from. For sport psychology to progress, it is imperative to distinguish and appreciate the difference between treating someone the same (i.e., culturally blind approach) and treating them equally (i.e., possess cultural awareness).

To address the paucity of cultural-specific research, this book explores the psychosocial issues of elite sport in Singapore using CSP as a theoretical and guiding philosophy. Given Singapore's recent successes at the Olympic and Paralympic levels, this book is ideally timed to investigate the social and cultural developments of elite sport as they occur in a specific sociocultural context. The authors argue that if elite sport and sport psychology is to progress in Singapore, there is a need to refine its elite ecosystem, regulate the practice of sport psychology, and work towards establishing a professional community centred around a culture of constructive exchange, debate and cooperation.

This book presents a blueprint to any researcher, national institute, or practitioner, to systematically explore the culture and context within which they operate and organise action plans to address unique needs that were identified through this process.

Nicholas de Cruz, PhD, is a psychology lecturer at the Singapore University of Social Sciences and developmental coach with the Singapore Sailing Federation. His research is centred around cultural sport psychology and elite sport in Singapore. At SUSS, he teaches performance psychology, research methods, and qualitative research. Nicholas is a chartered member (CPsychol) of the British Psychological Society, full member of the Singapore Psychological Society (MSPS) and National Registry of Coaches (SG-Coach Level 3), and a registered instructor with the Ministry of Education.

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Cultural Sport Psychology and Elite Sport in Singapore

An Exploration of Identity and Practice

Nicholas de Cruz

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To Mum, who helped me finish what I started.

And Eesha, to our adventures that lie ahead.

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Introduction

Nicholas de Cruz

Background

The importance of *appreciating* the role of culture in shaping human behaviour by exploring unique socio-cultural systems, through the examination of their interrelated structural processes (e.g., politics, religion, and history) and specific psychological norms, feelings and ideas (e.g., confidence, expectations, motivation), offers a means to understand how unique contexts can influence psychological practice (Thorpe, 2009). For sport psychology, it would therefore be reasonable to assume that understanding the sport system in which practice occurs can similarly inform the nature, aims, rationale and expectations of its application, for both the client and practitioner (McGannon & Johnson, 2009; Ryba, Stambulova, Si, & Schinke, 2013). However, despite this awareness regarding the impact of culture and context-specificity on psychological practice, the field, in general, has relegated its importance to the periphery of scientific inquiry (Thorpe, 2009), as even studies that appreciate culture tend to adhere to the development and application of universal concepts (e.g., Eastern or Western culture) and theories of human behaviour that are generalised from one cultural background to another (Lee & Foo, 2018). Such a phenomenon is encapsulated well in the following quote I came across while reading the book entitled "Quiet: The Power of Introverts in a World That Can't Stop Talking," written by Susan Cain (2012):

> Though Eastern relationship-honouring is admirable and beautiful, so is Western respect for individual freedom, self-expression, and personal destiny. The point is not that one is superior to the other, but that a profound difference in cultural values has a powerful impact on the personality styles favoured by each culture. In the West, we subscribe to the Extrovert Ideal, while in much of Asia (at least before the Westernisation of the past several decades), silence is golden.
>
> (p. 190)

Demonstrating an appreciation for culture, while coupled with broad generalisations of Western and Eastern personality styles and behaviours, this

quote illustrates the current trend of research that acknowledges the unique nature of culture, while reducing it to conceptual ethnic categories that seemingly overlook the unique environmental nuances *within* the various Western and Eastern cultural systems. The sport psychology literature is no different (e.g., Naoi, Watson, Deaner, & Sato, 2011; Si, Duan, Li, Zhang, & Su, 2015; Xinyi, Smith, & Adegbola, 2004), as Westerners tend to be associated with independent and individualistic cultures (e.g., strive to be unique and demonstrate high ability), which purportedly result in behaviours such as higher ego-orientation, higher self-confidence and greater achievement motivation. Whereas Easterners tend to be associated with interdependent and collectivistic cultures (e.g., strive to fit into the social context for harmony), which purportedly result in behaviours such as a greater affinity for task-orientation, lower self-confidence and less achievement motivation. Some studies (e.g., Xinyi et al., 2004) have even gone so far as to suggest that Westerners desire to be superior to others, in contrast to Easterners, who desire to be subordinate (Chelladurai, Imamura, Yamaguchi, Oinuma, & Miyauchi, 1988), or that Asian individuals prefer to believe in chance, fate, and opportunity, rather than in themselves (Rotter, 1966).

Classifying culture into either Western or Eastern groups imposes prominent ethnic features (i.e., individualistic or collectivistic) on a population that may seemingly not reflect such "universal" behaviours. For example, Singapore has been described as a Confucian heritage society, due to the dominant Chinese population. However, while Confucianism did originate from China, it may not simply be an Eastern ideology, as its core teachings, such as the ethical ideal of a noble person, the virtue of humanity and the process of self-cultivation, are values that may be present in other cultures throughout the world, but expressed differently based on individual cultural practices (Tan, 2012). In addition, Singapore and China may have a similar cultural identity and yet, due to different competitive experiences in high-performance sport, professional Singaporean athletes displayed higher levels of competitive trait anxiety in comparison to professional athletes from China (Xinyi et al., 2004). Similarly, while baseball is traditionally an American sport, it reflects the values of harmony, order and discipline, that are also traditionally part of Japanese culture, and so contributed to its acceptance and popularity among the Japanese people today, epitomising a Western sport with a Japanese cultural identity (Cha, 2009).

Thus, it would be difficult to understand and interpret individual behaviours, thoughts and feelings without considering the social context in which individuals operate in, as cultural similarities are not an indicator of similar behaviours (Lee & Foo, 2018; Miles, 1996; Phinney, 2000; Thorpe, 2009). Rather than simply generalising culture as if it were a generic blueprint, void of social construction and interaction, it would be more pertinent to examine the unique combination of systemic ingredients and processes that may represent the specific context, economy, politics and culture of an environment (De Bosscher, Shibli, Westerbeek, & van Bottenburg, 2016). It is also important to keep in mind that the goals of sport may be similar across nations and cultures, but the journey to achieving them may not be (Andersen & Ronglan, 2012).

What is This Book About?

Seeking new lines of inquiry beyond the orthodox cultural power and privilege of mainstream worldviews, this book explores the unique nature of Singapore's elite sports culture, drawing attention to its impact on the elite sport ecosystem and its influence on the practice of sport psychology, with recommendations to support the credibility and development of sport psychology in Singapore. The dynamics of Singapore's elite sports culture is personified through the experiences of Singaporean national athletes, para-athletes, sport psychologists, stakeholders, and other individuals, who share my passion for sport.

In an effort to achieve a balance between my creative expression and my theoretical commitment in utilising a mixed-methods research design informed by interpretivism, I not only examined, interpreted and discussed the experiences of participants, but also considered how this culture-specific knowledge could be represented and communicated. Conveyed through a realist narrative and supplemented by the use of data visualisation, I strived to illuminate and illustrate the unique cultural nuances that shaped participants' thoughts, feelings and behaviours within a specific socio-cultural context, with the goal of supporting the appreciation and application of this research in Singapore.

It is important to note that through the natural evolution and development of this book, topics that are sensitive in nature, such as political and organisational issues, will be discussed. However, while these topics were unsavoury and made me feel uncomfortable to mention, they were critical to understanding Singapore's elite sports culture to better support the health and well-being of local athletes, and to fulfil my research objectives. Moreover, it was not my intention to simply critique Singapore's elite sport ecosystem or the practice of sport psychology, but to use this book as a medium for participants to voice their experiential concerns in the hope that it can inspire positive change for elite sport, as well as contribute to the credibility and development of the sport psychology profession.

Structure of This Book

This book comprises nine chapters, beginning with this introductory section. To provide a theoretical and contextual foundation for readers to draw upon, I begin **Chapter One** by presenting a broad overview of the key literature pertaining to performance and sport psychology, the importance of appreciating specific cultural environments, its influence on Singapore's elite sport ecosystem, and the consequent impact on the application and practice of sport psychology. This was followed by **Chapter Two**, where I illustrated the sequential process of how the research was conducted, from the philosophical assumptions that informed my research practice, to the systematic and rigorous procedures surrounding the mixed-methods research design, data collection, data analysis, representation of findings, and the underpinning criteria and ethical considerations that guided this book.

With the goal of gaining a better understanding of Singapore's sports culture, **Chapter Three** reflects on Singapore's historical development and illustrates how

its dominant meritocratic system, exerted through the paternalistic and pragmatic social engineering of its government, led to a culture that was predicated on educational pursuits, rather than sporting excellence. **Chapter Four** then further examines the tiny variations and nuanced aspects within Singapore's elite sporting ecosystem by expanding on how a culture that focuses on the "measurable," rather than the "meaningful," has hindered the progress of elite sport in Singapore.

Turning my attention to the participants' attitudes and observed behaviours towards sport psychology in Singapore, **Chapter Five** focuses on the prevailing perceptions surrounding the profession. Such perceptions ranged from the multiple roles and responsibilities of sport psychologists, to the limited value attached to providing long-term and sustainable support for athletes.

From exploring the multifaceted nature of Singapore's elite sports culture and the perceptions of sport psychology, it became apparent that a clear professional identity needed to be established to support the advancement of sport psychology. As such, **Chapter Six** provides recommendations and practical steps to support the credibility and development of sport psychology in Singapore by emphasising the need and means to regulate the practice of sport psychology, and for professionals to purposively work towards establishing harmonious working relationships with other stakeholders in the elite sport community.

To facilitate the appreciation and application of this culture-specific knowledge in a nation that values tangible and quantifiable information, **Chapter Seven** builds upon my qualitative interpretations with the development of two bespoke questionnaires, evaluated via factor analyses, that provided a more profound and comprehensive examination of Singapore's sports culture and the practice of sport psychology in Singapore. The findings from these questionnaires were then visually narrated and illustrated in **Chapter Eight** to effectively communicate this complex information in its simplest form for convenient consumption and application. By drawing attention to specific macro-level (e.g., environmental or organisational factors) and micro-level (e.g., individual or personal factors) areas, it is my hope that this information can aid the understanding and appreciation of possible nuanced processes that, with revision, can generate more positive and favourable progress for elite sport and the practice of sport psychology in Singapore.

Chapter Nine then brings this book to a close by summarising the key empirical and methodological contributions conceived through this research process, with practical implications and recommendations for future research.

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1 What we Know and Where we are Going: The Trajectory of Cultural Sport Psychology

Nicholas de Cruz and Brett Smith

1.1 What is Sport Psychology?

It appears that in recent years, the field of sport psychology has witnessed a surge of interest and activity, despite its struggle for acceptance as a scientific field (Wylleman & Liukonnen, 2003). While this recognition is a step forward in the development of sport psychology, a consequence of this exponential expansion has been ambiguity as to what constitutes the boundaries of sport psychology given that no uniformly used formal definition of sport psychology exists (Portenga, Aoyagi, & Cohen, 2017; Rejeski & Brawley, 1988; Wylleman, Harwood, Elbe, Reints, & de Caluwé, 2009). Indeed, as the sport context presents a unique performance environment that can encompass clinical psychology, performance psychology, organisational psychology, mental skills, counselling, motor learning, and assessment, the domain of sport psychology may truly be such an interdisciplinary field that it is impossible to provide a universal definition (Winter & Collins, 2016).

In acknowledgement of the broad nature of sport psychology, the literature suggests that professionals can learn from clinical and counselling psychology given the similarities in, for example, service delivery such as applying specialised training, skills, and knowledge (McEwan & Tod, 2015). This is where identifying a clear definition of sport psychology falls short as the field becomes encumbered by the many overlapping commonalities from other disciplines within psychology. As sport psychology can be identified as a subset of sport science and psychology (Stelter, 2005), it has been observed that any psychological work which involves athletes is automatically assumed to be sport psychology by both public clientele and professional practitioners (Aoyagi & Portenga, 2010). Furthermore, the umbrella term sport psychology tends to be defined in relation to the academic discipline where the focus is on what sport psychologists research, rather than the unique aspects of what they do (Winter & Collins, 2015). While the emphasis on practising or "doing" sport psychology in relation to the unique interventions, techniques, and professional literature that make the field distinct from other psychological disciplines has been repeatedly highlighted in the extant literature (e.g., Aoyagi & Portenga, 2010; Dishman, 1983; Portenga et al., 2017), the domain of sport psychology continues to be defined by each

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researcher, author, and practitioner, based on their own experiences and biases (Lesyk, 2005).

To circumvent these vague definitions that appear to be impractical and misleading in relation to the practice and profession of sport psychology, a working definition of sport and performance psychology was recommended by Portenga et al. (2017) in the hopes of promoting more congruity between knowledge and practice, not just for consumers, but researchers and practitioners alike. Given the core application of sport psychology has revolved around performance excellence in the context of competitive sport, it seemed appropriate to conceptualise sport psychology within the field of performance psychology (Hays, 2006). In this regard, Portenga et al. (2017) proposed the following definition of performance psychology:

> Performance psychology is the study and application of psychological principles of human performance to help people consistently perform in the upper range of their capabilities and more thoroughly enjoy the performance process. Performance psychology practitioners are uniquely trained and specialised to engage in a broad range of activities, including the identification, development, and execution of the mental and emotional knowledge, skills, and abilities required for excellence in performance domains; the understanding, assessment, and managing of the psychological, cognitive, emotional, behavioural, and psychophysiological inhibitors of consistent, excellent performance; and the improvement of performance environments to facilitate more efficient development, consistent execution, and positive experiences in performers.
> (p. 52)

And the following definition of applied sport psychology:

> The application of psychological principles of human performance in helping athletes consistently perform in the upper range of their capabilities and more thoroughly enjoy the sport performance process. Sport psychology practitioners are uniquely trained and specialised to engage in a broad range of activities including the identification, development, and execution of the mental and emotional knowledge, skills, and abilities required for excellence in athletic domains; the understanding, assessment, and managing of the psychological, cognitive, emotional, behavioural, and psychophysiological inhibitors of consistent, excellent performance; and the improvement of athletic contexts to facilitate more efficient development, consistent execution, and positive experiences in athletes.
> (p. 52)

In acknowledging the broad interdisciplinary field of sport psychology, it is important to note that though the emphasis here is on the practice and scholarship of sport and performance psychology, this by no means is intended to

diminish the other areas of research within this discipline. Rather, its purpose is to provide a consistent understanding of applied practice and consequently the associated research within this context. In a similar way to how Portenga et al. (2017) suggest that competent and effective practice occurs when practitioners are equipped with a clear professional philosophy and theoretical orientation, so too should the researchers who wish to study applied sport psychology (Spruill et al., 2004).

1.2 Role(s), Responsibilities, and Competency

One prime explanation that captures the breath of sport psychology was depicted by Martens (1987), where sport psychology operates along a continuum ranging from individuals suffering from mental illness (abnormal) to those striving to unlock their fullest potential (super-normal). Although applied sport psychology may traditionally involve the application of performance psychology principles to help athletes reach their potential in a sporting environment, sport psychologists have often found themselves confronted with general well-being issues beyond the scope of performance psychology (Portenga et al., 2017). However, while there may be similarities in the theories which inform practice, the goals, purposes, and contexts by which these psychological interventions are carried out distinguish sport psychology from other psychological practices (e.g., exercise and health psychology, clinical and counselling psychology, positive psychology, and consulting psychology).

In this sense, under the overarching term of performance psychology, sport psychologists are in a position to both facilitate high performance through standard mental skills such as goal-setting, relaxation, and imagery, or address more clinical issues which impair performance like mental health disorders and identity (Peterson, Brown, McCann, & Murphy, 2012; Portenga et al., 2017; Sebbens, Andersen, & Hanrahan, 2012). In fact, evidence of these two different foci of performance excellence and therapy is corroborated by the American Psychological Association (APA, 2019), which lists various principle strategies and procedures that a proficient sport psychologist is expected to address such as:

- Psychological skills training for athletes
- Goal-setting and performance profiling for athletes
- Visualisation and performance planning for athletes
- Enhancing self-confidence for athletes
- Cognitive-behavioural self-regulation techniques for athletes
- Concentration and attentional control strategies for athletes
- Poise and emotion management training for athletes
- Attribution interpretations and self-assessment in sport
- Eating disorders and weight management interventions for athletes
- Substance abuse interventions for athletes
- Dealing with the use of ergogenic aids to athletic performance
- Grief, depression, loss, and suicide counselling for athletes

- Overtraining and burnout counselling
- Sexual identity issues in sport counselling
- Aggression and violence counselling in sports
- Athletic injury and rehabilitation
- Career transitions and identity foreclosure in sports
- Team cohesion training
- Team building
- Leadership training
- Moral and character development in sports and sportsmanship
- Development of self-confidence, self-esteem, and competence in sports
- Interventions to address parental and familial needs involved in youth sports participation
- Coaches' education regarding motivation, interpersonal, and leadership skills
- Education of coaches and administrators regarding early identification and prevention of psychological difficulties such as eating disorders or serious anxiety reactions

Given this wide variety of roles and challenges sport psychologists are laden with, from those struggling with the stressors of sport and life to those searching for more successful performances, knowledge of basic performance psychology interventions such as mental skills training can provide an initial platform to inform practice (Spruill et al., 2004; Zaichkowsky & Naylor, 2005). However, as recently stated by Weinberg (2014), "Many professional organisations want individuals who can handle both the mental skills and clinical aspects of sport psychology consultancy" (p. 36), reinforcing the principle strategies and procedures outlined by the APA. In addition, a position paper by the European Federation of Sport Psychology (FEPSAC; 2017) on quality of sport psychology services suggests, "The aim of applied sport psychology in competitive sport is to provide efficient psychological support for athletes, teams, coaches, sport clubs, organisations and significant others" (p. 1), emphasising how a sport psychologist's duty may extend to other stakeholders in sport (Meyers, Coleman, Whelan, & Mehlenbeck, 2001). This may involve addressing performance issues of athletes and coaches to providing support to the executive board and intervening at multiple organisational levels (Birrer, Wetzel, Schmid, & Morgan, 2012; Portenga et al., 2017).

It could, therefore, be suggested that to be a competent sport psychologist, professionals need specialised training from educational intuitions, associations representing sport psychology, or a combination of both (Wylleman et al., 2009). However, while this notion of competence has received some attention (e.g., Aoyagi, Portenga, Poczwardowski, Cohen, & Statler, 2012; Fletcher & Maher, 2013, 2014; Winter & Collins, 2016), the sheer broad nature of sport psychology, with its multiple roles and apparent boundary-crossing, makes it extremely difficult to establish a universal training model that fulfils the desired competencies outlined in the extant literature. Indeed, an overview of the various

training competencies in applied sport psychology from the Association of Applied Sport Psychology, International Society of Sport Psychology, and APA outlined by Fletcher and Maher (2013) showed there was little consensus as to what constitutes competent practice, despite being established sport psychology associations.

However, at its most basic level, sport psychology work involves being an active listener with clients, engaging with them to build a professional relationship and, through this process, exercising specialised training, skills, and knowledge in the pursuit of performance excellence and/or improved well-being (McEwan & Tod, 2015). That being said, four factors which have been repeatedly mentioned throughout the literature in relation to competence include working within one's professional capacity (Portenga et al., 2017; Spruill et al., 2004), evidence-based practice (Gardner & Moore, 2004; Winter & Collins, 2015), client and context specificity (Barnett, Doll, Younggren, & Rubin, 2007; Ward, Sandstedt, Cox, & Beck, 2005), and reflective practice (Fletcher & Maher, 2013; Poczwardowski, Sherman, & Ravizza, 2004). In a practical sense, this would involve the application of appropriate psychological theory via suitable skills and interventions to meet the client's needs and expectations, in tandem with regular self-reflection by the practitioner with regards to how personal values and beliefs impact the process of service provision (Tod, Anderson, & Marchant, 2009).

1.3 The Context of Practice

Interpreted as a whole, the literature suggests that if the field of sport psychology is to progress, there needs to be a shift from the traditional laboratory approaches which underpin "scientific" practice and by extension applied work, to a focus on sport settings and real-life situations (e.g., Stelter, 2005; Winter & Collins, 2015). Unfortunately, in spite of the enduring mention of evidence-based practice throughout the extant literature (e.g., Fletcher & Maher, 2014; Biddle & Fuchs, 2009; Moore, 2007), there appears to be a poor appreciation of the contexts to which these evidence-based interventions are applied to. In fact, the tendency to reflect more on what has been done, rather than why it was done, has inhibited the development and effectiveness of sport psychology to a point where professionals do not even need to know the systems and structures of various sporting contexts to be "effective" (Cruickshank & Collins, 2013; Martindale & Collins, 2013). It is therefore not surprising to read about the impact of context in recent studies with registered British sport and exercise psychologists under the Health and Care Professions Council (Winter & Collins, 2015) and even Western Olympic team sport psychology practitioners (Arnold & Sarkar, 2015), but beyond the implications of environmental or situational factors (i.e., unusual climate, overseas venues) on practitioner decision-making, there is scant consideration for the culture in which the athlete operates in.

Moving beyond the knowledge of techniques and cognitive strategies, this idea of contextual intelligence or knowing the culture and context of the setting

in which the athlete is based has been identified previously by Terenzini in 1993, and recognised as the foundation by which practitioners earn legitimacy, trust, and respect. Furthermore, while it has been acknowledged that an understanding of context may be a strong predictor of competent professional practice (Brown, Gould, & Foster, 2005), the nuanced aspects of contextual intelligence (i.e., understanding what to do, and how/why to do it), particularly that of culture, have been overlooked. Additionally, as the athletic population in the world has become more multicultural under the forces of globalisation (Hodge, Lonsdale, & Oliver, 2009), sport psychology practitioners who do not inculcate multiculturalism into their professional identity may be incapable of navigating the complex web of ever-changing and increasingly complex social and political forces that drive sport (Foltz et al., 2015; Stambulova & Johnson, 2010; Sue & Sue, 2012). Thus, to combat this scholarship, there is a need to expand the field of sport psychology knowledge across different contexts to account for the varying racial, ethic, and cultural backgrounds which have been overlooked in the past (Naoi et al., 2011; Portenga et al., 2017). Arguably, this emphasis to develop culturally competent sport psychologists would be a challenging endeavour but if the profession is to further its credibility and development, there is a need to draw information from many different contexts rather than blindly follow dominant research trends (Portenga et al., 2017).

1.4 An Emphasis on Culture

The omission of cultural factors such as race and ethnicity as meaningful tenets of human experience within the field of sport and exercise psychology was identified as early as 1990 by Duda and Allison. Following this oversight, the increase in globalisation has prompted a greater emphasis on the exchange of people, objects, images, ideas, value systems, and information, which in the past were relegated or excluded due to the predominant positivist, "natural science" approach to research rampant in the social sciences (Ryba et al., 2013; Westerman & Yanchar, 2011). Embracing a more qualitative paradigm where "truth," "knowledge," and "reality" are dynamic constructs, what is being studied, like all social knowledge, is dependent on the local contexts and current conversations in which they are situated (Tracy, 2010; Yardley, 2000). Similarly, research from a cultural perspective emphasises how the psyche, self, and identity are simultaneously cultural and social (McGannon & Mauws, 2000; Smith, 2010).

In this sense, culture holds the potential to shape how we think, feel, and act (Smith, 2010). To ignore it would be reductionistic as the complex and subtle characteristics which constitute individuals' identities, experiences, and behaviours would be regarded as nothing more than mechanisms and cognitions within the mind (McGannon, Curtin, Schinke, & Schweinbenz, 2012; Smith, 2010; Sue, 2004). While it can be argued that sport psychology, particularly in western contexts (Blodgett, Schinke, McGannon & Fisher, 2015), may not be outwardly inhibited by the lack of appreciation for cultural research, the consequences of this omission have been found to cause alienation and distress

(Smith, 2013), exclusion of worldviews and experiences of minority groups (Fisher, Butryn, & Roper, 2005; Ryba & Wright, 2005), stereotyped understanding of individuals' lives (Ryba et al., 2013), and reinforcing the dominant cultural power and privilege of mainstream (white, Euro-American) worldviews perpetuated in contexts with diverse or differing cultural factors (Blodgett et al., 2015; Blodgett et al., 2014).

1.5 Understanding Cultural Sport Psychology

According to Ford (2003), culture pervades all aspects of human functioning as it refers to patterns of language, thoughts, actions, customs, beliefs, courtesies, rituals, manners, interactions, roles, expected behaviours, and values associated with race, ethnicity, and religion. Evidently, cultural studies may be generic as it can refer to the study of intercultural relations or the anthropological study of culture, but for scholars within the field of sport and exercise psychology, cultural research is centralised around critically analysing how sport psychology is (re) represented based on the contexts in which its practices are situated in, which challenges the mainstream sport psychological assumptions which endorse a "one-size-fits-all approach" (Blodgett, Schinke, Smith, Peltier, & Pheasant, 2011; Ryba et al., 2013; Smith, 2010). Thus, cultural psychologists adopt an emic, meaning insider perspective, where culture is viewed as a fluid and dynamic entity through which individual experiences can be interpreted (McGannon & Spence, 2010; Ryba et al., 2013).

Operating often within the philosophical beliefs of a relativist ontology and constructionist epistemology, cultural sport psychology (CSP) recognises the importance of understanding people as individuals, rather than objectifying and interpreting psychological processes independent of the socio-cultural context in which they stem from (McGannon & Smith, 2015; Terry, 2009). Through challenging mainstream psychological assumptions, CSP scholars emphasise cultural praxis as the field of sport psychology moves away from decontextualised knowledge and practice to a new way of thinking that empowers marginalised populations, via the reflexive processes of the researcher, to identify and integrate sociocultural specific strategies that can promote positive change (Blodgett et al., 2010; McGannon & Smith, 2015). As explained by Terry (2009), "Gaining insight into the unique world view of each individual athlete, from whatever cultural background they may originate, is a cornerstone of becoming an effective psychologist in the world of sport" (p. 89).

1.6 Culture of Sport and Exercise Psychology

Notwithstanding the literature surrounding CSP and the emphasis to inculcate cultural awareness (i.e., personal understanding of one's culturally constituted beliefs, values, and attitudes), cultural knowledge (i.e., knowledge and understanding of alternative worldviews), and cultural skills (i.e., utilising culturally appropriate communication and interventions) into academia and applied work,

there is still a dearth of culturally diverse research in the sport psychology field (McGannon, Schinke, & Busanich, 2014; Ryba et al., 2013). Indeed, the genesis of this neglect and imposition of mainstream (white, Euro-American) worldviews within culturally diverse contexts can be linked to the promotion of sport psychology as a purely "scientific" (i.e., rationalist, positivist, quantitative, etc.) area of research to build its credibility during its infancy, at the expense the field's practical implications (Silva, 2001).

While these issues, particularly in relation to applied sport psychology, had been raised in the past (e.g., Goldstein & Krasner, 1987; Martens, 1987; Sherif, 1982), it would seem that as the social sciences were nurtured in the shadow of the physical sciences (Giddens, 2013), the long history of employing quantitative methodologies to attain a similar intellectual mastery to that of physical scientists have become the dominant language of research, rather than that of a particular paradigm (Smith, 2009; Tobin & Begley, 2004). In advocating this normative way of "doing" sport psychology the multiplicity of peoples' identities, experiences, and behaviours that do not conform to the Western-positivist model of practice are silenced or ignored, thus ignoring unique characteristics that should inform theory and practice (Blodgett et al., 2015; Schinke, McGannon, Parham, & Lane, 2012). For sport psychology to progress, it is imperative to distinguish and appreciate the difference between treating someone the same (i.e., culturally blind approach) and treating them equally (i.e., possess cultural awareness, knowledge, and skills; Butryn, 2010).

1.7 Paradigm Wars to Sport Psychology

Given the limitations of the extant literature in sport and exercise psychology, CSP research has tended to favour qualitative over quantitative traditions, methodologies less common in sport psychology, to transcend the "scientific traditions" that underpin its foundation (Ryba & Schinke, 2009). In so doing, professionals in the field are encouraged to think differently and ask new questions that have the potential to lead to creative solutions which can address the socio-cultural challenges and marginalisation of various racial and ethnic groups (Butryn, 2010; Smith & Sparkes, 2009). In contrast to quantitative studies which focus on factors or relationships based on a large sample with numbers and *p*-values, qualitative work is concerned with specific situations and personal experiences of individuals, (Morse, Barrett, Mayan, Olson, & Spiers, 2002; Yardley, 2000). However, rather than focus on the typical distinctions between both methodologies, it may be more prudent to perceive each "way-of-knowing" as two different ways of doing research that can complement and augment the other (Hagger & Chatzisarantis, 2011). As explained by Denzin (2010), there needs to be an openness to alternative methodologies and methods beyond what is perceived to be "good scientific practice" to find new strategic and tactical ways to work together, rather than against each other (cf. Sparkes, 2015).

In the same way to how the subjective interpretations of the researcher facilitate a dynamic co-construction of meaning with participants in qualitative

research (Smith & Caddick, 2012), CSP researchers and professionals are similarly urged to reflect on their own background, biases, and interests to appreciate how our own subjectivities impact practice (Ryba & Schinke, 2009; Schinke et al., 2012). With cultural praxis at the heart of CSP, engaging in reflexive practices (openly reflecting on the impact of personal assumptions, intentions, and actions on the research or practice) can allow sport psychology professionals to distance themselves from the myopic focus of mainstream practices and draw attention to issues of sociocultural differences, power, ethics, and politics among marginalised populations that have been overlooked or concealed (Ryba & Schinke, 2009; Ryba et al., 2013; Schinke et al., 2012). By adopting reflexive principles, sport psychology professionals can be more receptive to the different perspectives which shape our social world and therefore move beyond the monocultural sport practices which silence experiences of racism or prejudice (Blodgett et al., 2015; Schinke et al., 2012).

1.8 The Singapore Scene

In the spirit of fostering cultural awareness and illuminating the sociocultural environment of Singapore, it seemed prudent to first reflect on the existing literature that investigated Singapore's sports culture. Interestingly, much of this information was not based on psychosocial research, but rather a historical evaluation of Singapore's sporting development which in and of itself falls within the province of cultural history (Chan, 2016). Indeed, Peh (2012) suggests that sporting culture in any given society is expressed through its historical development and its function in relation to its citizens. Through many years of public education and promotion via government public institutions, both competitive sport and leisure-time physical activity in Singapore are now purported as an essential feature of Singaporean society (Aplin & Jong, 2002; Peh, 2012). However, it is important to highlight that the emphasis on academic achievement since the colonial period trumps that of physical activity and any sporting pursuits (Aplin & Jong, 2002; Huan, See, Ang, & Har, 2008; Tan & Yates, 2011). This was eloquently expressed by Singapore's first Prime Minister, Mr. Lee Kuan Yew in the "Sport for Life" message in his opening address at the Singapore's National (sports) Stadium in 1973:

> There are no national benefits from gold medallists for smaller countries… For the superpowers with large populations superiority in sports is national propaganda to persuade other people of the superiority of their competing political systems. But it is foolish and wasteful for the small countries to do it. Singapore's best return is to generate healthy, vigorous exercise for the population, young and old, enhancing the valuable qualities it has - a keen, bright, educated people who will lead better and more satisfying lives if they are fit and healthy.
>
> (Chandran & Fong, 1973, p. 1)

It is clear that for Singapore, since the early developmental years, recreational mass physical activity under the label of "sport" was used as a pragmatic tool for multi-racial socialisation (due to Singapore's multi-racial and cultural diversity) and to shape its citizens into healthy and physically fit individuals to be an effective workforce (Horton, 2002). This emphasis on a fit and healthy population was and is essential to Singapore as Mr. Lee Kuan Yew's administration (still currently in power) recognised that its people were and are its only natural resource (Horton, 2013). It is therefore not surprising that research on "sport" in Singapore has focused on recreational, educational, and sub-elite settings (e.g., Chian & Wang, 2008; Wang & Biddle, 2003; Wang, Sproule, McNeill, Martindale, & Lee, 2011), particularly motivational perspectives using quantitative methodologies (e.g., Li, Wang, & Pyun, 2017; Li, Wang, Pyun, & Kee, 2013; McNeill & Wang, 2005).

1.9 Rationale and Objectives of this Book

While the aforementioned research on sport in Singapore utilised Singaporean participants, they may as well have been void of their cultural identity as behaviours were repeatedly objectified in relation to the analytical frameworks and theories guiding each study. As such, sport psychology research in Singapore has made little progress in understanding the subjective nature of culture, elite sport, and how it holds the potential to shape identity and behaviour. The few papers that do possess some cultural orientation (e.g., Brooke, 2014; Peh, 2014; Peh, 2012; Phan, 2013; Xinyi et al., 2004) appear to generalise *Asian behaviour* based on the dominant Confucian values of East Asian society (e.g., filial duty, duty consciousness, personal discipline, the priority of collective interests; Tan, 2012; Tan & Yates, 2011), overlooking other nuanced and unique cultural aspects (e.g., religion, philosophy, historical development) that were and are woven into the fabric of every society around the world.

To address this paucity of cultural-specific research, this book explores the psychosocial issues of elite sport in Singapore using CSP as a theoretical and guiding philosophy. Given Singapore's recent success at the 2016 Olympics and Paralympics, this research was ideally timed to investigate the social and cultural developments of elite sport as they occur in a specific sociocultural context. Thus, the research objectives of this book serve to:

1 Better understand Singapore's sports culture (see Chapters Three and Four).
2 Explore the perceptions of sport psychology in Singapore (see Chapter Five).
3 Provide recommendations and practical steps to support the credibility and development of sport psychology in contexts beyond the mainstream (see Chapter Six).
4 Use culture-specific knowledge to develop a unique scale that can support the appreciation and application of this research in Singapore (see Chapters Seven and Eight).

These key objectives act as a guide to support the systematic rigour of this research. While these objectives shaped the interpretation of participants' experiences and the examination of statistical data, the research process naturally evolved as it progressed, with shifting perspectives, emergent goals, and evolving insights, that led to unexpected, but welcome findings.

1.10 Summary

Considering the ambiguity following the exponential expansion of sport psychology, recent research by Portenga et al. (2017) outlined a clear definition of sport psychology as a means to promote more congruity between knowledge and practice, not just for consumers but researchers and practitioners alike. However, while such a definition does provide clarity for the profession, the increase in globalisation has correspondingly raised the need to examine the role of culture and unique contexts, as culture can shape how we think, feel and act, and has consequent implications on the practice of sport psychology. Indeed, due to the forces of globalisation, the athletic population has become inherently multicultural, with different beliefs, value systems, and experiences. This multiculturalism necessitates the need to focus on specific sport settings and real-life situations so as to navigate the complex web of ever-changing and increasingly complex social and political forces that shape various sport ecosystems, as a one-size-fits-all approach should no longer be acceptable. Evidently, knowing the culture and context in which athletes operate can provide the foundation for sport psychologists to earn legitimacy, trust, and respect, which are essential for the efficacy, credibility, and development of the profession. More importantly, working towards attaining contextual intelligence can help sport psychologists better understand an athlete's world, and provide specific services tailored towards supporting health and well-being, as well as unique strategies to enhance performance. Thus, shifting the focus from the dominant cultural power and privilege of mainstream (white, Euro-American) worldviews, this book aims to explore how sport psychology is (re)represented in Singapore, a country that has made little progress in understanding and appreciating the nature of its unique culture, its impact on elite sport and the practice of sport psychology.

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2 A Perfectly Imperfect Process: Methodology and Mixed-Methods Part I

Nicholas de Cruz and Brett Smith

2.1 Philosophical Assumptions and Reflexivity

Committed to the paradigmatic assumptions of interpretivism grounded in ontological relativism and epistemological constructionism, and with the goal of achieving a cultural praxis of sport psychology in Singapore (see Chapter One), the researcher and the research embodies the belief that there is no separation between the knower and the known as the subjective interpretations of the researcher facilitates a dynamic co-construction of meaning with participants, envisioning multiple interpretations of experiences relative to sports culture and the practice of sport psychology in Singapore (McGannon & Smith, 2015; Smith & Caddick, 2012).

Arguably, it may be easy to present a fabrication of such beliefs for the convenience of presenting "good" research consistent with qualitative literary trends. However, if this investigation is to make a formative impact on sport in Singapore, the researcher needs to honestly engage in personal and epistemological reflexivity by acknowledging how the researcher's methodological and theoretical commitments, shaped by one's values, beliefs, and experience, influenced the ongoing decision-making process and knowledge produced from this research (Lazard & McAvoy, 2020; Poczwardowski et al., 2004; Willig, 2013). Moreover, engaging in honest reflexivity can allow readers to make fair, appropriate, and informed judgements about the quality of research as it unfolds from chapter to chapter (Smith & McGannon, 2018). As explained by Sparkes and Smith (2014):

> [We] conduct inquiry via a particular paradigm because it embodies assumptions about the world that we believe in and supports values that we hold dear. And, because we hold these assumptions and values, we conduct inquiry according to the precepts of that paradigm.
> (p. 9)

Situating the researcher in the unapologetic chaos of an interpretivist research process, the precepts that inform "truth", "knowledge," and "reality" can be traced to the self, in this case, the researcher, and his ongoing intersubjectivities surrounding daily activities and academic pursuits that have led or will lead to the

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communal construction and negotiation of meaning (Mann, 2016; Yardley, 2000). In revealing the personal values and principles of the researcher it seemed prudent to engage in a temporal discussion of relevant past experiences that shaped this research.

As a former Singapore national athlete of 11 years, sailing coach of 14 years for children and youth, and student of sport psychology, the lead researcher has been involved in competitive sport since the age of 10. With this intimate familiarity and immersion into Singapore's elite sport scene as a citizen, athlete, coach, and hopeful psychologist, the researcher is committed to ensuring the integrity of this research in the hope of contributing to Singapore's sporting development. Proof of this commitment, both paradigmatically and practically, can be seen in the researcher's past qualitative work with Singapore's elite athletes (see de Cruz & Duncombe, 2016; de Cruz, Spray, & Smith, 2019). Indeed, these experiences, both in sport and academically, may involve various stakeholders but, consistent with the researcher's participant or client-led approach, was always and will be at its core focused on the health and well-being of athletes. This was consistent with the definition of applied sport psychology by Portenga and colleagues (2017) in Chapter One, where the goal was to, "facilitate more efficient development, consistent execution, and *positive experiences in athletes* [emphasis added]" (p. 52).

2.2 On Mixed-Methods

Moving away from the detrimental recurring comparison with quantitative paradigms as a standard of worthwhile scientific research (Smith & Caddick, 2012), mixed-methods presents a flexible approach to executing and applying various forms of research designs innovatively and creatively, with the goal of influencing action and positive social change in a single study (McGannon & Schweinbenz, 2011). However, due to the lack of appreciation for the complex nuances that inform methodological decisions in mixed-methods research, particularly those new to utilising a qualitative design (de Cruz, 2019), valuable information can be overlooked or misunderstood and the opportunity for developing new and unique perspectives on behavioural phenomena could be lost (Smith, Sparkes, Phoenix, & Kirkby, 2012). As noted by Gill (2011), "different methods (data collection, analysis strategies) may mix well, but different methodologies and research paradigms (underlying philosophies and epistemologies) do not mix so easily" (p. 309).

To avoid such dangers, it is absolutely essential that when borrowing or utilising different methodologies or methods, researchers need to be reflexive and mindful of maintaining the integrity of the relevant paradigmatic assumptions that inform their research (Gibson, 2017). Through appreciating the unique qualities that guide quantitative and qualitative practice, researchers can engage in what Gibson (2017) described as "methodological bricolage", which signifies research practice that is open to multiplicity, eclecticism, flexibility, pluralism, and emergent design, rather than simply being a competent technician mechanically collecting and presenting data (Sparkes, 2015; Wolcott, 1999).

With the goal of producing impactful research through the analytical lens of CSP and exemplifying methodological bricolage, a sequential transformative mixed-method design, utilising thematic and factor analysis, informed by interpretivism, was used. Aligned with the concept of cultural praxis, this design focused on giving voice to the alternative perspectives of participants (i.e., development of cultural awareness, knowledge, and skills; Butryn, 2010) in order to better understand the phenomenon under investigation (Hanson, Creswell, Clark, Petska, & Creswell, 2005). This was first implemented by the development of an interview guide and the collection of qualitative data. Following analysis, the qualitative data was used to inform the construction of a quantitative questionnaire to supplement qualitative findings in a joint construction of meaning (see Chapter Seven).

Understandably, the integration of qualitative interpretivism (multiple realities) and the dominant trend of quantitative postpositivist approaches (one reality) presents an area of conflict due to the different paradigmatic beliefs of each approach (Sparkes, 2015). However, cognisant of the connection between a qualitative methodology and the individual methods utilised, this research remains grounded in interpretivism to ensure a coherent representation of the phenomenon under study (Gibson, 2017). As such, what is presented is one version interpreted by the researcher, that has been prioritised over others, to provide a fuller account of the phenomenon than what could be achieved if only one method had been used (Bryman, 2007; Creswell & Tashakkori, 2007; Martin, 2011).

2.3 Qualitative Participants

Leveraging on the researcher's professional and personal contacts, participants were recruited via personal correspondence and through local governing bodies such as the Singapore Sport Institute, Singapore Disability Sports Council, National Youth Sports Institute, and various National Sport Associations (NSAs). Fifteen potential participants were contacted via telephone, email, or WhatsApp, briefed about the nature of the research and asked if they would like to be a part of it. All agreed to participate and upon completion of their interviews several participants, on their own volition, were forthcoming in recommending other potential contacts that they felt may be interested to contribute to this research. Building on these leads, the researcher enthusiastically reached out to these new potential participants, the majority of which responded positively and who in turn, provided further recommendations.

It is worth mentioning that during this process, the researcher was mindful of *which* informants were sampled, rather than *how many*, as the focus was on developing a comprehensive picture of the phenomenon under study (Hammersley, 2015; Sim, Saunders, Waterfield, & Kingstone, 2018). As interviews progressed, the researcher began to develop an increasingly complete picture of developing themes that were logged in a reflective journal (Sim et al., 2018). During this iterative process, the accrual of information and theoretical

insights gradually dwindled when approximately 20 participants had been interviewed (O'Reilly & Parker, 2013). Given that there is no consensus regarding how many participants a qualitative study needs (Hammersley, 2015; Sparkes & Smith, 2014), and the varied characterises of participants, it was difficult to decide when to stop or continue data collection for fear of overlooking potentially rich information. With reference to the University of Auckland's thematic analysis frequently asked questions webpage edited by Braun and Clarke (2019), a sample of 20–30 participants is recommended for doctoral research. This recommendation, in addition to the accrual of data that resulted in saturation, contributed to the decision to stop data collection after 30 participants had been interviewed (O'Reilly & Parker, 2013; Sandelowski, 2008).

Having initially utilised a maximum-variation and criterion-based purposive sampling strategy, with the addition of snowball sampling as the interviews progressed, the total sample (N = 30) consisted of two groups namely, (1) athletes and para-athletes (see Table 2.1); and (2) sport psychologists and stakeholders (see Table 2.2). With regards to selection criteria, participants in both groups were required to be aged 18 years or over and are a Singapore citizen or permanent resident of Singapore. Specifically, for athletes and para-athletes, participants needed to have been or currently registered as national athletes with their respective NSAs and have represented Singapore in at least one major international competition. For sport psychologists and stakeholders, participants were required to have at least a years' experience and have or had worked in Singapore's performance sport scene.

The extent of how "elite" or competitive athletes and para-athletes were in relation to their respective sports was determined by the Sports Excellence Carding (spexCarding) framework governed by Sport Singapore. The spexCarding system uses a framework to determine how financial and sport science support are allocated based on past and projected athletic performance along a spectrum of basic, enhanced, and scholar (Singapore Sport Institute, 2019). As emphasised by Swann, Moran, and Piggott (2015), it is important to clearly illustrate or define the level of expertise or performance of athletes for more valid research with greater explanatory power. Admittedly, the notion of a universal definition of "elite athlete" is helpful, but to remain grounded in the context of Singapore and true to interpretivism, and notwithstanding that validity and explanatory power are quantitative concepts, the researcher chose to use the local spexCarding framework to illustrate the sporting expertise of participants.

In addition to the athlete and para-athlete selection criteria, the researcher made a conscious effort to invite or consider participants which represented the spexCarding spectrum. During this process potential participants were not asked whether they were carded or not as the researcher was woefully aware that this was a sensitive issue, given that some national athletes may qualify for carding but may not be carded due to unknown reasons, and thus chose to interpret the level of performance or carding based on the participants highest competitive experience rather than direct inquiry (see Table 2.1). This included scholars who had

Table 2.1 Participant Demographics of Athletes (A) and Para-Athletes (PA)

Participant	*Age*	*Gender*	*Sport*	*Years in Sport*	*Years as National Athlete*	*Highest Competitive Experience*	*Interview Duration (min)*
A1	26	M	Sailing	20	15	Olympic Games	51
A2	26	F	Sailing	18	12	Olympic Games	51
A3	23	M	Wresting	5	4	Asian Championship	42
A4	19	F	Taekwondo	7	2	SEA Games	44
A5	24	F	Kayaking	8	8	SEA Games	42
A6	26	F	Athletics	17	9	Olympic Games	52
A7	24	M	Athletics	3	2	SEA Games	44
A8	27	M	Golf	16	10	SEA Games	48
PA1	20	F	Swimming	12	2	ASEAN Para Games	48
PA2	33	M	Power Lifting	3	3	ASEAN Para Games	50
PA3	31	M	Sailing	16	16	Paralympic Games	46
PA4	28	F	Shooting	2	2	ASEAN Para Games	53
PA5	30	F	Swimming	19	19	Paralympic Games	56
PA6	33	F	Boccia	13	12	Paralympic Games	46
PA7	25	F	Table Tennis	15	3	ASEAN Para Games	43
M (SD)	26 (4)			12 (6)	8 (6)		48 (4)

Table 2.2 Participant Demographics of Sport Psychologists (SP) and Stakeholders (SH)

Participant	*Age*	*Gender*	*Highest Qualification*	*Occupation*	*Highest Industry Appointment*	*Years of Experience*	*Interview Duration (min)*
SP1	25	F	Degree	Sport Psychologist	Executive	1	48
SP2	34	M	Doctorate	Sport Psychologist	Head of Department	4	46
SP3	31	F	Masters	Sport Psychologist	Executive	3	61
SP4	38	F	Doctorate	Lecturer	Head of Department	13	49
SP5	32	M	Masters	Sport Psychologist	Executive	4	50
SP6	51	M	Masters	Sport Psychologist	Head of Department	22	55
SP7	40	M	Masters	Manager	Chief Executive Officer	8	40
SH1	44	M	Masters	Consultant	Chief Operating Officer	18	48
SH2	52	M	Doctorate	Physiologist	Director	25	46
SH3	38	M	Doctorate	Physiologist	Head of Department	9	48
SH4	38	M	Doctorate	Sports Doctor	Senior Registrar	9	47
SH5	58	M	Masters	Sports Scientist	Director	30	58
SH6	44	F	Degree	Lecturer	Lecturer	20	43
SH7	56	M	O-Level	Entrepreneur	Director	20	46
SH8	50	F	Degree	Sports Executive	Executive	12	41
M (SD)	42 (10)					13 (9)	48 (6)

competed at the Olympics and Paralympics to basic or enhanced carded national athletes who had just completed their first international competition. Similarly, sport psychologists and stakeholders, from directors to executives, were also selected based on their level of professional expertise and contributions to Singapore's elite sports industry (see Table 2.2). Thus, the combination of the three sampling strategies helped incorporate a broad range of elite sport experiences, while the selection criteria ensured that participants shared specific attributes, in relation to the research objectives (Hammersley, 2015; Sim et al., 2018).

2.4 The Interviews

As per the research objectives, to develop a deeper understanding of sports culture and implications for applied sport psychology in Singapore, interviews present an opportunity to create conversations with participants about their cultural understanding, perspectives, and interpretations of experiences as a means to generate knowledge and illustrate Singapore's sociocultural sporting landscape (Brinkmann, 2013; Smith & Sparkes, 2017). This is not to imply that these conversations paint an objective image of sport in Singapore. Rather, similar to the creation and appreciation of art or music (Smith & Hodkinson, 2009), what is presented serves specific personal and social functions based on the approximations and recollections of participants' experiences in as truthful a way as they can manage (Randall & Phoenix, 2009). Furthermore, as interpretivist research engages in what is referred to as the double hermeneutic (Giddens, 1987), the generation of knowledge does not end with the stories of participants. In fact, it also involves the researcher, who engages in further meaning-making throughout the research process, thus facilitating a dynamic co-construction of knowledge informed by an amalgam of fact and fictionalisations (Gibson, 2017; McGannon & Smith, 2015; Randall & Phoenix, 2009; Smith & Caddick, 2012).

Being one of the most systematic yet flexible methods, semi-structured interviewing was chosen as it empowered participants as the experiential experts of the phenomenon under study, while allowing the researcher to exert some control over the conversations (Sparkes & Smith, 2014). Specifically, the researcher used life-history interviews which invited stories on sport experiences influenced by the Singaporean environment (Coles & Knowles, 2001; Smith & Sparkes, 2017). With the use of an interview guide, the conversation of semi-structured interviews was generally driven by the interests of the researcher (Culver, Gilbert, & Sparkes, 2012). Although this did limit the scope and freedom of the participants' stories, it should be noted that the interview guide had gone through three iterations, whereby the researcher and supervisor critically discussed each question to ensure what was asked was informed by CSP and the research objectives, while still enabling a free-flowing and interactive dialogue between the researcher and participants.

In the final iteration, the interview guide was divided into four sections which explored the participants, (1) experiences and understanding of Singapore's

sports culture; (2) their thoughts about sport psychology; (3) their expectations of sport psychology; and (4) feedback and concluding thoughts (see Appendix A for interview guide). Throughout this process, broad probes (i.e., meaning, importance, concerns) or subsequent questions (i.e., Can you tell me why that is from your experience?) were used only if participants needed more guidance to describe their experiences with sufficient depth. As the stories unfolded the interviews occasionally moved back and forth between an unstructured and semi-structured format, dependent on the participants' openness to sharing their stories, where conservative participants preferred not to elaborate beyond the questions and needed more structured guidance to those who were more confident and "rattled" on happily.

The interviews were conducted in Singapore and spanned a period of six months from October 2017 to March 2018. For the participants' convenience, interviews were carried out at a venue of their choosing such as their training grounds, local cafés, homes, and places of work. This was appropriate as participants were able to choose the environment they felt most comfortable to describe their experiences (Crust, Keegan, Piggott, & Swann, 2011). All interviews were conducted on an individual basis, with the exception of two participants, who had requested to be interviewed together due to their training commitments. In this case, the researcher was mindful of representing each participants' story and directed the questions to each person individually but, given their similar experiences, there was generally a consensus in the stories shared. In accordance with University ethical procedures, all participants were given an information sheet, briefed about the nature of the study, and assured of confidentiality and anonymity should they agree to participate. Prior to the interview, participants were reminded of the purpose of the study and that there are no right or wrong answers and informed of their right to withdraw at any time without penalty or prejudice. Interviews for all participants lasted between 40 and 61 minutes with a total average interview time of 48 minutes (see Tables 2.1 and 2.2 for individual times). With the consent of all participants, interviews were recorded digitally and manually transcribed verbatim by the researcher over a period of six months from February 2018 to July 2018, yielding 345 pages of single-spaced text.

2.5 Thematic Analysis

With its theoretical freedom and compatibility with constructionism, thematic analysis is an ideal method to unravel the intricate meanings and experiences of participants, while providing a rich and complex, but detailed account of data (Braun & Clarke, 2006; Clarke & Braun, 2017). For the purpose of this study, theoretical thematic analysis was used as it allowed the researcher to provide a more detailed analysis specific to the researcher's theoretical interests, rather than an overall description of the data (Braun & Clarke, 2006). In adopting this predominantly deductive top-down method, the researcher deliberately engaged with the CSP literature during the conception of this study (i.e., ethics

application), and so was able to appreciate the subtle features of the data related to CSP in the conceptualisation of theory-based meaning during the analytical process (Braun & Clarke, 2012; Tuckett, 2005).

The research objectives guided the interpretive coding process. This analysis went beyond the superficial description of data to identify latent themes that illuminated the underlying ideologies and perceptions of participants. However, it must be noted that codes were generally a mix of descriptive and interpretive explanations (Braun & Clarke, 2012). For example, the code "emphasis on academics" mirrored the participants language and concept (e.g., SH5 said "… the majority still have that mindset of academics is more important for survival…"). In contrast, the code "Singaporean mindset" was not mentioned spontaneously by participants but instead based on the researcher's interpretation of various participants' accounts discussing Singaporean stereotypes. It is important to acknowledge that while this method is more explicitly researcher driven, it was impossible to be purely deductive due to the researcher's epistemological commitments, where findings were treated as a joint construction of meaning with participants (Braun & Clarke, 2012; Smith & Caddick, 2012). An example of how this was achieved was by conducting the analysis after all the interviews had been completed, so as to avoid distorting the natural flow of participants' stories during the interview process, with that of only the researcher's sentiments (Jones, 2015).

In accordance with the six-phase procedure outlined by Braun and Clarke (2006, 2012, 2013), the analysis spanned seven months, from March 2018 to September 2018, beginning with the manual transcription of interviews where the researcher read and reread the textual data, working with full transcripts, to develop an intimate familiarity with the participants' narratives. In line with the motto of inclusivity, where codes were included whether they were useful to the research or not, initial codes that focused on providing an interpretation of participants' underlying ideas and assumptions (latent approach) were generated from the data in relation to the research objectives. During this coding process, the researcher focused on identifying codes that appeared across more than one transcript to ensure that codes captured the diversity and patterns of responses within the data. These codes were then conceptualised into groups based on their similarity using the mind mapping software CMaps (https://cmap.ihmc.us/) to form recurring themes that convey the richness and complexity of the data. However, as the emphasis of this research was on the importance and significance of what was said, rather than its prevalence, these recurring themes were reviewed, refined, and combined into two theme levels with the goal of providing a coherent story of Singapore's sports culture and its impact on sport psychology practice. Themes and sub-themes were then allocated names to represent their thematic content. This was followed by the identification of in-depth and rich extracts across all participants' transcripts to illustrate the subjective meaning these themes had for each participant and its importance in the broader context of this study.

2.6 Judgement and Criteria

The creative complexity of qualitative inquiry, with its myriad of proposed criteria, presents a sharp contrast to the relative consensus of the quantitative community, where good research adheres to the standards of validity, reliability, generalisability, and objectivity. Ironically, what makes a good scientist may be the demand for researchers to constantly critically evaluate the information portrayed in the literature. For example, quantitative researchers are often critiqued as reductionistic due to their focus on one theory (e.g., CSP) but similarly, the use of scripted interview questions (e.g., semi-structured interviews) by qualitative researchers can also be conceived as reductionistic (Martin, 2011). Additionally, the use of statistics as a neutral and objective tool is itself a product of social and cultural influences, like the factor analysis, the Singapore Sports Culture Questionnaire (SSCQ), and the Singapore Sport Psychology Questionnaire (SSPQ), which were applied and developed with an intended purpose, rather than something "awaiting discovery" (Smith, 2009).

Thus, in the pursuit of pushing the boundaries of scientific inquiry, it is the responsibility of *both* the researcher and readers to reflect on their beliefs and assumptions, and assess the value of research by the criteria that are consistent with the study's ontology, epistemology, methodology and methods (Smith, 2018; Sparkes, 2015; Sparkes & Smith, 2014). By drawing on a broad stock of knowledge, researchers and readers can develop the ability of what Sparkes and Smith (2014) describe as connoisseurship. Instead of the passive acceptance of a definitive set of criteria, connoisseurship facilitates the continual refinement of research practices, from its development to its consumption, by appreciating the complex and subtle qualities within this study's interpretive paradigms, whether it is familiar or unfamiliar (Sandelowski, 2015). For example, the researcher was committed to the ideals of transparency (the researcher clearly illustrated the research process and interpretation of data; e.g., use of rich extracts across all participants' transcripts to illustrate the subjective meaning themes had for each participant and its importance in the broader context of this study; see Chapters Three to Six), trustworthiness (the research is credible, dependable, transferable, and confirmable; e.g., consistency of findings with the extant literature on elite sport in Singapore and the current qualitative and quantitative results; see Chapters Three to Eight), and reflexivity (the researcher openly reflected on the impact of his assumptions, intentions, and actions on the research; e.g., commitment to the paradigmatic assumptions of interpretivism grounded in ontological relativism and epistemological constructionism, and with the goal of achieving a cultural praxis of sport psychology in Singapore; see Chapters One and Nine), in the adjudication of this mixed-methods design to remain faithful to interpretivism (Smith & Caddick, 2012; Sparkes, 2015; Tracy, 2010). However, as factor analysis is a quantitative method informed by different paradigmatic assumptions (i.e., positivism, post-positivism), it was assessed by its respective standards of validity and reliability evident in Chapter Seven (Gibson, 2017).

2.7 Representation

In presenting this layered theoretical snapshot of sports culture and sport psychology of Singapore, it was essential to consider the stereotypical beliefs of Singaporeans, being the context in which this research is intended for and achieve cultural praxis by being socially relevant (Hagger & Chatzisarantis, 2011; McGannon & Smith, 2015). Undeniably, the researcher appreciates that data is co-constructed through the interaction with participants and its subsequent representation. However, participants generally believe that their contribution is understood as a representation of a finite reality or singular truth (Pickering & Kara, 2017). From the researcher's experience and extant literature on sport in Singapore (e.g., Li et al., 2017, 2013; McNeill & Wang, 2005), this is also reinforced by the belief that statistical research is more valuable and accepted over any qualitative work due to its lack of objectivity or "unscientificness." This dominant endorsement of quantitative inquiry was in fact a practical reason for the inclusion of factor analysis, as Singaporeans would be more receptive to statistical findings, and thus support the social relevance of this research.

Taken together, to ensure consistency, coherence, and commitment to interpretivism, while also fulfilling the need for conventional, positivist, or "natural science" approaches that permeate Singaporean society, realist tales (traditional theoretical framing by a disembodied author; e.g., writing in the third-person; Sparkes & Smith, 2014) were used throughout this study. The exceptions are the Introduction and Chapter Nine, which used a confessional tale (embeds my personal voice and experiences as an ex-national athlete of Singapore; e.g., writing in the first-person; Sparkes & Smith, 2014) in order to communicate the instrumental role and influence the researcher had in orchestrating this exploration of psychosocial phenomenon. In the execution of a realist narrative, it was not the intention of the researcher to remove himself from the research, but rather to relate the findings in a way that would be socially acceptable, for both local and other audiences. Indeed, while individual extracts from participants' transcripts were refined to support the researcher's interpretations and address the research objectives, as seen in Chapters Three to Six, the researcher was conscious to ensure the unique stories of what had been shared by participants were reflected in its totality that is this book. This was supplemented by the factor analysis in Chapter Seven, whereby key factors and associated items identified from the confirmatory factor analysis (CFA) were translated into visual data, presented, and discussed in Chapter Eight, to augment thematic findings in either reinforcing or contradicting results and consequently leading to knowledge greater than the sum of its parts.

2.8 Ethical Considerations

Beginning with procedural ethics, after approval had been received from the University of Birmingham, the researcher was required to follow-up with ethics approval from the Singapore Sport Institute Institutional Review Board, as per the requirements of collaborating with their staff member and sampling national

athletes. After minor changes were made to the consent forms, specifically information on participants rights and data protection, the researcher began reaching out to potential participants to begin an ongoing, evolutionary, and evolving research process. Being that Singapore has a small sporting community, participants' personal particulars were strictly limited to generically necessary information, to protect the participants' anonymity and confidentiality, and prevent any deductive conclusions on their identity (Palmer, 2017; Tracy, 2010). While the data collection for quantitative data proved to be ethically straightforward with the use of online questionnaires, the interview process was seemingly more complex.

Being a Singapore citizen since birth, it is the researcher's observation and experience that Singaporeans are generally conservative, less outspoken, and guarded in their respect for paternalistic hierarchical systems of authority that exist in every aspect of its infrastructure (de Cruz & Duncombe, 2016; de Cruz et al., 2019; Horton, 2002, 2013). Using a cultural responsive relational ethical lens, the appraisal of these unique cultural nuances aids the interpretation and understanding of sports culture and perceptions of sport psychology, for the researcher and to enlighten readers, as it draws attention to the imbalances of positionality and power during the interview process, and consequently its impact on the research (Lahman, Mendoza, Rodriguez, & Schwartz, 2011; Merriam et al., 2001).

A clear example was the different interactions and dialogues during the interviews with national athletes to that of sport psychologists and stakeholders, whereby the interviews with the former were more conversational and informal in contrast to the latter which were generally declamatory and formal. To diffuse the tension and navigate the chaos between these power differentials, as mentioned at the start of this chapter and in the Introduction, the researcher always returned to the main motivation of this research and professional purpose of a sport psychologist, which is to better support the health and well-being of athletes (Palmer, 2017; Portenga et al., 2017). Truly, in adhering to the position of virtue ethics and the researcher reflecting on *his* moral compass, any delicate decisions (i.e., quotes used, topics discussed, political issues, dissatisfied, or negative information) were made situationally in consideration of how it could impact the participants and the researcher, in order to avoid any unjust or unintended consequences (Blee & Currier, 2011; Hammersley, 2015; Tracy, 2010).

2.9 Summary

In setting forth the above, the choice of methodology and methods is, on one hand, a pragmatic decision of the researcher shaped by his own experiences and the Singaporean context he is situated in. More than this, it is also a means to produce new theoretical insights into a topic that has been ignored and unexplored. From the conceptualisation of a mixed-methods design to its application through interviews and questionnaires, followed by thematic and factor analysis respectively, the purpose of this chapter was not to simply explain the

systematic analytical processes of the research, but also to draw attention to the application of disciplinary knowledge and creative imagination of the researcher. In venturing into unfamiliar territory, the researcher outlines the possible criteria that were used and can be considered to judge the quality of this work, how and why the research is represented as such, and the ethical standards that were considered and adhered to throughout this research process. In what follows, each chapter is scientifically driven and systematically presented to provoke and evoke different ways of thinking. With much deliberation, it was written from the heart and not just from the head.

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3 History, Politics, and the Place of Elite Sport

Nicholas de Cruz and Brett Smith

3.1 Value of Sport

As early as 1959, when Singapore gained self-governance from the British colonial rulers, nation building, and national development have always influenced the development of sport in Singapore (Peh, 2012). Reiterating the points raised in Chapter One, Mr. Lee's administration, the People's Action Party (PAP), driven by a sense of pragmatism and functionalism, used mass recreational sport participation to shape its citizens, the only resource, into a healthy and fit workforce in order to form the structural foundation of Singapore's economy (Hill & Lian, 2002; Horton, 2002, 2013). Over a brief period of approximately 50 years, Singapore evolved from an environment of squalor with public standpipes for water and where public sanitation was only a luxury, to a highly urbanised city-state with high-rise buildings and private condominiums, and is now regarded as the economic gateway to South East Asia (McNeill, Sproule, & Horton, 2003). Instrumental to this rapid social-engineering and national building policies were in fact education and sport, and at essentially every sphere of economic and social life, the PAP with its authoritarian paternalism, influenced the lifestyle, work, family, and cultural values of its citizens (Horton, 2013). Synonymous with this approach, sport, being centrally significant, has certainly not escaped the purview of policy, and consequently through its historical development in relation to its function and role, constitutes the type of sporting culture of Singapore (Horton, 2002; Peh, 2012).

3.1.1 A sporting nation

Following Singapore's economic progress, the country now has one of the highest standards of living in the world, attaining the United Nations developed-nation status within 25 years of gaining sovereignty, with one of the world's highest literacy rates, and burgeoning gross national product, due to its political stability and a compliant and productive workforce (Fry & McNeill, 2011; Horton, 2002; Peh, 2012). The government's perception of sport has similarly progressed from one of mass recreational participation, that encouraged a healthy lifestyle, social cohesion, and good citizenship, to the pursuit of higher

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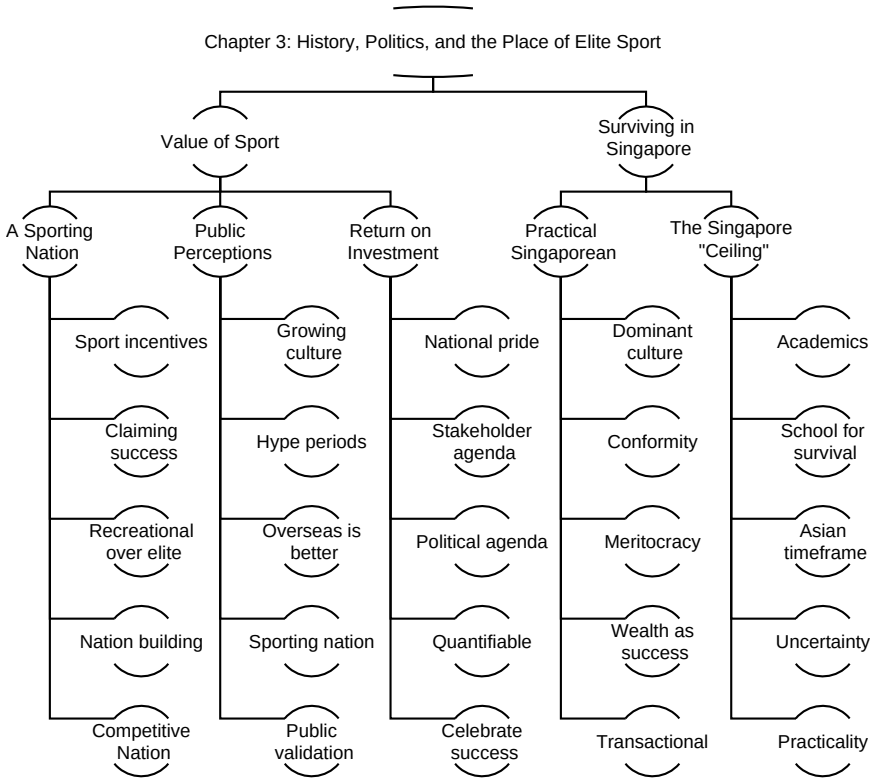

Figure 3.1 Thematic map of Singapore's history, politics, and the place of elite sport.

performance, as competitive standards were raised with aspirations of Olympic champions. In forging this national sporting identity, sport had reached a fabricated level of cultural significance as a potential means to advertise Singapore's international status as a world-class developed city (Teo, 2008). Being high on the government's political agenda, acknowledgement of this change was noted by participants. For example, when asked about Singapore's sports culture, SH5 explained how it had evolved in this manner:

> I think Singapore sports culture has evolved over, when I say evolved I'm telling you from the 70s right up to right now. Following independence etcetera, there were just, sports was just seen as an outlet, as a kind of a mass exercise, that sort of thing in the 70s alright. But as it evolved you can see the way in which even elite athletes are supported by sport science personal, it's amazing. I travel quite a bit in this region but in terms of sport science I think we are there to a large extent. Great sport science support for very elite athletes alright.

Admittedly, this development from participation to performance has been highlighted numerous times throughout the literature (e.g., Horton, 2002; Huan et al., 2008; Peh, 2014; Tan & Yates, 2011), and evidently is not innately insightful, but it is interesting that even with the impetus of government support, the concept of elite sport is still an elusive phenomenon for most Singaporeans according to SH1 when asked the same question about culture:

> The sports culture in Singapore over the years has definitely become more vibrant. I would say the exercise culture is extremely vibrant, but the competitive sports culture is maybe still a little bit lagging behind and what do I mean by that. So, if you look at when I differentiate between competitive sports and exercise, exercise culture is very strong, so you look at a lot of fitness gyms, a lot of fitness instructors. You look at mass exercise running events, the number of marathons now that we have on our Singapore calendar, the number of running events we have is like 60 to 70 running events a year. So that's easily more than one a week so that's just general exercise. Competitive sports culture has definitely improved over the years but probably has not improved as fast or grown to be as big as the mass exercise culture.

Although sport has been integrated successfully into the lives of its citizens, the value attached to competitive or elite sport has yet to be recognised by the masses as it apparently continues to be eclipsed by the dominance of mass recreational participation. In spite of the effective social-engineering skills of the PAP, evident in Singapore's economic success, the same level of achievement in elite sport seems to be unattainable (Horton, 2002). Indeed, this is somewhat perplexing given how a high gross national product has usually been correlated with the success in international sport, measured by the number of Olympic medals (Rigauer, 1993). It would seem that while Singapore is eagerly awaiting sustained elite success in the international sporting arena, the participation sports culture has risen in tandem with the nation's economic achievements, rather than a performance sports culture (Teo, 2008).

3.1.2 Public perceptions

Spearheaded by government initiatives through its public institutions, quasi-state agencies, schools, and grassroot bodies, Singaporeans have been socialised into sport and exercise from a young age generally for the purposes of recreation and health (Peh, 2012). As noted in Chapter One, Singapore has been solely governed by the PAP since its independence in 1965, and with this deep-seated and predominant paternalistic-pragmatic leadership style, citizens are dependent on the government for not only economic and social security, but also in shaping and giving direction to their lives (McNeill et al., 2003). While the government's conceptualisation of sport did accommodate the notion of competitive sport (Aplin, 1998), the primary motivation for exercise for the vast majority of

Singaporeans revolved around concerns of social status and an acceptable body image (Horton, 2001). To the credit of the PAP, the Singapore public was very aware of the benefits and instrumental role sport had in shaping the nation and was compliant in engaging in a healthy lifestyle (Fry & McNeill, 2011). However, in terms of sporting excellence or performance, dedication to competitive sport was viewed as pointless in the pursuit of material "success" (McNeill et al., 2003). Almost two decades later, A2 expressed how national athletes are still faced with the same perceptions from the public:

> Some of my friends always question me like, why are you doing this? You know like, are you getting paid then? I'm like no. So then they are like, why are you wasting money on something that like has no future and like I mean what's your goal kind of thing? I mean like all you can say is passion and like you want to achieve your own personal goals. But if you want to see it like a job or something that you can do forever it's a bit hard because there's not much support in it.

Clearly, the prevalent value attached to sport in the minds of Singaporeans, is "Why should I do it, what's in it for me?" (McNeill et al., 2003, p. 38). This may be the reason for the success of recreational sport as there are clear tangible benefits to engaging in physical activity, particularly the notion that, "sport means health and health means wealth" (Peh, 2012, p. 79). Even politicians present themselves as sport enthusiasts to the public to elevate their social status, whereby association with medal-winning athletes portrays an image of a strong, rugged, resilient leader, "capable" to lead the nation (Kissoudi, 2008). However, what is portrayed to the public is similarly socially engineered to present a manufactured image of elite sport as expressed by PA5:

> Sometimes I don't understand the celebrations or the like fan fair that comes with it. That part is a bit strange for me because I don't think they [the public] even understand what goes on behind our trainings, like to get there you know. All they see is the glory at the end of it and like I feel like that is very, very shallow. Very shallow view of sport because they only see our value if we have something to show for it and I don't like that, so I think I'm very torn about my medal. Because I know that the only reason why people are paying attention to me now is because of my medal when the truth is I have been the same athlete all these years and the only difference was my medal. It's a very weird feeling so I feel like the general public don't really understand athletes' lives. They only see the glory that comes if we succeed and then they don't understand the hardships that a lot of other athletes face when they just train for 18 years but have nothing really, no medal to show for it but you still worked hard.

There are two points of note here. One is how the outcomes like medals and winning are favoured over the journey and process of development in pursuit of sporting performance (e.g., de Cruz & Duncombe, 2016), and two, what tends

to be portrayed presents a "shallow" view of sport, where only champions are celebrated to the detriment of "unsuccessful" athletes who fade into obscurity and are eventually forgotten (e.g., Horton, 2002).

It is understandable that galvanising a young nation, which has focused on economic development and tangible benefits for decades, to *also* consider competitive sport excellence as another avenue towards nation building and national development is a formidable task, given that only medallists are "rewarded" (i.e., spexCarding; see Chapter Two). Even Olympians like A1 admitted to a probable lack of interest in competitive sport had he not been passionate about sport to begin with:

> I wouldn't care much about sports if I wasn't into sports like if I was a "normal person". I mean there's the hype before like major games and stuff but that's about it.

As the interview progressed, A1 went on to elaborate as to how there is a need to first demonstrate your ability as an athlete in international arenas, recognised by sport governing bodies, before any support is given, especially with the regulated funding for elite sport:

> I think it's easy to say that you want more funding into sports and more support for the athletes but it's a tough thing because then the money comes from taxpayer's money. So, if you want more funding you need to earn it so it's a give and take you know. But if you want more funding you need to deliver [medals] and if you can deliver then you are worthy of something.

Collectively, these accounts demonstrate why the public perceives that elite sport is not a worthwhile pursuit as the answer to the favoured question, "What's in it for me?" can only be known after years of commitment and dedication, and may not even equate to what has been invested. Furthermore, with promises of greater sporting performance going unfulfilled (Brooke, 2014), with the exception of foreign talent naturalised to win medals (Phan, 2013), it is more convenient to focus on the few that have succeeded rather than draw attention to the many who have yet to succeed, in order to present an appealing image of elite sport for public satisfaction. This begs the question as to who benefits from this bolstered image of elite sport, as it evidently is not in the interest of the larger pool of national athletes who have yet to deliver medals or even the general public, who are still not convinced that the pursuit of sporting excellence is worthwhile.

3.1.3 Return on investment

Ranging from eugenics to excellence, the government has always pragmatically and purposefully directed sport policy to achieve specific goals, either through its fitness programmes and community events to foster communal integration, health, national defence, and nationalism, or through hosting international sporting events and promoting national athlete success to augment Singapore's global status and

position on the world stage (Cha, 2009; Chan, 2016; Horton, 2002; Peh, 2014). In terms of excellence, international sport performance cannot be underestimated as it presents a source of pride that reflects the nation's view of itself and the image it wants to portray to the rest of the world. Returning to the people's favoured question, "What's in it for me?," the government is no different in always first establishing what can be gained before investing into elite sport as mentioned by A8:

> I guess that's the like that culture of Singapore, like Singapore like you have to do something first and then, and then things will happen like the funding will come, the people will come and I guess I don't blame them because that's really the, the whole culture of Singapore like they want to see results first and I wish it wasn't that way.

According to Cha (2009) on sport and politics, "victories represent the validation of one's place in the world or they symbolise an aspiration point that the nation wants to rise to" (p. 1585). This perspective seems to be consistent with the PAP's goals for elite sport and what drives their policies. Understandably, resources are always limited and the need to provide a clear justification and rationale for any expenditure is a desirable characteristic of any government. While national athletes do appreciate this foresight and accountability, it would seem that the focus to celebrate and support medallists over non-medallists creates an obscure image that does not align with the high-performance sport system goals outlined in the latest spexCarding guide that state, "[it] endeavours to be fully behind *every* [emphasis added] Team Singapore athlete to support them on their journey of sporting excellence" (Singapore Sport Institute, 2019, p. 4).

In the haste to be associated with major developed nations and cash in on elite sport to broaden Singapore's entrepreneurial capacity (Horton, 2013), the government enlisted naturalised foreign athletes to aid in achieving its sporting aspirations and overcome the current perceived limitations of local-born athletes (Phan, 2013). Regrettably, the instant gratification and fulfilment of Singapore's sporting aspirations (i.e., Olympic medals) were eroded by this "mercenary attitude," as this achievement was simply a means to an end with little or no value towards developing elite sport in Singapore or inspiring national identity and pride (Phan, 2013; Teo, 2008). This observation was supported by SP4, who expressed her concerns for elite sport:

> From the outside people perceive that our athletes get the best support and stuff like that but they don't understand that that's not the case…It seems like they have lots of support so on the outside everything looks nice and glossy and I think that is the way they [Sport Singapore] like to portray, to continue to make it look like everything is fine but once you go deep down inside and you realise oh no that is not the way.

Technically speaking, investing in foreign talent with the potential to contribute to their new nation may be sensible. But in this case, it would appear that the

value in pursuing sport excellence was lost as Singapore trivialised itself by being preoccupied with pursuing and claiming recognition for superficial status symbols and honours (Phan, 2013), especially when these athletes were not nurtured by Singapore's sport system. While the means may have justified the ends, given Singapore's First World economic status (Aplin & Jong, 2002; Fry & McNeill, 2011), it is unclear if fulfilment of this valuable outcome can be attributed to its high-performance sport system or if it had any positive contribution to elite sport in Singapore.

3.2 Surviving in Singapore

From the early days of independence, the PAP was faced with the challenge of building a young nation with no natural resources except its people and the fact that it is a strategically located maritime port connecting east and west Asia (Horton, 2013). The government's pragmatic approach to extract the best from its citizens, in their determination to build a successful nation, was the emphasis on meritocracy, whereby advancement in society is based on individual ability, to portray transparency and develop a productive and progressive economy (Fry & McNeill, 2011; McNeill & Fry, 2010). In executing this meritocratic ideology, educational achievement became the main route to prosperity, regardless of social status or personal connections (Horton, 2001; McNeill et al., 2003). To this end, education was and is a beacon of critical importance, central to Singapore's essence, as it produced an educated elite, believed to be the most precious stock of Singapore's only natural resource, its people, with the intellectual ability to be capitalised on (Horton, 2013). The following quote from a speech in 1966 given by Mr. Lee, Singapore's founding father and first Prime Minister captures this ideology well:

> In any given society, of the one thousand babies born, there are so many percent near geniuses, so many percent average, so many percent morons. I am sorry if I am constantly preoccupied with what the near-geniuses and the above average are going to do. But I am convinced that it is they who will ultimately decide the shape of things to come. It is the above average in any society who sets the pace (as cited in Horton, 2013).

Understandably, an elitist-materialistic mindset prevails among Singaporeans today as educational achievement remains the gateway to success, wealth, and survival, as economic-based values were always given precedence over other social practices such as sport (Aplin & Jong, 2002; Chua, 1995; Horton, 2013; McNeill et al., 2003; Peh, 2012).

3.2.1 Practical Singaporean

Today, the ethnic Chinese, responsible for many of the institutional and attitudinal characteristics mentioned, like their devotion to education, passion for

commerce and industry, and somewhat passive attitude towards sport, not only dominate in numbers but also in power, as their influence extends to all areas of social activity, particularly government, education, law, business and culture (Horton, 2001). Although Singapore has always been a plural society (Aplin & Jong, 2002), with the presence of Malays (13.4%), Indians (9%), and Eurasians/Others (3.2%), the Chinese represent 74.3% of the 3.99 million resident population (Singapore Department of Statistics, 2018). Being pragmatic in nature, the Chinese prized the material gains derived through education and business, with recreational sport being viewed as of minor importance even after many years of government interventions (Horton, 2001, 2002). It might be argued that, owing to the resilience of these traditional Chinese values, this pragmatic ideology has manifested into a highly materialistic, meritocratic, and extremely prosperous young nation. Educational qualifications lead to a successful career, elevated social status, and wealth (Brooke, 2014; Horton, 2001). This emphasis on education remains familiar to many participants alongside the confounding notion that sport or even any form of play was "wasteful" as remarked by A6:

> Our priorities are academic. Yeah because well it's because like I think most Singaporeans see success as being wealthy… a good education background usually leads you to that, very traditional route, it's fool proof more or less and it's safe…I completely understand why parents would want their kids to go through the safe route because I mean the whole concept of like starving artists and to a certain extent starving athletes. Yeah it's scary and no parent wants their kid to go through all that struggle…We are all very passionate I think and I do see that we have a lot of talent and the government is trying to push through but I think it obviously takes a long time to change mindsets and perceptions.

And SP1:

> With the athletes that I have worked with, especially the youth, it does come about that the topic of like you know the parents wanting them to concentrate on their studies. So, the focus on having to do well academically does come about but then that passion for the sport is also acknowledged. But yeah generally academically its always like you know, you have to do well, make sure you are studying, if you are not studying why are you not studying, and you know yeah just the grades matter and then that whole mindset that you know you have to do well in school to get a good job then you get a good pay…They are very stressed. They are afraid of what they could do in the future like what kind of jobs so I guess like right now this may be their sport that they are focusing on but then they also like, oh now what am I going to do in the future and you know is what I'm doing really going to bring me far.

Naturally, any parent would want what is best for their child. However, perceived as having little "value" or material worth, except as a conduit for more "academic

points" (McNeill & Fry, 2010), sport was clearly not the avenue that could lead to the desired success that Singaporeans craved. Even people who are passionate about sport are burdened with the fear of what their future may hold should they not attain the education necessary to enter Singapore's meritocratic society. This is compounded by Singapore's highly competitive environment described by PA4, where from a young age, children are compelled to compete in all aspects of their lives so as to acquire the best opportunities (e.g., elite primary and secondary schools, and colleges), believed to be necessary to achieve the "Singapore dream" of material success:

> I think in Singapore it is very competitive. It is not just in academics, everything, even in like jobs, sports, you know you are just competing. In school, primary school, we are competing, so we want the best in everything, we want the best.

This inherent competitiveness is a dominant theme for many Singaporeans as the pursuit of educational qualifications became synonymous with success (Aplin, 1998). Contrary to the government's effort to promote elite sport (Brooke, 2014), by all appearances, the naturally competitive, education-conscious Singaporeans were more intent on pursuing more conventional routes to success, rather than squander their potential prosperity on the pursuit of sporting excellence, that seemingly had no guarantee of any tangible outcomes in the long run, other than a healthy lifestyle (Peh, 2014).

3.2.2 The Singapore "ceiling"

Notwithstanding Singapore's success in impressing itself on the world of business and education, gaining international recognition for these achievements, Singapore has never been able to create a firm foundation for sport (Aplin & Jong, 2002; Fry & McNeill, 2011). Although there have been some outstanding performances at regional and international competitions, competitive elite sport has been unable to thrive as the government continues to ascribe a higher priority to economic progress and its citizens to educational accomplishments (Peh, 2012). In fact, Singaporeans have become so attuned to focus on academic success as the fastest route to prosperity that this enduring and intense quest has been affectionately labelled as "the paper chase" (Horton, 2001; McNeill et al., 2003). According to SP3, this cultural mindset seems unlikely to change, given Singapore's historical development and current state of elite sport:

> Singapore's resources are just the people and back then the way to advance or the way to flourish in society would be to have a good education so that's the government's initiative or that's the governments push. And the general population also kind of I guess embraced it…The historical culture, the way the country was developed economically and the governments initiative and that push, the focus that they had in the past kind of all led up to this [current mindset] and it's very hard to change mindsets. So, in the past

> 50 years of the country's development that was a focus or that was I guess the tone, the momentum that was set then and now you suddenly want to change, its going to take another 50 years maybe before it shifts.

Such is the intensity of the paper chase that even with recent policy-driven indicators to de-emphasise academic outcomes (Ministry of Education, 2019), primary school children from the ages of 10 to 12 need to attend stress management workshops to equip them with skills to manage stress (Health Promotion Board, 2019), which makes one wonder how much stress does a child have to contend with and how many children are affected, such that a government-mandated stress management curriculum is necessary. As a student-athlete, A3 highlights how the competitive culture and need for academic achievement impacts his pursuit of sporting excellence:

> Most of us are students and we have jobs. Most of us are not full-time athletes because we have to either support our family or we have to commit to studying…I'm trying to juggle it, all these are unnecessary stressors which can decrease our productivity, potentially not just as an athlete but overall as a functional human being. That is one thing we have to take, take stress at like multiple levels compared to the athletes in other nations because Singapore is actually quite a competitive society.

It should therefore not be surprising that few people are willing to commit themselves to elite sport, not for a lack of passion or motivation (de Cruz & Duncombe, 2016), but simply because it does not seem like a viable option given these unfavourable circumstances (Peh, 2014). Even for national athletes like PA6, who had completed their academic quest and secured a stable job, were still encumbered by the fear and worry of balancing the responsibilities as a dedicated employee with the obligatory training requirements of being an elite athlete:

> For me, it was trying to balance work. We have you know [key performance indicators] that we have to reach and it's difficult when you're like campaigning half the time. So that was what motivated me to take that full 3 years off from work…It was yearly so every year it was time to renew right I was a bit worried, like ok will my boss like take me back because they were holding my position.

Renowned for their work ethic, Singaporeans are known to have little time for other pursuits outside the working environment. Supplemented by the paternalistic government policies that encourage continuous educational advancement to maintain Singapore's competitive edge and fuel its knowledge-based economy, elite sport seems to be marginalised in favour of more traditional pursuits that provide the best avenue for upward mobility (Brooke, 2014; McNeill et al., 2003). Indeed, many athletes tend to abandon elite sport in their late 20s, having embarked on more viable career paths (Peh, 2014).

3.3 Summary

Throughout this chapter, from the value sport offered Singapore to what it takes to be a successful Singaporean, the historical development of Singapore constituted the type of sporting culture that remained participatory and recreational in nature, in spite of the government's aspirations to establish Singapore as an elite sporting nation. Even with the bolstered image from purchased Olympic champions, citizens remain unconvinced about the merits of elite sport as they were accustomed to the prevalent education-conscious ideology that consistently was proven to lead to prosperity and the fulfilment of the Singapore dream. With the excess of economic success, citizens gave in to the omnipresent demand to achieve materialistic, tangible outcomes that could elevate social status, contrary to elite sport, which lacked the functional or pragmatic value that could offer the same benefits. It should not be forgotten that a select few individuals have dedicated their lives to the pursuit of sporting excellence for passion, love for sport, and the hope of realising their dreams, but regrettably, these idealistic beliefs eventually fizzle out as the reality and demands of Singapore's elitist-materialistic culture forces them to eventually abandon elite sport.

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4 A Distorted Elite Ecosystem

Nicholas de Cruz and Brett Smith

4.1 Support Infrastructure

Whilst the government has enacted policies and taken steps to support the pursuit of sporting excellence, such as the spexCarding system (Singapore Sport Institute, 2019), investment of hundreds of millions into facilities and infrastructure such as the Singapore Sport Institute, National Youth Sports Institute, Singapore Sports Hub and Singapore Sports School, it would seem that these resources have yet to bear fruit in the form of Olympic gold medals, the definitive rate to measure the nation's *international* success and effectiveness of the elite sport system (Brooke, 2014; Horton, 2001; Koh-Tan, 2011; Peh, 2014; Teo, 2008). Certainly, in terms of crafting a successful elite sport system, Singapore does possess the nine pillars (see Sport Singapore, 2019, for specific details) outlined by De Bosscher, Shibli, Westerbeek, and van Bottenburg (2015). That is, "financial support, an integrated approach to policy development, a participation base, a talent identification system, athletic and post career support, training facilities, coaching provision and coach development, national and international competition structures, and scientific research" (p. 4).

Nevertheless, simply providing an ideal institutionalised system does not guarantee Olympic success as the nation's cultural predisposition, forged over many years, has been found to be a stronger indicator in fostering the success of high-performance sport (Digel, Burk, & Fahrner, 2006). Unfortunately, in the case of Singapore, the predominant culture is recreational as highlighted in Chapter Three and by implication, may present a systemic issue that impedes the potential of elite success. Moreover, as systems tend to be part of a hierarchy, with layers of complex factors that inform and interact with each other, the failure to accomplish the desired aspirations of elite sport in Singapore as yet, may not simply be due to its culture or the infrastructure, but the tiny variations and their influence on its effectiveness within the system (Andersen, Houlihan, & Ronglan, 2015).

4.1.1 Financing excellence

Beginning with parents, the majority of athletes and a few other participants acknowledged the emotionally supportive role parents had played in the

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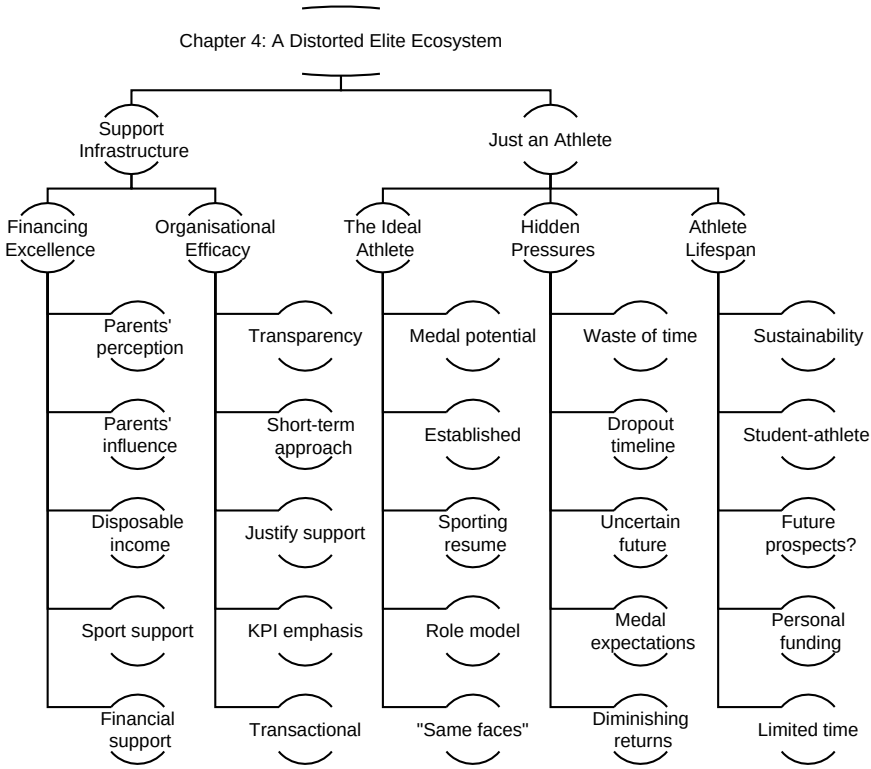

Figure 4.1 Thematic map of Singapore's elite ecosystem.

childhood years of their sport involvement, from developing their love and passion for sport, providing them with various sporting opportunities, to moral and logistical support, and attending events, chauffeuring, or financing training (e.g., de Cruz & Duncombe, 2016). As athletes found a niche and progressed from participatory or developmental stages to a more performance-oriented stage, in tandem with age and maturity, parental involvement shifted to more indirect aspects of support, like financing superior equipment and more advanced training, where emotional support was relegated to a secondary but still crucial role (De Bosscher, Sotiriadou, Brouwers, & Truyens, 2015).

Given the education-conscious nature of Singaporeans discussed in Chapter Three and being the most expensive city in the world according to The Economist (2019), it was curious that parents were still keen to encourage the pursuit of sporting excellence, considering the contested nature of academic and sport development, as both needed time, money, and energy for achievement (De Bosscher et al., 2015). On reflection and reinforced by SH5, sport was a conduit for academic points and it became apparent that, in many cases, parental support for sport was much less for the value of participating in sport (e.g., resilience, ruggedness,

confidence) but instead as a means to buy entry into better schools (McNeill & Fry, 2010), especially for individuals who were not academically gifted, in the hope that this would lead to better career opportunities for their child:

> In our system we have something known as direct school admission…if you are good at sports you can get into an elite school through your sports, not through your academics, even though your academics are a bit low…because this gives them a head start, so look parents are also smart…they see sports as a healthy lifestyle for them to show the employers or educational institutions, my son or daughter is holistic, been involved but they don't see it as something which they will go all out to support their child. That's how I think the average person sees [sport].

According to SP2, during this journey, if a child showed potential to excel in sport and if parents were financially able, they would do what they could to sustain this sporting involvement until such time that it was likely no longer feasible, in either fulfilling its academic purpose (McNeill & Fry, 2010) or when performance was deemed inadequate (Koh-Tan, 2011), prompting a return to educational or more mainstream pursuits (e.g., professional careers):

> It is a lot of time and a lot of sacrifice, a lot of effort that goes into being an elite athlete and if you don't have some sort of safety net then you know I can understand why most people would choose to abandon sports and go into academics, so they can have a stable career at least.

SP2 went on to elaborate on how it seemed that this pragmatic pursuit of elite sport was only a viable option for families with a disposable income that could balance the expenses of the "safety net," being education, with the uncertainty associated with sporting excellence:

> If you look at maybe some of our really really top athletes at the moment that are winning, are doing well on the international stage, most of them are actually coming from well to do families or at least families that can afford to you know put out a huge financial outlay for them. I think most of them do not come from a poor family or low-income family so the support they get helps to negate the necessity to have a stable career because family wise, they can support their decision to pursue sports.

It seemed the prevailing trend, corroborated by other participants, indicated a connection between "well-to-do" families and top athletes, stressing the importance of socio-economic status as a key factor for engaging in elite sport. It must be acknowledged that athlete-participants were at a stage in their athletic career where they had already established themselves as national athletes and were eligible for the privileges associated with their status (i.e., government-financed training and sport science support). However, it would be naïve to disregard the

journey to achieve this coveted "national" status as not all individuals with sporting potential are fortunate to afford the privileged path to become national athletes, like the majority of those in this book. No matter the source, Minikin and Robinson (2015) found that sufficient financial resources were central to a successful elite sport system. In this case, without parents with the necessary affluence, the potential of many other individuals may not have been realised, especially as the greater demand for paper qualifications constantly compels Singaporeans to choose education and more mainstream pursuits instead.

4.1.2 Organisational efficacy

Consistent with the pragmatic culture of Singapore, the elite sport system, driven by fulfilling medal targets, naturally focused its efforts, via strategic investment, on sports that had the greatest potential of winning (Koh-Tan, 2011; Peh, 2014). Thus, similar to the observations of Sam and Macris (2014) on national sport organisations in New Zealand, this emphasis on achieving organisational goals, rather than supporting athletic development, has led to the selection or cherry-picking of not only specific sports in Singapore, but also specific athletes within these sports who can easily meet performance objectives. A good example of such actions was the mercenary attitude discussed in Chapter Three, where talented foreign athletes (i.e., table tennis and swimming) were purchased and given citizenship to compete for Singapore at the Beijing Olympics 2008 (Phan, 2013). Although the results of such actions cannot be contested as performance goals were achieved, the way in which these achievements were met matters, and simply purchasing Olympic medals, which arguably was more efficient than grooming local athletes, is not a measure of the system's success, but rather just a reflection of its purchasing power as depicted by SH2:

> We tend to focus on personalities rather than the system itself, so we are successful with individuals, but we fail as a system. If you are investing in 1200 to 1500 athletes a year, that is the number of carded athletes we have in Singapore, if you are investing in 1500 athletes a year for the last 30 years and only one Olympian you know, and even that Olympian was not produced in Singapore, what does it tell you about your system ok. So I think that's what I mean if we are serious about wanting to have the outcome that we so desire…I think we got to go back to fundamentals, put aside comfort zone, put aside habits that we have created, recognise the negative culture we have created and start building things from scratch because if you don't do that, the next 50 years you'll still be at where we are. Lots of money but little achievement.

There is however no evidence to support the persistent political notion (see Brooke, 2014; Peh, 2012, for affirmation) between role models or elite success, purchased or not, and the claim that these "national heroes" can inspire others to emulate them (Grix & Carmichael, 2012). Furthermore, the failure to acknowledge the impact of

this decision, that emphasises the measurable instead of the meaningful, a prime example of an individualistic outcome-oriented system, has been found to hinder organisational learning and progress, as this approach to achieving sport excellence fosters risk aversion (Sam, 2015), and consequently creates other distortions within the organisation, especially affecting its athletes as experienced by PA4:

> I think it's great that they have this carding system, the high performance and that sort of thing, but again how one is being treated at the medical centre for example, whether or not we are being denied treatment, whether we are given treatment, who is given the higher priority, who is given the lower priority, whether or not there are actual reasons or actual problems going on within the institute itself, or whether these [justification of sport science services rendered] are just deflections you know, because you're a complex case so I'd rather not treat you. Then let's just come out with a nice reason to say that we are not able to handle your case, or we are not able to treat you because of this. In fact, something can be done but it's just a matter of whether you [sport science staff] want to do it or not.

Illustrating the complex pattern of interactions between culture, the policies of the organisation, its influence on staff, and the subsequent impact on athletes, the extract from PA4 exemplifies how an elite system that churns out medals every so often may not be a reflection of its effectiveness in developing elite athletes, given that PA4 was denied medical treatment for being a "complex case." To be fair, the case of PA4 may be an extreme example, but one does wonder how this may have been different if PA4 was a Paralympian medallist. Nevertheless, this was a similar experience shared by other participants and clearly shows that although the Singapore elite sport system claims to provide holistic support for *every* athlete (Singapore Sport Institute, 2019), this does not seem to be consistent with the experiences of participants in this book.

Even though the competitive nature of elite sport naturally aligns with outcomes like winning and medals, Koh-Tan (2011) has suggested that organisational effectiveness should be judged based on the efficient operations and quality of its structures, processes, and procedures, rather than simply the fulfilment of outcome goals. Evidently, Singapore's elite sport system appears to be premised on what Grix and Carmichael (2012) termed as a "virtuous cycle of sport," where elite success leads to prestige, national identity, and interest, that consequently promotes healthy mass participation, leading to a larger pool of potential elite athletes, feeding into elite success, and thus perpetuating a cyclical process fuelled by fulfilling performance goals. That said, the intricacies of such a self-fulfilling system may not be aligned with the goal to provide holistic support for all, especially when it privileges some athletes over others according to SH8:

> If you want a sporting culture in Singapore to be robust you know it has to be consistent, be seen as consistent, fair, transparent and the athletes know that they will not be side lined you know. That even if they didn't do as well,

> they will be given another chance to be better. So, we need to take interest in the athlete individually you know, not collectively.

Practically speaking, there is nothing inherently wrong with strategically investing limited resources to achieve performance goals but, coupled with the outcome-orientation of sport organisations, this strategic approach resulted in a significant gap between what should be holistic support for all, and the consistency in its availability. For example, SH8 describes how support changed in relation to medals achieved, in a direct relationship where, more medals meant more support and lack of medals led to the removal of support. It seemed there was no clear definition of holistic support which contributed to the dissatisfaction of participants in this book. As such, it was debatable how sport organisations were effective in elite athlete development (e.g., Brooke, 2014; Peh, 2014; Teo, 2008), when the behaviours described here revolved around supporting only athletes who fulfilled organisational goals, to the exclusion of those who had yet to or failed. Nevertheless, as national athletes, they should still be afforded access to the same "basic" quality of holistic support stated by the Singapore Sport Institute (2019) which, "aims to develop an athlete-centric environment that allows *each* [emphasis added] athlete to fulfil their sporting aspirations" (p. 4).

4.2 Just an Athlete

It has been well established that the pursuit of elite sport requires tremendous time, effort, motivation, and money before any significant success can be achieved, especially so in the Singapore environment, where athletes must contend with the competitively demanding academic and work culture that determines success (see Chapter Three). The widespread acceptance that only material outcomes like medals or money lead to success has become so ingrained into the overall Singapore system, since its inception as a successful nation, that it constantly demands official, visible, and tangible rewards to sustain its momentum, both in and out of sport (Aplin, 1998). However, despite the dedication and sacrifices Singapore's national athletes have demonstrated to fuel this momentum (e.g., de Cruz & Duncombe, 2016; de Cruz et al., 2019), the prevailing notions regarding elite sport, such as lack of talent, poor motivation, better alternative careers and small population (e.g., Horton, 2002; Peh, 2014), purported in past literature, regrettably still persists today. In a competitive atmosphere preoccupied with the need to be prosperous, the fact that anyone dares to commit themselves to elite sport seems absurd as this journey offers no tangible benefits besides the intrinsic joy and satisfaction athletes receive in fulfilment of pursuing their passion and love for sport.

4.2.1 The ideal athlete

As athletes grow and develop during the pursuit of sporting excellence, transiting from adolescence to adulthood like the participants in this book, the competitive

social environment of sport moulds a self-identity that gradually becomes more focused on athletic performance, as training experiences shift from fun and enjoyment, to more purposeful and less informal mindsets, emphasising hard work and dedication to reach higher levels of performance (De Bosscher et al., 2015). During this process, motivations change over time and, according to Mallett and Hanrahan (2004), the growth of athletes is accompanied with a change in perception that focuses on personal reasons about why they choose to remain in elite sport, as opposed to external inducements like money, recognition and winning, which are no longer the powerful motiving forces they may have been. This explanation was consistent with the feelings of national athletes like A7, whose identity as a national athlete was secondary to his passion for sport and self-determination to achieve his potential, when asked why he wanted to become a national athlete:

> I have always been an athlete so growing up sports has been a part of me and I started doing this…I started doing this competitively only about 3 years ago. Well I did this because it was fun. It was fun for me to challenge myself to go further in the sport that I like. Well what is driving me now really is, really realising my potential and there's room for improvement, there's huge potential for me to carry on so that's the main driving force. What got me to be a national athlete…I mean I'm proud to be a national athlete but that is secondary to me fulfilling my potential so that is really the main driving force.

As the purpose of elite sport is competition, and the outcome of achieving a win its goal, striving to achieve one's potential and perform is indeed necessary to remain in sport. Nevertheless, the athlete identity illustrated by A7 shies away from the typical assumption that success must be based on measurable achievements and social recognition (Ronkainen, Kavoura, & Ryba, 2016), but instead is a testament to how passion and the need to fulfil various personal goals (i.e., athletic potential), can be more powerful motivating factors to sustain participation in elite sport (Mallett & Hanrahan, 2004).

4.2.2 Hidden pressures

While it is indeed worthwhile to support athletes in meaningful pursuits that foster adaptive motivational constructs (e.g., self-efficacy, competence, enjoyment), which support prolonged engagement in elite sport (Mallett & Hanrahan, 2004), the reality is that resources are limited, and Singapore naturally needs to be selective in the support rendered to national athletes (Phan, 2013). That said, there is currently no clear distinction as to what these "limits" refer to. With a culture that prioritises economic development (see Chapter Three), funding restrictions for elite sport may be beyond contestation, but the baseline of *established* support services (i.e., sport science support, coaching, medical aid, training facilities, welfare programmes) currently in-place and

available, seemingly do not appear to be readily offered to national athletes who do not deliver medals. An example of this phenomenon was shared by PA3 during his most recent Paralympic campaign for Rio 2016:

> When we go for major games they will have like a physio or masseur. Initially the first few days when I wanted to go and see them they said you cannot come to us, you got to go through the team manager, the team manager has got to book a timing with us then you can come. So ok fine, until the next few days, me and [my teammate] were likely the only team to win a gold medal. Wah! Things changed already you know. Wah! When they see you they said, hey are you feeling better today? Anytime you want to come you can come you know…Just because you know that we are going to win, and we might be the only potential winner then you suddenly pay more attention to us. Why? At the end of the day you want to be in the picture…It is quite sad you know because at the Rio Paralympic games we didn't manage to compete. We had to withdraw the team and there was this [politician] who came for dinner together in the game's village, everybody sitting all together in one table. Only [our team] was seated away you know. Nobody came to sit with us you know. Even our own staff also treated us as transparent.

As portrayed by PA3, the aforementioned phenomenon would appear to be consistent with the shallow portrayal of sport noted by Horton (2001) and in Chapter Three, where national athletes who do not win, conveniently become invisible without the glare of a medal to attract support. Although the various support services would presumably be occupied with their priorities, working practices, and lines of accountability (Andersen et al., 2015), the "instability" of elite sport in Singapore, at this juncture, appeared to emanate from the practice of acquisition and instant gratification, rather than contribution, as staff seemed less focused on providing holistic support and more intent on seeking association with athletes who were already on the podium for the purpose of legitimising their professional reputation (Sam, 2015), as observed by SP4:

> I don't see any other sport scientist go down to training, only one once in a while you know. But they will always show up at times when they shouldn't be showing up, like during the SEA Games when they [athletes] are going to win a gold medal. Suddenly everybody shows up because the [politician] is there. So, you can see that unfortunately, the sports ecosystem is just skewed so wrongly because the main objective of any sport scientist should always be to improve the performance of the athlete and the sport, not about their own egos.

The medal-seeking mindset for athletes and their entourage may be born out of the need to conform to the competitive outcome-oriented culture cultivated by meritocracy, discussed in Chapter Three, as the pressure to constantly produce

results to satisfy policy-driven indicators overpowers basic legitimate concerns deemed unessential for athletic success. Such an atmosphere that prioritises performance outcomes has been found to have very real consequences for athletes in and beyond sport, as turning a blind eye to such behaviours may result in poor performance, career termination, poor mental health, and loss of athlete identity (Carless & Douglas, 2012; Ronkainen et al., 2016). In support, Koh-Tan's (2011) exploration of national sport associations in Singapore concluded that, beyond athletes' medal winning ability, there was little or no concern for their well-being or welfare during or after their sport career. This was reinforced by A6 who, upon completion of her Olympic campaign, found herself left far behind her peers, who had chosen more mainstream careers after completing tertiary education:

> Every time he [ex-teammate] sees me he's like, hey you really should just go and focus, focus on your career like [another ex-teammate] who is now a lawyer. So like basically that is where I'm a bit stuck. We have the people who had exited the sport earlier on and yeah, they are very very successful, and they are like yeah, there really wasn't a point because sport didn't give you shit. In fact, it probably took a lot out of you.

Having been immersed in their athlete roles, the focus on fulfilling policy-driven indicators to maintain their winning-elite status and associated support resulted in the neglect of other crucial domains, like post-sport career development, consequently leading to social and emotional difficulties as experienced by A6. Clearly, even the glorification of top athletes leaves little to be celebrated upon exiting their sporting careers as the conceptualisation of success sadly overlooked the "whole" person (Carless & Douglas, 2012; Ryan, 2018), as athletes were only valued for their winning abilities.

4.2.3 Athlete lifespan

The holistic and long-term development of elite athletes is a major undertaking for any country as elite sport systems strive to achieve a balance between fulfilling policy-driven indicators, the needs of athletes and their sport, and personal development outside the sporting arena (De Bosscher et al., 2015). With the myriad of developmental stages among and within sports, such as the age of peak performance and specialisation, effectively promoting a holistic view is challenging (Vaeyens, Lenoir, Williams, & Philippaerts, 2008). Although the sporting domains may be unique to the sport in question, the paths athletes travel outside of sport can provide substantial insight to support policies and athlete development (Andersen et al., 2015), especially in the authoritarian-paternalistic nation of Singapore (Horton, 2013), where citizens generally follow a progressive standard linear educational route, from primary school enrolment at approximately 6 years old, till completion of pre-university at approximately 21 years of age (Ministry of Education, 2018). In addition, during the transition from pre-university to higher education or joining the workforce, male citizens are

required to enlist in national service, a mandatory 2-year conscription in the armed forces (Ministry of Defence, 2019).

Regrettably, as short-term performance targets are given priority in Singapore, the long and arduous process of encouragement, nurturance, and training of individuals appears to be disregarded, in favour of the naturally gifted that already possessed high levels of capability. The impact of this eugenic practice was encapsulated well by A8:

> Outcome-oriented…I think this is drilled into us since we were young, from like PSLE [primary school leaving examination], O levels, A levels. Everything is based on results, like what school you get in, what job you get in, it's all based on [school] results and it really puts a lot of pressure on those certain examinations, like PSLE from a very young age. PSLE, it already determines the majority of your education career and if you don't do very well then you get streamed into a lower tiered school. And unless you work really hard, it affects you the rest of your life. So, I think they kind of transfer that into like athletes you know. They want them [athletes] to show the results so that they [sport organisations] can put the money in. To know that the money is a good investment. This is in most Singaporeans since they were young. So, I think that's the mindset that they [sport organisations] have.

Such an elitist mindset succumbs to the omnipresent demand to celebrate early future stars, but this premature fulfilment of policy-driven indicators is not without its drawbacks. As cautioned by Bloom (1985) and Vaeyens et al. (2008), no matter how gifted individuals may be at a young age, they may not continue to grow if the environment does not have the foresight or inclination to support long-term development. Furthermore, the focus on only gifted individuals may not be a good use of Singapore's limited sport resources, as they may not attain the anticipated outcomes expected of them, identified early in their childhood, which may make them vulnerable to mental health issues due to a lack of external reinforcement, resulting in compromised psychological well-being that impacts functioning (Biggin, Burns, & Uphill, 2017; Wolanin, Gross, & Hong, 2015). This premature assessment may also discount many other talented children who mature at a different pace (Vaeyens et al., 2008).

Indeed, the implicit pressure to perform from a young age to adulthood, in both education and in elite sport, weighed heavy on all athlete-participants' minds and, understandably, seemed to only intensify in relation to higher levels of education and competitive sport environments, as outcomes in the classroom and during competition needed to either be maintained or surpassed. Examples of this perpetual pressure were expressed by A4, when asked to share her experiences on Singapore's sports culture:

> The government, they support sports a lot but then as a student-athlete, it's quite stressful to like handle both work, studies and sports together because

> you have to do well in like your sports, but at the same time you have to do well in your studies, but they don't go quite well together actually…Because studies are for your future, for your work, but for sports right, I feel to me, it's more of like your interests, so they just don't get along quite well because you don't really have time to like do both well.

And by A3, who had similar sentiments:

> We are talking about hours in doing different things like holding a job and doing sports. It's a psychological stress in the sense that if I'm studying and I have exams, I need to worry about my exams, and I need to worry about training also. If I've got a comp and exams at the same time, it's worst because I'm worried I won't do well for comp because I don't train enough, then I train enough, but I don't clock enough hours for studying, I'm worried I screw up my exams. So there is that factor that I might actually have anxiety over two things just because I'm trying to juggle it. All these are unnecessary stress which can decrease our productivity, potentially not just as an athlete but overall as a functional human being. I guess that is one thing we have to take, stress at like multiple levels because Singapore is actually quite a competitive society.

On further investigation, athlete-participants' ages ranged from 19 to 33 (see Table 2.1), which fell within the range of peak competitive performance, identified by Allen and Hopkins (2015), in their systematic review of age and elite sport performance. Accordingly, these peak competitive years overlap with the risk of athletes' onset of mental disorders (Schinke, Stambulova, Si, & Moore, 2018), due to the concurrent mental and physical demands of, academic or other career paths, and sport pursuits. The risk of mental health disorders may be compounded by the overwhelmingly competitive, education-conscious, materialistic Singaporeans (see Chapter Three), and indeed research on elite sport in Singapore by Brooke (2014) and Peh (2014) observed dropout between the ages of approximately 16 to late 20s, the transition periods from pre-university, where young Singaporeans are competing for places in university and the workforce, or conscripted into national service.

It would appear that the national athletes in this book were examples of the exception, rather than the rule, but with the hidden pressures from remaining in elite sport, the efficacy of structures to support continued development in the sport system are questionable given the scenario presented by PA7:

> I met with someone who shared his concerns, like what if they [sport organisation] are not going to renew his [sport] scholarship and then what is he going to do? There was another friend of mine, he was offered the [sport] scholarship but he did not go ahead to take it. He chose to stick to his job while continuing training. Yeah because that is one of the concerns. So, what if you know your performance isn't good and you're dropped, and then you have to go out and find another job again.

Research on elite sport systems has emphasised how systemic changes are not always possible as they are deeply rooted in the historical, cultural, and political context of nations (De Bosscher et al., 2016). Indeed, this may be the case for elite sport in Singapore as the uncertain route for aspiring champions, identified as early as 1998 by Aplin, was apparently still impeded by the prevailing performance culture, and the need for a safety net of academic qualifications and mainstream careers, ultimately restricting the continued involvement in elite sport at the time when athletes should be peaking.

4.3 Summary

As Singapore works towards raising its own homegrown Olympic champions, investigating the interactions linking culture to the policies of the organisation and its influence on staff, as well as subsequent impact on athletes within the elite sport ecosystem, has illuminated several nuanced aspects of elite sport that may have been overlooked or disregarded. It appeared that affluent parents, who recognised the value of what sport had to offer and the intrinsic joy it brought their children, were necessary to kickstart and support athletes through their sporting development. As athletes matured, passion and self-determination eventually became insufficient to fend off the pressure to conform to the cultural stereotypes of education and a mainstream career, especially when performance dropped. Although best practices of an elite sport system are featured in Singapore, the way in which these practices were applied may not be in the interest nor consistent with a holistic and long-term athlete development approach, contrary to the organisation's aims, given the number of participants who described organisational behaviours that were more concerned about fulfilling policy-driven indicators of success. This emphasis on the measurable rather than the meaningful, has made it difficult to break the chains that bind Singaporeans to their materialistic obsession for tangible results, to the detriment of progress in elite sport, as the ecosystem revolves around the acquisition of medals rather than the contribution to holistic athlete development.

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5 Confounding Perceptions of Applied Sport Psychology

Nicholas de Cruz and Brett Smith

5.1 Subjectivity of Psychology

In many ways, sport psychology is still regarded as a young profession as it continues to be laden by the vague academic standards and various professional competencies that plague the discipline, with only recent scholarship that specifically examines and critiques its position as a true member of psychological practice (e.g., Portenga et al., 2017). Similar to the principles that govern sport performance, the connection between mind and body, where aspects of the mind (e.g., attitudes, emotions) affect our bodies physiology and behavioural responses, is widely accepted in the psychological community (Gee, 2010). However, during the process of sport psychology's rapid growth and expansion (Rejeski & Brawley, 1988), it would seem that its development was not accompanied by specific parameters which define and guide its practice. Fortunately, recent research on applied sport psychology, like that by Portenga et al. (2017) and Keegan (2016), addressed these issues and provided some traction for the profession's development by establishing a clearer image depicting the professional boundaries of sport psychology (see Chapter One). Indeed, although this scholarship is to be commended and does redirect the profession towards firmly establishing itself as a unique psychological practice in its own right, with the emphasis on service provision for the "healthy," rather than the "sick," it is difficult to circumvent decades of stigma, confusion, and doubt associated with applied sport psychology (Biggin et al., 2017; Zaichkowsky & Naylor, 2005). Moreover, what was the lack of understanding of applied sport psychology in the past for Western countries is in fact true today for Singapore, as the question raised by Dr. John Silva (1986), at his presidential address at the first Association for Applied Sport Psychology conference, "Who is a sport psychologist?," continues to remain unanswered and undefined in Singapore.

5.1.1 Omniscience

The complexity of Singapore's elite sporting environment, like all high-performance environments (Portenga et al., 2017), is entrenched with

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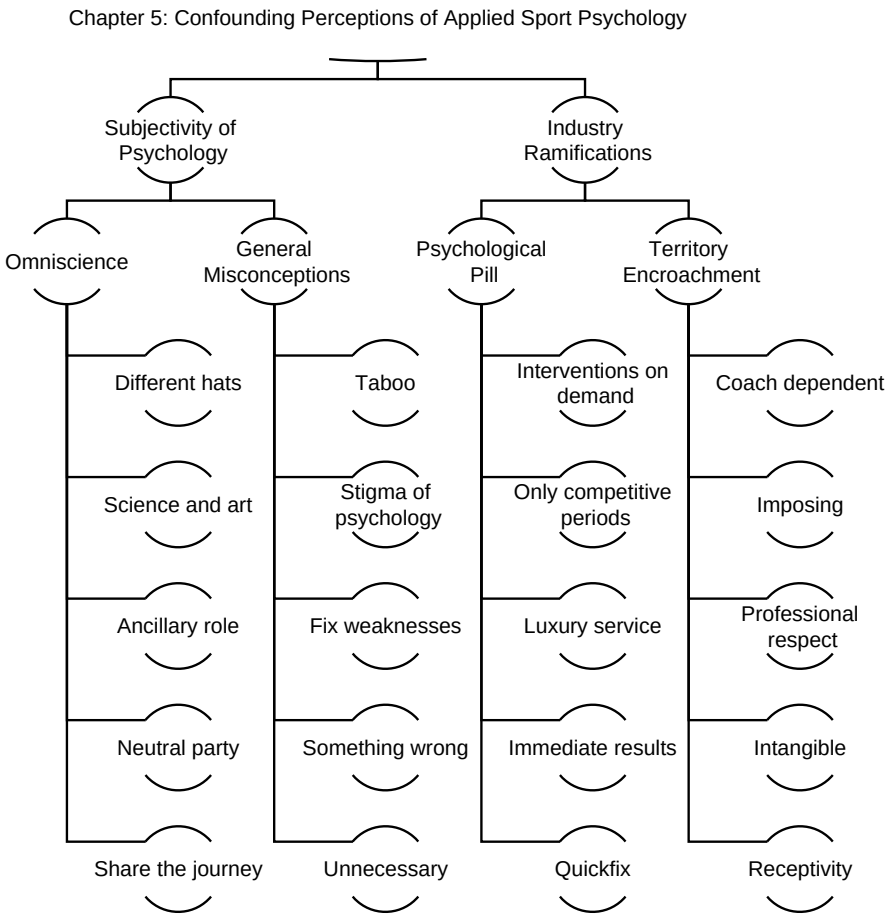

Figure 5.1 Thematic map of perceptions of applied sport psychology in Singapore.

challenging realities (see Chapters Three and Four), that warrant local sport psychology practitioners to appreciate this perplexing ecosystem and adopt different roles, that test personal and professional boundaries, as they navigate the labyrinth of its pragmatic-elitist-materialistic culture. Thus, as a truly interdisciplinary field (see Chapter One), it is indeed necessary for practitioners to draw upon a stock of knowledge and empirical evidence from not only psychological research, but exercise science and physical education as well (Foltz et al., 2015). However, it should be noted that the use of this knowledge is not limited to applied practice, as explained by SP3, but encompasses conducting research to contribute to the field as well as communicating this research to relevant stakeholders:

> Other than working with athletes, coaches, team managers, there's also needing to do research, so we are not just consumers of science. We want to be I guess contributors to science also, so there's research and then I guess projects also. The respective projects would be like setting up our psychology lab, developing mental health frameworks, coming up with a program that can, I don't know, help initiate foreign coaches into the Singapore culture…and then also making sure we keep up with our own professional development.

The provision of psychological services depicted by SP3 was consistent with the literature on applied sport psychology (FEPSAC, 2017; Wylleman et al., 2009), as recipients were not limited to athletes, but coaches and team managers as well, although the extent of this working relationship was unclear.

Given that the literature (e.g., Birrer et al., 2012; Portenga et al., 2017) highlights how practitioners support athlete performance at multiple organisational levels (e.g., collaboration with national sport associations, administrative staff, policy developers, other sport science practitioners), there was no mention from any participant regarding interventions rendered extending beyond coaches and team managers, in the Singapore context. Nevertheless, in managing the multiple roles and relationships sport psychologists contended with, it was necessary for practitioners to reflect on who the client was in this varied array of service recipients. Returning to the definition of applied sport psychology by Portenga et al. (2017) outlined in Chapter One and the researcher's main motivation of this research discussed in the Introduction and Chapter Two, sport psychologists in this book shared similar beliefs, being that the health and well-being of athletes were of foremost importance, portrayed by SP2 in his athlete-centred approach to practice:

> If you have your athletes' best interest at heart and you do what's best for your athlete then, I think, if your decisions are all driven by that then I don't think you can do wrong.

And by SP6, who went further to say how it would have been preferable to only focus on the athlete's needs and avoid the noise from other aspects of the performance environment:

> It is a very dynamic complex job actually. I'd rather just focus on the athlete but if I'm travelling as the team psychologist then I have an added role to make sure that these other aspects [issues that may impact athlete's performance] are dealt with so that it doesn't interfere with the athletes. So at the end of the day it's still the athletes as the focus that we [sport psychologists] care about, but everything else that sabotages their preparation is something we need to get involved somehow.

The need to broaden sport psychologists' competencies beyond the walls of sport-specific activities was shared among participants, including national athletes

and stakeholders, as the sole use of psychological skills training for athletes would likely be ineffective in tacking many of the issues (e.g., conflicts or frictions between athletes and coaches) that may "sabotage" the pursuit of sporting excellence (Birrer et al., 2012). While other responsibilities (i.e., cooking, driving, assisting coaches, and team managers) that extended beyond focusing directly on athletes' welfare were in fact perceived as an inconvenience for some sport psychologists in this book, as it interfered with their focus on servicing athletes only and essentially blurred the boundaries between the client and practitioner (Foltz et al., 2015), sport psychologists continued to be resolute in their commitment to fostering the best possible performance environment for athletes.

In discussing the multiple roles sport psychologists were expected to hold, the "neutrality" of their position as a sport science professional became apparent, as it comprised of expertise in research and application of performance and organisational psychology, mental skills and assessment, motor learning and control, and counselling (Winter & Collins, 2016). This "neutral position" was supported by SH8 in her explanation of how sport psychologists play many roles in and beyond the sporting performance domain:

> For a sport psychologist, I think that you know you play many, you wear many hats ok. You are like a scientist because you come out with the methods and how to help them and then you are a friend, and you are also a mentor you know, and you are a supporter. So, you play may roles. Yeah, that is how I see a sport psychologist should be and you are also a bit of a counsellor and all that. You cannot draw a line and say ok I'm only a sport psychologist now, after 6 o'clock I'm not. You can't do that, [because] it's very unique.

Although the practice of sport psychology may consist and be informed by different disciplines and theories, the central theme that many participants shared, especially national athletes, was that of a mediator, bridging the gaps (e.g., miscommunication, misunderstandings) between athletes and their entourage, specifically the coach and/or team manager. Having demonstrated the ability to engage in various roles and responsibilities as a sport psychologist, hence the neutrality of the position or as SH8 puts it, "wearing many hats," it was reasonable that sport psychologists were perceived to negotiate on behalf of the athlete as reiterated by PA3:

> Athletes sometimes may find it difficult to communicate with the coach or even the coach may find it…why am I [coach] always not able to deliver my message to the athlete. So, psychologists can be a person who is the middleman.

It is worth noting that though the extant literature (e.g., APA, 2019; Peterson et al., 2012; Portenga et al., 2017; Sebbens et al., 2012) emphasises the importance of having expertise in clinical psychology to address clinical issues that

impair performance, there was no mention of experiencing or treating clinical issues by the participants. In fact, it was unclear why the majority of psychological services discussed were generally limited to psychological skills training and the mediating role of the sport psychologist. Nevertheless, in interpreting the complex roles and responsibilities of sport psychologists, what stood out among athlete-participants was the importance of having a companion to share the journey, no matter the circumstances, as they persevered to achieve their potential as elite athletes. This was clearly expressed by A7 when asked about his expectations of a sport psychologist:

> I guess some expectations would be for them [sport psychologists] to at least understand what I'm going through…I think it's just to have somebody, I think having somebody to share like the journey and with like the little little details, like how I'm resting, how I'm sleeping, how I'm training, what's my mindset. I think all of this will, a lot of things comes with mindset, and I think having somebody to be there…will be very helpful.

5.1.2 General misconceptions

Being an interdisciplinary field that provides support services for performance excellence and therapy (Aoyagi et al., 2012; see Chapter One), there are understandably multiple pathways in sport psychology, with no perfect or right solution, to knowledge generation and intervention application (Herzog & Hays, 2012; Winter & Collins, 2016). This ambiguity is amplified by the various possible pathways to become an applied sport psychologist, as certification and academic standards differ across jurisdictions and countries (Watson II, Way, & Hilliard, 2017). For Singapore, the extent of this ambiguity is even more pronounced. Local researchers Araki and Balasekaran stated in 2009 that sport psychology in Singapore was in its infancy in comparison to more developed sporting nations, like the United Kingdom. Correspondingly, recent research exploring the attitudes of Singaporean athletes towards sport psychology consulting concluded in part that participants were not as open to seeing a sport psychologist as their British counterparts due to the lack of education and awareness regarding the benefits of sport psychology (Ong & Harwood, 2018). Thus, it would seem that, approximately 10 years later, sport psychology in Singapore has stagnated at its infancy stage, as it continues to be unappreciated and misunderstood as portrayed by SP1:

> After talking to a lot of people, they doubt psychology a lot, yeah they doubt it. I think psychology is something that is so intangible that sometimes you just like, what are you talking about?…It's not like physiology you know or physiotherapy, where everything is physical and tangible, and you see numbers and measures and everything. But I think its way more than that and I think psychology, being a science and art…psychology being so intangible, I think sometimes you don't know whether you are helping, and

> then it's also convincing other people to believe in what you do and sometimes you also don't know how much people understand, to have certain expectations of what psychology can do.

Although it was not explicitly mentioned by SP1, she and many other participants had alluded to the general lack of understanding and appreciation of sport psychology by the Singaporean sporting community (e.g., coaches, athletes, sport administrators). In a culture that values and prioritises tangible outcomes (see Chapter Three), these beliefs might have been woven into the expectations of a sport psychologist, like other sport science disciplines, where results and outcomes can be objectively seen, felt, and directly impact athletic performance (e.g., weight gain from nutritional supplements, increase in oxidative capacity and muscle mass from strength and conditioning).

In fact, the label of "psychology" itself carried its own negative stereotypical beliefs that extended to sport psychology as well, whereby seeing a practitioner within the athletic domain implied the athlete in question had a mental illness (Gee, 2010). This may partly explain why there was no mention of any experience with clinical disorders by any participant. Thus, this negative perception, identified by Ravizza (1988), seemed to persist in Singapore today and may similarly be the most significant barrier to working with sport psychologists, especially in an environment that equates good health with wealth, and wealth to success (see Chapter Three). This perception was clearly highlighted by PA4 when discussing why she believed sport psychology was not readily accepted in Singapore:

> I think there's a lot less emphasis on it because honestly, I don't think people see it as important you know or maybe athletes don't see the necessity of seeing a sport psychologist. Like they feel I can do it by myself, why should I see one and also perhaps there is that taboo of seeing a psychologist. Whether or not there is that word in front that says sport, but there is that word at the back that says psychologist. That means you have a problem and locally, culturally speaking, we have a lot of taboos. We are still very much an Asian country and our values are there and we think very traditionally, even though we are somewhat modern, but many of us are geared towards that sense where seeing a psychologist means you have issues.

In the same way, people suffering from a mental illness may avoid seeking help for fear of being discriminated against (Gee, 2010), athletes in Singapore shared the same sentiments; they would rather bear their problems alone, than approach a sport psychologist or even seek help from other stakeholders for that matter. In contrast to the prevailing definitions and concepts that emphasise how sport psychology is for the healthy, rather than the sick (e.g., Biggin et al., 2017; Portenga et al., 2017; Zaichkowsky & Naylor, 2005), participants believed that most athletes associated sport psychology with mental illness, rather than performance enhancement, solidifying seeking sport psychological support as a stigma or "taboo."

On a more encouraging note, athlete-participants in this book, who had worked with sport psychologists, exhibited an appreciation and receptivity to sport psychology services, as explained by A6:

> I mean obviously mental health is something that people are talking about more often and more openly now, but it's just really stupid sometimes when people react with ignorance. So like the other day after training, I was saying bye to [my sport psychologist] and I spoke to her for a short while and then my training partner, who is a new guy, said, oh who is that? Oh, my sport psych and then he was like, oh how long have you been seeing her. I replied, oh I think just this year, and he was, are you feeling depressed? I just was like, shut the fuck up, then I left.

However, these developments were rare as the predominant performance culture appeared to reinforce the taboo of psychology, prevalent in the minds of the general sports community, especially national athletes, as A6 elaborated:

> The whole time I was thinking that is the problem. Like someone will think that they it's only if I am depressed then I need a sport psych, which doesn't make sense. There was another athlete who used to train with us. Her mental [health] was like shit. So bad like she gets nervous for training and she cannot sit properly if there's going to be a hard session the next day, so it was ridiculous. So, I think she needs to talk to a sport psych. I think it will really help and she just refused to because she just kept thinking that there was something wrong with her…Up till now she hasn't reached out to a sport psych because she just doesn't want to, which is damn stupid, but it's that stigma and I think that is the first barrier that people have, to even reach out to a sport psych. I think that is [why] sport psyches also have to constantly assure people there is nothing wrong with you, it's ok… it's just like a coach for your brain.

While this refusal to seek help from a sport psychologist may have been born out of a variety of factors, such as lack of knowledge and awareness (e.g., SP1), and public or community attitudes (e.g., PA4 and A6), the stigma associated with mental health services was found to be the biggest barrier to athletes seeking help (Biggin et al., 2017). In addition, competing in such an outcome-oriented environment, that values medals over the health and well-being of athletes (see Chapter Four), it is reasonable to believe that seeing a sport psychologist would be avoided for fear of being branded as "mentally unstable," and consequently a liability to achieving the policy-driven indicators of sport organisations (Barker & Winter, 2014). More importantly, it should be acknowledged that the issue of a sports culture that downplays "weakness," in favour of superior performance and success, reinforces this stigma and may inadvertently overlook potential sub-clinical mental health concerns that could eventually become clinical disorders,

especially as the absence of a clinical condition is not an indicator of good mental health (Schinke et al., 2018; World Health Organisation, 2019).

5.2 Industry Ramifications

Trailing the blazing path of Singapore's rapid economic success (Aplin & Jong, 2002; Fry & McNeill, 2011), its ideal institutionalised elite sport system was hastily constructed on the foundations of advertising Singapore's international status as a world-class developed city in order to be associated with major developed nations and cash in on elite sport so as to broaden Singapore's entrepreneurial capacity, as well as present an appealing image of elite sport for public consumption (Horton, 2013; Teo, 2008; see Chapters Three and Four). It must be said that having no natural resources besides its people and its strategic geographical location as a maritime port connecting east and west Asia (Horton, 2013), there should be a strong sense of achievement and pride to have shaped and built Singapore, in a span of only five decades, from the tropical island it was to the developed city-state it is today. However, specific to elite sport, this swift and burgeoning development was seemingly not accompanied by reflection on the ramifications of its materialistic obsession for tangible results and the future implications on the industry and its stakeholders.

Returning to the *beliefs* of participants in this book and their *experiences* with sport psychology, it seemed that Singapore's obsession with tangible results overlooked the fundamental development of sport psychology as an applied science discipline given that broad and ambiguous statements, born from ignorance and the lack of awareness (e.g., the subjectivity and differing perceptions of psychology), led to an identity premised on quickly ameliorating mental health issues when all other physiological or technological avenues had been exhausted, rather than the application of performance psychology principles to support athlete development and well-being (Portenga et al., 2017; Schinke, Hancock, Dubuc, & Dorsch, 2006).

5.2.1 Psychological pill

As explained in Chapter Four, the increase in investment of financial resources for elite sport development was accompanied with the need to produce a return on this investment. While the returns or fulfilment of policy-driven indicators were primarily based on medals produced by athletes, stakeholders such as sport scientists, team managers, and coaches were similarly required to demonstrate the merits of their work in return for this increased investment (Fletcher & Wagstaff, 2009; Koh-Tan, 2011). Additionally, the need for tangible results associated with the misconceptions of sport psychology, raised in Chapter Three as well, fortify the prevailing Singaporean cultural perception that Pullen & Malcolm (2018) described in the exercise sciences as a "fetishization of the quantification of production such as scores, times and distances" (p. 495). This book has thus far demonstrated how the political and economic agendas of

Singapore have created a culture that clearly shaped its meritocratic society and likewise the outcome-orientation of Singapore's sporting community. As such, the fundamental flaw of this fetishization, with tangible, measurable, and statistical values, has restricted the practice of psychology to a narrow prescription discourse, similar to the phenomenon plaguing the "exercise is medicine" paradigm (Cairney, McGannon, & Atkinson, 2018).

Collectively, the necessity for a rapid turnover to produce tangible results, combined with the increasing investment in elite sport, has resulted in the medicalisation or "pill" of sport psychology, where interventions are expected to universally solve problems instantaneously and quickly demonstrate improvements in sporting performance, without any consideration for the unique performance environments that also influences athletic development and more importantly, personal health and well-being (Portenga et al., 2017). An example of this prescription discourse was expressed by A6 when asked to share her experiences and expectations of her significant encounters with sport psychologists:

> I just expected them to diagnose me straight away which yeah I mean like it's not super possible I suppose so that's one. So I guess that was me being impatient to a certain extent in a different way but I think I just really needed that framework, just to know that we were falling back on something because I just really wanted their guidance and I felt like we were going through the sessions just not doing, like it was quite aimless and that's what frustrated me. So, the moment we had the framework and I connected with the framework and agreed with it, like that was the one that would suit my mindset a bit better, then I was ok can already. So, I think it was just because the first few sessions were just very like, like it was just laying everything out and I was just a bit ok, but like you know what are we doing here?

The need to provide immediate and concrete or tangible solutions, a phenomenon generally associated with neophyte psychologists and a possible reason for the stagnation of sport psychology in Singapore, was necessary as sport psychologists needed to appear credible to justify their involvement with athletes (Fortin-Guichard, Boudreault, Gagnon, & Trottier, 2018; Tod et al., 2009). However, such practices, like hastily enacting a framework simply to suit the demands of an athlete, may lack careful consideration for the whys and why nots of such an action, as what is right in an absolute sense (i.e., giving the athlete control) may not always be in the best interests of the athlete (Winter & Collins, 2016).

Collaborative stances, such as the autonomy given to A6 which allowed her to dictate the terms of the psychology session, have been found to positively impact the therapeutic process, as athletes feel more confident in the interventions and in their ability to achieve the desired change (Tod et al., 2009). However, given that the reason for implementing the framework was at the behest of A6 simply to circumvent the frustration she was feeling from past "aimless" sessions, that in actuality seemed like attempts by the sport psychologists to build rapport and understand the athlete better, the limited relationship between A6 and her sport

psychologists made it difficult to achieve a strong collaborative relationship and the potential positive changes in performance that should follow. It was reasonable to infer that such behaviours of sport psychologists were less surprising as they needed to balance the pressures of fulfilling policy-driven indicators of success with tangible and measurable expectations of athletes within a short time frame of approximately three to six months as mentioned by several participants (although this cannot be confirmed). To this point, sport psychologists appeared to gloss over the conceptualisation stage of practice and moved directly from needs assessment to intervention, typically informed with popular or favoured strategies rather than a bespoke plan as in the case of SP1:

> For me, mindfulness is something that I can relate to a lot in the sense that it was something that was introduced to me a few years ago and then I ended up doing my thesis on it and then eventually I just grew the interest for mindfulness. [It] just kept on growing and the more I read about it, the more I felt like this is something that could really help…and I think that's why mindfulness is something that I can, something that I believe, try and yeah use to and apply it, you know with my sessions.

And, related to the expedient demands of sport stakeholders, SP4 explains how sport psychologists were usually seen as a last resort after coaches and athletes had exhausted all other sport science options to improve performance and required a quickfix:

> My colleagues and I used to joke, like we are prostitutes. Like when they [sport organisations] need us they will come and pay money and get us but when they don't, they just chuck you aside and you have to like, hey when are you coming?…There are policies that you don't agree with, that go against your own values perhaps, but you don't have a choice and there is just so much dirty work to do… It's not about fixing problems for them every single time but somehow when they [athletes] speak to you they need to feel like something has progressed. It cannot be, I talk to you and I feel the same. Then they [athletes] will say you are useless you know… Sometimes they [athletes] want, they are very specific when they say, I have this problem please help me now, and you can't say, oh you know I can't, I can't give you a solution but maybe when we go back I will put you through a 6 month long training program. Then they [athletes] will be like whatever you know. They don't understand that, because to them, it needs to happen in an instant.

Given the pragmatic nature of Singaporeans (see Chapter Three) and the outcome-oriented environment that tends to focus on the measurable rather than the meaningful (see Chapter Four), it seemed logical for both neophyte (e.g., SP1) and experienced (e.g., SP4) sport psychologists to adopt intervention strategies that were generally brief, irregular, familiar and focused solely on

performance enhancement, intentionally leaving other important psychological issues unexplored, in order to deliberately address policy-driven indicators of sport organisations and the demands of athletes, who are similarly under pressure to perform. It should be noted that the use of brief and irregular contact sessions, such as those alluded to by SP4, are normally used prior to competitions as a means to quickly ameliorate a single problem and provide immediate solutions to support short-term performance enhancement (Birrer et al., 2012; Pitt, Thomas, Lindsay, Hanton, & Bawden, 2015). Sport psychologists in this book appeared to be cognisant regarding the implications of these brief and irregular sessions and that a long-term relationship with athletes and making informed choices, based on athlete's unique needs, were crucial for competent and effective practice to facilitate desired behavioural changes for sustained performance enhancement (Birrer et al., 2012; Spruill et al., 2004). However, the focus on trying to accommodate the demands of stakeholders and athletes, in tandem with the prescription discourse associated with psychology practice, led to the expectation that seeing a sport psychologist was equivalent to the consumption of a pill that could miraculously cure any performance ailment instantly. Anything short of this miracle cure was deemed inadequate on the part of the sport psychologist.

5.2.2 Territory encroachment

Elite sport professionals whose roles involved tangible, measurable, and statistical values, such as that of physicians, physiologists, strength and conditioning coaches, biomechanists, nutritionists, and sport coaches, were generally understood by Singapore's sporting community, given its fetishization with quantification (McCalla & Fitzpatrick, 2016; Pullen & Malcolm, 2018). As such, the boundaries between these roles and the contribution each professional could make to support an elite athlete or team's performance was readily accepted (Fletcher & Arnold, 2011). However, for sport psychology, in addition to working with individual athletes, the limited quantification of work in comparison to that of disciplines or areas not above (e.g., physiology), the ambiguity of the role and responsibilities, along with the possible need to intervene at multiple organisational levels to address environmental, organisational and systemic issues that may be critical of other professionals (Portenga, Aoyagi, Balague, Cohen, & Harmison, 2011), made it difficult for the profession to be recognised and accepted as an integral member of the high-performance team, as experienced by SP3:

> I feel that there are some coaches who see us as encroaching in their territory, so they are not so willing to let their athletes work with us or let us be a part of the program. Cause a lot of times sport psychology needs to be embedded in the training program. It can't just be like, oh you know the athletes comes in a room and then that's it. So, when the coaches don't let us be a part of the program it gets hard… And then I think also there is this notion that sport psychology is only for athletes so when we try and want to

> support coaches or team managers or even like management in their processes, they are not as open. Oh no, you just work with the athletes can already, ok? But it's like upstream and downstream work, working with the athletes and coaches is like downstream but if upstream there is pollution or there are blockages, then downstream everything else is going to be affected.

Where professional practice is concerned, each member of the athlete's or team's entourage understandably is concerned about securing their position and role in order to keep their job (McCalla & Fitzpatrick, 2016), and having someone intervene and critique their effectiveness, may seem like an intrusion into their domain. All this may explain the defensive stance of coaches and managers as experienced by SP3.

Moreover, sport psychologists need to know when to intervene and learn to carry out their duties without obstructing or being a nuisance towards other stakeholders, who share the same goal of facilitating the best athletic performance for an athlete or team (Fortin-Guichard et al., 2018). The literature and participants like SH1, a former sport psychologist, have repeatedly raised the importance of building positive relationships with coaches in particular (e.g., Fortin-Guichard et al., 2018; Winter & Collins, 2015), so as to gain access to athletes and collaborate on congruent interventions that support the primary objective of all high-performance teams (McCalla & Fitzpatrick, 2016), being the well-being and performance of athletes:

> Sports psychology, as you know, its ancillary to the main coach and the team. So, the team of sport scientist right, the psychologist, biomechanist, nutritionist, physiologist, strength and conditioning coach, the team of sport scientists are always a support role to the main coach and the athlete. In other words, the sport science team and sport psychology included, you will always and should, rightly so, you should be under the command and control of the coach, the head coach. And if the head coach, if the head coach doesn't want your services, so be it. And I think that is the reality that we have to face, so with that reality the growth of sports science and sports psychology and the importance of it, a lot of it is dependent on the coach, the head coaches and whether they see the importance. When I was practicing sport psychology quite a lot of coaches did not see the importance or the necessity [of sport psychology].

Be that as it may, the extracts from SP3 and SH1 illustrate how sport psychologists appear to be aware that their role extends beyond simply servicing athletes only. While there were rare instances where coaches were open to working together with sport psychologists to better support athletes' development, it would seem that the prevailing need for sport psychologists to appear credible and provide immediate solutions prior to competitions to support short-term performance enhancement for athletes only (e.g., prescription discourse), made it

difficult for them to build a good partnership with coaches. Accordingly, as services rendered by sport psychologists were in close proximity to major competitions and only reserved for athletes with podium potential (see Chapter Four), the lack of time available to establish a trust-based relationship between coaches and sport psychologists appeared to also make it difficult for coaches to trust the potential utility and support that sport psychology had to offer. The genesis of this scepticism of coaches towards sport psychologists was explained well by SH5, when asked about the challenges sport psychologists may face in Singapore today:

> Yeah people, coaches, coming up and telling me, don't give me that bullshit, all this sport psych nonsense, I don't need it, I don't need any sport psychology. Yeah, sport physiology yes, testing yes, biomechanics analysis, but sport psychology no, I don't need it because things like physiology, biomechanics, they are very quantitative, you can actually see it you know, when there is a change. Psychology involves a little bit of the mind. It's very hard to really see it and coaches also have a fear that if something good happens that the accolades are given to the psychologist instead of the coach themselves.

Reaffirming the need for tangible and measurable values, SH5 highlights the prevailing perceptions of sport psychologists by coaches, where the ambiguity and subjectivity regarding the role and effectiveness of sport psychology unintentionally contributed to a lack of understanding and appreciation of the profession. These perceptions may also include other stakeholders in management, as previously mentioned by SP3. Furthermore, with the emphasis on short-term goals to acquire medals, rather than focusing on the long-term holistic development of athletes (see Chapter Four), many coaches may be afflicted with the need to validate their abilities by producing medallists, given that their effectiveness is generally measured in the achievements of their athletes (Jones, Evans, & Mullen, 2007; Ong & Zhao, 2019). In contrast, as there is currently no clear mechanism or indicator to measure how effective or ineffective a sport psychologist may be (Portenga et al., 2011), it would be difficult to hold practitioners accountable for athletic success or the lack thereof. Thus, with the pressure to validate one's professional abilities to remain credible and employed in the meritocratic and competitive nation that is Singapore, it would seem that coaches, and possibly other stakeholders may, out of necessity to protect their interests, have little or no inclination to work with sport psychologists for fear of losing the potential acclaim and professional validation associated with winning athletes. In pursuit of the coveted support and prestige from producing medals, Singapore's elite sport system not only pits athletes against each other, but professionals as well, resulting in an environment that appears to disregard unfamiliar approaches like sport psychology, in favour of practices (e.g., biomechanics, exercise physiology) that can transparently and statistically account for their contribution to athletic success, so as to avoid diverting acclaim attributable to coaches and other stakeholders.

5.3 Summary

This chapter has called attention to the critical issues surrounding the practice of sport psychology in Singapore. Although the profession was appropriately perceived by participants to facilitate performance enhancement in sport and possibly other areas of life, due to the complex and undefined boundaries of sport psychology, participants also believed that it was misunderstood by society, bearing the stigma of a clinical shrink associated with treating mental health disorders. As such, seeing a sport psychologist was believed to be damaging to an individual's status as an athlete, as it may portray weakness and threaten their position on the team, especially in a culture that values superior performance and success over health and well-being. For athletes who were open to seeing a sport psychologist, consultations were expected to adhere to a prescription discourse, like that of the consumption of a pill that had instantaneous results. Adding to these conflicting beliefs and the fact that sport psychology was difficult to quantify and only utilised for winning athletes prior to major events, sport professionals, in an attempt to secure their positions in Singapore's meritocratic society, were resistant to working together to avoid sharing the acclaim and prestige associated with medallists. Consequently, the uncertainty that accompanied these mixed perceptions of sport psychology resulted in a profession shrouded in doubt, apprehension, and scepticism by not just athletes but stakeholders like coaches and other sport scientists as well.

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6 Advancing the Practice of Sport Psychology

Nicholas de Cruz and Brett Smith

6.1 Clarifying the Profession

Sport psychology can mean a lot of different things depending on who you ask, as discussed in Chapter Five, where there was simply no consistent understanding or appreciation for the profession, having been defined by each athlete, sport psychologist, and stakeholder in this book according to their personal experiences and beliefs. Admittedly, this issue had been raised in previous studies (e.g., Lesyk, 2005), and attributed to the lack of a clear definition of the profession (Wylleman et al., 2009). To address this and create a shared understanding of sport psychology, Portenga et al. (2017) have presented a working definition outlining the profession's role, purpose, and potential contribution to sport (see Chapter One). However, a victim of its success, Singapore's elite sport system continues to operate without a shared understanding of sport psychology or what it entails and, as such, remains inappropriately utilised as it is informed by the meritocratic measure of effectiveness exercised by local sport organisations, being the attainment of medals, instead of supporting the development, health, and well-being of athletes. With Singapore's rapidly constructed institutionalised elite sport system (see Chapter Five) and purchasing power to procure Olympic champions (see Chapter Three), the efficacy or implications of its "successful" elite ecosystem has unfortunately escaped scrutiny and been accepted without question (see Chapter Four). As such, sport psychology in Singapore continues to be poorly defined by whom practitioners work with, rather than the application of ethical and competent performance psychology principles to support athletic development (Portenga et al. 2011). Indeed, Singapore's need for rapid growth in elite sport and benign neglect to allocate sufficient time for ethical reflection has resulted in serious consequences for the field of sport psychology, evident in Chapter Five, as sport psychology continues to remain trapped in its infancy, as it struggles to make its value known to the sporting community without an established identity.

6.1.1 The "right" people

Generally, for health professions, it is essential to provide an appropriate assured quality and well-regulated system of training, and this cannot be truer for sport

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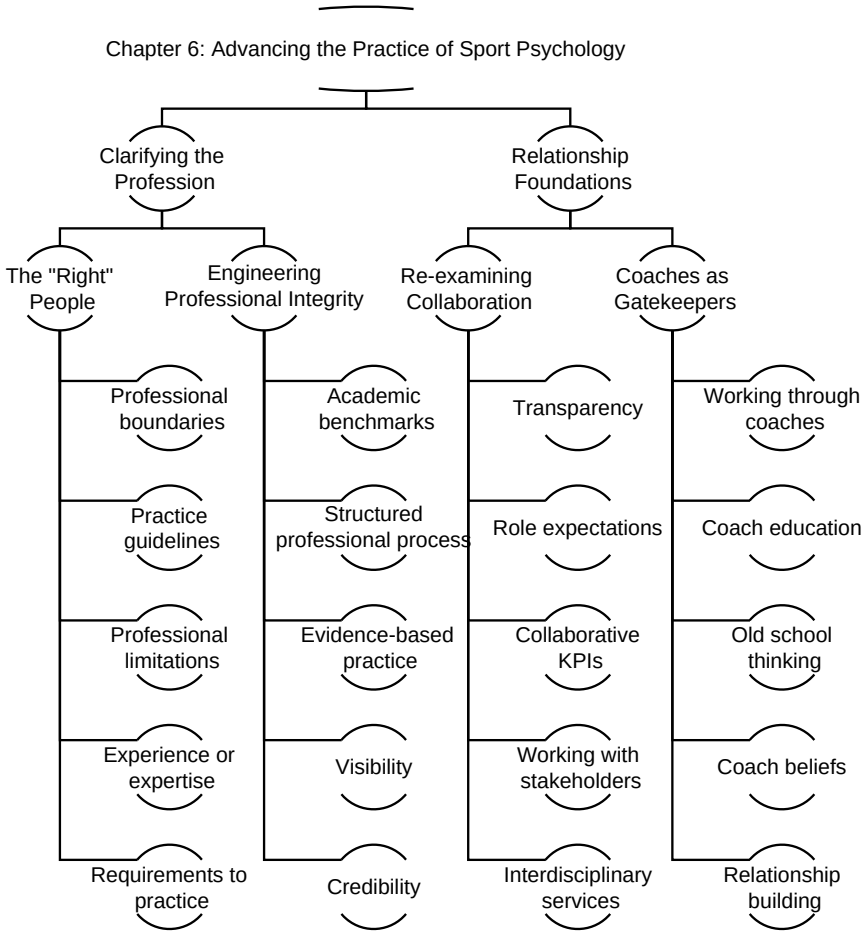

Figure 6.1 Thematic map of recommendations to advance sport psychology in Singapore.

psychology (Thelwell, Wood, Harwood, Woolway, & Van Raalte, 2018), given the range of complex multiple-roles and environments practitioners need to navigate for competent and ethical practice (see Chapter One). In many developed countries, the title of "psychologist" is legally regulated and protected, restricting the practice of psychology to credentialed professionals, and consequently deterring non-credentialed individuals from using the title or identifying themselves as psychologists and publicly practicing psychology (Watson II et al., 2017). For Singapore, although distinguished as a world-class developed city (Horton, 2013; Teo, 2008; see Chapter Three), the practice of psychology is not officially regulated by the government, and anyone may call themselves a psychologist and practice (Singapore Psychological Society, 2017). Specific to sport

psychology, participants in this book represent the majority of practicing sport psychologists in Singapore, ranging from executives to department heads, and private practitioners (see Table 2.2). Taking into consideration that there are only two sport organisations that engage sport psychologists that provide services for all and *only* national athletes in Singapore, namely, the Singapore Sport Institute and the National Youth Sports Institute (Sport Singapore, 2019), only one person in Singapore is registered with the Singapore Psychological Society and there were no indicators (https://singaporepsychologicalsociety.org/srp-membership-directory/), from interviews or otherwise, that any sport psychology participants were accredited with an internationally recognised governing psychological body (e.g., American Psychological Association, Australian Psychological Society or British Psychological Society). Considering these observed circumstances, there could be a possibility of individuals who have little or no training in performance or exercise sciences but identify themselves as sport psychologists (Carr, 2006), and may possibly have contributed to the misconceptions and ramifications of the profession discussed in Chapter Five.

While Singapore has an ideal institutionalised system to support elite sport (De Bosscher et al., 2015; Sport Singapore, 2019; see Chapter Four), it is also critical to have the right personnel in place at all organisational levels. That is because they represent the "tiny variations," yet vital variations, that influence the system, and are responsible for competently responding, creating, optimising, and maintaining an effective high-performance environment (Andersen et al., 2015; Arnold, Fletcher, & Molyneux, 2012). Specific to sport psychology, Henschen and Tenenbaum (2005) have highlighted the need to develop a psychological practice that is accountable and trustworthy, as anecdotal evidence is no longer sufficient or *ethical* to justify the efficacy of sport psychologists. Regrettably, the trend of using anecdotal evidence to justify "scientific" decisions still persists in Singapore's elite sport environment, as apparently anyone who has a minor background in psychology or counselling perceives themselves to be competent to contribute to psychological practice, as experienced by SP3 during an executive meeting with an NSA:

> In that meeting with the exco there was a lot of power tripping. There was a lot of, oh you know I have had how many years of experience doing this this this, what makes you think you know better than me. One of them was saying, yeah you know by the way just to let you know I also graduated with psychology and counselling degree blah blah blah, so I know exactly what to do. I'm like yeah but you're not behaving [as] if you had graduated in psychology. I challenged them and they didn't like it and word got around. One of the other excos that I can trust came up and said, oh by the way, we had this meeting [with] this person the other day and they said they did not like what they heard from you.

It would seem that without properly regulating the profession of psychology and coupled with the ambiguity (see Chapter Five) and eclectic nature of sport

psychology (see Chapter One), it has become easy for sport stakeholders to justify or legitimise decisions based on "experience." This allows sport stakeholders to do whatever feels right at the time, conveniently overlooking strict ethical standards and undermining the scientific credibility and validity of sport psychology, developed over years of professional research and practice (Hassmén, Keegan, & Piggott, 2016). To stress the significance and *persistence* of this unethical attitude in elite sport, SH2, a veteran scientist of Singapore's elite sport system, highlighted how this attitude was not limited to sport psychology professionals but sport scientists in general:

> You [sport stakeholders] think that you are using sports science, but in reality you are wasting it, because you are just treating everybody like a technician, not like a sport scientist.

To circumvent the "blurred lines" between sport psychologists and their professional relationships with athletes and stakeholders, there is a need to first address the sporting community's perception regarding the misunderstood identity of sport psychology, so as to provide the foundation to build its credibility and validity (Aoyagi et al., 2012; Tod, Hutter, & Eubank, 2017), and eventually, address the stigma attached to seeing a sport psychologist, rather than perpetuate the prevailing "technician" discourse, that portrays sport psychologists as only mediators for coach-athlete conflict or a dispenser of mental "band-aids" for short-term performance enhancement (see Chapter Five). While the extant literature (e.g., Aoyagi et al., 2012; Portenga et al., 2017; Thelwell et al., 2018; Tod et al., 2017) has suggested that it is crucial to have a clear consensus outlining the role and responsibilities of sport psychologists and subsequently communicating this consistent understanding to the sporting community to support the profession's credibility and validity, in Singapore it may be more prudent to first establish the requirements to be a sport psychologist, given that psychological practice is not regulated (Singapore Psychological Society, 2017), as having the right community of professionals can support the effective construction of a professional identity, built on competent and ethical psychological practice.

6.1.2 Engineering professional integrity

While there is a multitude of pathways across jurisdictions and countries to practicing sport psychology (Watson II et al., 2017), recent literature on the future directions and developments of the field recognise the importance of attaining professional accreditation to support the credibility and visibility of the profession internationally (Schinke et al., 2018). With this goal in mind, the *International Society of Sport Psychology* is working towards establishing an internationally recognised consultant registry to address the absent regulation of sport psychology services, as in the case of Singapore, to provide a minimum, satisfactory level of service provision that is ethical and professional (see Schinke et al., 2018). Interestingly, such efforts, though still in the developmental stages,

have not escaped the purview of veteran sport scientists in Singapore, like SH2, who recognised the importance of being properly qualified and trained to practice sport psychology, when asked about what criteria should be used to distinguish professional practitioners in Singapore:

> The permanent expectation should be a PhD. That must be the permanent expectation alright. If you look at the training a doctor goes through to become a specialist, we should not give ourselves any discount ok. So, this is one. I think that if, just like in medicine, you have medical officers who are non-specialists, you can start of as a master's degree person but that is not the end. A lot of people get into a comfort zone that they, you know, practice and then they find that they are influencing some athletes in the right way and they think that it is enough for them. I think at a personal level that is fine, if as a personal goal that is what you have that is fine. Professionally, I would say you are not fully qualified until you have a sport psychology, a PhD, that is number one. Number two is that a PhD is just the beginning. In other scientific disciplines, after your PhD you go through another 3 to 5 years of postdoctoral training before you are recognised as a principal investigator and I think that is the case [here] as well. So, after PhD I think it's 3 to 5 years of mentorship under someone who has been practicing for a long time before this person should [or] can independently manage an individual or team.

In addition to this consistent appreciation for a rigorous professional pathway (Schinke et al., 2018), it must be noted that getting the minimum qualifications, as highlighted by SH2, is not the end, as learning is a continuous and lifelong process, shaped by working with clients and colleagues, where, "learning leads to new application, then more learning, then more new application" (Lesyk, 2005, p. 181). This need for continuous learning and mentorship, corroborated by sport psychology pioneers, like SP6, emphasises the importance of needing the right professional community to guide practice and provide feedback that can support competent and ethical practice:

> Get a mentor, really, get a mentor. I mean you need to walk in the shoes of someone else who has gone through that path. Really, how else to describe it, there is no other way. You can't find it [various roles and responsibilities of sport psychologists] in textbooks. Textbooks won't teach you all these things…These are the nuances of the job that nobody teaches. So, mentoring, supervision is important, especially for those who are transiting from their postgrad studies to becoming a practicing psychologist.

Notwithstanding these insightful perspectives that theoretically would contribute to the credibility and validity of sport psychology (Schinke et al., 2018), it would be wise to note that not all sport psychologists may be self-aware. Research suggests that experience does not equate to competence, and simply being an

experienced practitioner may not translate to expertise (Portenga et al., 2011). This again emphasises the significance of having the right people who can support the effective construction of a respected professional identity. In addition, with the kaleidoscope of evolving educational programs, various training models, and multiple routes to accreditation, with a myriad of perspectives on best practices (e.g., Fletcher & Maher, 2014; Keegan, 2016; Portenga et al., 2017), compounded by the absence of psychological practice regulation (Singapore Psychological Society, 2017) and a culture that focuses on the measurable rather than the meaningful (see Chapter Four), the practice of sport psychology is precariously reliant on practitioners to be honest and forthright in their ability to competently meet the needs of clients and adhere to their personal ethical obligations (i.e., moral compass, employer code of conduct and regulations; Lubker, Visek, Watson, & Singpurwalla, 2012). Furthermore, based on the experiences of participants in this book, the professional identity of sport psychology appears to be shrouded in doubt, apprehension and scepticism (see Chapter Five), and with past and recent research suggesting that sport psychology in Singapore is still in its infancy (e.g., Araki & Balasekaran, 2009; Ong & Harwood, 2018), supplemented by the comments on the state of sport psychology by SH1, it would seem that current practices do not inspire confidence and it was unclear if practitioners today will be able to support the development of a competent and ethical professional practice of sport psychology:

> The fact that the head of sport psychology and all the people who have done sport psychology are somehow out of it [no longer employed as sport psychologists] and you know always just fresh blood, the turnover is very high…I would argue that the profession has not actually grown in Singapore…I think now even as a semi-outsider I don't feel the presence of sport psychology in Singapore any more than when I was working in sport psychology [approximately 18 years ago].

Clearly, there is a need to first establish an accepted standard of procedures and quality of care that holds sport psychology professionals accountable for the efficacy of services rendered to construct a professional identity that can be readily acknowledged by the sporting community, and address the neglected rigorous process of becoming a competent and ethical practitioner (Winter & Collins, 2016). For example, practice should be sufficiently "evidence-based," where professionals should be afforded the time, by either sport governing bodies or clients, to build rapport, and be able to transparently explain how they deliberated and integrated scientific research findings into their interventions with clients (Hassmén et al., 2016; Winter & Collins, 2016), rather than conveniently redefining and applying "evidence" based on familiarity, personal opinions, demands of clients and experiences (see Chapter Five).

Thus, as mentioned by SH2, hopeful sport psychologists should be held to a minimum standard by sport organisations before they can independently practice in the field. Rather than identify professionals by educational qualifications only

(e.g., doctorate, masters, degrees), as it may not cover the necessary practitioner skills and technical competencies expected of a sport psychologist (Harwood, 2016), professional certification or accreditation with internationally recognised and established psychological organisations (e.g., *American Psychological Association*, *Australian Psychological Society* or *British Psychological Society*) can be the first step to adequately assess the necessary competencies of hopeful sport psychologists and distinguish them from less competent individuals (Portenga et al., 2017), until such time that the International Society of Sport Psychology establishes their internationally recognised consultant registry (Schinke et al., 2018). Implementing clear boundaries that regulate the practice of sport psychology should be possible with the support and social-engineering capabilities of the Singapore government (see Chapter Three). With the governments backing, this should encourage individuals to attain professional certification that emphasises the scientific and professional parameters which define competent and ethical practices, and support a single professional identity built on the foundation of credentialed professionals (Watson & Portenga, 2014). More importantly, it will protect the public from malpractice and allow the field of sport psychology to achieve a consistent level of professionalism (Aoyagi et al., 2012), that currently remains dependent on the unregulated opinions and experiences of individual practitioners and sport stakeholders (see Chapter Five).

6.2 Relationship Foundations

Bearing in mind the considerable literature from various health services, such as counselling, psychology, and medical practice, that highlight the importance of building positive rapport for effective service delivery (e.g., Allen, Montgomery, Tubman, Frazier, & Escovar, 2003; Campbell, 2009; Sharpley, Jeffrey, & Mcmah, 2006), sport psychologists would be remiss to not appreciate the significance of establishing an effective professional relationship with both athletes and coaches (Lubker et al., 2012). Admittedly, other relationship dyads (e.g., physiotherapist, nutritionist, biomechanist, strength trainer, team manager) beyond just the coach-psychologist or athlete-psychologist do exist (Watson II et al., 2017), but as raised in Chapter Five and supported by the extant literature (Gardner & Moore, 2007; Speed, Andersen, & Simons, 2005; Williams & Andersen, 2012), successful sport psychology is highly contingent on a positive working alliance with athletes and their coach (Fortin-Guichard et al., 2018; Henriksen, Storm, Stambulova, Pyrdol, & Larsen, 2019; Winter & Collins, 2015). Again, that is not to say that other relationships are any less crucial as they all contribute to an athlete's development and should, at their core, demonstrate a care and understanding for the individual that goes beyond the sporting arena or conference room. Thus, there is a need to invest time and effort into building harmonious relationships with various stakeholders and sport scientists to arrive at shared agreements with the coach that centre around the provision of holistic and long-term support for *every* national athlete (Henriksen et al., 2019; McCalla & Fitzpatrick, 2016; Parham, 2016).

6.2.1 Re-examining collaboration

In considering the meritocratic culture that has been so much a part of life in Singapore (see Chapter Three), and the pressure to validate one's professional abilities to remain credible and employed via association with winning athletes (see Chapter Five), the idea of collaboration, open communication and compromise would understandably incur some resistance (Reid, Stewart, & Thorne, 2004). This "isolating effect" is further compounded by the nature of sport psychology work (Wylleman, 2019), which tends to be confined to working one-to-one with an athlete and, only when required, as a mediator or mental band-aid, consulting with the coach or, on occasion, other stakeholders (see Chapter Five). However, working in the mercurial performance environment of sport, professionals are required to adopt different roles and responsibilities (see Chapter One). Thus, a need to work in teams and adopt interdisciplinary approaches to support both performance enhancement and restoration is warranted. This is especially so if sport psychologists intervene at multiple organisational levels (Portenga et al., 2011; Wylleman, 2019). Indeed, beyond helping athletes, sport psychologists like SP5 did mention how he and other sport psychologists spent a significant amount of time meeting with coaches, NSA leaders, and fellow sport scientists, to devise ways to better support athletic performance, particularly for "high-tiered" athletes, which was taken to mean potential medallists or athletes ranked higher on the spexCarding spectrum (see Chapter Two), based on the cultural trends of fulfilling policy-driven indicators and measurable outcomes (see Chapters Four and Five):

> We do not just focus on one discipline, we work very closely with our own internal colleagues as well. So, whether is it sport psychology, sport nutrition, sport physiology, sport biomechanics or strength and conditioning or even sport medicine as well, we will all work very closely. So in Singapore we have this, or for the various sports, we have this meeting called functional sports program, FSP meetings, where each of the various sport scientists working with the sport will come together to have a meeting with the people in charge in the NSA. So, the high performance manager, the assistant, the technical directors, and then we discuss what can be done to help the high-tiered athletes to progress. So, we go and have an individualised program for each of them. So, this is something that we do on a regular basis as well for the various sports. So, this allows greater communication, more understanding, common understanding of what each of us are doing or each of us is doing to help this athlete. So, in terms of sport science, sport psychology, it's important, but we all work as a team to help the athletes.

It was reassuring to hear how sport psychologists do have opportunities and have allocated time to work in teams and collaborate on the best practices that can support the pursuit of sporting excellence. Overlooking the premise that these collaborations appeared to be limited to high-tiered athletes only, the common

understanding regarding athlete development, described by SP5, apparently has yet to translate to action based on the inconsistent experiences of both high-tiered and low-tiered national athletes (see Table 2.1), several sport psychologists and even observed by senior stakeholders like SH3, as pragmatism, materialism and the aforementioned isolating effect, born from the competitive outcome-oriented culture cultivated by meritocracy (see Chapter Four), compels individuals to ask the familiar Singaporean question, "Why should I do it, what's in it for me?" (McNeill et al., 2003, p. 38; see Chapter Three):

> You can see there is disconnect you know, the administrators putting their plans that are not getting fulfilled at a level that matters [was referring to athletes in general], so at that level what is happening? High performance managers, technical directors or coaches, are they getting the full understanding of why we [sport scientists] do certain things…As you go along you will start to see, hey actually these people are all not talking about the same thing, they have their pieces that are not aligned…Right now, because the people who are helming the projects don't really want to think alike, and we do need to think alike, but they are not trained, yeah they are not trained.

These points draw attention to the possible lack of action behind the unexamined words and behaviours of collaborative activities mentioned by SP5 that, while consistent with the ideal practice of high-performance teams (De Bosscher et al., 2015), seemingly have yet to incur any measurable (e.g., locally groomed Olympian) nor meaningful (e.g., focus on health and well-being of athletes) results (Brooke, 2014; Horton, 2002; Phan, 2013; Teo, 2008; see Chapter Three). It is therefore important to be aware of the difference between behaving like collaborators and acting on said collaboration (Pitt et al., 2015), as "successful" practices and "extensive" training may be meaningless without actualising shared goals and adhering to transparent policies that integrate and apply various multidisciplinary approaches (Reid et al., 2004).

Given the resource competitive culture of Singapore and the need for immediate results, where winning athletes have been portrayed as valuable resources or commodities for professional validation (see Chapter Five), the constant pressure to appear effective or successful may create a work environment predicated on distrust and insecurity, as professionals are forced to differentiate and validate their contribution to athletic success from other sport scientists or stakeholders in an effort to justify their professional efficacy (Reid et al., 2004). Considering these circumstances, if all stakeholders respect and value each professionals' clearly defined role and contribution to athletic development, working within the parameters of their expertise, with the assumption that they are indeed the *right experts*, the prevailing climate of distrust and insecurity can be altered to attain a more homoeostatic environment conducive for optimally supporting the pursuit of sporting excellence, not just for sport psychology, but other sport science disciplines as well.

In humility, sport scientists, or the researcher for that matter, may not always have all the answers, but whether professionals effectively work in teams or

individually, as remarked by Foster (2019), sport scientists simply act as a support and analytical lens for coaches to view and gain insight into the various developmental needs of athletes. Moreover, there is no doubt that micropolitics exists in Singapore's elite sporting ecosystem (see Chapter Four) and it would be reasonable to expect professionals to maintain the status quo of "behavioural collaboration" to keep their position, but this should not take precedence over the primary objective of helping professions, like that of sport science, which is to support and facilitate sporting performance and more importantly, athlete health and well-being, both physically and mentally, in and out of sport (Foster, 2019; McCalla & Fitzpatrick; 2016; Portenga et al., 2017). Reiterating the words of SP2, quoted in Chapter Five:

> If you have your athletes' best interest at heart and you do what's best for your athlete then, I think, if your decisions are all driven by that then I don't think you can do wrong.

Thus, rather than asking, "What's in it for me?," sport professionals at all levels should reorient this self-serving attitude and take responsibility for their actions, to support more meaningful collaborative practices, by asking the more pertinent question, "Am I acting in the best interests of my client, the athlete?," and if these actions are in tune with Singapore's high-performance sport system goals outlined in the latest spexCarding guide that state, "[it] endeavours to be fully behind *every* [emphasis added] Team Singapore athlete to support them on their journey of sporting excellence" (Singapore Sport Institute, 2019, p. 4).

6.2.2 Coaches as gatekeepers

Simply stated by PA1, the relationship between an athlete and coach has a profound significance for athletic development:

> I really feel it is important to have a supportive coach and a coach that you respect and the coach respects you as well, you know this mutual understanding between you and your coach.

Undeniably, with the coach's ability to shape athletes' personal experiences, a healthy coach-athlete relationship, built on trust and mutual respect, is essential to support the pursuit of sporting excellence (Barker & Winter, 2014). However, in the paternalistic society that is Singapore, people are naturally conservative, less outspoken, and guarded in their respect for hierarchical systems of authority (de Cruz & Duncombe, 2016; de Cruz et al., 2019; Horton, 2002, 2013; see Chapter Three), where athletes are similarly expected to submit to the authority of coaches (Ong & Zhao, 2019). Thus, athlete engagement or disdain for sport psychology services is highly dependent on the coach's perceptions and beliefs of sport psychology and what it has or has not have to offer (Barker & Winter, 2014). An example of this attitude was expressed by PA5:

> My coach was the one who introduced it [sport psychology]. So, he was the one who kind of rounded up the team and felt like you have to have a sport psych. So, it also depends on the coach you know, what they believe in. If the coach is more like old school then usually, they tend not to have sport psych…Yeah, I'm also lucky because it could have been a different coach and someone who just doesn't believe in science you know, like just train, just train. Yeah like old school, and just train hard can already you know, but I think he's definitely moving with the times.

This is where sport psychology consulting becomes challenging as historical or "old school" practices and current professional thinking may collide (Reid et al., 2004). In addition, the friction caused by Singapore's paternalistic culture (see Chapter Three), the credit clamouring of sport stakeholders in the effort to validate abilities and remain employed (see Chapters Four and Five), aggravated by the stigma, ambiguous identity, and dominant prescription discourse of sport psychology in proximity to competitions with medal potential (see Chapter Five), has made it difficult to establish a trust-based relationship between coaches and sport psychologists, to the detriment of athletes' health and well-being. In gaining entry to begin working with athletes and maintaining a positive working relationship, sport psychologists are indeed at the mercy of coaches, being the gatekeepers to other sources of support beyond "just training hard" (Mazzer & Rickwood, 2015; Sharp & Hodge, 2011), as acknowledged by SP2:

> A sport psychologist can only be as effective as the relationships they have with the various key stakeholders. You know, no matter how good a psychologist, if you are unable to have a good relationship with the athlete or with the coach, then your work becomes ineffective.

To circumvent the toxic practices within Singapore's elite sport ecosystem, which overemphasises the fulfilment of policy-driven indicators and a results-oriented culture that objectifies athletes to quantify success (see Chapters Four and Five), there is a need for all sport stakeholders, especially coaches being gatekeepers (Mazzer & Rickwood, 2015), to recognise and acknowledge these behaviours and attitudes as problematic, instead of downplaying or normalising the immoral standards that overlook athlete health and well-being (Biggin et al., 2017; Henriksen et al., 2019). That being said, sport psychology practice, being the focus of this research and affirmed by SH2, needs to demonstrate and advise coaches that support rendered should not be an exclusive commodity or quickfix for only high-tiered athletes just before a competition, but an indispensable and integral component that consistently supports long-term athletic development through working in partnership with the coach (Fifer, Henschen, Gould, & Ravizza, 2008):

> I think there has to be a lot of education and coach education is one of it, but you see you cannot just expect the user [coach and athlete] to change,

> the sport psychology community must come out and practice the right thing. That is what is missing today.

By devoting the time to communicate the value of sport psychology to coaches, through translating scientific strategies that can be of *practical* use or attending training sessions and being present and available for *every* athlete during peak and off-peak periods, sport psychologists can create opportunities to build rapport and establish trusting relationships with coaches. This can allow both parties to engage in honest discussions, drawing on the breadth and depth of knowledge from each other, and deliberating on how to best support sport-specific and personal needs of athletes (Biggin et al., 2017; Foster, 2019; Henriksen et al., 2019; Reid et al., 2004; Sharp & Hodge, 2011). Of course, in working towards establishing this coach-athlete-psychologist triad, sport psychologists need to acknowledge and address the potential barriers that may inhibit developing an effective working relationship (Arnold & Sarkar, 2015), such as the misconceptions and ambiguity surrounding sport psychology in Singapore (see Chapter Five), and as mentioned by SH2, have the right people to apply the right practices to ensure that sport psychologists do not overstep their boundaries and, advised by SP6, work within the parameters of the profession (see Chapter One):

> At the end of the day it is coach driven and it's important that we, as psychologists, not overstep our boundaries…Be very clear about your role.

6.3 Summary

The practical nature of the recommendations outlined in this chapter provides a foundation on which to start building a consistent professional identity of sport psychology, centred around providing competent, credible, valid, evidence-based and ethical support for every national athlete in Singapore. Through regulating the profession of sport psychology, professionals that have attained the minimum recognised standard to practice psychology can be differentiated from individuals who may not share the same responsibilities to deliver a competent standard of care or behave ethically, and importantly protect clients from potential malpractice. To continue this advancement and move on from infancy, the collaborative practices among sport scientists and stakeholders, especially coaches, need to be receptive to the potential of sport psychology and together enforce Singapore's high-performance sport system goals outlined in the latest spexCarding guide that state, "[it] endeavours to be fully behind *every* [emphasis added] Team Singapore athlete to support them on their journey of sporting excellence" (Singapore Sport Institute, 2019, p. 4). Moreover, given the paternalistic culture of Singapore and its government, there is a need for industry leaders to acknowledge and address the toxic outcome-oriented culture that pervades elite sport and transparently answer the fundamental question, "Am I acting in the best interests of the client, the athlete?" and, leveraging on

the consistent professional identity of accredited sport psychologists, establish meaningful collaborative practices and shared agreements that are harmoniously aligned to collectively foster holistic and long-term sustainable athletic development.

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7 The Quantification of Qualitative Information: Methodology and Mixed-Methods Part II

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7.1 Quantitative Sample

Upon completion of the qualitative analysis and construction of the Singapore Sports Culture Questionnaire (SSCQ) and Singapore Sport Psychology Questionnaire (SSPQ), the first phase of sampling for the exploratory factor analysis (EFA) began with the use of purposive sampling coupled with snowball and convenience methods. Specifically, for the SSCQ, typical case purposive sampling was used and had two inclusion criteria whereby participants were required to be at least 18 years or older and a Singapore citizen, permanent resident, or reside in Singapore. As the purpose of this scale was to understand Singapore's sports culture from the perspective of the "average" person, inclusion criteria were quite broad as anyone living in Singapore could participate.

Alternatively, for the SSPQ, criterion-based purposive sampling was used and had an additional inclusion criterion of needing to be involved or have experience in sport and/or Singapore's sporting industry (e.g., athlete, parent, educator, coach, administrator, and enthusiast). Criterion-based sampling was necessary as the questions in the SSPQ were sport-specific to address sport psychology research objectives, and thus required participants to have some sporting experiences and involvement in sport in order to answer them. Interestingly, during the recruitment process, some participants informed the researcher that they had found some of the questions in the SSCQ to be too sport-specific and did not feel confident to answer them. To address this, during the second phase of sampling for the confirmatory factor analysis (CFA), only criterion-based sampling, in tandem with snowball and convenience methods, were used for both questionnaires administered concurrently.

EFA and CFA are best used with large samples, typically in the hundreds, to obtain accurate results (Flora & Flake, 2017). Unfortunately, what constitutes an appropriate sample size is inconsistent across the literature as, due to the various inconsistent variables and factors across models, its adequacy cannot be determined until after the data has been analysed (Henson & Roberts, 2006; Schmitt, 2011). However, there is a general consensus in the literature that a sample of at least 300 is sufficient in most factor analyses (Comrey & Lee, 1992; Reise, Waller, & Comrey, 2000; Yong & Pearce, 2013; Worthington &

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Table 7.1 Participant Demographics of EFA, CFA, and ANOVA

	EFA		*CFA*		*ANOVA*[a]
	SSCQ	*SSPQ*	*SSCQ/SSPQ*		
			Sample A	*Sample B*	
N	394	376	253	250	348
Male	189	179	144	140	189
Female	205	197	109	110	159
M_{age} (SD)	31 (11)	32 (12)	33 (13)	32 (14)	29 (12)
Age Range	18–68	18–76	19–74	18–76	18–76
M_{years} Sport Involvement (SD)	3 (2)	9 (9)	11 (9)	14 (10)	11 (9)
Nationality					
Singapore Citizen	379	357	240	237	333
Singapore Permanent Resident	10	12	9	8	11
Others[b]	15	7	4	5	4
Sport Involvement					
General Public	128	–	–	–	–
Elite Athlete	50	36	93	93	179
Recreational Athlete	135	174	88	87	169
Parent of Athlete	22	39	30	16	–
Sport Industry Professional	35	32	22	35	–
Sport Psychologist	–	4	1	3	–
Others[c]	25	91	19	16	–

[a] All participants who were not elite or recreational athletes were removed and 13 outliers (as determined by having a z score of ±3) were also removed, leaving a final sample of 348 athletes.
[b] Other nationalities include foreigners who work in Singapore.
[c] Other sport involvement includes a very broad range of experiences from volunteers to retired national athletes who likely did not identify with the categories presented.

Whittaker, 2006). Furthermore, it was favourable to obtain a large sample to reduce scale variance and increase accuracy (Tabachnick & Fidell, 2001). As such, the use of snowball and convenience sampling methods aided the collection of data to achieve a sufficient sample. This was carried out by the researcher who utilised social networking sites (i.e., Facebook, Reddit), emailed personal contacts, family, and friends, visited NSAs and distributed flyers with QR codes, and with permission placed posters at various sport organisations. On occasion, the researcher requested participants to share the questionnaires with family, friends, and colleagues, who also in turn referred more potential participants. A summary of participant demographics can be found in Table 7.1. It should be noted that the researcher was mindful to contact different groups of potential participants for each phase of sampling to avoid using the same dataset to verify the CFA (Flora & Flake, 2017).

7.2 Questionnaires

Considering the need to achieve a sample of at least 300, designing an internet-based questionnaire was suitable and convenient to fulfil the requirements of factor analysis and address the research objectives as systematically and efficiently as possible (Jones, 2015). In developing this new measurement instrument, the researcher was aware of how even a meticulously designed questionnaire can portray a highly misleading picture of the study phenomenon if participants misinterpret or are unable to relate to the questions asked (Kelle, 2006). Fortunately, the thematic analysis had already identified culture-specific knowledge in the form of codes and, informed by inductive reasoning, were used to produce an item pool to measure perceptions of sports culture and sport psychology specific to Singapore.

The (dis)order of items within each thematic category represents the unpredictable and iterative process of interpretation and deliberation between codes identified by the researcher and experiences shared by participants. By making these early stages of item development transparent, the researcher was able to illustrate how originating items were conceptualised from codes and which domains of inquiry were privileged above others, revealing assumptions and theoretical positions of the researcher and this research (Rowan & Wulff, 2007). A summary of codes and subsequent thematic categories and questionnaire items, for the SSCQ and SSPQ, can be found in Tables 7.2 and 7.3, respectively. For example, the code "Public validation" informed the SSCQ item, "Public support for sport has improved," and the code "Share the journey" informed the SSPQ item, "Effective psychology requires time and effort."

To measure these items or observed variables, a five-point Likert scale from one (strongly disagree) to five (strongly agree) was used to rate them. According to Kline (2011), Likert scales with at least five points are favourable as it gives participants the autonomy to reasonably discriminate between scale values. In addition, each theorised factor had an average of 20 items to allow for a greater variation in responses (Roberson III, Elliott, Chang, & Hill, 2014), especially as such context-specific measures, to the researcher's knowledge, had not been established before. Regarding the labelling of theorised (EFA) and latent (CFA) factors, concise statements were constructed to represent their respective thematic content (e.g., Questions relating to perceptions of sport in Singapore). For participants' convenience and given the number of items, the researcher was mindful to keep the questions brief but comprehensive (Carpenter, 2018).

This process of scale development led to the construction of a 100-item SSCQ and a 127-item SSPQ. To evaluate the face and content validity, clarity, conciseness, grammar, reading level, and redundancy of items (Worthington & Whittaker, 2006), four industry experts (sports manager, strength and conditioning coach, physiotherapist, and sports doctor) and four practicing sport psychologists were invited to review the SSCQ and SSPQ, respectively. Collectively, the expert panel for the SSCQ had 62 years of experience in Singapore's sports industry (M = 16, SD = 6), with professional qualifications ranging from degrees to doctorates. Collectively, the expert panel for the SSPQ

Table 7.2 Development of Items for SSCQ from Thematic Analysis and Expert Panel

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
	Public Perceptions of Sport				
Sporting nation	Singapore is a sporting nation	100%	100%	100%	No action needed
Growing culture	Sport is a growing culture in Singapore				
Recreational over elite	There is only attention to sport at major games				
Hype periods	Sport in Singapore is vibrant				
Public validation	Public support for sport has improved				
Growing culture	Sport services for athletes have improved				
Sport incentives	Elite sport is thriving in Singapore				
Recreational over elite	There is a lack of community engagement				
Public validation	There is no sports culture in Singapore				
Competitive nation	Sport is a worthwhile pursuit				
Overseas is better	Being an athlete overseas is better				
	Value and "Worth" of Sport				
Growing culture	Emphasis is only for a healthy lifestyle	100%	100%	100%	No action needed
Sport incentives	Sport incentives are limited in Singapore				
Recreational over elite	Sport is general seen as a "therapy"	100%	25%	100%	Refined to, "Sport is generally seen as a 'therapy'"
Sporting nation	Singapore hosts enough sporting events	100%	100%	100%	No action needed
Nation building	Sport is useful for national development				
Sport incentives	Sport is seen as a secondary option				
Recreational over elite	There is a large recreational sporting population				
National pride	There is national pride for winning in sport				
Sport incentives	Athletes should perform with increased support				

(*Continued*)

Table 7.2 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Stakeholder agenda	Increased funding makes sport more sustainable				
Political agenda	The government has an agenda for sport	100%	100%	100%	No action needed
Claiming success	Athletes are used to fulfil political agendas				
Quantifiable	There is a need for tangible results to gain support				
Celebrate success	Sport investment must be justified with results				
	Surviving as an Athlete and Being "Successful"				
Academics	Academic success leads to future success	100%	100%	100%	No action needed
School for survival	Academic success is more crucial than sport				
Dominant culture	Exam periods inhibit sporting performance				
Practicality	It is difficult to excel in both school and sport				
Conformity	National service does not hinder sport performance				
Uncertainty	A career in sport is very uncertain				
School for survival	Between school and sport, school is a priority				
Wealth as success	Singaporeans are competitive				
Transactional	Money is measure of success in Singapore	100%	25%	100%	Refined to, "Money is a measure of success in Singapore"
Wealth as success	Financial security is desired as soon as possible	100%	100%	100%	No action needed
Meritocracy	Nothing is free in Singapore				
Transactional	Success is measured in tangible outcomes				
	Sporting Organisations and Infrastructure				
Sport support	Athletes are given good support	100%	100%	100%	No action needed
Justify support	Support must be justified before it is given				

(*Continued*)

Table 7.2 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
KPI emphasis	Support is given only after successful results				
Sport support	Organisations have an athlete-centred approach				
Transactional	Sport organisations have fostered success				
Transparency	Athletes' success is a result of sport organisations				
Transparency	Sport organisations are transparent with athletes				
Short-term approach	Leaders of sport organisations lack relevant skills				
Justify support	Policies support athletes' development				
Transparency	All athletes are treated fairly and equally				
KPI emphasis	There is a general fear of failure in sport				
Transparency	Organisations and athletes communicate well				
Short-term approach	Sport goals are short-sighted in practice				
Short-term approach	Succession planning in organisations is sufficient	100%	100%	100%	No action needed
Sport support	A coach is key to an athlete's success				
Sport support	A healthy coach-athlete relationship is important				
Justify support	The coach's behaviour will affect the athlete				
Parents' perceptions	What parents think of sport is important				
Parents' influence	Parents are always supportive of sporting pursuits				
Transparency	Sport professionals work in isolation				
Transparency	Sport professionals communicate with each other				
Transparency	It is difficult to determine who is a sport "expert"				
Transparency	Sport is governed by sport professionals				

(*Continued*)

Table 7.2 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Transactional	Sport organisations are professionally managed				
KPI emphasis	Sport professionals focus on athlete development				
Transactional	Athletes' well-being is a priority for organisations				
KPI emphasis	Professionals need to be associated with winners				
Justify support	Only champions are the priority for organisations				
Sport support	There is a good emphasis on athlete development				
	Being an Athlete in Singapore				
Sporting resume	Being a national athlete is prestigious	100%	100%	100%	No action needed
Uncertain future	It is easy to be a national athlete in Singapore				
Role model	There is national pride in representing Singapore				
"Same faces"	The same athletes are always presented in media				
"Same faces"	Only medal contenders are seen by the public				
Role model	Singapore has many role-model athletes				
Established	Being a role-model athlete requires prior success				
"Same faces"	Athletes are accurately represented in the media				
Sustainability	It is easy to be a full-time athlete in Singapore				
Future prospects	Athletes can maintain a full-time job and compete				
Uncertain future	Employers are supportive of sporting pursuits				
Sustainability	A career as an athlete is sustainable in Singapore				
Student-athlete	The education system supports student-athletes				
Student-athlete	Sporting performance takes priority over school				
Personal funding	Financial support is essential for sporting success				

(*Continued*)

Table 7.2 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Future prospects	Sport is a means to gain entry to elite schools				
Waste of time	Athletic success is valued by potential employers				
Student-athlete	Academic scholarships are easily available	100%	100%	100%	No action needed
Uncertain future	Singaporean athletes are a priority in Singapore				
Dropout timeline	Drop in sporting success leads to support removal				
Diminishing returns	There is no real benefit to being a national athlete				
Medal expectations	Sport outcomes are prioritised over the process				
Medal expectations	Athletes are expected to always perform				
Waste of time	Time and effort invested in sport is always valued				
Waste of time	Sport is not a waste of time and energy				
Medal expectations	Support given is dependent on attaining medals				
Personal funding	It is easy to find sponsors to fund athletic pursuits				
Medal potential	Athletes need to earn support before it is given				
Medal potential	Sports with medal potential are prioritised				
Established	Organisations associate themselves with winners				
Medal potential	Medals are an indicator of organisational success				
Sustainability	Athletes have it easy compared to past athletes				
Sustainability	Support systems are taken for granted by athletes				
Established	National athletes are entitled to sport support				

[a] Each response of "yes" contributed 25% to the total score (e.g., 100% indicates that all four experts endorsed the item relative to its respective category), whereas "no" or "unsure" would be a null endorsement and have no value.

Table 7.3 Development of Items for SSPQ from Thematic Analysis and Expert Panel

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
	Perceptions of Sport Psychology				
Different hats	It is unclear what a sport psychologist does	100%	100%	100%	No action needed
Science and art	A sport psychologist improves sport performance				
Science and art	Sport psychology is a science and an art				
Neutral party	Sport psychologists are a neutral party	75%	50%	50%	Refined to, "Sport psychologists are impartial and neutral"
Neutral party	A sport psychologist is a listener and an advisor	100%	100%	100%	No action needed
Fix weaknesses	Sport psychologists can address clinical issues				
Ancillary role	Sport psychology gives athletes a mental edge				
Different hats	The role of sport psychology is clearly defined				
Science and art	Sport psychologists are qualified psychologists	75%	50%	50%	Refined to, "Sport psychologists are licensed psychologists"
Science and art	All sport psychologists are qualified to practice	100%	100%	100%	No action needed
Science and art	Practicing sport psychology involves trial & error				
Fix weaknesses	Sport psychology is crucial for sport performance				
Unnecessary	Only elite athletes should see sport psychologists				
Ancillary role	Sport psychology is crucial for athlete growth				
Science and art	Sport psychologists receive adequate training				

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Different hats	The role of sport psychology is clearly defined	50%	50%	50%	Removed due to limited relevance
Something wrong	Seeing a sport psychologist reflects badly on you	100%	75%	75%	Refined to, "Seeing sport psychologists reflects badly on client"
Taboo	Sport psychology is only for the mentally weak	100%	100%	100%	No action needed
Stigma of psychology	It is unfavourable to see a sport psychologist				
Unnecessary	Sport psychology is unnecessary for performance				
Stigma of psychology	Sport psychology is not intrusive	100%	50%	25%	Refined to, "Sport psychology is innately invasive for clients"
	Impact of Singapore's Sports Industry on Sport Psychology				
Immediate results	Good performance is credited to sport psychology	100%	100%	100%	No action needed
Immediate results	Sport psychology is blamed for poor performance	100%	100%	75%	Refined to, "Sport psychologists are blamed for poor performance"
Coach dependent	Coaches are supportive of sport psychology	100%	100%	100%	No action needed
Receptivity	Coaches believe sport psychology is unnecessary				
Professional respect	Sport organisations work well with psychologists				
Professional respect	Sport organisations accept psychologists' advice				
Luxury service	Sport psychology is a luxury service				

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Only competitive periods	Sport psychology is only for medal contenders				
Luxury service	Athletes are forced to see a sport psychologist				
Only competitive periods	Sport psychology is limited to national athletes				
Interventions on demand	Sport psychology services are taken for granted				
Luxury service	Sport psychology services are under-utilised				
Quickfix	Impact of seeing a sport psychologist is instant	100%	75%	75%	Refined to, "The impact of seeing a sport psychologist is instant"
Quickfix	Results from sport psychology takes time	100%	100%	100%	No action needed
Only competitive periods	Sport psychology is utilised only at major events				
Quickfix	Sport psychologists are used only as a "quickfix"				
Luxury service	Athletes with potential need sport psychology				
Luxury service	All athletes have access to a sport psychologist	100%	75%	75%	Refined to, "All athletes at any level have access to a sport psychologist"
Immediate results	"One-off" workshops are beneficial to athletes	100%	100%	100%	No action needed
Intangible	Sport psychologists must provide tangible results				
Quickfix	Athletes require regular psychological services				
Receptivity	There are too few sport psychologists				

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Receptivity	There is a need for more sport psychologists				
Professional respect	Sport psychology is not taken seriously				
Receptivity	A career in sport psychology is not worthwhile				
Receptivity	There is limited knowledge of sport psychology				
Intangible	The benefits of sport psychology are unknown	100%	100%	100%	No action needed
Receptivity	"Sport" title is restrictive for the profession				
Professional respect	Sport psychology is not essential to the industry				
	Current Practice of Sport Psychology				
Immediate results	Clients expect instant results after a consultation	100%	100%	100%	No action needed
Interventions on demand	Sport psychologists need to appease the client				
Receptivity	Clients should practice skills after consultation				
Ancillary role	Interventions should be athlete-centred				
Interventions on demand	Interventions must conform to clients' demands				
Practice guidelines	Consultations should be regular & consistent				
Professional respect	Sport psychologists are recognised as "experts"				
Interventions on demand	Clients' expectations must be fulfilled				
Immediate results	Sport psychologists facilitate performance goals				
Intangible	Clients tend to be normal to optimal functioning				

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Ancillary role	General practice fosters optimal performance	50%	50%	50%	Refined to, "Regular client practice supports athletic growth"
Professional respect	The athlete is always "the client"	100%	100%	100%	No action needed
Different hats	Sport psychology service extends beyond athletes				
Coach dependent	Coaches work well with sport psychologists				
Professional respect	Managers work well with sport psychologists				
Receptivity	Organisations accept sport psychology expertise				
Receptivity	Athletes are receptive to mental training				
Receptivity	Coaches are receptive to mental training				
Intangible	Psychology is as important as strength training	100%	75%	75%	Refined to, "Psychology is as important as physical training"
Interventions on demand	Psychological theories are tailored to suit athletes	75%	75%	75%	Refined to, "Interventions are tailored to suit athletes"
Share the journey	Effective psychology requires time and effort	100%	100%	100%	No action needed
Intangible	The benefits to sport psychology are unknown	50%	50%	50%	Refined to, "Clients recognise the benefits of sport psychology"
Receptivity	Sport psychology has a lasting impact on athletes	100%	100%	100%	No action needed

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Intangible	The practice of sport psychology is tedious				
Receptivity	Effectiveness of psychology is athlete-dependent				
Quickfix	Athletes are responsible for their mental training				
	Being an Effective Sport Psychologist				
Professional boundaries	Sport psychology guidelines are always observed	75%	75%	75%	Refined to, "Psychology ethical guidelines are always observed"
Professional boundaries	The boundaries of sport psychology are clear	100%	100%	100%	No action needed
Professional limitations	Psychologists must respect professional limitations				
Experience or expertise	Psychologists' personal beliefs influence practice				
Evidence-based practice	Evidence-based practice is crucial to be effective				
Evidence-based practice	Tangible evidence will support psychologists				
Academic benchmarks	Sport psychologists require continuous learning				
Academic benchmarks	Professional degrees are important for practice				
Credibility	All psychology degree holders are "qualified"	100%	75%	75%	Refined to, "All psychology bachelor's degree holders are qualified to practice psychology"
Credibility	Sport psychologists require advanced degrees	100%	100%	100%	No action needed

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Experience or expertise	Experience is more important than expertise				
Requirements to practice	It is necessary to be registered to practice	100%	50%	50%	Refined to, "It is necessary to be licensed to practice"
Visibility	Sport psychology practice is easily understood	100%	100%	100%	No action needed
Structured professional process	There is no structure to sport psychology practice				
Visibility	Sport psychologists benefit from athletes' success				
Professional boundaries	Being affiliated with winners is important				
Professional boundaries	Success of sport psychology is athlete-dependent				
Credibility	Credibility is dependent on producing champions				
Professional limitations	Sport psychology is performance enhancement				
Practice guidelines	Psychology should begin at developmental stages				
	Building a Professional Community for Sport Psychology				
Transparency	Sport psychology is not limited to elite athletes	100%	75%	100%	Refined to, "Sport psychology is not exclusive to elite athletes"
Interdisciplinary services	Sport psychology is beneficial to organisations	100%	100%	100%	No action needed
Relationship building	Psychology should be utilised from a young age				

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Old school thinking	The benefits of sport psychology are unknown	75%	25%	25%	Removed to avoid repetition
Collaborative KPIs	Sport policies should be informed by psychology	100%	100%	100%	No action needed
Collaborative KPIs	Sport policies impact athlete development				
Relationship building	Psychology should begin at a grassroots level				
Role expecta-tions	There is room to fail in pursuing sport outcomes				
Working with stakeholders	Organisations work well with sport psychologists				
Transparency	Sport policies are transparent to all stakeholders				
Old school thinking	Sport leaders possess appropriate skills to govern				
Working with stakeholders	Professionals often communicate and collaborate				
Working with stakeholders	Collaboration among professionals is critical				
Transparency	Athletes perspectives are considered in decisions				
Working through coaches	An effective psychologist is coach dependent				
Working through coaches	Sport psychologists should work through coaches				
Coach education	Coaches are receptive to psychology practices				
Coach education	Coach education is key for athlete development				
Coach education	Sport psychology is a factor in coach education				

(*Continued*)

Table 7.3 (Continued)

Codes	*Thematic Categories and Questionnaire Items*	*Expert Agreement Score*[a]			*Action Taken*
		Relevant	*Clear*	*Specific*	
Coach beliefs	Coach's beliefs influence coaching practice	100%	50%	50%	Removed to avoid repetition
	Sport Psychologist-Athlete Relationship				
Relationship building	Rapport is important for effective practice	100%	50%	50%	Removed to avoid repetition
Role expectations	Psychologists are always available to all athletes	25%	50%	25%	Removed due to limited relevance and to avoid repetition
Role expectations	Psychologists must be stable despite outcomes	50%	50%	25%	
Relationship building	Effective psychology requires time investment	50%	75%	75%	
Role expectations	Sport psychology goes beyond "office" settings	25%	25%	25%	
Role expectations	Sport observation informs psychology practice	100%	75%	25%	Removed to avoid repetition
Working with stakeholders	Athlete is at the centre of psychology practice	75%	50%	100%	
Collaborative KPIs	Athlete behaviour informs psychology practice	75%	50%	50%	
Role expectations	Sport psychologist must cater to individual needs	50%	50%	25%	Removed due to limited relevance and to avoid repetition
Relationship building	Athletic experience informs psychology practice	25%	25%	25%	
Old school thinking	Elite & recreational sport experience is different	50%	50%	50%	

[a] Each response of "yes" contributed 25% to the total score (e.g., 100% indicates that all four experts endorsed the item relative to its respective category), whereas "no" or "unsure" would be a null endorsement and have no value.

had 48 years of experience practising sport psychology in Singapore (M = 12, SD = 10), with professional qualifications ranging from masters to doctorates.

The experts were briefed on the nature of the research via email and provided with copies of the questionnaires which included three categories (relevant, clear, and specificity) with yes, no, or unsure options and a section for comments or

feedback with a deadline of two weeks. Each response of "yes" contributed 25% to the total score (e.g., 100% indicates that all four experts endorsed the item relative to its respective category), whereas "no" or "unsure" would be a null endorsement and have no value. To further support the rigour of this scale development process, items in the SSCQ and SSPQ were only retained and unaltered if they received unanimous endorsement by the respective expert panels for all three categories. Items that did not receive unanimous endorsement by the respective expert panels were either refined or removed. A summary of expert agreement scores and subsequent actions taken, for the SSCQ and SSPQ, can be found in Tables 7.2 and 7.3, respectively. Review by the expert panels resulted in a revised 100-item SSCQ and 113-SSPQ (see Appendix B for EFA questionnaires), where majority of changes addressed issues of clarity, grammar, and redundancy. For example, the SSPQ item, "Athlete is at the centre of psychology practice," was removed to avoid repetition, as it was found to be too similar to, "Interventions should be athlete-centred." Following the completion of the EFA, the SSCQ and SSPQ were both reduced to 37 items for the CFA (see Appendix C for CFA questionnaires).

Both questionnaires were available online using Google Forms. For the EFA and CFA phases, questionnaires took approximately 15–20 minutes and 10 minutes to complete, respectively. Instructions at the start of each questionnaire detailed the purpose, objectives, and inclusion criteria of the research, and explained that all data collected would remain anonymous and strictly confidential. Participants were encouraged to respond as honestly and accurately as possible and were asked to sign an electronic consent form before completing the questionnaire to fulfil ethical requirements. To avoid any "missing" responses, the Google Form was organised such that participants could only progress to the next item only after they had completed the questions in the order it was presented. Data collection for the EFA was over a period of three months, from January 2019 to March 2019, and immediately following completion of the EFA, data collection for the CFA began and was completed two months later in April 2019.

7.3 Factor Analysis

Given the immense theoretical content identified in the thematic analysis, factor analysis was a useful method to statistically decipher latent constructs from a large number of observed variables (i.e., codes from thematic analysis) to develop a deeper understanding of the phenomenon under investigation in relation to the broader context of Singapore (Worthington & Whittaker, 2006). As the application of factor analysis involves mathematical procedures that focus on identifying patterns in the data, it adheres to the principle of parsimony, by attempting to establish the simplest method of interpretation for a specific dataset of observed variables through the process of scale development (Yong & Pearce, 2013). Indeed, it is easier to focus on meaningful key factors instead of becoming encumbered by too many variables that may not be pertinent to the objectives of the research.

Once data collection had been completed for the new scales SSCQ and SSPQ, statistical software SPSS followed by Amos were used for the EFA and

CFA, respectively. This was conducted in collaboration with a sport psychologist at the Singapore Sport Institute, who had a significant expertise in quantitative research, and supported the analysis and interpretation of quantitative data only.

As new scales were developed for context specificity and to aid the qualitative interpretations of the researcher, EFA was required to first explore the dataset. Being exploratory in nature, the lack of inferential statistics and subjectivity of psychosocial phenomenon meant that the researchers needed to make numerous subjective decisions, particularly in relation to the naming and selection of factors (Costello & Osborne, 2005). This proved difficult due to the inconsistent and inconclusive information on factor analysis in the extant literature (Schmitt, 2011). To remain coherent, it was decided that the work on applying factor analysis by Cabrera-Nguyen (2010) and Schmitt (2011) was used. After adjusting and readjusting the factor models following the EFA, CFA was used to help support the validity of the scale by confirming the extent to which the models produced fitted the data of the new samples (Worthington & Whittaker, 2006). It should be noted that the factor analyses were not focused on testing hypotheses or how a set of variables might predict an outcome variable, but rather on supplementing the interpretive analytical interests of the researcher and to address the research objectives (Gibson, 2017).

7.4 Exploratory Factor Analyses

The purpose of this procedure was to analyse the factorial composition of the 100-item SSCQ and the 113-item SSPQ.

7.4.1 Preliminary analyses

For the SSCQ, the univariate skewness values of the 100 items ranged from –1.47 to 0.60 and the univariate kurtosis values ranged from –0.85 to 1.86. For the SSPQ, the univariate skewness values of the 113 items ranged from –0.75 to 1.46 and the univariate kurtosis values ranged from –0.86 to 1.74. There were no missing values found for either questionnaire, and the correlation matrix was inspected to decide on the suitability of the data for EFA. For the SSCQ, the Bartlett's test of sphericity suggested item interdependence ($\chi^2 = 17770.70$, $p < .001$), and an acceptable Kaiser-Meyer-Olkin (KMO) sampling adequacy statistic was observed (KMO = .86). Similarly, for the SSPQ, the Bartlett's test of sphericity suggested item interdependence ($\chi^2 = 22432.83$, $p < .001$), and an acceptable Kaiser–Meyer–Olkin (KMO) sampling adequacy statistic was observed (KMO = .86). As such, the correlation matrix for both questionnaires were deemed suitable for EFA.

7.4.2 Main analyses

A principal components analysis was conducted for both questionnaires using varimax rotation. An orthogonal rotation method was selected for both cases as

Table 7.4 Summary of EFA Results for the SSCQ

	Rotated Factor Loadings (F)			
Item	*F 1*	*F 2*	*F 3*	*F 4*
Athletes are given good support	**.45**	.36	.17	−.05
Organisations have an athlete-centred approach	**.60**	.10	.17	−.13
Sport organisations have fostered success	**.66**	.18	.10	.05
Athletes' success is a result of sport organisations	**.60**	.06	.11	.00
Sport organisations are transparent with athletes	**.64**	.07	.20	−.12
Leaders of sport organisations lack relevant skills	**−.49**	−.21	.01	.10
Policies support athletes' development	**.61**	.08	.09	−.05
All athletes are treated fairly and equally	**.60**	.12	.19	−.17
Organisations and athletes communicate well	**.75**	.18	.15	−.01
Succession planning in organisations is sufficient	**.56**	.08	.14	−.17
Sport is governed by sport professionals	**.60**	.00	.06	−.03
Sport organisations are professionally managed	**.73**	.20	.15	−.07
Sport professionals focus on athlete development	**.64**	.16	−.03	.09
Athletes' well-being is a priority for organisations	**.60**	.16	.08	−.07
There is a good emphasis on athlete development	**.67**	.24	.10	−.13
Athletes are accurately represented in the media	**.46**	.13	.21	−.02
Singapore is a sporting nation	.27	**.74**	.12	.10
Sport is a growing culture in Singapore	.17	**.80**	.03	−.01
Sport in Singapore is vibrant	.20	**.76**	.11	−.07
Public support for sport has improved	.11	**.75**	.02	.02
Sport services for athletes have improved	.23	**.66**	−.02	.04
Elite sport is thriving in Singapore	.39	**.59**	.15	−.12
There is no sports culture in Singapore	−.11	**−.59**	−.07	.15
It is easy to be a full-time athlete in Singapore	.21	.05	**.59**	−.16
Athletes can maintain a full-time job and compete	.21	.09	**.68**	.04
Employers are supportive of sporting pursuits	.29	.05	**.66**	−.16
A career as an athlete is sustainable in Singapore	.27	.09	**.70**	−.22
The education system supports student-athletes	.27	.25	**.48**	−.12
Sporting performance takes priority over school	.15	.04	**.58**	−.21
It is easy to find sponsors to fund athletic pursuits	.36	.09	**.48**	−.07
There is a general fear of failure in sport	.03	.00	−.09	**.50**
Only medal contenders are seen by the public	−.09	−.00	−.32	**.40**

(*Continued*)

Table 7.4 (Continued)

Item	*Rotated Factor Loadings (F)*			
	F 1	*F 2*	*F 3*	*F 4*
Drop in sporting success leads to support removal	–.12	–.10	–.15	**.70**
Sport outcomes are prioritised over the process	–.18	–.07	–.08	**.69**
Athletes are expected to always perform	–.09	–.08	–.21	**.60**
Support given is dependent on attaining medals	–.07	–.06	–.10	**.50**
Sports with medal potential are prioritised	–.16	–.01	–.10	**.52**
Eigenvalues	8.05	5.15	4.48	4.04
% of variance	8.05	5.15	4.48	4.04
α	.87	.66	.84	.78

this was the first time such questionnaires had been created, and there was no prior evidence for any relationship between the factors of either questionnaire. Factor extraction was done by inspecting both the eigenvalues as well as the scree plot. This was based on Stevens' (2002) assertion that using Kaiser's (1960) eigenvalue criteria (eigenvalue > 1.0) as the sole deciding factor might result in the retention of factors that do not have practical significance. To interpret the extracted factors, we adopted Field's (2009) recommendation to suppress factor loadings of less than 0.4. After applying the previously mentioned criteria, a four-factor solution emerged for both the SSCQ and the SSPQ.

For the SSCQ, the solution contained 37 items which loaded onto the four factors and explained 21.71% of the variance. Table 7.4 shows the factor loadings after rotation. Factor one was labelled as "Sport Organisations and Their Support," and consisted of 16 items. This factor assessed the level of support athletes received from their organisations, and the manner in which sport organisations were functioning. Factor two was labelled as "Perceptions of Sport," and consisted of 7 items. This factor evaluated the perception of Singapore as a sporting nation, as well as the status of sport culture in the country. Factor three was labelled as "Being an Athlete," and consisted of 7 items. This factor gauged the feasibility for athletes to pursue their sporting dreams, as well as the pathway available to support athletes. Factor four was labelled as "Outcome-Driven Environment," and consisted of 7 items. This factor assessed the level of outcome focus in sport, as well as the pressure to attain success.

For the SSPQ, the solution also contained 37 items which loaded onto the four factors and explained 22.27% of the variance. Table 7.5 shows the factor loadings after rotation. Factor one was labelled as "Perceptions of Sport Psychology," and consisted of 12 items. This factor encompassed the various perspectives and stereotypes pertaining to sport psychology. Factor two was labelled as "Professionalism of Sport Psychologists," and consisted of 9 items. This factor considered the elements of professional conduct that a sport psychologist

Table 7.5 Summary of EFA Results for the SSPQ

	Rotated Factor Loadings (F)			
Item	*F 1*	*F 2*	*F 3*	*F 4*
Only elite athletes should see sport psychologists	**.44**	−.07	−.03	.07
Seeing sport psychologists reflects badly on client	**.76**	−.22	.02	.13
Sport psychology is only for the mentally weak	**.77**	−.27	.02	.13
It is unfavourable to see a sport psychologist	**.78**	−.25	−.02	.05
Sport psychology is unnecessary for performance	**.69**	−.07	.01	.03
Sport psychology is innately invasive for clients	**.68**	−.06	−.12	.13
Sport psychologists are blamed for poor performance	**.46**	−.14	−.11	.17
Sport psychology is only for medal contenders	**.43**	−.11	.11	−.03
Athletes are forced to see a sport psychologist	**.45**	−.25	.02	−.04
The impact of seeing a sport psychologist is instant	**.55**	−.32	.07	−.01
Sport psychologists are used only as a "quickfix"	**.47**	−.04	−.08	.20
Sport psychology is not essential to the industry	**.46**	−.06	−.02	.03
Effective psychology requires time and effort	−.02	**.47**	−.19	.04
Athletes are responsible for their mental training	.08	**.41**	−.14	−.12
Psychologists must respect professional limitations	.04	**.63**	−.12	.08
Evidence-based practice is crucial to be effective	.13	**.75**	−.02	.04
Tangible evidence will support psychologists	.02	**.67**	−.06	.02
Sport psychologists require continuous learning	−.01	**.63**	−.15	−.06
Professional degrees are important for practice	.05	**.63**	.01	−.02
It is necessary to be licensed to practice	.09	**.47**	−.18	−.03
Collaboration among professionals is critical	.12	**.46**	−.07	.13
Sport organisations accept psychologists' advice	.04	.06	**−.47**	−.03
Coaches work well with sport psychologists	.14	−.00	**.41**	.00
Managers work well with sport psychologists	.08	.02	**.43**	.03
Organisations accept sport psychology expertise	−.05	.05	**.43**	.02
Organisations work well with sport psychologists	−.05	.01	**.70**	−.00
Sport policies are transparent to all stakeholders	−.02	−.01	**.76**	.03
Sport leaders possess appropriate skills to govern	−.03	−.01	**.83**	−.02
Professionals often communicate and collaborate	.09	.03	**.76**	−.07

(*Continued*)

Table 7.5 (Continued)

	Rotated Factor Loadings (F)			
Item	*F 1*	*F 2*	*F 3*	*F 4*
Athletes perspectives are considered in decisions	.16	–.04	**.70**	–.06
Coaches are receptive to psychology practices	.17	.02	**.48**	.03
Psychology should begin at developmental stages	.13	–.00	.04	**.56**
Sport psychology is beneficial to organisations	.07	–.11	–.08	**.51**
Psychology should be utilised from a young age	.00	–.13	–.08	**.74**
Sport policies should be informed by psychology	.00	.00	.01	**.72**
Sport policies impact athlete development	–.03	–.11	–.02	**.53**
Psychology should begin at a grassroots level	–.05	.05	.02	**.67**
Eigenvalues	12.64	5.15	4.33	3.03
% of variance	11.19	4.56	3.84	2.68
α	.87	.86	.88	.84

was expected to adhere to. Factor three was labelled as "Sport Stakeholders and Psychologists," and consisted of 10 items. This factor judged the attitudes of various stakeholders towards sport psychology, and how receptive they were towards it. Factor four was labelled as "Application of Sport Psychology," and consisted of 6 items. This factor encapsulated the utility and application of sport psychology in various areas, such as in the grassroots level and among developing athletes.

7.5 Confirmatory Factor Analyses

The purpose of this procedure was to cross-validate the findings of the EFA using CFA and, if needed, improve the structure of the SSCQ and the SSPQ.

7.5.1 Data analysis guidelines

In order to demonstrate the stability of the final CFA structure, a random split of the total CFA sample ($N = 503$) was done: one sub-sample (Sample A; $N = 253$) was used to provide an initial test of the model; and the other sub-sample (Sample B; $N = 250$) was used to confirm the final CFA model. The 37-item SSCQ and 37-item SSPQ were separately analysed with CFA using Amos version 22. One item from each of the four factors in the SSCQ and SSPQ was fixed to 1.0 for the purpose of identification and latent variable scaling. Following literature pertaining to CFA (Hu & Bentler, 1999), multiple fit indices were used to assess the suitability of the model to the data. These indices included the chi-square statistic, the comparative fit index (CFI; Bentler, 1990), the Tucker-Lewis

index (TLI; Bentler & Bonnett, 1980), the standardised root mean residual (SRMR; Hu & Bentler, 1998), and the root mean square error of approximation (RMSEA; Steiger, 1990). For CFI and TLI, it was suggested that a value of >.90 was considered satisfactory, while a value of >.95 would be considered very good (Bentler, 1992; Hu & Bentler, 1999; Marsh, Hau, & Wen, 2004). For SRMR and RMSEA, a value of <.08 and <.06 (respectively) would be considered acceptable (Hu & Bentler, 1999). For the purposes of data analysis, the aforementioned values were used as guides rather than absolute values to be strictly followed (Marsh et al., 2004). Besides these fit indices, other indicators (standardised residuals, standardised factor loadings, and modification indices) were analysed as well.

7.5.2 Preliminary analyses

For the SSCQ Sample A, the univariate skewness values of the 37 items ranged from –1.76 to 1.97 and the univariate kurtosis values ranged from –0.89 to 3.70. For the SSCQ Sample B, the univariate skewness values of the 37 items ranged from –1.78 to 0.97 and the univariate kurtosis values ranged from –1.05 to 4.36. For the SSPQ Sample A, the univariate skewness values of the 37 items ranged from –1.66 to 1.76 and the univariate kurtosis values ranged from –0.88 to 3.60. For the SSPQ Sample B, the univariate skewness values of the 37 items ranged from –1.04 to 1.90 and the univariate kurtosis values ranged from –0.63 to 4.23. Due to the presence of non-normally distributed data, the bootstrapping function in Amos was utilised to correct for non-normality. There were no missing values found for either questionnaire.

7.5.3 Main analyses

For the SSCQ, results of the initial CFA (based on Sample A; see Table 7.6 for the means, standard deviations, and factor loadings) suggested that modifications were required: χ^2 (623) = 1091.47, p < .001, CFI = .90, TLI = .89, SRMR = .06, RMSEA = .06. A total of 8 problematic items were removed based on an inspection of the standardised factor loadings, standardised residuals, and modification indices. Excluding those 8 items improved the fit of the model to the data: χ^2 (365) = 578.22, p < .001, CFI = .95, TLI = .94, SRMR = .05, RMSEA = .05. The model was run again with Sample B, and the fit was acceptable once again: χ^2 (365) = 691.06, p < .001, CFI = .92, TLI = .91, SRMR = .06, RMSEA = .06. These values indicate that the model is acceptable for the proposed scales based on the CFI, TLI, SRMR, and RMSEA guidelines.

For the SSPQ, results of the initial CFA (based on Sample A; see Table 7.7 for the means, standard deviations, and factor loadings) suggested that modifications were required: χ^2 (623) = 1577.16, p < .001, CFI = .80, TLI = .78, SRMR = .06, RMSEA = .07. A total of 11 problematic items were removed based on an inspection of the standardised factor loadings, standardised residuals, and modification indices. Excluding those 11 items improved the fit of the model to the

Table 7.6 Item Means, Standard Deviations, and Factor Loadings following CFA for SSCQ

SSCQ subscale and item	*M*	*SD*	*Loading*
Factor 1: Sport Organisations and Their Support			
Athletes are given good support	3.05	0.98	.70
Organisations have an athlete-centred approach	2.93	1.04	.71
Sport organisations have fostered success	3.17	0.97	.77
Athletes' success is a result of sport organisations[a]	3.05	1.11	.51
Sport organisations are transparent with athletes	2.69	0.98	.64
Leaders of sport organisations lack relevant skills[a]	3.15	1.05	–.43
Policies support athletes' development	2.91	1.04	.65
All athletes are treated fairly and equally	2.79	1.12	.67
Organisations and athletes communicate well	2.82	0.98	.71
Succession planning in organisations is sufficient	2.73	1.04	.76
Sport is governed by sport professionals	2.96	1.17	.74
Sport organisations are professionally managed	2.94	1.08	.81
Sport professionals focus on athlete development	3.19	1.07	.80
Athletes' well-being is a priority for organisations	3.08	1.06	.74
There is a good emphasis on athlete development	3.13	1.01	.77
Athletes are accurately represented in the media	3.04	1.05	.66
Factor 2: Perceptions of Sport			
Singapore is a sporting nation	2.43	1.07	–.73
Sport is a growing culture in Singapore	3.40	1.06	–.77
Sport in Singapore is vibrant	3.01	1.02	–.83
Public support for sport has improved	3.38	1.04	–.68
Sport services for athletes have improved	3.49	0.96	–.75
Elite sport is thriving in Singapore	2.85	1.07	–.73
There is no sports culture in Singapore[a]	2.61	1.17	.58
Factor 3: Being an Athlete			
It is easy to be a full-time athlete in Singapore	1.51	0.79	.65
Athletes can maintain a full-time job and compete[a]	2.00	1.00	.57
Employers are supportive of sporting pursuits	2.34	0.92	.61
A career as an athlete is sustainable in Singapore	1.75	0.86	.66
The education system supports student-athletes[a]	2.43	1.13	.62
Sporting performance takes priority over school[a]	2.11	0.98	.40
It is easy to find sponsors to fund athletic pursuits	1.83	0.88	.60
Factor 4: Outcome-Driven Environment			
There is a general fear of failure in sport[a]	3.78	0.95	.35
Only medal contenders are seen by the public	4.36	0.80	.70
Drop in sporting success leads to support removal	4.02	0.94	.73
Sport outcomes are prioritised over the process	4.04	0.93	.79
Athletes are expected to always perform	4.11	0.88	.66
Support given is dependent on attaining medals	4.18	0.91	.70
Sports with medal potential are prioritised[a]	4.45	0.80	.53

[a] Item removed after CFA.

Table 7.7 Item Means, Standard Deviations, and Factor Loadings following CFA for SSPQ

SSPQ subscale and item	*M*	*SD*	*Loading*
Factor 1: Perceptions of Sport Psychology			
Only elite athletes should see sport psychologists[a]	1.94	0.99	.46
Seeing sport psychologists reflects badly on clients	1.71	0.93	.70
Sport psychology is only for the mentally weak	1.48	0.78	.80
It is unfavourable to see a sport psychologist	1.60	0.87	.73
Sport psychology is unnecessary for performance[a]	1.70	0.95	.59
Sport psychology is innately invasive for clients	1.96	0.92	.64
Sport psychologists are blamed for poor performance[a]	1.87	0.91	.44
Sport psychology is only for medal contenders	1.75	0.99	.70
Athletes are forced to see a sport psychologist[a]	1.97	0.96	.40
The impact of seeing a sport psychologist is instant[a]	2.06	0.92	.28
Sport psychologists are used only as a "quickfix"[a]	2.09	1.01	.41
Sport psychology is not essential to the industry	1.74	0.87	.58
Factor 2: Professionalism of Sport Psychologists			
Effective psychology requires time and effort	4.40	0.79	.74
Athletes are responsible for their mental traininga	4.02	0.92	.44
Psychologists must respect professional limitations	4.19	0.82	.62
Evidence-based practice is crucial to be effective[a]	3.91	0.88	.53
Tangible evidence will support psychologists[a]	3.87	0.89	.59
Sport psychologists require continuous learning	4.35	0.76	.79
Professional degrees are important for practice[a]	3.91	0.91	.55
It is necessary to be licensed to practice[a]	4.07	0.99	.59
Collaboration among professionals is critical	4.39	0.78	.79
Factor 3: Sport Stakeholders and Psychologists			
Sport organisations accept psychologists' advice	3.20	0.80	.79
Coaches work well with sport psychologists	3.21	0.89	.74
Managers work well with sport psychologists	3.19	0.83	.82
Organisations accept sport psychology expertise	3.22	0.83	.83
Organisations work well with sport psychologists	3.16	0.83	.83
Sport policies are transparent to all stakeholders	2.86	0.94	.71
Sport leaders possess appropriate skills to govern	2.99	0.96	.64
Professionals often communicate and collaborate	3.17	0.93	.59
Athletes perspectives are considered in decisions	3.01	0.97	.60
Coaches are receptive to psychology practices	3.26	0.84	.70
Factor 4: Application of Sport Psychology			
Psychology should begin at developmental stages	4.07	0.85	.75
Sport psychology is beneficial to organisations	4.16	0.82	.77
Psychology should be utilised from a young age	3.94	0.90	.80
Sport policies should be informed by psychology	3.77	0.93	.67
Sport policies impact athlete development	4.27	0.83	.66
Psychology should begin at a grassroots level	3.71	0.98	.68

[a] Item removed after CFA.

data: χ^2 (365) = 518.11, $p < .001$, CFI = .93, TLI = .93, SRMR = .04, RMSEA = .05. The model was run again with Sample B, and the fit was acceptable once again: χ^2 (365) = 545.90, $p < .001$, CFI = .93, TLI = .92, SRMR = .05, RMSEA = .06. These values indicate that the model is acceptable for the proposed scales based on the CFI, TLI, SRMR, and RMSEA guidelines.

Please see Appendix D and E for the final versions of the 29-item SSCQ and the 26-item SSPQ, respectively.

7.6 Differences According to Gender and Level of Sport Involvement

In order to investigate the potential differences that may exist between participants of different gender and level of sport involvement in terms of their SSCQ and SSPQ scores, a series of 2 × 2 between factor analysis of variance (ANOVAs) were conducted with gender (male and female) and level sport involvement (elite and recreational) as the independent variables, and each of the eight SSCQ and SSPQ sub-scales as the dependent variables. Post hoc Tukey tests were used to explore any significant effects between groups. For this analysis, all participants who were not elite or recreational athletes were removed, resulting in 361 participants remaining. Furthermore, 13 outliers (as determined by having a z score of ±3) were also removed, leaving a final sample of 348 athletes (see Table 7.1 for ANOVA participant demographics). For all subscales, skewness ranged from –0.62 to 0.80, and kurtosis ranged from –0.50 to 0.48. There was a total of 85 elite male athletes, 94 elite female athletes, 104 recreational male athletes, and 65 recreational female athletes.

A summary of descriptive statistics for the analysis can be found in Table 7.8. Starting with the SSCQ, the subscale of *sport organisations and their support* showed a significant main effect for level of sport involvement $F(1,344) = 5.72$, $p = .017$, $\eta_p^2 = .016$, where elite athletes ($M = 3.10$, SD = 0.82) were found to score higher than recreational athletes ($M = 2.90$, SD = 0.68). For the subscale of *perceptions of sport*, there was a significant main effect observed for gender $F(1,344) = 8.22$, $p = .004$, $\eta_p^2 = .023$, where females ($M = 3.24$, SD = 0.74) were found to score higher than males ($M = 2.99$, SD = 0.82). For the subscale of *outcome-driven environment*, there was a significant main effect observed for gender $F(1,344) = 4.25$, $p = .040$, $\eta_p^2 = .012$, where females ($M = 4.25$, SD = 0.60) were found to score higher than males ($M = 4.09$, SD = 0.71). There were no other main or interaction effects observed for any of the subscales.

In terms of the SSPQ, for the subscale of *perceptions of sport psychology*, there was a significant main effect observed for gender $F(1,344) = 6.97$, $p = .009$, $\eta_p^2 = .020$, where males ($M = 1.74$, SD = 0.65) were found to score higher than females ($M = 1.57$, SD = 0.54). For the subscale of *professionalism of sport psychologists*, there was a significant main effect observed for gender $F(1,344) = 4.54$, $p = .034$, $\eta_p^2 = .013$, where females ($M = 4.37$, SD = 0.50) were found to score higher than males ($M = 4.25$, SD = 0.61). For the subscale of *sport stakeholders and psychologists*, there was a significant main effect observed for level of

Table 7.8 ANOVA Descriptive Statistics for SSCQ and SSPQ Subscales

	Elite Male	*Recreational Male*	*Elite Female*	*Recreational Female*
N	85	104	94	65
SSCQ				
Sport Organisations and their Support	3.19 (0.82)	2.85 (0.73)	3.03 (0.82)	2.97 (0.60)
Perceptions of Sport	3.00 (0.83)	2.98 (0.81)	3.24 (0.78)	3.24 (0.68)
Being an Athlete	1.84 (0.62)	1.75 (0.61)	1.93 (0.62)	1.92 (0.61)
Outcome-Driven Environment	4.14 (0.72)	4.06 (0.70)	4.24 (0.64)	4.26 (0.55)
SSPQ				
Perceptions of Sport Psychology	1.74 (0.63)	1.75 (0.67)	1.56 (0.57)	1.58 (0.48)
Professionalism of Sport Psychologists	4.19 (0.66)	4.30 (0.56)	4.38 (0.51)	4.37 (0.48)
Sport Stakeholders and Psychologists	3.34 (0.73)	3.05 (0.67)	3.27 (0.64)	3.11 (0.58)
Application of Sport Psychology	3.97 (0.68)	4.00 (0.71)	4.05 (0.60)	4.03 (0.63)

sport involvement $F(1,344) = 9.77$, $p = .002$, $\eta_p^2 = .028$, where elite athletes ($M = 3.30$, SD = 0.68) were found to score higher than recreational athletes ($M = 3.07$, SD = 0.63). There were no other main or interaction effects observed for any of the subscales.

7.7 Validity and Reliability

As a note to the validity and reliability of the final versions of the SSCQ and SSPQ, the following points are presented. First, face and content validity can be claimed as the initial sample of questions were derived from the culture-specific codes identified in the thematic analysis. In addition, there was the involvement of an expert panel of four industry experts (sports manager, strength and conditioning coach, physiotherapist, sports doctor) and four practicing sport psychologists, who assessed the initial sample of questions and ensured that the content of the questions accurately portrayed the construct of interest. Construct validity can be determined through the EFA and CFA procedures that were used and outlined in this chapter. The EFA was able to group a large set of items into meaningful sub-factors. It showed that the items under each factor were able to represent the core of the construct being investigated. The CFA demonstrated that the proposed factor structure could accurately fit the data from a different sample, supporting the validity of the scale produced by the EFA. In addition, the final scales for both SSCQ and SSPQ proved to have good reliability based on their Cronbach alpha values: SSCQ – "Sport Organisations and Their Support"

(Sample A, α = .938; Sample B, α = .941), "Perceptions of Sport" (Sample A, α = .882; Sample B, α = .852), "Being an Athlete" (Sample A, α = .722; Sample B, α = .797), and "Outcome-Driven Environment" (Sample A, α = .838; Sample B, α = .858); SSPQ – "Perceptions of Sport Psychology" (Sample A, α = .842; Sample B, α = .871), "Professionalism of Sport Psychologists" (Sample A, α = .823; Sample B, α = .803), "Sport Stakeholders and Psychologists" (Sample A, α = .919; Sample B, α = .924), and "Application of Sport Psychology" (Sample A, α = .864; Sample B, α = .882).

7.8 Summary

With the complex web of theoretical content identified from the thematic analysis, factor analysis assisted in the identification of latent constructs from a large number of observed variables (i.e., codes from thematic analysis), to develop a more profound and comprehensive examination of Singapore's sports culture and the practice of sport psychology in Singapore. By attempting to establish the simplest method of interpretation for a specific dataset of observed variables through the process of scale development, the outcome of the factor analyses, informed by the initial thematic analysis and consequently identified through the procedures of EFA and CFA, resulted in a valid and reliable 29-item SSCQ and a 26-item SSPQ, with four-factors each, that could be used to address the research objectives, by supplementing the earlier qualitative inquiry and complementing the interpretive analytical interests of the researcher. Certainly, it was easier to focus on meaningful key factors instead of becoming encumbered by too many variables that may not be pertinent to the objectives of the research.

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8 Data Visualisation of Quantitative Findings: Infusing Statistics with Emotion

Nicholas de Cruz and Nathanael Ong

8.1 Basis for Data Visualisation

Regardless of the complexity of statistical models, power of algorithms, or the sample size, the most critical variable to consider is the target audience, being Singapore's sporting community, of which this book is conceived for and interpreted by (Ryan, 2016). However, this consideration has received little attention in the extant literature as quantitative researchers tend to present numbers in their raw form that, while statistically meaningful (see Chapter Seven), may have little or no resonance for anyone except scientists familiar with the quantitative paradigm and advanced statistics (Foster, 2019; Onwuegbuzie & Dickinson, 2008). To address this issue and facilitate the translation of complex scientific results into information that is accessible and of practical use, research on communicating quantitative information simply, efficiently, and powerfully recommends the use of visual data (e.g., images and graphical displays; Williams & Quave, 2019). Defined as a "visual display of information that is transformed by the influence of purposeful design decisions with the intent of encoding and conveying information that would otherwise be difficult to understand or unlikely (or impossible) to connect with in a meaningful way" (Ryan, 2016, p. 179), data visualisation can illustrate important patterns and information that may not be apparent if it were to simply be presented in a table laden with numbers (Onwuegbuzie & Dickinson, 2008; Williams & Quave, 2019).

With the goal of shortening the path of insight, learning, and application, the design of data visualisation in this book was informed by the principles of analysis from the thematic analysis and factor analysis (see Chapters Two and Seven), being the identification of patterns and observing the principle of parsimony (Braun & Clarke, 2006, 2012, 2013; Yong & Pearce, 2013). This unity between analysis and design was further complimented by the interpretivist assumptions of the researcher, in the double hermeneutic between researcher and participants (see Chapter Two), by actively interpreting, co-constructing and producing knowledge to fulfil the research objectives, share participants stories, and effectively communicate this to a wider audience (e.g., policy-makers; Gibson, 2017; McGannon & Smith, 2015; Randall & Phoenix, 2009; Smith & Caddick, 2012). To support this creative process in the pursuit of producing impactful and

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engaging research, only the most pertinent and simplistic elements of data (i.e., percentage, Likert scale responses, colours) were used to highlight the patterned responses of participants and data trends for clearer comprehension and convenience (Petrillo, Spritzer, Freitas, & Pimenta, 2011; Ryan, 2016). In so doing, the researcher moved from being a passive transmitter of knowledge, where data are collected, analysed and likely archived, to creatively using the power of images to speak simply to the layman, as a picture is worth more than a thousand words (Khoury et al., 2019). Indeed, illuminating specific psychosocial phenomenon and behaviours, informed by complex qualitative and statistical analysis, holds the potential to inspire change that can advance elite sport and the profession of sport psychology (Ryan, 2016).

8.2 Singapore Sports Culture Questionnaire

Cognisant of how culture can shape the way we think, feel, and act (Smith, 2010; see Chapter One), the final 29-item SSCQ (see Appendix D for questionnaire) with a total of 503 participants (see Table 7.1) affirmed how Singapore's education-conscious, materialistic and pragmatic ideologies shaped peoples' feelings towards sport, which was predominantly participatory and recreational in nature (see Chapter Three). With regard to elite sport, the minority who were willing to dedicate themselves to the pursuit of sporting excellence were indeed governed by the need to fulfil policy-driven indicators of success, in an ecosystem that revolves around the acquisition of medals, rather than the contribution to holistic athlete development (see Chapter Four).

8.2.1 Sport organisations and their support

The overall result of this factor group was relatively indeterminate, with a dominance of neutral responses ranging from 30% to 39% (see Figure 8.1). For athletes, questions generally referred to athlete development, concern for well-being, support from sport organisations, and representation to the public. Additionally, questions pertaining to organisational support focused on professionalism, clarity of communication, and management. These results indicate that participants were uncertain about the efficacy of sport organisations to support sport in Singapore, given the indecisive responses seen in Figure 8.1. While Singapore does possess an ideal institutionalised sport system (De Bosscher et al., 2015; Sport Singapore, 2019; see Chapter Four), these findings imply a possible lack of transparency and communication between sport organisations and their stakeholders.

To this point, it would seem that the pursuit of performance goals (i.e., medals) and process goals (i.e., athlete health and well-being) may not be harmoniously aligned, especially as the measure of organisational effectiveness revolves around the fulfilment of policy-driven indicators of success, rather than the efficient operations of its structures, processes and procedures, evident in the qualitative themes discussed in Chapters Four and Five. Indeed, the friction

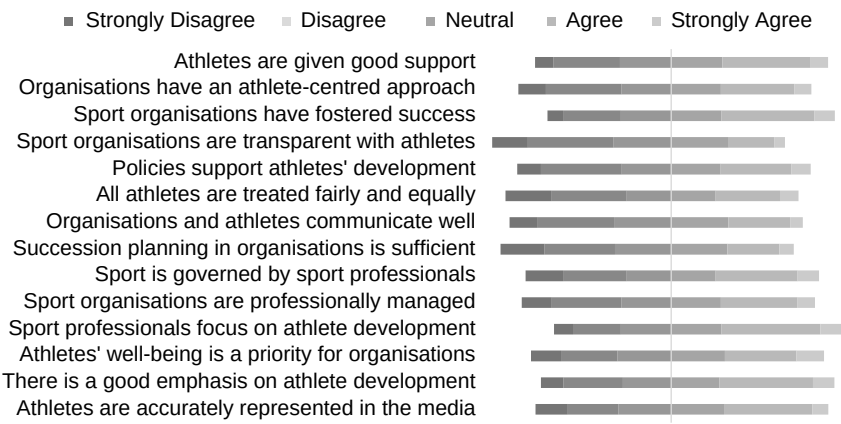

Figure 8.1 Stacked bar chart of responses relating to sport organisations and their support.

caused by the lack of transparency, poor communication, and misalignment of goals may have contributed to Singapore's inability to create a firm foundation for elite sport (see Chapter Three), as the sport delivery system (e.g., management of sport science support and its subsequent application) may not have progressed together with the advancement of its ideal infrastructure. As such, the latent construct of sport organisations and their support was consistent with earlier qualitative findings discussed in Chapters Three (History, Politics, and the Place of Elite Sport) and Four (A Distorted Elite Ecosystem).

In determining the success of an elite sport system, success being conceptualised as attaining and sustaining successful outcomes (e.g., Olympic medal), Fletcher and Wagstaff (2009) emphasised the importance of utilising strategic leadership and management to cultivate a culture of performance that needs to be "inspirationally led, effectively managed and competently executed" (p. 427). Considering Singapore's paternalistic society and hierarchical systems of authority (Horton, 2002, 2013; see Chapter Three), local sport organisations similarly adhere to the sequential top-down approach to management, where policies, goals, and rules made at the top are directed and strictly followed at lower levels for implementation (Andersen et al., 2015; Koh-Tan, 2011). However, evident in Chapters Four and Five, there appears to be a disparity between policies and their uncritical implementation with athletes (e.g., inconsistency of sport science support, cherry-picking of winning athletes, and credit clamouring). It would seem that the appraisal of Singapore's elite sport system may be based on simply a description of the interconnection between established practices (Andersen et al., 2015), overlooking the nuanced variations in efficiency and effectiveness that cumulatively created a system of inadequacy, as reinforced by the indeterminate pattern of responses in Figure 8.1.

In relation to the ANOVA results, which showed a significant main effect for the level of sport involvement $F(1,344) = 5.72$, $p = .017$, $\eta_p^2 = .016$, where elite athletes ($M = 3.10$, SD = 0.82) were found to score higher than recreational athletes ($M = 2.90$, SD = 0.68), this finding was not surprising given the inconsistency of sport science support available to *even* national athletes and the cherry picking of winning athletes raised in Chapters Four and Five. It has been established that sport authorities, led by the Singapore Sport Institute, gravitate towards investing in specific sports and associated athletes with medal potential (e.g., Koh-Tan, 2011; Peh, 2014). As such, it would be reasonable to infer that most recreational athletes would likely not be afforded the opportunity to engage with Singapore's ideal institutionalised system of *established* support services (i.e., sport science support, coaching, medical aid, training facilities, welfare programmes), and therefore have few experiences to draw on in relation to determining the quality of support rendered by sport organisations. This may further explain the indeterminate pattern of responses in Figure 8.1.

As a reminder, it is important to recognise that becoming and staying an elite athlete requires a great deal of time and effort, at the expense of other essential elements such as deferred higher education, career opportunities, and financial stability (e.g., de Cruz & Duncombe, 2016; see Chapters Three and Four). Thus, sport policies that emphasise sustainable athlete development in and beyond sport (holistic view) need to go beyond the façade of superficial promotion of successful personalities (i.e., national heroes; see Chapter Four), and instead actively engage with all national athletes, whether they are a medallist or a sparring partner, and uphold the statement on athlete support outlined by the Singapore Sport Institute (2019) which, "endeavours to be fully behind *every* [emphasis added] Team Singapore athlete to support them on their journey of sporting excellence [and] aims to develop an athlete-centric environment that allows *each* [emphasis added] athlete to fulfil their sporting aspirations" (p. 4).

Athletes are not machines, they are human beings, and operating in such a competitive and high-pressure environment, the necessity to foster and maintain quality relationships within high-performance teams is vital, not only to nurture talent and athletic performance, but support good health and well-being (Burns, Weissensteiner, & Cohen, 2019; De Bosscher et al., 2015). By acknowledging this perspective, sport organisations would be steered towards cultivating a climate of contribution, cooperation, and reciprocity that can ultimately provide a greater contribution to the evolution and success of sport in Singapore (Koh-Tan, 2011). That said, being a paternalistic and authoritarian society (Horton, 2013), having the right personnel (individuals who can acknowledge the need to move beyond the prevalent culture of acquisition; see Chapters Four and Six) to lead and manage sport programmes is paramount to the successful implementation, dissemination and maintenance of a high-performance environment that is inspirationally led, effectively managed and competently executed (Arnold et al., 2012; Fletcher & Wagstaff, 2009). Such individuals will need to be role models for this initiative to inspire other stakeholders to invest in it and so adapt to the changing demands that would accompany such a cultural shift (Fletcher & Arnold, 2011). In support,

research exploring the determinants of effectiveness of sport organisations in Singapore has similarly highlighted how having the right people in the right roles is even more critical than funding alone (Koh-Tan, 2011).

8.2.2 Perceptions of sport

The trend of responses in this factor group was not unexpected given that the results, as illustrated by Figure 8.2, were consistent with Singapore's sports culture, discussed in Chapter Three. While the government has invested in sport to foster social cohesion, nation building, heath, fitness, and international recognition to supplement its successful economy (Horton, 2002; McNeill et al., 2003; Teo, 2008), 22% strongly disagree and 35% disagree that Singapore is a sporting nation. While 41% of participants agreed that sport is a growing culture in Singapore, with 41% and 44% having agreed that public support and sport services, respectively, have improved, participants seemed unsure whether it was vibrant or not based on the 34% neutral responses. Even with the infrastructure and ideal institutionalised elite sporting system (De Bosscher et al., 2015; Sport Singapore, 2019; see Chapter Four), participants did not view Singapore as a sporting nation. It may well be that these shiny new structures simply portray a world-class sporting system to support economic development, with little regard for elite sport in particular, as a means of itself. On whether elite sport was thriving in Singapore, 33% were neutral but there was an inclination to disagree (25%), with 15% who strongly disagreed. Taken together, these findings reinforce the cultural significance of sport in Singapore, being participatory and recreational in nature, with a lack of appreciation for elite competitive sport, besides claiming recognition for superficial status symbols and honours (Phan, 2013; see Chapters Three and Four). As such, the latent construct pertaining to perceptions of sport in Singapore was consistent with earlier qualitative findings

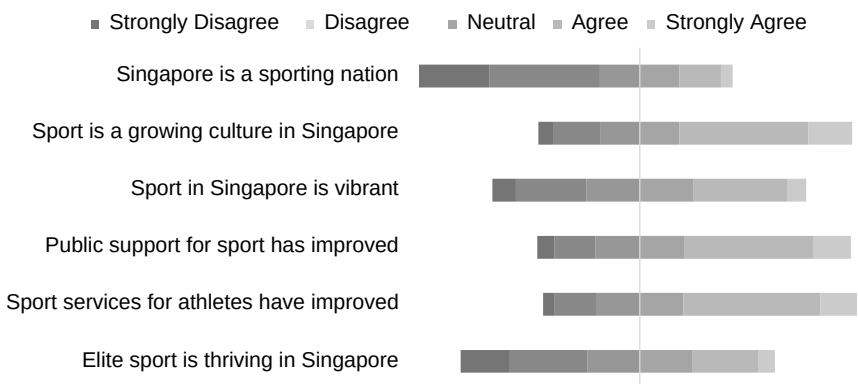

Figure 8.2 Stacked bar chart of responses relating to perceptions of sport in Singapore.

discussed in Chapters Three (History, Politics, and the Place of Elite Sport) and Four (A Distorted Elite Ecosystem).

Having recognised the value of recreational sport as a means to build a healthy and fit workforce (Hill & Lian, 2002; Horton, 2002, 2013), and elite sport to advertise Singapore's international status as a world-class developed city to broaden the nation's entrepreneurial capacity (Horton, 2013; Teo, 2008), Singapore's government has socialised Singaporeans into sport and exercise from a young age through its public institutions, quasistate agencies, schools and grassroot bodies (Peh, 2012; see Chapters Three and Four). While these interventions have been effective for the general population at a recreational level, evidently seen in Figure 8.2, the progress of elite sport seemed to be impeded by the education-conscious Singaporeans, who are more intent on pursuing conventional routes to success, rather than squander their potential prosperity on the pursuit of sporting excellence, that seemingly had no guarantee of any tangible outcomes in the long run (Peh, 2014). Indeed, as Singapore's routes to prosperity are clearly prescribed and defined by its meritocratic society, its well-established cultural predisposition to attain academic qualifications and material wealth clearly overshadows the desire to pursue elite competitive sport (see Chapter Three). Without a well-established culture that values high-performance sport, elite sport in Singapore is unlikely to thrive (Andersen et al., 2015). Perhaps if elite sport offered the same tangible rewards seen in mainstream pursuits it might be afforded a greater level of significance, which it has thus far been denied.

In relation to the ANOVA results, which showed a significant main effect observed for gender $F(1,344) = 8.22$, $p = .004$, $\eta_p^2 = .023$, where females ($M = 3.24$, SD = 0.74) were found to score higher than males ($M = 2.99$, SD = 0.82), this finding was surprising given that mainstream media, in general, has a tendency to emphasise sport as a masculine activity, where the physical appearance of women tend to be the focus, rather than their athletic achievements and abilities (Cooky, Wachs, Messner, & Dworkin, 2010; Hardin & Greer, 2009; Wanta, 2006). Interestingly, given that the primary motivation for exercise for the vast majority of Singaporeans revolved around concerns of social status and an acceptable body image (e.g., proportionate, balanced, fit, slim, and tall; Horton, 2001), the finding that women perceive sport in Singapore more positively than males may further substantiate Horton's observations on attaining an acceptable body image via sport. This may be apparently so for women, as femininity is often measured in terms of aesthetic appeal (Krane, Choi, Baird, Aimar, & Kauer, 2004). It would therefore seem that engaging in sport appears to be associated with the pursuit of an ideal Singaporean image (i.e., healthy, wealthy, and physically fit; Horton, 2002; see Chapter Three). Such findings may also contribute to the dominant recreational sports culture in Singapore, as females, in particular, may desire thin, aesthetically pleasing bodies, but fear potential excessive masculinity if they were to engage in sport at higher performance levels (Howells & Grogan, 2012; Mosewich, Vangool, Kowalski, & McHugh, 2009).

8.2.3 Being an athlete in Singapore

Proving to be completely counterproductive to the achievement of the Singapore dream (McNeill et al., 2003; see Figure 8.3), being an athlete in Singapore was clearly unfavourable, with 63% who strongly disagreed that it was easy to be a full-time athlete. This unfavourable trend persisted as 22% of participants strongly disagreed with a further 38% who disagreed that employers were supportive of sporting pursuits. Naturally, 46% of participants strongly disagreed and 36% disagreed that a career as an athlete was sustainable. These perceptions were consistent with past literature (e.g., de Cruz & Duncombe, 2016; Horton, 2001; Koh-Tan; 2011; Peh, 2014) and the current qualitative results (see Chapters Three and Four), which emphasised that the pursuit of elite sport had little merit for upward mobility in Singapore. Another hurdle that athletes had to contend with was finding sponsors to fund athletic pursuits, with 44% who strongly disagreed and 34% who disagreed that it was easy, in spite of Singapore's economic success (Aplin & Jong, 2002; Fry & McNeill, 2011; The Economist, 2019) and ideal institutionalised elite sporting system (De Bosscher et al., 2015; Sport Singapore, 2019; see Chapter Four). As such, the latent construct pertaining to being an athlete in Singapore was consistent with earlier qualitative findings discussed in Chapters Three (History, Politics, and the Place of Elite Sport) and Four (A Distorted Elite Ecosystem).

Being disparate from the economy-based values and materialistic orientation that forms the backbone of the Singaporean identity (McNeill et al., 2003), the pursuit of sporting excellence is clearly undermined by the Singapore system, which requires visible, instantaneous, and tangible outcomes to be successful (see Chapter Three). Consequently, this severely limits the scope of competitive sport to a select few individuals who are courageous enough to pursue their passion for elite sport, forgoing better alternative prospects (Aplin, 1998; Peh, 2014). It should therefore come as no surprise that elite sport is simply not a viable option considering Singapore's culture, which remains focused on the educated elite,

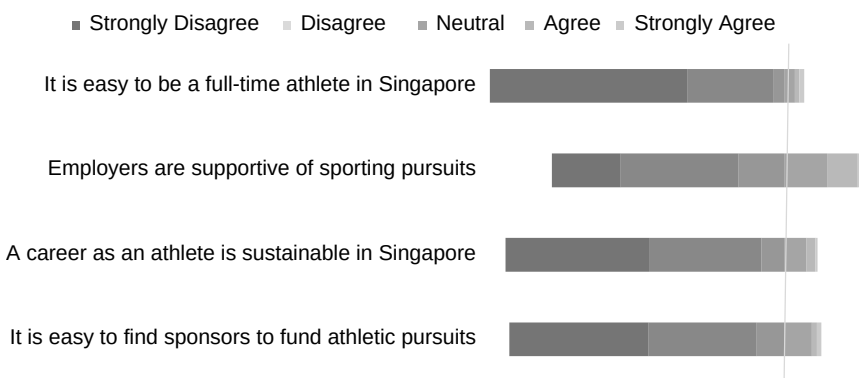

Figure 8.3 Stacked bar chart of responses relating to being an athlete in Singapore.

economic endeavours, and material gain to fuel its status as a First World economic nation (Aplin & Jong, 2002; Fry & McNeill, 2011).

From these results, research suggesting that athletes are not motivated enough to commit to elite sport (e.g., Peh, 2014), or how the lack of international success is due to the limited talent pool of Singapore's small population (e.g., Brooke, 2014), falls short of fully considering the cultural influence of Singapore, that clearly inhibits elite sport participation (see Chapters Three and Four). As explained by SH2 in Chapter Four, there is a need to shift the focus from personalities (i.e., medallists) and focus on the system itself (i.e., elite sport ecosystem). The following statement made by Aplin (1998) in his research exploring the joint pursuit of academic and sporting goals in Singapore adds precedence to SH2's statement:

> Currently the Singapore *system* [emphasis added] does not provide a continuous route for the aspiring champion to plot a course to international excellence. It is inconceivable that a Singaporean athlete could achieve acclaim without first securing the safety net of a complete education. It has therefore become difficult to attract the academic high-flyer to join the quest for sporting gold and underachievement in international sport is now as commonplace as outstanding performance in the field of economic competitiveness. (p. 22)

The quantitative results (see Figure 8.3) further illustrate that perceptions of being an elite athlete have not changed in 21 years, despite government support and funding to promote elite sport.

8.2.4 Singapore's outcome-driven environment

With reference to Figure 8.4, 53% of participants strongly agreed and 34% agreed that only medal contenders were seen by the public, evidently as a means to present an appealing image of elite sport for public consumption (Horton, 2013; Teo, 2008), and possibly to augment Singapore's global status and position on the world stage (Cha, 2009; Chan, 2016; Horton, 2002; Peh, 2014; see Chapters Three and Four). Predicated on its meritocratic culture and the outcome-orientation of Singapore's sporting community, 46% of participants strongly agreed and 33% agreed that support given is indeed dependent on the attainment of medals. Furthermore, 39% of participants strongly agreed and 34% agreed that sport outcomes are considered to be more vital than the process or journey to sporting excellence. It was therefore not surprising that 36% of participants strongly agreed and 37% agreed that support will be removed if athletes failed to deliver medals, with 39% who strongly agreed and 42% who agreed that athletes are always expected to perform.

As anticipated, the quantitative results (see Figure 8.4) were consistent with the thoughts, feelings, and experiences of participants from the qualitative interviews discussed in Chapter Four. Specifically, these results highlighted how

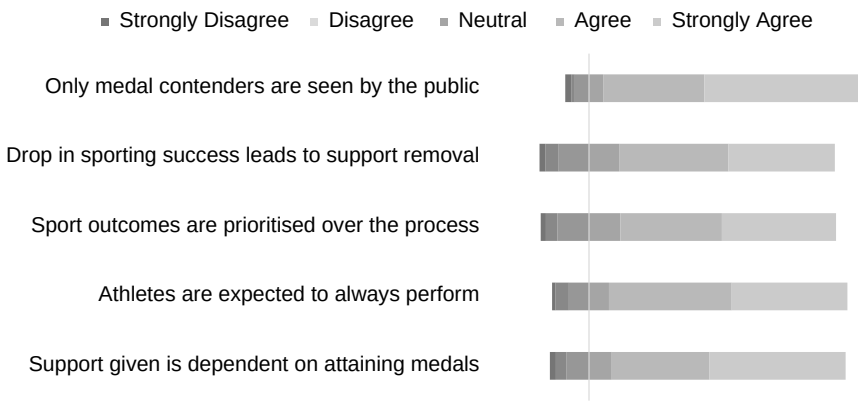

Figure 8.4 Stacked bar chart of responses relating to the outcome-driven environment.

Singapore's elite sport system may feature best practices (e.g., long-term development focus, support network; see Sport Singapore, 2019, for specific details), but the application of these practices appeared to be neither in the interest of supporting holistic and long-term athlete development, nor consistent with the statement by the Singapore Sport Institute (2019), that claims to support *every* athlete on their sporting journey. Undoubtedly, these findings represent how Singapore's elite sport ecosystem favours the measurable rather than the meaningful, in a self-fulfilling system that is more concerned with policy-driven indicators of success and acquiring medals, overlooking the importance of sustainable and holistic athlete development. As such, the latent construct pertaining to Singapore's outcome-driven environment was consistent with earlier qualitative findings discussed in Chapters Three (History, Politics, and the Place of Elite Sport) and Four (A Distorted Elite Ecosystem).

In relation to the ANOVA results, which showed a significant main effect observed for gender $F(1,344) = 4.25$, $p = .040$, $\eta_p^2 = .012$, where females ($M = 4.25$, SD = 0.60) were found to score higher than males ($M = 4.09$, SD = 0.71), this finding appeared to be consistent with literature on sport, women and gender roles (e.g., Chalabaev, Sarrazin, Stone, & Cury, 2008; Hall & Oglesby, 2016). Statements, like "You throw like a girl," are common in many sporting arenas across the world and continue to perpetuate the stereotype that women are assumed to be less capable of excelling at sport in comparison to men (Hall & Oglesby, 2016). Indeed, in Singapore, the accomplishments of women in sport tend to be overlooked to the detriment of many women who have dedicated their lives to the pursuit of sporting excellence, be it as an athlete or coach. For example, according to Ong and Zhao (2019), professional female sport coaches in Singapore felt they lacked the necessary support mechanisms needed to succeed in a male dominant environment and had to contend with the cultural stereotype that coaching is mainly for men. This perceived lack of support and

apparent neglect to consider the performance of women in sport was consistent with previous literature on sport in Singapore, where a coach was dismissed after the 2001 Southeast Asian Games for failing to produce any gold medallists, in spite of having supported and trained a female world champion (McNeill et al., 2003). Clearly, Singapore's sporting scene is no exception to the dominant stereotypes surrounding gender issues in sport. It seemed that females in this study still faced barriers to full sport participation and felt more compelled to prove their sporting abilities to succeed, in comparison to men.

These results offer compelling evidence for the performance narrative that dominates Singapore's elite sport ecosystem. Born from its pragmatic and meritocratic culture, the modus operandi for elite sport remains driven by medal targets as the standard criteria for success, silencing other victories (e.g., endurance, perseverance, resilience, determination) that may not have resulted in a desired outcome, but led to success in other areas beyond sport (e.g., a good parent, leader, teacher, coach, scientist, manager). The following quote by Koh-Tan (2011) further impresses the dominance of this shallow conceptualisation of success:

> Besides medals, the personal well-being and welfare of the athletes during and after their careers are not important considerations to their associations who may not have quality elected members and the expertise of high performance athlete management who can view sport development from a long-term perspective.
> (p. 221)

Having developed an elite sport system with the features and policies that claim to support holistic and long-term athlete development indicates that there is an awareness of the importance of a holistic approach for good athlete health, well-being, and performance. It would seem that organisational learning has been hindered, as the transference of these ideal policies and guidelines to practice appears to be an issue, given how the "medals at all costs" mantra continues to pervade all aspects of the elite ecosystem, to the disservice of its athletes, professionals, and stakeholders. It should be noted that professionals colluding in unhealthy practices that are morally and ethically questionable, conveniently overlooking athlete health and well-being, is a primer for a dysfunctional sporting environment (Henriksen et al., 2019). Some examples of these negative consequences can be seen in the way national athletes were only rendered sport science support and attention when they were in medal contention (see Chapter Four), how coaches and other sport professionals seemed to seek association with medal winners to bolster their credibility, and how sport psychology was only used as a band-aid or quickfix to "boost" performance (see Chapter Five).

8.3 Singapore Sport Psychology Questionnaire

Still in its infancy (Araki & Balasekaran, 2009; Ong & Harwood, 2018; see Chapter Five), sport psychology in Singapore continues to be dependent on the

unregulated opinions and experiences of individual practitioners and sport stakeholders in authority (Rejeski & Brawley, 1988). In an effort to remedy this stagnation and aid in the construction of a consistent professional identity of sport psychology, centred around providing competent, credible, valid, evidence-based, and ethical support for every national athlete in Singapore (see Chapter Six), there is a need to first examine and reflect on the current views of the profession. The final 26-item SSPQ (see Appendix E for questionnaire) with a total of 503 participants (see Table 7.1) compliments the qualitative findings by illustrating and critically analysing these views.

8.3.1 Perceptions of sport psychology

Contrary to the negative stereotypical beliefs about sport psychology (e.g., only for the mentally ill, associated with being weak), raised by participants during the qualitative interviews (see Chapter Five), the quantitative results (see Figure 8.5) portrayed a more positive view on mental health services in the sporting domain. The majority of participants (55%) strongly disagreed that seeing a sport psychologist reflected badly on the client, with 66% strongly disagreeing that sport psychology was only for the mentally weak. In addition, 59% strongly disagreed that it was unfavourable to see a sport psychologist, with 39% who strongly disagreed and 29% who disagreed that sport psychology was invasive for clients. Furthermore, 54% of participants strongly disagreed that sport psychology was only for medal contenders and 51% strongly disagreed that sport psychology was not essential to the industry. As such, the latent construct pertaining to perceptions of sport psychology was inconsistent with earlier qualitative findings discussed in Chapter Five (Confounding Perceptions of Applied Sport Psychology).

While qualitative themes illuminated the stigmatic trend generally associated with psychology (e.g., Gee, 2010; see Chapter Five), quantitative findings conversely highlighted more positive developments, possibly indicating a greater

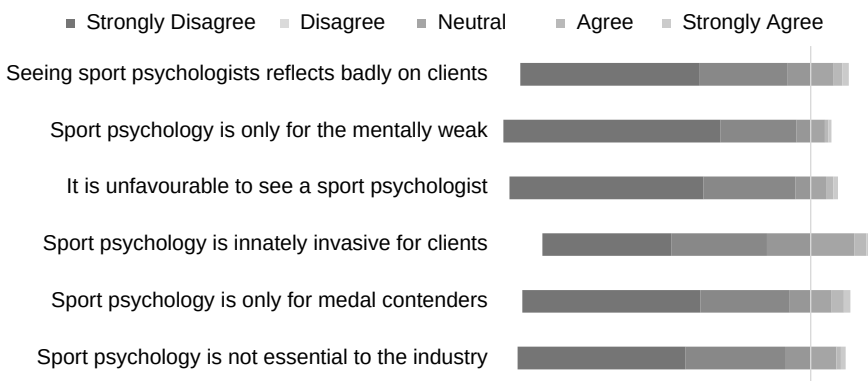

Figure 8.5 Stacked bar chart of responses relating to perceptions of sport psychology.

awareness, understanding, and acceptance of psychology, specifically sport psychology in Singapore. Contradicting the fear of being negatively labelled and perceived as mentally weak (e.g., general misconceptions), it appeared that there was a disparity between the participants' perception of society's view of being involved with a psychologist (i.e., belief that most athletes who had not worked with a sport psychologist associated sport psychology with mental illness, rather than performance enhancement) based on the qualitative interviews, and that of the participants from the quantitative analysis.

These positive developments from quantitative findings are encouraging for the profession of sport psychology in general. However, the inconsistent actions of sport psychologists and the sport entourage raised in the qualitative discussion were disconcerting, given that only athletes who have medals or are medal contenders were favoured over others to receive sport science and psychological services (see Chapters Four and Five). This highlighted a disparity between what is portrayed and perceived by quantitative participants, and specifically that of the experiences of national athletes and para-athletes. Indeed, as mentioned by SP4 in Chapter Three, Singapore's elite sport system appears ideal on the surface, but upon further examination, its surface does not appear to be a reflection of its reality, as the focus to celebrate and support medallists over non-medallists creates an obscure image that is misaligned with its high-performance sport system goals (see Sport Singapore, 2019, for sport system goals).

In relation to the ANOVA results, which showed a significant main effect observed for gender $F(1,344) = 6.97$, $p = .009$, $\eta_p^2 = .020$, where males ($M = 1.74$, SD = 0.65) were found to score higher than females ($M = 1.57$, SD = 0.54), this finding was consistent with previous literature on attitudes towards sport psychology consulting, where male athletes were found to be less receptive, likely to stigmatise, and have less confidence in sport psychology consulting, in comparison to female athletes (Anderson, Hodge, Lavallee, & Martin, 2004; Martin, 2005; Martin, Lavallee, Kellmann, & Page, 2004; Martin, Wrisberg, Beitel, & Lounsbury, 1997; Wrisberg, Simpson, Loberg, Withycombe, & Reed, 2009). However, recent research that involved Singaporean school-level to national-level athletes and their attitudes towards sport psychology consulting found no significant main effects observed for gender (Ong & Harwood, 2018). To avoid reinforcing the dominant cultural power and privilege of mainstream (white, Euro-American) worldviews perpetuated in contexts with diverse or differing cultural factors (Blodgett et al., 2015; Blodgett et al., 2014), these findings, together, may warrant future research specific to the unique context and culture under investigation (i.e., cultural praxis). While a common explanation for the finding that males generally perceive sport psychology consulting negatively can be attested to the social norms and cultural stereotypes that male athletes should display masculine traits and avoid discussing or disclosing any emotional problems (Yambor & Connelly, 1991), such an explanation would overlook the possible unique cultural nuances of Singapore and her sporting ecosystem.

8.3.2 Professionalism of sport psychologists

In support of the extant literature (e.g., Hassmén et al., 2016; Henriksen et al., 2019; Winter & Collins, 2016), 52% strongly agreed and 37% agreed that effective psychological practice requires time and effort (see Figure 8.6). Such beliefs logically extended to the need for continuous learning, with 48% who strongly agreed and 41% who agreed, and that collaborating with other professionals is important for professional practice, with 53% who strongly agreed and 35% who agreed. It should be noted that as per the points raised in Chapters Five and Six, time and effort for competent and effective psychological practice was not simply limited to working with athletes, but included coaches and an athlete's entourage, and engaging in continuous learning via education, application, and research (Portenga et al., 2011; Wylleman et al., 2009). Furthermore, participants felt it was important that psychologists respect their limitations, with 40% who strongly agreed and 44% who agreed. Together, the responses in Figure 8.6 consistently illustrated the trend of agreement towards engaging in professional practice, *essential* for a sporting environment that is reliant on practitioners to be honest and forthright in their ability to competently meet the needs of clients and adhere to their personal ethical obligations (i.e., moral compass, employer code of conduct and regulations; Lubker et al., 2012; see Chapter Six). As such, the latent construct pertaining to professionalism of sport psychologists was consistent with earlier qualitative findings discussed in Chapter Six (Advancing the Practice of Sport Psychology).

According to Portenga et al. (2011), experience does not equate to competence, and simply being an experienced practitioner may not be an indicator of expertise or professionalism (see Chapter Six). Likewise, becoming a qualified practitioner via academic certification or professional accreditation is only the first step to practicing psychology, not the end result (Lesyk, 2005). In the mercurial performance environment that sport psychologists operate in, with the myriad roles, responsibilities, and expectations (see Chapters One and Five),

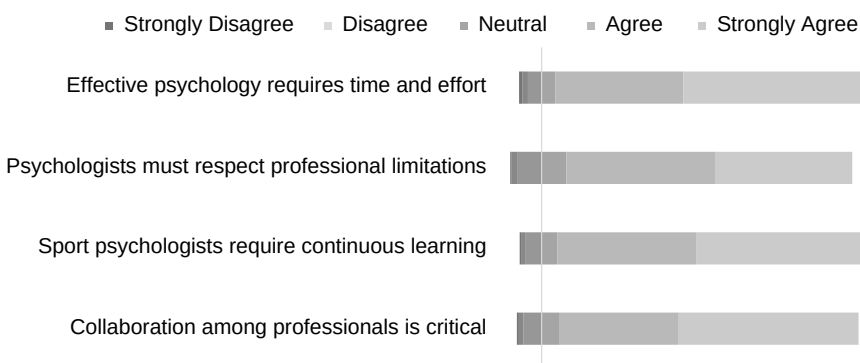

Figure 8.6 Stacked bar chart of responses relating to professionalism of sport psychologists.

coupled with Singapore's fast-paced elite ecosystem that demands immediate and instant results (see Chapter Four), the development of professional skills and abilities likely occur through experiences over time, rather than systematic educational opportunities (Portenga et al., 2011). Such a demanding environment requires practitioners to not only be knowledgeable, but versatile as well, if they wish to be relevant and useful (Herzog & Hays, 2012; Winter & Collins, 2016).

One way in which practitioners can supplement their expertise is by immersing themselves in the sports they are assigned to (Barker & Winter, 2014), taking the time and effort to build rapport, not just with athletes, but coaches and associated stakeholders (see Chapter Six). Indeed, the need to build rapport and develop a trusting, collaborative and long-term relationship with athletes and their entourage, for effective psychological practice, has been repeatedly raised in the literature (e.g., Henriksen et al., 2019; Tod et al., 2009) and in Chapters One, Five, and Six. However, despite this insistence to build long-term relationships to support competent and effective psychological practice, that can consequently lead to sustained performance enhancement (Birrer et al., 2012; Spruill et al., 2004), the need to accommodate the demands of stakeholders and athletes, in tandem with the prescription discourse associated with psychological practice, has raised the disparity between the perceptions of what professional sport psychology *should* entail (see Figure 8.6) and its *reality* (see Chapter Five).

Further evidence of this disparity can be seen in the consensus that collaboration, continuous learning, and respecting professional limitations is important for professionalism, and yet qualitative findings (e.g., credit clamouring and use of favoured interventions; see Chapter Five) highlighted how Singapore's meritocratic culture has inhibited such actions, to the detriment of athletes (e.g., cherry-picking athletes to fulfil performance objectives; see Chapter Four) and the profession of sport psychology (e.g., a profession shrouded in doubt, apprehension and scepticism; see Chapter Five).

In relation to the ANOVA results, which showed a significant main effect observed for gender $F(1,344) = 4.54$, $p = .034$, $\eta_p^2 = .013$, where females ($M = 4.37$, SD = 0.50) were found to score higher than males ($M = 4.25$, SD = 0.61), this finding was consistent with the results of the subscale of *perceptions of sport psychology* discussed in Section 8.3.1. As females were found to perceive consulting with a sport psychologist more positively than males (see Section 8.3.1), it was not surprising that females also expressed the need for professionalism among sport psychologists in Singapore more than males did. The general trend of positivity towards sport psychology among females in Singapore, in comparison to males, may be linked to their greater receptivity towards sport psychology consulting. Research suggests that positive sport psychology attitudes in athletes were related to effective past experiences from consulting with a sport psychologist (Anderson et al., 2004; Martin, 2005; Martin et al., 2004; Wrisberg et al., 2009). This suggests that the positivity towards sport psychology among females in Singapore may be due to effective past experiences from consulting with a sport psychologist.

In addition, as females are not inhibited by social norms and cultural stereotypes of masculinity, like men are (Yambor & Connelly, 1991), they would

conceivably be more open to sharing emotional problems with a sport psychologist. Therefore, as females would be more likely to consult with a sport psychologist (i.e., positive sport psychology attitudes), this would naturally lead to more opportunities that can support the development of an effective working relationship (i.e., effective past experiences), similarly resulting in the general trend of positivity towards sport psychology found in this study. It should be noted that, similar to concerns of cultural praxis, raised in Section 8.3.2, further research exploring why men and women feel this way, in relation to the practice of sport psychology and the specific environment in which practice occurs, is crucial to gain a more nuanced and culturally relevant perspective to inform future practice (Blodgett et al., 2015, 2014).

8.3.3 Sport stakeholders and psychologists

The responses in this factor group followed a neutral trend which made findings relatively indeterminate, with neutral responses ranging from 41% to 55% (see Figure 8.7). In relation to sport psychology, questions generally referred to the working relationship and possible collaboration with sport organisations, coaches, and managers. These results indicate that participants were uncertain about the presence or absence of professional working relationships between sport psychologists and stakeholders within sport organisations. Interestingly, there were three questions within this factor group that stood apart from the general theme of working relationships and collaboration. These were, (1) sport policies are transparent to all stakeholders; (2) sport leaders possess appropriate skills to govern; and (3) athletes' perspectives are considered in decisions. Results for these three questions followed the aforementioned neutral trend

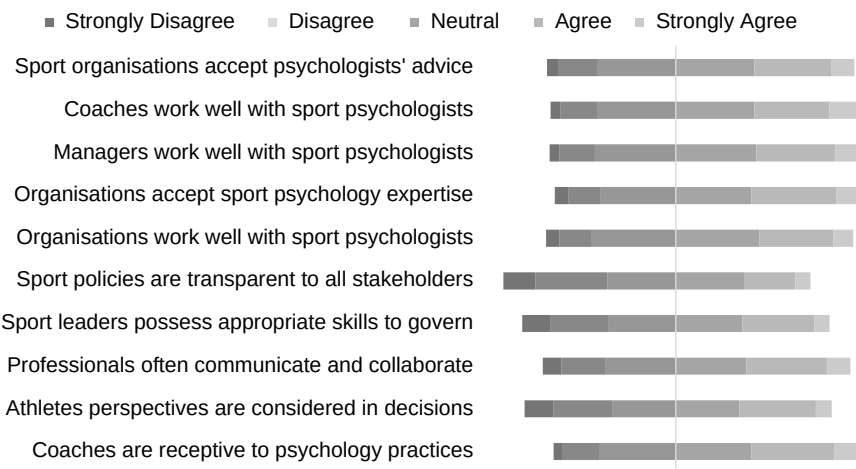

Figure 8.7 Stacked bar chart of responses relating to sport stakeholders and psychologists.

(see Figure 8.7), indicating that it was similarly unclear whether sport policies were transparent, if sport leaders have the appropriate skills to lead and if athletes' perspectives are considered in decision making, for example when drafting sport policies (i.e., emphasis on athlete health and well-being).

In relation to the ANOVA results, which showed a significant main effect observed for level of sport involvement $F(1,344) = 9.77$, $p = .002$, $\eta_p^2 = .028$, where elite athletes ($M = 3.30$, SD = 0.68) were found to score higher than recreational athletes ($M = 3.07$, SD = 0.63), this finding was consistent with the results of the subscale of *sport organisations and their support* discussed in Section 8.2.1. Reflecting the issues raised in Chapters Four and Five, as Singapore's ideal institutionalised system of *established* support services (i.e., sport science support, coaching, medical aid, training facilities, and welfare programmes) appeared to be restricted to athletes who had delivered medals or had medal potential (Koh-Tan, 2011; Peh, 2014), it was again not surprising that elite athletes would be in a better position to comment on the working relationships between sport stakeholders (i.e., sport coaches, managers, leaders, policymakers) and sport psychologists in Singapore. However, the dominant neutral trend for *both* elite and recreational athletes made it difficult to decipher the quality of the working relationship between sport stakeholders and psychologists. It may be that the higher scores observed in elite athletes were simply because elite athletes were exposed to these sport support services more than recreational athletes.

As discussed in Chapters One and Five, the challenging nature of high-performance sporting environments requires sport psychologists to intervene at multiple organisational levels to be effective (Portenga et al., 2011). From the quantitative findings in Figure 8.7 and the ANOVA results, the indeterminate responses made it difficult to identify whether stakeholders were indeed receptive to sport psychology and worked well with sport psychologists, as mentioned by SP5 in Chapter Six (i.e., spending a significant amount of time meeting with coaches, NSA leaders and fellow sport scientists, to devise ways to better support athletic performance). Unfortunately, there was more evidence to suggest an uncooperative working relationship between stakeholders and sport psychologists, evident in the experiences of SP3 (i.e., downplaying of sport psychology due to its eclectic nature) and SH2 (i.e., treatment of sport scientists as mere technicians), discussed in Chapter Six. This lack of collaboration was generally corroborated by participants in the qualitative sample, as there was no mention from any participant regarding interventions rendered extending beyond a select few coaches and team managers, who were open and receptive to the practice of sport psychology (see Chapters Five and Six). As such, the latent construct pertaining to sport stakeholders and psychologists was consistent with earlier qualitative findings discussed in Chapters Five (Confounding Perceptions of Applied Sport Psychology) and Six (Advancing the Practice of Sport Psychology).

Given the general lack of understanding regarding the role of a sport psychologist, evident in the misconceptions of the profession and dominant prescription discourse raised in Chapter Five, coupled with the limited time

allocated to build deep and trusting long-term existential relationships with athletes and stakeholders, like coaches and managers, the pressure to differentiate oneself to validate one's professional abilities makes the idea of collaboration, open communication, and compromise understandably undesirable (Reid et al., 2004; see Chapter Five). However, despite this micropolitics, and as repeatedly emphasised throughout this book, private goals and personal agendas of sport professionals should not take precedence over the primary objective of athlete support, being the health and well-being of the athlete, actualised in every aspect of the elite ecosystem, beginning at a policy and leadership level (McCalla & Fitzpatrick, 2016; Portenga et al., 2017). Certainly, if sport professionals can appreciate and embody the significance of having an athlete's interest at heart, the interpersonal symmetry within high-performance teams can lead to successful collaborative professional relationships (Parham, 2016), as they would be centred around a culture of constructive exchange, debate and cooperation (Böhlke & Neuenschwander, 2015), rather than the current toxic climate of conflict, measurement, and acquisition (see Chapters Three and Four).

8.3.4 Application of sport psychology

The responses to questions regarding the application of sport psychology in Singapore were overwhelmingly positive. With reference to Figure 8.8, 37% of participants strongly agreed and 42% agreed that working with a psychologist should begin at developmental stages (i.e., prior to becoming a national athlete), with 34% who strongly agreed and 37% who agreed that psychology should be utilised from a young age. In addition, 27% of participants strongly agreed and 32% agreed that psychology should begin at the grassroots level. However, it should be noted that this positive inclination to establish a working relationship with a sport psychologist from a young age was in sharp contrast to the current trend of psychological practice. From interviews with qualitative participants,

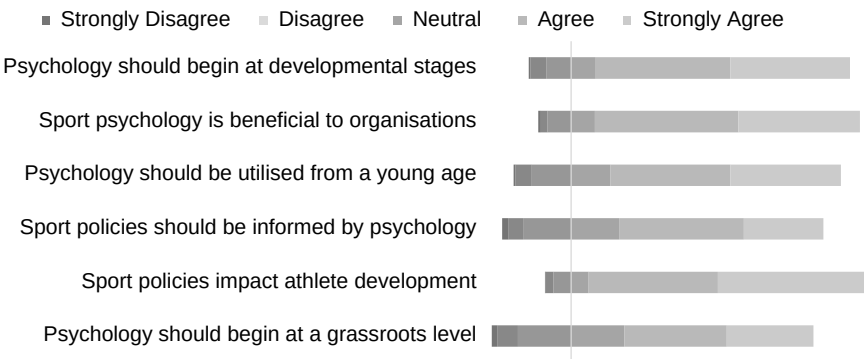

Figure 8.8 Stacked bar chart of responses relating to the application of sport psychology.

psychological consultations seemed to only occur prior to major events (i.e., brief and irregular contact sessions) for athletes who were medal contenders and as a last resort, after coaches and athletes had exhausted all other sport science options to improve performance (see Chapters Four and Five).

From an organisational perspective (see Figure 8.8), 38% of participants strongly agreed and 45% agreed that sport psychology is beneficial to sport organisations. Regarding sport policies, 25% of participants strongly agreed and 39% agreed that policies should be informed by psychology, with 46% who strongly agreed and 40% who agreed that these policies do indeed impact athlete development. Similar to the perceptions of sport psychology in Figure 8.5, the responses in Figure 8.8 reinforce the notion that Singaporeans in this study are receptive to the practice of sport psychology, and seem to be aware of the potential value and benefit it can provide to supporting sport organisations and informing their policies. However, the ideal working relationship of collaboration between sport organisations and sport psychologists has yet to occur. Based on the experiences of qualitative participants, the practice of sport psychology tends to be confined to working one-to-one with an athlete and, only when required, as a mediator or mental band-aid, consulting with the coach or, on occasion, with other stakeholders to portray a collaborative façade (see Chapters Five and Six). To this point, the interactions linking Singapore's meritocratic culture to the policies of the organisation, discussed in Chapter Four, and its influence on staff (i.e., the collaborative façade), as well as the subsequent impact on athletes within the elite sport ecosystem (i.e., normalising immoral standards that overlook athlete health and well-being), are examples of areas that can benefit from psychological intervention. As such, the latent construct pertaining to the application of sport psychology was consistent with earlier qualitative findings discussed in Chapter Six (Advancing the Practice of Sport Psychology).

On review of public institutions, quasistate agencies, schools, and grassroot bodies, to the best of the researcher's knowledge, there appears to be competing definitions for young people and youth in Singapore. The Children and Young Persons Act Chapter 38 outlined by the Singapore Statutes (2019) defines a young person as an individual, "who is 14 years of age or above and below the age of 16 years" (p. 9). Alternatively, Singapore's National Youth Council (2018) defines youth as a person between the ages of 15 and 35 years. However, the broadest definition of youth sport, defined by Vealey and Chase (2016), involves both developmental and competitive participation by children and adolescents typically under the age of 18 years.

With direct school admission via sporting achievements to secondary schools, such as the Singapore Sports School, it would be reasonable to assume that young people at the age of 12 years and above (secondary one intake) begin to actively engage in more competitive levels of sport (i.e., national and international inter-school games; McNeill & Fry, 2010; Ministry of Education, 2018). Furthermore, the aim of the recently launched National Youth Sports Institute, to drive youth sports development by supporting student-athletes and various sport communities in Singapore, via services like youth coaching, sport science,

athlete life management, and talent identification (National Youth Sports Institute, 2019), is consistent with the beliefs of participants (see Figure 8.8), that sport services should begin from a young age, ostensibly at approximately 12 years of age.

The need to provide such services is further substantiated by the extant literature on elite sport in Singapore by Brooke (2014) and Peh (2014), which raised the issue of dropout between the ages of approximately 16 to late 20s (see Chapter Four). Considering Singapore's overwhelmingly competitive, education-conscious, and meritocratic environment (see Chapter Three), this should not be surprising as athletes also have to contend with the added pressure of mental demands from academic and career pursuits, which could inadvertently threaten their mental health, and lead to dropout (i.e., Brooke, 2014; Peh, 2014), at a period at which they should be peaking (Allen & Hopkins, 2015; Schinke et al., 2018).

For sport psychology, being oriented towards performance enhancement and restoration (Portenga et al., 2017), the mental skills and adaptive psychological constructs (e.g., relaxing under pressure, managing emotions, positive attitude) that can be gained from working with a sport psychologist within the sport context are the same life skills that can be applied to other goal-oriented or performance domains (e.g., academic examinations; Lesyk, 2005). In addition, as every elite athlete was once a beginner and relied on teachers, coaches, and sports clubs to develop their talent (De Bosscher et al., 2015), coupled with the importance placed on building good and trusting relationships with athletes and stakeholders as early as possible (Arnold & Sarkar, 2015), it would be reasonable to suggest that sport psychology should begin at these early stages of an athlete's development, specifically at the entry into secondary school and introduction to a higher level of competitive sport. Early opportunities to work with a sport psychologist may also foster a greater appreciation for the profession, considering that qualitative athlete-participants in this study, who experienced sport psychology services, were more inclined to seek them again (see Chapter Five).

Such a system, implemented at a policy-level, may possibly circumvent the dominant prescription discourse (see Chapter Five) and foster more sustainable, effective, and long-term collaborative practices (see Chapter Six). This can be achieved by building strong professional relationships with stakeholders, like coaches and team managers, early in an athlete's career, rather than only be utilised as a last resort without any prior investment into building trust and rapport. Moreover, the potential to affect change from an organisational and policy-level, especially in Singapore's hierarchical and paternalistic society (Horton, 2002, 2013; see Chapter Three), will be far greater if sport psychologists can work through performance leaders and gatekeepers (see Chapter Six), rather than in isolation with athletes only (Fletcher & Arnold, 2011). Nevertheless, it must be noted that the implementation of such changes, or lack thereof, is dependent on the governing sport organisation's understanding, receptivity and utilisation of sport psychology (Wylleman, 2019), and whether it is interested in long-term, holistic, and sustainable athlete development, or if it

chooses to perpetuate the prevailing meritocratic and outcome-oriented culture (see Chapters Three and Four).

8.4 Summary

The visualisation and narration of quantitative data in this chapter have illustrated important patterns and emphasised specific nuanced aspects of elite sport within Singapore's unique culture and ecosystem. Such information may have gone unseen had the data simply been presented in a table laden with numbers (see Chapter Seven). During this process, the researcher moved from being a passive transmitter of knowledge, where data are collected, analysed and likely archived, to creatively using the power of images to speak simply to the layman, in an effort to better communicate recommendations and, consequently, generate more favourable progress for elite sport and the practice of sport psychology in Singapore. Truly, a picture is worth more than a thousand words.

The quantitative findings were generally in agreement with the experiences of participants from earlier chapters, being that Singapore's elite sport ecosystem does favour the measurable, rather than the meaningful, seemingly overlooking the importance of sustainable and holistic athlete development. Eclipsed by the dominance of mass recreational participation (see Chapter Three), Singapore unfortunately still lacks a well-established culture that values high-performance sport, making it undesirable to be an elite athlete. If elite sport is to advance beyond the current toxic culture of acquisition, it is paramount for leaders in sport organisations to steer Singapore's elite ecosystem towards a climate of contribution, cooperation, and reciprocity.

Interestingly, the only conflicting findings were perceptions of sport psychology. In contrast to the misconceptions perceived by qualitative participants outlined in Chapter Five, quantitative findings indicated a greater awareness, understanding, and acceptance of psychological practice. However, the general trend concerning the practice of sport psychology was in agreement with the extant literature and qualitative data, such as the need to build long-term relationships to support competent and effective psychological practice, that can consequently lead to sustained performance enhancement. Unfortunately, the need to accommodate the demands of stakeholders and athletes, in tandem with the prescription discourse associated with psychological practice (see Chapter Five), created an obscure image of applied work, that appeared to be misaligned with Sport Singapore's high-performance sport system goals. Indeed, the positive inclination to establish a working relationship with a sport psychologist from a young age was in sharp contrast to the current trend of psychological practice, with its focus on medallists over non-medallists. Perhaps it may be prudent for sport leaders to recognise the potential value and benefit that sport psychology can provide in support of sport organisations' goals and guide their policies towards promoting long-term and holistic athlete development, answering the call to inculcate sport psychology at multiple organisational levels.

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9 Conclusion: Moving Elite Sport and Psychology Forward

Nicholas de Cruz

9.1 Empirical Contributions

9.1.1 A recreational sporting culture

With the predominant paternalistic-pragmatic leadership style of Singapore's government, sport, being centrally significant to the nation's view of itself and the image it wants to portray to the rest of the world, has not escaped the purview of policy, as success particularly in elite sport, presents a potential means to advertise Singapore's international status as a world-class developed city (Horton, 2002; McNeill et al., 2003; Peh, 2012). However, it would seem that the bolstered image of elite sport (e.g., foreign athletes naturalised to win medals; Phan, 2013) may not be in the interest of national athletes or the development of elite sport for that matter, as only champions are celebrated only during their sporting careers, overlooking the larger pool of "unsuccessful" national athletes in and beyond sport, despite their years of commitment and dedication (Horton, 2002; Koh-Tan, 2011). As such, while the "victories" of Singapore's athletes may have enhanced its First World economic status (Aplin & Jong, 2002; Cha, 2009; Fry & McNeill, 2011), and portrayed a successful high-performance sport system, the cultural significance of sport in Singapore remained participatory and recreational in nature, as the concept of elite sport continues to be an elusive phenomenon for most Singaporeans, based on both qualitative (see Chapter Three) and quantitative (see Chapter Eight) findings.

It seemed the government's efforts to promote elite sport were contradictory to its pragmatic policies that encouraged continuous educational advancement to fuel its knowledge-based economy and consequently, marginalised the pursuit of elite sport in favour of more traditional pursuits that had the highest probability of upward mobility in its meritocratic society (Brooke, 2014; McNeill et al., 2003). Clearly, without any guarantee of tangible benefits from elite sport, other than a healthy lifestyle (Peh, 2014), the majority of naturally competitive, education-conscious Singaporeans, did not view elite sport as a viable option, besides its utility as a conduit for academic points (McNeill & Fry, 2010). Thus, without a well-established culture that values the pursuit of sporting excellence, elite sport in Singapore is unlikely to thrive (Andersen et al., 2015),

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especially as athlete-participants, passionate about sport, were also apprehensive of what the future might hold if they did not first secure the safety net of a complete education (e.g., bachelor's degree) to survive in its highly competitive and outcome-oriented environment, should they be unable to achieve or sustain their "champion" status.

9.1.2 The precarious position of elite sport

In spite of possessing the nine pillars necessary for a successful elite sport system (see Sport Singapore, 2019, for specific details), namely, "financial support, an integrated approach to policy development, a participation base, a talent identification system, athletic and post career support, training facilities, coaching provision and coach development, national and international competition structures, and scientific research" (De Bosscher et al., 2015, p. 4), the predominant recreational culture, coupled with the individualistic outcome-oriented environment, that emphasises the measurable instead of the meaningful, presents several systemic issues and distortions within Singapore's elite ecosystem. From an organisational perspective, the practice of acquisition and instant gratification by sport stakeholders (i.e., sport scientists, coaches, team managers) drew attention to the apparent neglect of providing holistic support for national athletes, in favour of conforming to the competitive outcome-oriented culture and pressure to constantly satisfy policy-driven indicators of success. Other distortions included overlooking the possible risk of mental health disorders that accompany such irresponsible practices (Schinke et al., 2018), evident in how athletes appeared to only be valued for their winning abilities, leaving little to be celebrated upon exiting their sporting careers. For example, being left behind, both academically and financially, by peers who had chosen more mainstream careers after completing tertiary education (see Chapter Four).

Evidently, Singapore's strategic meritocratic approach to investing her sporting resources (e.g., sport science support), while outwardly successful (e.g., Beijing Olympics 2008 table-tennis and swimming medallists; Phan, 2013), portrayed an illusion of holistic support for all national athletes, when the reality was more akin to selective availability for athletes with medals or medal potential. Furthermore, stressing the importance of support to pursue sporting excellence, many participants shared how it would be difficult to begin and sustain involvement in elite sport in Singapore had families not attained the necessary affluence to fund such pursuits. This begs the question of how effective Singapore's elite ecosystem is, if it is reliant on the socio-economic status of its citizens. Such issues were reflected in the qualitative findings in Chapter Four and affirmed by the quantitative findings in Chapter Eight, where Singapore's world-class sporting system portrayed structures and features of best practices (e.g., long-term development focus, support network; see Sport Singapore, 2019, for specific details), and yet the collective experiences of participants in this book indicated that its application appeared to be inconsistent with the statement by the Singapore Sport Institute (2019), that claims to support *every* athlete on

their sporting journey. Taking these distortions into account, it is not surprising why elite sport struggles to establish a firm foundation in Singapore.

9.1.3 Stagnation of sport psychology

A central theme shared by many participants, particularly national athletes, was how sport psychologists were expected to act as mediators (e.g., clarifying misunderstandings) between athletes, their coaches and possibly other stakeholders, due to their perceived neutral positions in the elite ecosystem (see Chapter Five). This working relationship was consistent with the extant literature (FEPSAC, 2017; Wylleman et al., 2009), where the practice of sport psychology extended beyond working with athletes, to including coaches and team managers. However, what stood out when interpreting the complex roles and responsibilities of sport psychologists was how athlete-participants simply wanted a companion to share the journey with them, whether they be medallists or not. Unfortunately, operating in a culture that values tangible and material outcomes (see Chapter Three), sport psychologists were pressured and expected to deliver results that could be objectively measured, seen and felt, similar to that of other sport science disciplines (e.g., increase in oxidative capacity and muscle mass from strength and conditioning). In addition, with the need to fulfil policy-driven indicators of success (see Chapter Four), the experiences of athlete-participants indicated that sport psychology seemed to be mainly available for selected athletes with "potential" and deemed worthy to receive such services.

Rather than the application of performance psychology principles to support athletes' development and well-being (Portenga et al., 2017; Schinke et al., 2006), the obsession with tangible outcomes has overlooked the fundamental principles of sport psychology, as it continues to be plagued by ambiguous statements and misconceptions. This led to an identity premised on the dispensing of a psychological pill that could quickly cure any performance ailment, especially when other physiological or technological avenues had been exhausted. Such poor practices were raised throughout Chapter Five, where the application of psychology was restricted to a narrow prescription discourse or how both neophyte and experienced sport psychologists adopted intervention strategies that were generally brief, irregular, familiar, and focused solely on performance enhancement, intentionally leaving other potential psychological issues unexplored. Even establishing working relationships with coaches and team managers proved challenging. With the pressure to validate one's professional abilities to remain credible and employed in Singapore's meritocratic and competitive nation, coupled with the lack of clear mechanisms to measure the effectiveness of sport psychologists (Portenga et al., 2011), sport psychology was generally downplayed in an effort to protect the personal interests of other stakeholders, and to avoid losing or sharing the acclaim and professional validation gained from association with winning athletes (see Chapters Five and Six). All this was done in order to deliberately address policy-driven indicators of sport organisations and the demands of athletes, who were similarly under pressure to

perform. Given that the general application of sport psychology appeared to be limited to that of neophyte practices, and with empirical evidence to suggest uncooperative working relationships with stakeholders, it should not be surprising that the development of sport psychology has been trapped in its infancy, with little hope of progress even after 10 years of existence in an ideal institutionalised elite sporting system (e.g., Araki & Balasekaran, 2009; Ong & Harwood, 2018).

9.2 Methodological Contributions

9.2.1 Sociocultural specific strategies

According to Portenga et al. (2017), competent and effective psychological practice occurs when practitioners are equipped with a clear professional philosophy and theoretical orientation. In an effort to embody this belief and go beyond the limits of scientific inquiry in the field of sport psychology (i.e., predominant positivist, "natural science" approach and decontextualised knowledge; Blodgett et al., 2010; McGannon & Smith, 2015; Ryba et al., 2013; Westerman & Yanchar, 2011), and explore social phenomenon through the analytical lens of CSP, I focused on designing and applying a mixed-methods design which utilised different research methods (i.e., thematic and factor analysis) that could compliment and augment each other. This design remained grounded in interpretivism and was fuelled by my conscious effort to personify the professional purpose of a sport psychologist, which is to support the health and well-being of athletes (Palmer, 2017; Portenga et al., 2017). With cultural praxis at the heart of CSP, the mixed-methods design provided a systematic yet flexible approach from which to develop new ways of thinking that could explore and shed light on marginalised environments like that of elite sport in Singapore and, through my ongoing engagement in reflexive practice, identify and integrate sociocultural specific strategies that can hopefully inspire positive change (Ryba & Schinke, 2009; Ryba et al., 2013; Schinke et al., 2012). As such, while the theoretical (i.e., CSP) and methodological (i.e., mixed-methods) principles utilised may not be innately "new knowledge," the process of how this research was conducted presents a fruitful line of inquiry that illustrated how cultural praxis and interpretivism can inform innovative research designs to examine the nuances within marginalised contexts.

In applying cultural praxis, remaining committed to interpretivism and the professional purpose of a sport psychologist, interviews proved challenging, evident in the tension mentioned in Chapter Two, where I had to navigate the complex web of informal conversations with athletes, and declamatory dialogues with sport psychologists and stakeholders. Fortunately, I was resolute in upholding my professional philosophy and theoretical orientation, and always returned to my main motivation for this research. That is, to find ways and means to better support the health and well-being of athletes. Furthermore, cognisant of how social knowledge is dependent on the local contexts and current

conversations in which they are situated (Tracy, 2010; Yardley, 2000), some other examples of sociocultural specific strategies included the use of Singapore Sport Institute's (2019) spexCarding framework to illustrate the sporting expertise of qualitative participants, rather than the "universal" formula proposed by Swann et al. (2015). Even the stereotypical beliefs of Singaporeans, being that quantitative research is more valuable given our fetishization with tangible, measurable, and statistical values (see Chapters Two and Five), was a practical reason to use realist tales in Chapters One to Eight, and for me to include factor analysis as a means to support the receptivity of this research. The factor analyses led to the construction of the SSCQ and SSPQ. However, it must be noted that while the SSCQ and SSPQ can be considered theoretical contributions to the CSP literature, they were constructed in the service of supporting the integrity and receptivity of *this book* and, being unique to Singapore's sporting environment, should not be applied haphazardly to other contexts.

9.2.2 Communication and accessibility

I was mindful that the quantitative data in Chapter Seven, while statistically meaningful, may be difficult to interpret or be understood by anyone except scientists familiar with the quantitative paradigm and advanced statistics (Foster, 2019; Onwuegbuzie & Dickinson, 2008). Thus, in considering the target audience for which this book was conceived for (Ryan, 2016), being the Singaporean sporting community, I wanted to find a means to make this information accessible and of practical use, rather than to be forgotten in a repository, unutilised. Having little information to go on in the extant psychological and quantitative methods literature, I turned to journals and books on communication and graphic design (e.g., Williams & Quave, 2019). This led me to data visualisation, which held the potential to illustrate important patterns and information that may not have been apparent had I simply settled for tables laden with numbers (see Chapter Seven; Onwuegbuzie & Dickinson, 2008; Williams & Quave, 2019).

Encompassing the principles of both thematic and factor analysis, through presenting the patterned responses of quantitative participants and observing the principle of parsimony (Braun & Clarke, 2006, 2012, 2013; Yong & Pearce, 2013), the visual data presented in Chapter Eight augmented thematic findings by reinforcing and, in some cases, contradicting qualitative results. This led to information greater than what could have been achieved had I simply presented the thematic and factor analyses results independently. One such example was how qualitative participants raised stigmatic issues associated with psychological practice (see Chapter Five), but quantitative findings instead showed a greater understanding and acceptance of sport psychology in Singapore (see Chapter Eight). Certainly, by being open to multiplicity, eclecticism, flexibility, pluralism, and emergent design, or what Gibson (2017) has termed as "methodological bricolage" (see Chapter Two), the visualisation of data allowed me to move from being a passive transmitter of knowledge that just systematically collected and

presented data, to a proactive researcher that used the power of images to communicate this culturally-specific information for Singapore's sporting community (Khoury et al., 2019; Sparkes, 2015; Wolcott, 1999).

9.3 Practical Implications

9.3.1 Focusing on the system

It was intriguing that the trend of information throughout this book highlighted how the Singapore elite sport system did not appear to provide holistic support for every athlete, contrary to the statements in the spexCarding Guide by the Singapore Sport Institute (2019). In an atmosphere that seemed to only prioritise performance outcomes to fulfil policy-driven indicators of success with tangible and measurable expectations from athletes, there appeared to be no inclination to consider the possible consequences of such actions (i.e., poor performance, career termination, poor mental health and loss of athlete identity; Carless & Douglas, 2012; Ronkainen et al., 2016). Early indicators of these consequences can already be seen in the work on elite sport in Singapore by Brooke (2014) and Peh (2014), who observed dropout between the ages of approximately 16 to late 20s. A time when athletes should be peaking (Allen & Hopkins, 2015; Schinke et al., 2018), yet instead, had to not only deliver medals, but also contend with the added pressure to remain competitive in Singapore's education-conscious and meritocratic society (see Chapters Three and Four).

Evidently, there is a need to shift the focus from personalities (i.e., medallists) and focus on the system itself (i.e., elite sport ecosystem), especially as there is no evidence to support the persistent political notion (see Brooke, 2014; Peh, 2012, for affirmation) that role models or elite success, purchased or not, can inspire others to emulate them (Grix & Carmichael, 2012). As mentioned earlier, elite sport in Singapore is unlikely to thrive without a well-established culture that values the *pursuit* of sporting excellence (Andersen et al., 2015), rather than just its outcomes (Koh-Tan, 2011; see Chapter Four). Thus, it may be prudent to move beyond the façade of an ideal ecosystem and the superficial promotion of successful personalities, to focusing on making the statement by the Singapore Sport Institute (2019) a reality, which is "to be fully behind *every* [emphasis added] Team Singapore athlete to support them on their journey of sporting excellence" (p. 4).

9.3.2 Regulating psychological practice

The apparently misunderstood identity of sport psychology, with its prescription discourse and dispenser of mental "band-aids" for short-term performance enhancement (see Chapters Five and Eight), has made it clear that there is a need to establish a professional identity to clarify these misconceptions, and provide a foundation from which to build its credibility and validity (Aoyagi et al., 2012; Tod et al., 2017). While the extant literature (e.g., Aoyagi et al., 2012; Portenga

et al., 2017; Thelwell et al., 2018; Tod et al., 2017) has suggested that it is crucial to have a clear consensus outlining the role and responsibilities of sport psychologists, and subsequently communicating this consistent understanding to the sporting community, the application of sport psychology in Singapore is precariously reliant on practitioners to be honest and forthright with clients, given that the practice of psychology is not regulated in Singapore (Singapore Psychological Society, 2017). Thus, it may be more prudent to first establish the requirements to be a sport psychologist, as having the right community of professionals can support the effective construction of a professional identity, built on psychological practice that is accountable, trustworthy, competent, and ethical (Henschen & Tenenbaum, 2005).

Simply identifying professionals by educational qualifications only (e.g., doctorate, masters, degrees) may not cover the necessary practitioner skills and technical competencies expected of a sport psychologist (Harwood, 2016). Instead, it would be more effective for sport governing bodies to limit the employment and professional practice of sport psychology to individuals with professional certification or accreditation endorsed by internationally recognised and established psychological organisations (e.g., *American Psychological Association*, *Australian Psychological Society,* or *British Psychological Society*). This can be the first step to adequately assess the necessary competencies of hopeful sport psychologists and distinguish them from less competent individuals prior to employment (Portenga et al., 2017), until such time that the International Society of Sport Psychology establishes their internationally recognised consultant registry (Schinke et al., 2018). It is fortunate that the majority of sport psychology services are accessible only through the Singapore Sport Institute and the National Youth Sports Institute, allowing the implementation of clear boundaries to be relatively achievable with the backing of the Singapore government. In addition, such measures can protect the public from malpractice and allow the field of sport psychology to achieve a consistent level of professionalism (Aoyagi et al., 2012).

9.3.3 Establishing a professional community

Paramount to implementing and maintaining a high-performance environment, that can move beyond the prevalent outcome-oriented culture of quantification and acquisition (see Chapters Four and Six), is the need to have the right people who understand, acknowledge and are willing to abolish the current toxic atmosphere that has seemingly inhibited the growth of elite sport in Singapore, and subsequently the practice of sport psychology. Having been predicated on only superior performances, personalities, and medal success, the disparity between sport policies and their uncritical implementation with athletes has normalised immoral standards that apparently overlook athlete health and well-being. Consequences of turning a blind eye can already be seen in the experiences of participants in this book, apparent in how specific athletes were cherry-picked from specific sports to easily fulfil performance objectives, or how sport

stakeholders resorted to credit clamouring in an effort to validate abilities and remain employed, or the lack of collaboration that followed such self-fulfilling pursuits (see Chapters Four and Five).

Indeed, in Singapore's hierarchical and paternalistic society (Horton, 2002, 2013; see Chapter Three), such a cultural shift would require the appointment of performance leaders who can inspirationally lead, effectively manage and competently execute the statements and policies outlined by the Singapore Sport Institute (2019), being the unwavering support for all national athletes in their pursuit of sporting excellence (Arnold et al., 2012; Fletcher & Wagstaff, 2009; McCalla & Fitzpatrick, 2016; Portenga et al., 2017). Such individuals can be role models for this initiative to inspire other stakeholders to invest in it, and so adapt to the changing demands that would accompany such reforms (Fletcher & Arnold, 2011). In support, research exploring the determinants of effectiveness of sport organisations in Singapore has similarly highlighted how having the right people in the right roles is even more critical than funding alone (Koh-Tan, 2011). If sport professionals at all organisational levels can be led to appreciate the importance of having an athlete's interest at heart, the interpersonal symmetry within high-performance teams can support the development of collaborative professional relationships (Parham, 2016), as they would be centred around a culture of constructive exchange, debate and cooperation (Böhlke & Neuenschwander, 2015).

9.3.4 Building trust and rapport

With the establishment of a professional community, the responsibility of providing entry to high-performance teams may fall onto gatekeepers, like performance leaders and sport stakeholders, particularly coaches (see Chapter Six). However, sport psychologists need to simultaneously make the effort to immerse themselves into the sports they are assigned to by investing time and energy into building and maintaining these working relationships (Barker & Winter, 2014; Henriksen et al., 2019; McCalla & Fitzpatrick, 2016; Parham, 2016). Expanding on the current, albeit limited, opportunities to work with coaches and team managers (see Chapter Five), communicating the value of sport psychology, through the provision of scientific strategies that are of *practical* use or attending training sessions and being present and available for *every* athlete during peak and off-peak periods, can create opportunities to build rapport and demonstrate the commitment sport psychologists have towards the professed objective of Singapore's high-performance sport system, being the well-being and performance of her athletes (Singapore Sport Institute, 2019).

An example of how this strategy can be implemented is by ingraining sport psychology into the sports team early in an athlete's career (i.e., approximately 12 years of age; see Chapter Eight). With the importance placed on building good and trusting relationships with athletes and stakeholders as early as possible (Arnold & Sarkar, 2015), it would be reasonable to suggest that sport psychology should begin at these early stages of an athlete's development. Early

opportunities to work with a sport psychologist may also foster a greater appreciation for the profession, considering that qualitative athlete-participants in this book, who experienced sport psychology services, were more inclined to seek them again (see Chapter Five). In addition, it would demonstrate how sport psychology is an integral and indispensable component to the development and performance of elite athletes, rather than only consulting with athletes prior to major events (i.e., brief and irregular contact sessions) and as a last resort (see Chapters Four and Five). If sport stakeholders and sport psychologists can develop relationships built on trust, and value each other's contribution to athletic development, both parties can effectively collaborate and draw on a collective breadth and depth of knowledge from multiple sources to maximise the potential support rendered to athletes (Biggin et al., 2017; Foster, 2019; Henriksen et al., 2019; Reid et al., 2004; Sharp & Hodge, 2011).

9.4 Concluding Thoughts and Future Possibilities

Considering the insight that has been gained through this book, in regard to Singapore's sports culture, its elite ecosystem and the practice of sport psychology, it can be said that elite sport does not appear to be existential to Singapore and her continued success as a First World economic nation. Through contributing to the dearth of culturally diverse research in the field of sport psychology, the multiplicity of participants' identities, experiences and behaviours drew attention to the possible lack of action behind the unexamined words and behaviours of sport psychologists and other stakeholders, such as coaches and team managers. It is crucial to be aware of the difference between portraying an ideal institutionalised elite sport system, that recognises it should support every national athlete in their pursuit of sporting excellence (Singapore Sport Institute, 2019), and the current toxic practices that seemingly revolve around objectifying athletes to fulfil policy-driven indicators of success. Such practices (e.g., credit clamouring to remain employed and necessity to rapidly produce tangible results) and their unfavourable implications (e.g., lack of professional collaboration and the prescription discourse of sport psychology) have been thoroughly discussed, and are examples of areas that can be addressed with the specific recommendations (e.g., appointing the right leaders and regulating the practice of sport psychology) mentioned in this book. However, the first step to solving any problem is *acknowledging* that there is one, rather than continuing to generate positive outcomes burdened with negative consequences (e.g., Olympians that have limited prospects after their sports career), or perpetuate hollow pursuits and call it progress (e.g., bolstered image of elite sport from purchased Olympic champions).

Nevertheless, systemic changes are not always possible as they are rooted in the historical, cultural, and political context of nations (De Bosscher et al., 2016). In Singapore, the issues inhibiting the progress of elite sport, being the prevailing performance culture and need for a safety net of academic qualifications and mainstream careers, had been identified by Aplin in 1998. Now, approximately

24 years later, findings from this book show that it will be challenging to overcome such a firmly established culture, in spite of the specific and empirically grounded recommendations. Advancing the practice of sport psychology poses a similar challenge, having made little progress even after 10 years of existence in Singapore's ideal institutionalised elite sporting system (e.g., Araki & Balasekaran, 2009; Ong & Harwood, 2018). In addition, being sensitive to the context in which this research took place, I had to be particularly diplomatic in my presentation and discussion of findings so as to balance the tension between what *should* be said and what *can* be said. By restricting my expression of certain points without compromising them or engaging is what Lazard and McAvoy (2020) have termed as "limited disclosure," I hope to protect participants and myself from any possible undesirable outcomes, while representing the experiences of participants fairly and without political agenda.

Moving forward, the prospect of culturally diverse research is heartening, especially for Asian neophyte sport psychology students like myself, who have to contend with the dominant cultural power and privilege of mainstream (white, Euro-American) worldviews perpetuated in contexts that do not conform to the Western-positivist model of practice (Blodgett et al., 2015, 2014; Schinke et al., 2012). In undertaking this research, I share the sentiments of Lee and Foo (2018), where mind and culture are inseparable and cannot exist independently of each other. This was evident in how I continually linked the experiences of participants in this book to the extant literature relevant to Singapore's unique culture to achieve cultural praxis. For example, utilising a longitudinal design, the SSCQ and SSPQ can be used after every Olympic cycle to examine whether there has been any change pertaining to the culture of sport and the practice of sport psychology in Singapore. Rather than simply comparing the similarities and differences of specific cultural findings to mainstream contexts as a means of literary acceptance and "universal" application or generalisation (e.g., Westerners are individualistic whereas Easterners are collectivistic; Naoi et al., 2011; Si et al., 2015; Xinyi et al., 2004), this book has shown that it is possible and beneficial to focus on what has been said and its meaning within the context in which it is being studied. I hope this can inspire future research to do the same and continue the exploration of sport psychology in contexts beyond the mainstream.

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Appendix

Appendix A Interview Guide

Section One

To better understand Singapore's sports culture, I would like to ask you a few questions about your experiences in sport.

	Interview Questions	*Participant Probes*
1.1	Can you tell me about Singapore's sports culture?	Where, when, what, who, why?
1.2	How do you think sport is viewed in Singapore?	Meaning, importance, experiences
1.3	How important is sport to you?	Time, finances, health, support, culture
1.4	What do you think are peoples' view of sport in Singapore?	Where, when, what, who, why?
1.5	Can you tell me about when you first thought about becoming a [participant]?	Meaning, importance, experiences
1.6	Can you tell me about the demands and responsibilities of being a [participant]?	Support, responsibility, issues
1.7	How has life been since you became a [participant]?	Accomplishments, enjoyment, demands
1.8	Can you describe what a good day/bad day is like for you?	Positive and negative experiences
1.9	Can you tell me how your career has progressed over the years?	Where, when, what, who, why?

Section Two

To better understand your thoughts of sport psychology, I would like to ask you a few questions about the profession.

	Interview Questions	*Participant Probes*
2.1	Can you share your understanding/thoughts about sport psychology?	Meaning, experiences, concerns
2.2	How do you think sport psychology can impact Singapore's sports scene?	Therapy, training, family, friends, coach
2.3	Who do you think should see a sport psychologist?	Where, when, what, who, why?
2.4	As a [participant], would you recommend sport psychology?	Goals, obstacles, social support, health
2.5	Can you tell me what you think a sport psychologist does?	Where, when, what, who, why?
2.6	Do you know anyone who has seen or worked with a sport psychologist? If so, can you share what you have learnt from their experience?	Positive and negative experiences

Section Three

I would like to use the valuable information that you and other participants are providing me with to improve sport services in Singapore. In this section of the interview, I would like to ask you a few questions about your expectations of sport psychology.

	Interview Questions	*Participant Probes*
3.1	How would you describe an effective sport psychologist?	Support, importance, relationships
3.2	What services would you expect a sport psychologist to provide?	Therapy, training, family, friends, coach
3.3	What skills and knowledge would you expect a sport psychologist to possess?	Training, education, experience
3.4	As a [participant], what challenges do you think a sport psychologist would face?	Risks, concerns, struggles
3.5	Where do you think the profession of sport psychology fits within the field of sport science?	Meaning, importance, responsibility

Section Four

This just about completes the interview. However, before we finish, let me ask you some final questions.

	Interview Questions
4.1	How do you think the interview went?
4.2	Did you feel you could tell your story fully?

(*Continued*)

Interview Questions
4.3 Did I lead you or influence your responses in any way?
4.4 Is there anything that we haven't talked about that you are able to tell me about your experiences in para-sport?
4.5 Have you any comments or suggestions about the interview itself?

Thank you for participating in this study.

Appendix B EFA Questionnaires

100-item SSCQ

Questions relating to public perceptions of sport in Singapore

1. Singapore is a sporting nation
2. Sport is a growing culture in Singapore
3. There is only attention to sport at major games
4. Sport in Singapore is vibrant
5. Public support for sport has improved
6. Sport services for athletes have improved
7. Elite sport is thriving in Singapore
8. There is a lack of community engagement
9. There is no sports culture in Singapore
10. Sport is a worthwhile pursuit
11. Being an athlete overseas is better

Questions relating to the value and "worth" of sport in Singapore

12. Emphasis is only for a healthy lifestyle
13. Sport incentives are limited in Singapore
14. Sport is generally seen as a "therapy"
15. Singapore hosts enough sporting events
16. Sport is useful for national development
17. Sport is seen as a secondary option
18. There is a large recreational sporting population
19. There is national pride for winning in sport
20. Athletes should perform with increased support
21. Increased funding makes sport more sustainable
22. The government has an agenda for sport
23. Athletes are used to fulfil political agendas
24. There is a need for tangible results to gain support
25. Sport investment must be justified with results

Questions relating to surviving as an athlete and being "successful" in Singapore

26. Academic success leads to future success
27. Academic success is more crucial than sport
28. Exam periods inhibit sporting performance
29. It is difficult to excel in both school and sport
30. National service does not hinder sport performance
31. A career in sport is very uncertain

(*Continued*)

100-item SSCQ

32. Between school and sport, school is a priority
33. Singaporeans are competitive
34. Money is a measure of success in Singapore
35. Financial security is desired as soon as possible
36. Nothing is free in Singapore
37. Success is measured in tangible outcomes

Questions relating to Singapore's sporting organisations and infrastructure

38. Athletes are given good support
39. Support must be justified before it is given
40. Support is given only after successful results
41. Organisations have an athlete-centred approach
42. Sport organisations have fostered success
43. Athletes' success is a result of sport organisations
44. Sport organisations are transparent with athletes
45. Leaders of sport organisations lack relevant skills
46. Policies support athletes' development
47. All athletes are treated fairly and equally
48. There is a general fear of failure in sport
49. Organisations and athletes communicate well
50. Sport goals are short-sighted in practice
51. Succession planning in organisations is sufficient
52. A coach is key to an athlete's success
53. A healthy coach-athlete relationship is important
54. The coach's behaviour will affect the athlete
55. What parents think of sport is important
56. Parents are always supportive of sporting pursuits
57. Sport professionals work in isolation
58. Sport professionals communicate with each other
59. It is difficult to determine who is a sport "expert"
60. Sport is governed by sport professionals
61. Sport organisations are professionally managed
62. Sport professionals focus on athlete development
63. Athletes' well-being is a priority for organisations
64. Professionals need to be associated with winners
65. Only champions are the priority for organisations
66. There is a good emphasis on athlete development

Questions relating to being an athlete in Singapore

67. Being a national athlete is prestigious
68. It is easy to be a national athlete in Singapore
69. There is national pride in representing Singapore
70. The same athletes are always presented in media
71. Only medal contenders are seen by the public
72. Singapore has many role-model athletes
73. Being a role-model athlete requires prior success
74. Athletes are accurately represented in the media
75. It is easy to be a full-time athlete in Singapore
76. Athletes can maintain a full-time job and compete

(*Continued*)

100-item SSCQ

77. Employers are supportive of sporting pursuits
78. A career as an athlete is sustainable in Singapore
79. The education system supports student-athletes
80. Sporting performance takes priority over school
81. Financial support is essential for sporting success
82. Sport is a means to gain entry to elite schools
83. Athletic success is valued by potential employers
84. Academic scholarships are easily available
85. Singaporean athletes are a priority in Singapore
86. Drop in sporting success leads to support removal
87. There is no real benefit to being a national athlete
88. Sport outcomes are prioritised over the process
89. Athletes are expected to always perform
90. Time and effort invested in sport is always valued
91. Sport is not a waste of time and energy
92. Support given is dependent on attaining medals
93. It is easy to find sponsors to fund athletic pursuits
94. Athletes need to earn support before it is given
95. Sports with medal potential are prioritised
96. Organisations associate themselves with winners
97. Medals are an indicator of organisational success
98. Athletes have it easy compared to past athletes
99. Support systems are taken for granted by athletes
100. National athletes are entitled to sport support

113-item SSPQ

Questions relating to the perceptions of sport psychology in Singapore

1. It is unclear what a sport psychologist does
2. A sport psychologist improves sport performance
3. Sport psychology is a science and an art
4. Sport psychologists are impartial and neutral
5. A sport psychologist is a listener and an advisor
6. Sport psychologists can address clinical issues
7. Sport psychology gives athletes a mental edge
8. The role of sport psychology is clearly defined
9. Sport psychologists are licensed psychologists
10. All sport psychologists are qualified to practice
11. Practicing sport psychology involves trial and error
12. Sport psychology is crucial for sport performance
13. Only elite athletes should see sport psychologists
14. Sport psychology is crucial for athlete growth
15. Sport psychologists receive adequate training
16. Seeing sport psychologists reflects badly on client
17. Sport psychology is only for the mentally weak
18. It is unfavourable to see a sport psychologist
19. Sport psychology is unnecessary for performance
20. Sport psychology is innately invasive for clients

(*Continued*)

113-item SSPQ

Questions relating to the impact of Singapore's sports industry on sport psychology

21. Good performance is credited to sport psychology
22. Sport psychologists are blamed for poor performance
23. Coaches are supportive of sport psychology
24. Coaches believe sport psychology is unnecessary
25. Sport organisations work well with psychologists
26. Sport organisations accept psychologists' advice
27. Sport psychology is a luxury service
28. Sport psychology is only for medal contenders
29. Athletes are forced to see a sport psychologist
30. Sport psychology is limited to national athletes
31. Sport psychology services are taken for granted
32. Sport psychology services are under-utilised
33. The impact of seeing a sport psychologist is instant
34. Results from sport psychology takes time
35. Sport psychology is utilised only at major events
36. Sport psychologists are used only as a "quickfix"
37. Athletes with potential need sport psychology
38. All athletes at any level have access to a sport psychologist
39. "One-off" workshops are beneficial to athletes
40. Sport psychologists must provide tangible results
41. Athletes require regular psychological services
42. There are too few sport psychologists
43. There is a need for more sport psychologists
44. Sport psychology is not taken seriously
45. A career in sport psychology is not worthwhile
46. There is limited knowledge of sport psychology
47. The benefits of sport psychology are unknown
48. "Sport" title is restrictive for the profession
49. Sport psychology is not essential to the industry

Questions relating to the current practice of sport psychology

50. Clients expect instant results after a consultation
51. Sport psychologists need to appease the client
52. Clients should practice skills after consultation
53. Interventions should be athlete-centred
54. Interventions must conform to clients' demands
55. Consultations should be regular and consistent
56. Sport psychologists are recognised as "experts"
57. Clients' expectations must be fulfilled
58. Sport psychologists facilitate performance goals
59. Clients tend to be normal to optimal functioning
60. Regular client practice supports athletic growth
61. The athlete is always "the client"
62. Sport psychology service extends beyond athletes
63. Coaches work well with sport psychologists
64. Managers work well with sport psychologists
65. Organisations accept sport psychology expertise

(*Continued*)

113-item SSPQ

66. Athletes are receptive to mental training
67. Coaches are receptive to mental training
68. Psychology is as important as physical training
69. Interventions are tailored to suit athletes
70. Effective psychology requires time and effort
71. Clients recognise the benefits of sport psychology
72. Sport psychology has a lasting impact on athletes
73. The practice of sport psychology is tedious
74. Effectiveness of psychology is athlete-dependent
75. Athletes are responsible for their mental training

Questions relating to being an effective sport psychologist in Singapore

76. Psychology ethical guidelines are always observed
77. The boundaries of sport psychology are clear
78. Psychologists must respect professional limitations
79. Psychologists' personal beliefs influence practice
80. Evidence-based practice is crucial to be effective
81. Tangible evidence will support psychologists
82. Sport psychologists require continuous learning
83. Professional degrees are important for practice
84. All psychology bachelor's degree holders are qualified to practice psychology
85. Sport psychologists require advanced degrees
86. Experience is more important than expertise
87. It is necessary to be licensed to practice
88. Sport psychology practice is easily understood
89. There is no structure to sport psychology practice
90. Sport psychologists benefit from athletes' success
91. Being affiliated with winners is important
92. Success of sport psychology is athlete-dependent
93. Credibility is dependent on producing champions
94. Sport psychology is performance enhancement
95. Psychology should begin at developmental stages

Questions relating to building a professional community for sport psychology

96. Sport psychology is not exclusive to elite athletes
97. Sport psychology is beneficial to organisations
98. Psychology should be utilised from a young age
99. Sport policies should be informed by psychology
100. Sport policies impact athlete development
101. Psychology should begin at a grassroots level
102. There is room to fail in pursuing sport outcomes
103. Organisations work well with sport psychologists
104. Sport policies are transparent to all stakeholders
105. Sport leaders possess appropriate skills to govern
106. Professionals often communicate and collaborate
107. Collaboration among professionals is critical
108. Athletes perspectives are considered in decisions
109. An effective psychologist is coach dependent
110. Sport psychologists should work through coaches

(*Continued*)

113-item SSPQ

111. Coaches are receptive to psychology practices
112. Coach education is key for athlete development
113. Sport psychology is a factor in coach education

Appendix C CFA Questionnaires

37-item SSCQ

Questions relating to sport organisations and their support

1. Athletes are given good support
2. Organisations have an athlete-centred approach
3. Sport organisations have fostered success
4. Athletes' success is a result of sport organisations
5. Sport organisations are transparent with athletes
6. Leaders of sport organisations lack relevant skills
7. Policies support athletes' development
8. All athletes are treated fairly and equally
9. Organisations and athletes communicate well
10. Succession planning in organisations is sufficient
11. Sport is governed by sport professionals
12. Sport organisations are professionally managed
13. Sport professionals focus on athlete development
14. Athletes' well-being is a priority for organisations
15. There is a good emphasis on athlete development
16. Athletes are accurately represented in the media

Questions relating to perceptions of sport in Singapore

17. Singapore is a sporting nation
18. Sport is a growing culture in Singapore
19. Sport in Singapore is vibrant
20. Public support for sport has improved
21. Sport services for athletes have improved
22. Elite sport is thriving in Singapore
23. There is no sports culture in Singapore

Questions relating to being an athlete in Singapore

24. It is easy to be a full-time athlete in Singapore
25. Athletes can maintain a full-time job and compete
26. Employers are supportive of sporting pursuits
27. A career as an athlete is sustainable in Singapore
28. The education system supports student-athletes
29. Sporting performance takes priority over school
30. It is easy to find sponsors to fund athletic pursuits

Questions relating to the outcome-driven environment in Singapore

31. There is a general fear of failure in sport
32. Only medal contenders are seen by the public
33. Drop in sporting success leads to support removal

(*Continued*)

37-item SSCQ

34. Sport outcomes are prioritised over the process
35. Athletes are expected to always perform
36. Support given is dependent on attaining medals
37. Sports with medal potential are prioritised

37-item SSPQ

Questions relating to the perceptions of sport psychology in Singapore

1. Only elite athletes should see sport psychologists
2. Seeing sport psychologists reflects badly on client
3. Sport psychology is only for the mentally weak
4. It is unfavourable to see a sport psychologist
5. Sport psychology is unnecessary for performance
6. Sport psychology is innately invasive for clients
7. Sport psychologists are blamed for poor performance
8. Sport psychology is only for medal contenders
9. Athletes are forced to see a sport psychologist
10. The impact of seeing a sport psychologist is instant
11. Sport psychologists are used only as a "quickfix"
12. Sport psychology is not essential to the industry

Questions relating to professionalism of sport psychologists in Singapore

13. Effective psychology requires time and effort
14. Athletes are responsible for their mental training
15. Psychologists must respect professional limitations
16. Evidence-based practice is crucial to be effective
17. Tangible evidence will support psychologists
18. Sport psychologists require continuous learning
19. Professional degrees are important for practice
20. It is necessary to be licensed to practice
21. Collaboration among professionals is critical

Questions relating to sport stakeholders and psychologists in Singapore

22. Sport organisations accept psychologists' advice
23. Coaches work well with sport psychologists
24. Managers work well with sport psychologists
25. Organisations accept sport psychology expertise
26. Organisations work well with sport psychologists
27. Sport policies are transparent to all stakeholders
28. Sport leaders possess appropriate skills to govern
29. Professionals often communicate and collaborate
30. Athletes perspectives are considered in decisions
31. Coaches are receptive to psychology practices

Questions relating to the application of sport psychology in Singapore

32. Psychology should begin at developmental stages
33. Sport psychology is beneficial to organisations
34. Psychology should be utilised from a young age
35. Sport policies should be informed by psychology
36. Sport policies impact athlete development
37. Psychology should begin at a grassroots level

Appendix D Final 29-Item SSCQ

Final version of SSCQ

Factor 1: Sport organisations and their support
1. Athletes are given good support
2. Organisations have an athlete-centred approach
3. Sport organisations have fostered success
4. Sport organisations are transparent with athletes
5. Policies support athletes' development
6. All athletes are treated fairly and equally
7. Organisations and athletes communicate well
8. Succession planning in organisations is sufficient
9. Sport is governed by sport professionals
10. Sport organisations are professionally managed
11. Sport professionals focus on athlete development
12. Athletes' well-being is a priority for organisations
13. There is a good emphasis on athlete development
14. Athletes are accurately represented in the media

Factor 2: Perceptions of sport
15. Singapore is a sporting nation
16. Sport is a growing culture in Singapore
17. Sport in Singapore is vibrant
18. Public support for sport has improved
19. Sport services for athletes have improved
20. Elite sport is thriving in Singapore

Factor 3: Being an athlete
21. It is easy to be a full-time athlete in Singapore
22. Employers are supportive of sporting pursuits
23. A career as an athlete is sustainable in Singapore
24. It is easy to find sponsors to fund athletic pursuits

Factor 4: Outcome-driven environment
25. Only medal contenders are seen by the public
26. Drop in sporting success leads to support removal
27. Sport outcomes are prioritised over the process
28. Athletes are expected to always perform
29. Support given is dependent on attaining medals

Appendix E Final 26-Item SSPQ

Final version of SSPQ

Factor 1: Perceptions of sport psychology
1. Seeing sport psychologists reflects badly on clients
2. Sport psychology is only for the mentally weak
3. It is unfavourable to see a sport psychologist
4. Sport psychology is innately invasive for clients

(*Continued*)

Final version of SSPQ

5. Sport psychology is only for medal contenders
6. Sport psychology is not essential to the industry

Factor 2: Professionalism of sport psychologists

7. Effective psychology requires time and effort
8. Psychologists must respect professional limitations
9. Sport psychologists require continuous learning
10. Collaboration among professionals is critical

Factor 3: Sport stakeholders and psychologists

11. Sport organisations accept psychologists' advice
12. Coaches work well with sport psychologists
13. Managers work well with sport psychologists
14. Organisations accept sport psychology expertise
15. Organisations work well with sport psychologists
16. Sport policies are transparent to all stakeholders
17. Sport leaders possess appropriate skills to govern
18. Professionals often communicate and collaborate
19. Athletes perspectives are considered in decisions
20. Coaches are receptive to psychology practices

Factor 4: Application of sport psychology

21. Psychology should begin at developmental stages
22. Sport psychology is beneficial to organisations
23. Psychology should be utilised from a young age
24. Sport policies should be informed by psychology
25. Sport policies impact athlete development
26. Psychology should begin at a grassroots level

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