

BSP193072

DEPARTMENT OF PSYCHOLOGY

JULY, 2023

RELATIONSHIP BETWEEN DEPRESSION AND HARDINESS AMONG PERSONS WITH DISABILITIES



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A Research Thesis submitted to the
DEPARTMENT OF PSYCHOLOGY
in partial fulfillment of the requirements for the degree of
BACHELOR OF SCIENCE IN PSYCHOLOGY

Faculty of Management and Social Sciences
Capital University of Science & Technology,
Islamabad
July, 2023

CERTIFICATE OF APPROVAL

It is certified that the Research thesis titled "*Relationship between Depression and Hardiness among Persons with Disabilities*" carried out by **Anosha Ilyas**, Reg no. **BSP193072**, under the supervision of **Mr. Muhammad Naeem**, Capital University of Science and Technology, Islamabad, is fully adequate, in scope and quality, as a Research Thesis for the degree of **BS Psychology**.

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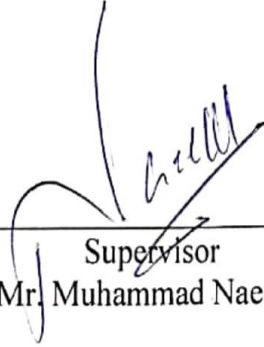
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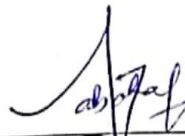
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ACKNOWLEDGMENT

In the name of Allah, the Most Gracious and the Most Merciful Alhamdulillah, all praises to Allah for the strengths and his blessings in completing this thesis. Special appreciation goes to my supervisor, Sir Muhammad Naeem for his supervision and support. Her contribution was invaluable to the success of this thesis.

My deepest gratitude goes to my beloved father Muhammad Ilyas and my mother Tasneem Abbasi who supported me at every single step throughout my thesis and my lovely sister (Washal Ilyas) and cute brothers (Waqas Ahmed and Muhammad Huzaifa) for their endless love, help, prayers and encouragement.

Last but not least, I would like to express my appreciation to another teacher Ms. Rabia Umar who helped and guide me throughout the academic session.

Sincere thanks to all my friends especially my bright, hardworking and lovable friends Syeda Mehwish Bukhari and Zainab Ahmed for their kindness and moral support during my thesis. Thanks for the friendship and memories.

I am also thankful to all the respondents and those who indirectly contributed in this thesis, your kindness means a lot to me. Thank you very much!

ABSTRACT

Present study resolve measure Relationship Between Depression and Hardiness among Persons with Disabilities. Sample size was calculated using G power and purposive sampling technique was used. Participants was selected on the basis of inclusion criteria of study and after taking informed consent, questionnaires will be given to participants for the purpose of data collection. Through purposive sampling technique sample of 150 disable person was taken from Islamabad and Rawalpindi. The two scales will used Major Depression Inventory Scale and Cognitive Hardiness Scale. The result showed that there is a negative relationship between depression and hardiness among disable individual. The gender differences were also examined the result reveal that males have more depression than females and male have more hardiness than females.

Keywords: Disability, Depression, Hardiness and Young Adults.

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Chapter 1

INTRODUCTION

We are living in 21st century, in this era everyone wants to get better in terms of financial status, and social status. Some people want to get a car those who have it wants a bigger or better one some wants to get a good job, or to buy a house and so on. Everyone has different type of goals whom they want to get achieve. But everything comes with a health and efforts. Similarly, there is a big number of people who are disable either physically or mentally to do, such things for them self. Around fifteen per cent of the world's population at least one billion people has some sort of disability. Disability is of any kind either from the time of birth or it may cause by any accident / injury. Nearly 240 million of them are youngsters. People with disability in developing countries often find themselves alone, isolated, and with little hope, because of disability many young adults suffer from different types of life challenges which lead them towards depression (Chibaya et al., 2021).

Depression

It is one of the serious types of mental health issue and often develops alongside anxiety. It is one of the most prevalent mental illnesses. It can be carried on by a variety of things, such as interpersonal relationships and physical limitations. Depression among youngster having disability usually caused by environment and common class derive into show and they have to interact with other people. It can be mild and short-lived or severe and long lasting. Depression can lead towards suicide as well which makes it more dangerous (Brown et al., 1989).

Depression seems to be delivered from generation to generation in some families, because of the disability of their parents however, it can also occur in individuals without a depression related family history. Depression among youngster

having disability usually caused by environment and social class come into play and they have to interact with other people. It can be mild and short lived or severe and long lasting. Depression can lead towards suicide as well which makes it more dangerous. Whether or not it is inherited, major depressive disorder is frequently related with brain structure or function changes. Depression can only be diagnosed by a psychologist or a doctor with experience (Kindle Berger, 1986).

Hardiness

On the other hand, “Hardiness” is the capacity for enduring or sustaining problem or hardship. The word “Hardiness” first introduced by “Kobasa”. He stated that, Hardiness as a personality trait having the components of commitment, challenge, and control and is found to be linked with strong conflict to negative feelings induced by adverse environments (Kiva et al., 2016).

According to the above-mentioned definition, Hardiness has three components.

- 1) Commitment.
- 2) Control.
- 3) Challenge.

Commitment

Are those who have a sense of dedication also having a sense of purpose in their work and in themselves? Are the feelings they have toward work, family, social encounters, and self? They believe that they have a significant and active role to play in their own lives. Hardy children who are disabled believe in the reality, importance, and interest of who they are and what they are doing. They frequently serve as role models for their children and the public because of their strong commitment to self, work, family, and other values (Mund & Pallabi Kobasa, 2017).

Control

People who have a lot of control over their lives are able to take control of their lives and feel responsible for it. Influence is the attitude of those with a lot of control over others. They believe they can alter the course of events that affect them. A person experiences feelings of helplessness and hopelessness because they believe they are powerless to deal with the situation when control is low. A tough person believes that he or she can change course of actions in his or her life, even bad ones like disability or depression. They take personal responsibility for both their successes and failures (Mund & Pallabi Kobasa, 2017).

Challenge

Is it possible for disabled children who have low levels of difficulty recognizing any given circumstance as a threat to their well-being? Is it possible to overcome any situation with positive outcomes? In contrast, disabled children who believe in hardship view change as a challenge rather than an intimidation. They like facing problems at effort and in life. They answer change by obliging the unexpected, investigating the climate, and figuring out which assets to approach and utilize when required. They view change as an impetus for further development (Mund & Pallabi Kobasa, 2017).

Hardiness provides them a meaning of life to survive and fight with these challenges like a warrior. Because of hardiness they can spend their life like a normal fit person it is vice versa of depression. The minds of its children are a nation's most valuable natural resource. Society's attitude toward its most vulnerable population, children with disabilities of any kind, has drastically changed. More people are accepting of it now than ever before. Children with special needs are no longer overlooked, and they now have access to more resources and opportunities.

In this thesis, we have discussed the opportunities and challenges to assist

special needs children and adults in achieving their best outcomes as more and more are accepted into mainstream schools, as more people become aware of learning disabilities like dyslexia and dyscalculia, as more children are identified as having ADD or ADHD, and as more children are diagnosed with autism spectrum disorder. The main determination of this thesis is to impact all areas that play a role in disable youngsters and the depression they have facing now, and for the development of their academic, vocational, psychological, physical, social, special emphasis on them. The Last 30 years have been a time of tremendous development in the field of Psychology as a whole (Lambert & Yamase, 2003).

Increasing numbers of marginalized individuals can now be integrated into mainstream settings thanks to new research. Energizing revelations in mind versatility and advancement have significantly impacted the manner in which we check out at human potential and capacities. More children with understanding difficulties now have a chance to succeed and living up to their potential thanks to new education methods.

A person with relevant skills plays a crucial role in this field as a teacher, parent, caregiver, or other adult who works with disabled young adults. Unfavorable circumstances and disabilities are aspects of human life that many people have experienced or may experience at any time, from any perspective, which can elicit depressive feelings and impede an individual's adaptive capacity to lead a normal life. Despite the fact that this is a fact, adopting certain personality traits can certainly lessen the depressed things of negative psychological conditions brought on by stressful life events. There may be a number of things that are thought to protect children from the negative emotions that are brought on by any kind of disability, as well as a variety of difficult life circumstances. "Hardiness" appears to be one of the most important factors. Children with disabilities who have high, moderate, or low hardiness would

have significantly different rates of depression throughout their lives (Curr Psychol, 2022).

Literature Review

A disability in some condition of the body or mind (impairment) that makes it other tough for the person with the condition to do certain actions and interact with the world around them participation boundaries (Center for Disease Control & Prevention, 2017).

An individual's visualization, effort, thinking, memorizing, learning, communicating, hearing, mental health, and social relationships are all affected by disabilities. Disability affects the minds of young adults due to which they got serve depression (Sawchuk et al., 2018). In contrast, depression, also known as major depressive disorder or clinical depression, is a mood disorder that causes a persistent sense of unhappiness and difficulty paying attention (Sawchuk et al., 2018).

Having a disability doesn't mean you have been excluded. More than a billion people worldwide have some sort of disability. Lots of persons in Pakistan have different kinds of disabilities. The UNDP (United Nation Development Program) has calculated that almost 6.2% of the Pakistanis have some sort of disability. However, different working organizations had estimates and reflect this proportion to be much higher.

The HRW (Human Rights Watch), for instance, has pointed out how estimations of PWDs (Public Works Department) in Pakistan differ broadly, ranging from 3.3 million to 27 million. The cross-sectional study in Shanghai Medicine's Chinese communities was published online. The study's objective was to investigate the occurrence and related factors of depression between people with disabilities in mainland Chinese communities. In this research a total of 1815 persons participated

with a disability certificates and results reported high level of depression among sample (Zhou et al., 2020).

Disability can lead to depression through hardiness individual can cope with depression. The mediating role of hardiness in the relationship between perceived loneliness and depressive symptoms between older. According to this study elder people with higher level of perceived loneliness reported fewer hardiness. Lower levels of hardiness, in turn, correlated with increased self-reported depressive symptoms. The potential benefits of hardiness for supporting mental health of older people were discussed (Tatia et al., 2019).

In order to decrease nonresponse prejudice and difficult, research was carried out from 2016 to 2019 on the prevalence of various types of disabilities (hearing, visualization, perception, movement, self-care, and living independently). These types of disabilities were compared to adults of similar age from the common population as estimated by the American Community Survey and standardized to the strong suitable population.

This research explained a relationship between persons with any sort of disability who are not in employ, learning, or everyday activities, family condition and its relation to work related status. In the present modern labor market entering and keeping employment is quite challenging for youth facing disabilities in general. Young adults with intellectual disability face major problems in establishing an occupation. A considerable group of young adults with intellectual disability who are not in employ, learning or everyday basic necessities have been well-known. The basic purpose of this study is to describe and analyze the family condition for those who essential (Luthra, 2019).

A Hong Kong and Australian study on young people's attitudes toward dating

people with disabilities has been published. An electronic study that asked youngsters (n = 2208) about their dating encounters and perspectives yielded inability related information. Quantitative data were analyzed using descriptive statistics, while open-ended responses were analyzed using interpretive content analysis. When asked what they liked most about potential dates, young people said things like loyalty, honesty; dedication, humor, and kindness were unlikely to be affected negatively by disability.

However, when asked if disability would influence their seeing decisions, the majority responded that it would, and they were unwilling to date disabled people. Compared to young adults in Australia, Hong Kongans was less receptive to dating people with disabilities. Compared to intellectual or developmental disabilities, mental health issues and physical disabilities were viewed as less of a barrier to dating (Rennethura, 2002).

This article's study objectives were to examine disability risk factors then measure disability prevalence and severity between adults alive with HIV in London, UK. In London, United Kingdom, HIV-positive individuals experienced episodic and multidimensional symptoms. Handicap Results help to more readily grasp the pervasiveness, seriousness, and hazard variables of incapacity (Elizabeth et al., 2022).

The occurrence and diagnosis of depression in people with mild or borderline intellectual disability, and to check the number of people affected slightly by this issue this research used multiple of instrument for testing it estimates almost 39% of the occurrence of depression in people with intellectual disability range. The consequences of three screening instruments are used toward count more about the occurrence in people with slight or borderline disability (Scheirs et al., 2022).

Theoretical Framework

In 1962 Abraham Harold Maslow proposed a theory in which he states that there

are essentials that are exclusive to the human species. The most essential of these is the need for self-actualization (achieving out potential). The self-actualizing human being has a meaningful life. Whatever that blocks our striving to achieve this need can be a cause of depression (Maslow, A.H 1962).

Youngsters who are going through any sort of disability are unable to achieve their state of self-actualization which leads them towards depression. In 1967 Famous cognitive theorist Aaron Beck identified that people who are suffering from depression and found that they judged events in a negative way (Beck, A.T 1967).

Usually, People with disability take everything in a negative way like if we conduct a racing competition in a school a child who suffers from leg disability start thinking that he is unable to compete in this competition that's why we are conducting this event, because of his negative thinking he leads himself towards depression.

Depression is a mood disorder which prevents humans from common life, at work, socially or within their family. Seligman (1973) called depression the common cold of psychiatry because of the occurrence of its diagnosis (Seligman, M.E 1973).

Whereas hardiness is a common quality that occurs from rich, varied, and satisfying childhood involvements. This general quality displays itself in feelings and behaviors that are characterized as commitment, control, and challenge (Maddi & Kobasa, 1984).

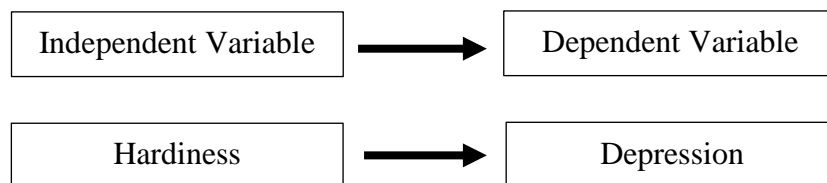
Disability can be minimized morally or mentally just because of hardiness. The framework for this study was provided by the stress-depression theory of (Pearlin et al., 1981) in addition to (Bury, 1979) theory of disablement and (Kobasa, 1979) theory of hardiness. Bury defined disability as any limitation or incapacity to engage in an activity within the normal range for a human being. He suggested that a person & level of disability may be partly caused by physiological factors (such as physical health

status and aging) or by a combination of physiological and psychological factors (such as toughness and depression). As a result, illness related impairment cannot completely predict disability severity. According to research, psychological factors may also increase disability severity beyond what would be expected from physiological factors alone (Dereby & Tullis, 1983).

The construct of health-related toughness is a collection of essential personality traits control and responsibility/challenge (Pollock & Duffy, 1990). According to Pollock and Duffy, the sense of mastery required to appropriately assess and interpret health stressors is the control dimension. The motivation and competence required to deal with the threat of a health stressor are referred to as commitment, and the reappraisal of a health stressor as a potential opportunity for growth and benefit is referred to as challenge. When confronted with a health stressor, people are challenged rather than threatened, which leads to a personal commitment (Pollock & Duffy, 1990).

Figure 1

Conceptual Framework



Rationale

In past many researches have been conducted also many articles have been published but mostly covers the specific areas like focused on disability, depression and hardiness separately. No of them explained the relation between among these three before? Data was gathered from especially able individuals. A disability doesn't mean you have been excluded, but it is a fact that disability causes depression but this research highlights their positive mind set by promoting hardiness among young adults who are suffering from disability.

Lot of disabled persons mostly young adults made their mind set that they are not like others they can't do anything either it would be a physical work or a mental work depending upon their disability which leads them towards depression. Depression which occurs because of disability made their life more difficult mostly studies identified the harmfulness of depression it could be as serious as it can take a life of a person. Depression which occurs because of disability made their life more difficult mostly studies identified the harmfulness of depression it could be as serious as it can take a life of a person. Hoping our work will be remembered in this trade of psychology and it would be beneficial for the betterment mankind in future.

Objectives

Objectives of this study are the following;

1. To measure the role of hardiness among disable individuals.
2. To find out the association of hardiness and depression.
3. To explore the gender differences between depression and hardiness among individuals.

Hypotheses

Hypothesis of this study are the following;

1. There will be a significantly negative association between hardiness and depression.
2. Female have more depression than males.
3. Male will have more hardiness than females.

METHODS**Research Design**

In this study, Correlational study design has been used to observe the relationship between Disability with Depression & Role of Hardiness among Young Adults.

Ethical Considerations

For this study, ethical approval has been taken from the research department of Capital University of Science and Technology. Permission has been taken for the original scale's authors contacted and permission has been taken. Permission of scales has been taken from the authors. According to the guidelines of American Psychological Association (APA), the participants was be selected on volunteer basis and was be informed about the purpose of this study. The confidentiality of the participants has been maintained; the end results has been shared in with participants. The participants signed a consent form and allowed to leave the study whenever they will be willing to.

Population and Sample

Sample of the current study was calculated through G power. 150 sample has been used for this study. Participants of both males and females shaving general disability and belonging to middle socioeconomic status.

Sampling Technique

Purposive sampling technique was used for current study.

Inclusion Criteria

- Participants of age range 18 to 30 years was selected.
- Participants of middle socioeconomic status was recruited.

- Physical disability was including for example Polio, Cerebral Palsy, Paralysis, Blindness, Low Vision, Deaf, Hard of Hearing and other.

Exclusion Criteria

- Participants without any physical disability was excluded.
- Participants having age range less than 18 was not be included.

Instruments

Informed Consent

Inform consent was provided to participants to confirm the voluntary participation of individuals in this research study. By signing this informed consent, participants demonstrate their understanding of the study and their voluntary decision to participate, ensuring that their rights are protected throughout the research process. The inform consent is attached in Appendix A.

Demographic Sheet

A Demographic Sheet was provided to participants. They are requested to provide information on their gender, age, education, Housing type, Cause of Disability, and Type of Disability. Demographic sheet is attached in Appendix B.

Major Depression Inventory

The Major Depression Inventory (MDI) is self-report mood questionnaire developed by World Health Organization. It is 10 items depression severity measure and 5-point Likert scale.

For item 8a versus 8b and for items 10a versus 10b, it is the highest score on a or b that is used. MDI measures of depression severity. Total score of ten items calculated by addition together 10 scores. The total score range is 0-50. 0-20 indicates depression does not exist or its presence is uncertain, 21-25 indicates mild depression, 26-30 indicates moderate depression, and 31-50 indicates severe depression. The

Reliability Cronbach's Alpha is .90.

Cognitive Hardiness Scale

The 30-item Nowack (1990) cognitive hardiness scale will be used to measure young adults. Self-report measures include the Cognitive Hardiness Scale. As indicated by Nowack, this scale professes to survey perspectives and convictions about work and life that are an in all actuality stable piece of daily existence. (1) Commitment, which is a sense of involvement in everyday life events, family, hobbies, and activities that aid in the search for belonging and meaning in life, is one of these attitudes and beliefs. (2) Control alludes to a conviction of having command over life conditions and that all that occurs in life is one's very own consequence conduct as opposed to any outer power. (3) A belief that encourages a person to view changes in everyday life as opportunities for personal development rather than threats is referred to as a challenge.

A 5-point Likert scale is used to rate the items with 1= strongly agree and 5= strongly disagree. This scale has a high internal consistency of .83 (Nowack,1990). The Urdu version of the scale used in the current study has already been used in a previously unpublished study generating a reliability coefficient of .63.

Procedures

For this study, institutional approval has been taken from the university department for data collection. The objectives of the study will be explained to the participants. The participants will be provided with a demographic sheet, consent form and three questionnaires i.e., Major Depression Inventory and Cognitive Hardiness Scale. Present study was identifying the relationship between Depression & Hardiness among Persons with Disabilities. Sample size was calculated using G power. Participants will be selected through purposive sampling and was be briefed about

current study. Informed consent was taken, confidentiality was ensured and questionnaires was given for data collection.

RESULTS

The present study aimed to examine the relationship between Major Depression and Cognitive Hardiness. Data analysis was carried out by using SPSS- version 26. Initially, the demographics characteristics were identified through frequencies and percentages. Descriptive statistics and alpha reliability coefficients were computed. Spearman correlation was computed to examine the relationships between variables. Lastly sample Mann-Whitney U tests was applied to examine mean difference across demographic factors like gender differences.

Table 1

Sociodemographic Characteristics of Participants

Characteristics	<i>n</i>	%
Gender		
Male	65	43.3
Female	85	56.7
Age		
18-20 Years old	29	19.3
21-23 Years old	53	35.3
24-26 Years old	53	35.3
27-30 Years old	15	10.0
Education		
Matric	21	14.0
FA/FSC	40	26.7
Undergraduate	79	52.7
Graduated	9	6.0
Housing Type		
Hostel	41	27.3
With Parents	102	68.0
With Guardian	7	4.7

Cause of Disability		
By Birth	86	57.3
Disease	49	32.7
Accident	15	10.0
Type of Disability		
Polio	40	26.7
Cerebral Palsy	12	8.0
Paralysis	6	4.0
Blindness	47	31.3
Low Vision	23	15.3
Deaf	8	5.3
Hard of Hearing	10	6.7
other	4	2.7

Note. n= Number of responses, %= Percentage.

Table 1 reveals that the sample consists of male (n=65,43.3%) and females (n=85, 56.7%). The age distribution of the sample participants of age group 18-20 years (n=29, 19.3%), age group 21-23 years (n=53, 35.3%), while the participants of age group 23-25 years (n=53, 35.3%), and 25 years old and above (n=15, 10.0%). In terms of education, participants have completed Matric (n=21, 14.0%), participants have completed FA/FSC (n=40, 26.7%), participants are currently undergraduate students (n=79, 52.7%), and participants have graduated (n=9, 6.0%). Among the participants, (n=41, 27.3%) reside in hostels, while (n=102, 68.0%) live with their parents or guardians. The majority of participants attribute their disability to disease (57.3%), followed by accidents (32.7%), and a smaller proportion indicate being born with their disability (4.7%). Among the participants with disabilities, the most common types are polio (26.7%), followed by blindness (31.3%), low vision (15.3%), and paralysis (4.0%). The remaining types of disabilities are less prevalent, with percentages ranging from 2.7% to 8.0%.

Table 2*Psychometric Properties for Scales*

Scale	n	M	SD	α	Range	
					Actual	Potential
Major Depression	10	54.60	6.43	.90	34-59	0-50
Cognitive Hardiness	30	36.00	13.27	.96	30-89	30-150

Note. n= Number of items, M= Mean, SD= Standard Deviation, α = Cronbach's Alpha.

Table 2 shows psychometric properties for the scales used in present study. The Cronbach's α value for Major Depression Scale for individuals was .90 (> .90) which shows high internal consistency. The Cronbach's α value for Cognitive Hardiness Scale for Adolescents was .96 (> .90) which also shows high internal consistency.

Table 3*Descriptive Statistics for Major Depression and Cognitive Hardiness*

Variables	N	M	SD	Skewness	Kurtosis	K-S	p
1. Major Depression	150	54.61	6.43	-1.11	-.007	.007	.00
2. Cognitive Hardiness	150	38.56	16.19	1.72	1.51	.006	.00

Note. N=number of participants, M= Mean, SD= Standard Deviation, K-S= Kolmogorov-Smirnov, p= Significance Value.

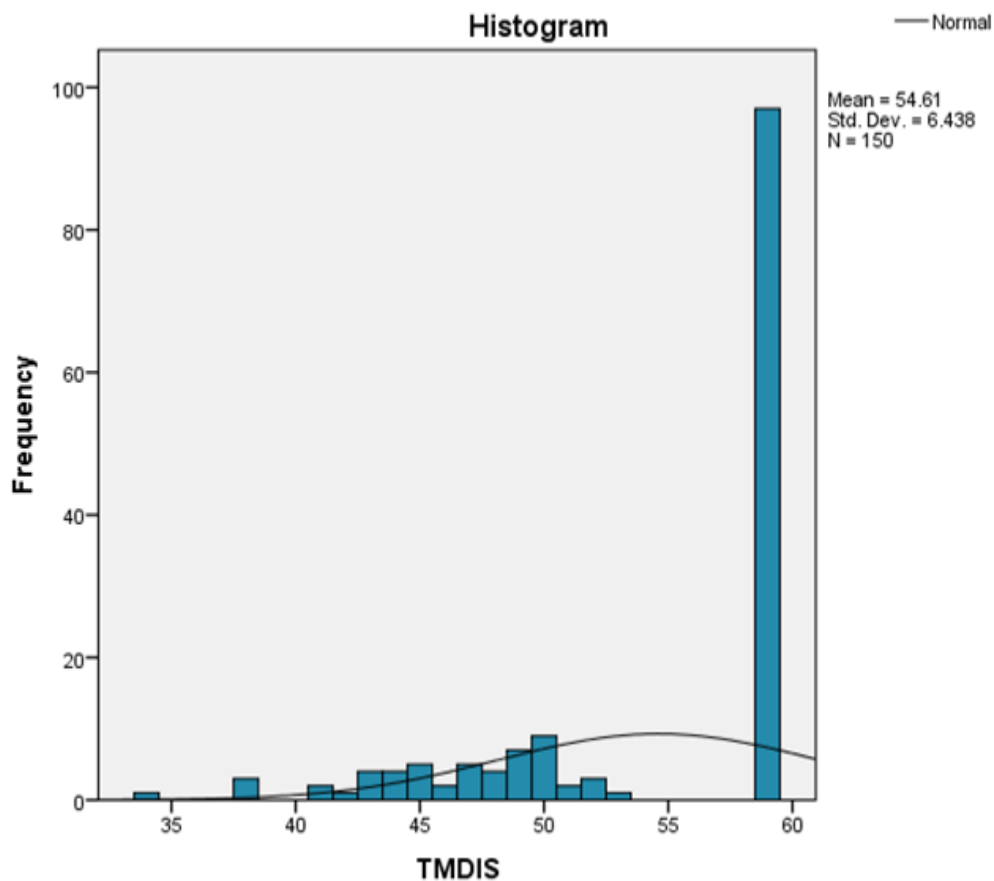
The mean score for Major Depression is (M=54.61). This indicates the average level of Major Depression symptoms reported by the participants in the sample. The standard deviation for Major Depression is (SD=6.438). The skewness value for Major Depression is -1.113 which indicates that the distribution is skewed to the left. The kurtosis value for Major Depression is -0.007. The p-value of (p=0.00) indicates that the Kolmogorov-Smirnov (K-S) test, suggests that the Major Depression scores in sample deviate significantly from the normal distribution. The mean score for Cognitive Hardiness is (m=38.56). The standard deviation for Cognitive Hardiness is

(SD=16.199). The skewness value for Cognitive Hardiness is 1.723, the positive skewness value indicates that the distribution is skewed to the right. The kurtosis value for Cognitive Hardiness is 1.511. The p-value of ($p=0.006$) indicates that the Kolmogorov-Smirnov (K-S) test, suggests that the Cognitive Hardiness scores in sample deviate significantly from the normal distribution.

Figure 2

Distribution of Major Depression Inventory Scale

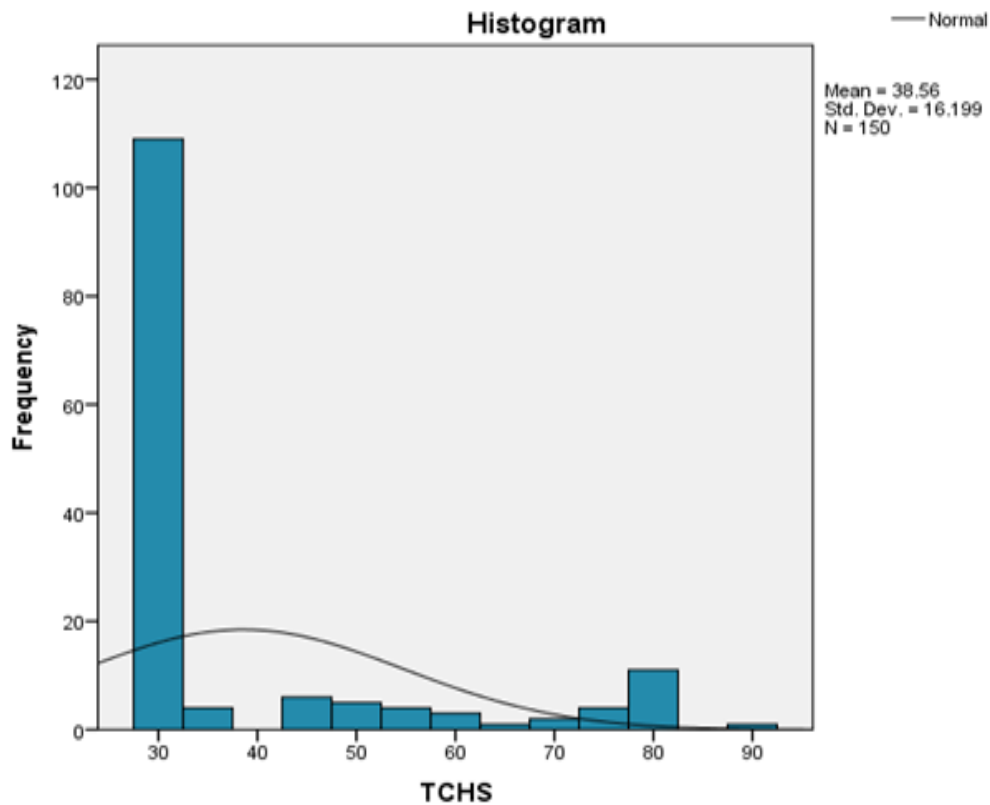
The graph illustrates the distribution of Major Depression among a sample of 150 young adults.



This figure demonstrates the distribution of the Major Depression of participants and the values of skewness, kurtosis and K-S value, suggesting that the data significantly deviates from a normal distribution.

Figure 3*Distribution of Cognitive Hardiness Scale*

The graph illustrates the distribution of Cognitive Hardiness among a sample of 150 young adults.



This figure demonstrates the distribution of the Cognitive Hardiness of participants and the values of skewness, kurtosis and K-S value suggesting a significant deviation from a normal distribution.

Table 4*Descriptive Statistics and Correlation for Study Variables*

Variables	<i>N</i>	<i>M</i>	<i>SD</i>	1	2
1. Major Depression	150	54.61	6.43	–	
2. Cognitive Hardiness	150	38.56	16.19	-.08	–

Note. *N*= Total number of Participants, *M*= Mean, *SD*= Standard Deviation.

Table revealed that the Major Depression has negatively correlational ($r = -.084$) with Cognitive Hardiness.

Table 5

Descriptive Statistics and Mann-Whitney U test scores of Major Depression and cognitive Hardiness

Variables	Male		Female		U	p
	N	M	N	M		
1. Major Depression	65	76.69	85	74.59	5692.00	.00
2. Cognitive Hardiness	65	80.72	85	71.51	7303.00	.00

Note. N= Number of Participants, M= Mean Rank, U= U value, p= Significance Value.

Table revealed that the sample size for males is (N=65). The mean rank Major Depression score for males is (M=76.69). The sample size for females is (N=85). The mean rank Major Depression score for females is (M=74.59). The U value is 5692.00, which represents the Mann-Whitney U test statistic. The p-value is (p=0.00), indicating a statistically significant difference in Major Depression scores between males and females. The Major Depression scores differed significantly between males and females (p < .001). The sample size for males is (N=65). The mean rank Cognitive Hardiness score for males is (M=80.72). The sample size for females is (N=85). The mean rank Cognitive Hardiness score for females is (M=71.51). The U value is 7303.00, which represents the Mann-Whitney U test statistic. The p-value is (p=0.00), indicating a statistically significant difference in Cognitive Hardiness scores between males and females. The Cognitive Hardiness scores differed significantly between males and females (p < .001).

Chapter 4**DISCUSSION**

The hypothesis proposes that there is a significantly negative association between hardiness and depression, implying that higher levels of hardiness are associated with lower levels of depression.

Longitudinal studies have also investigated the association between hardiness and depression over time. For instance, in a study by Bartone et al., 2008, military personnel with higher levels of hardiness were found to have lower levels of depression and post-traumatic stress symptoms over a three-year period. In a similar vein, Maddi & Harvey's, 1988 two-year longitudinal study of college students found that hardiness was negatively correlated with depression. These discoveries propose that elevated degrees of strength might act as a defensive variable against the improvement of discouragement. Certain factors may moderate the association between hardiness and depression. For example, a study by Jex & Bliese, 1999 found that the relationship between hardiness and depression was stronger in individuals who experienced higher levels of job stress. This suggests that the protective effect of hardiness against depression may be more pronounced in the presence of significant stressors.

Several studies have examined potential mediating factors that may explain the negative association between hardiness and depression. For example, research suggests that hardiness is associated with adaptive coping strategies, such as problem-solving and seeking social support Connor-Smith et al., 2000. These coping strategies may contribute to the lower levels of depression observed among individuals with higher hardiness.

Numerous cross-sectional studies have examined the association between hardiness and depression, providing support for a negative relationship. For example,

in a study by Zoccola et al., 2015, higher levels of hardiness were associated with lower levels of depressive symptoms among a sample of college students. Similarly, a study by Gustems-Carnicer et al., 2017 found that individuals with higher hardiness scores reported lower levels of depression in a sample of working adults. These findings suggest that individuals with higher levels of hardiness are less likely to experience symptoms of depression.

The hypothesis proposes that Female with disabilities will have higher levels of depression compared to male with disabilities. The result of this study suggest that males have minimal depression than females among disable individuals. But literature suggest that females have more depression than males Dahl et al., 2009. There are some factors that can influence high depression rate among disable males.

According to traditional gender roles and expectations, where men are often expected to fulfill the role of the primary breadwinner and maintain strong family ties. These societal expectations can place significant pressure on men, leading to stress, anxiety, and a higher risk of developing depression. The pressure to conform to traditional masculine norms, may also discourage males from seeking help for their mental health issues Yadav. S, 2010.

The results of a study showed that the risk factors for depressive symptoms and that the high level of depression characterizes both men and women of all ages Turner & NOH, 1998.

Gender differences in coping strategies may influence depression levels among individuals with disabilities. Research suggests that males and females may employ different coping mechanisms when dealing with their disability. For example, females may be more inclined to seek social support and engage in emotional expression, which can buffer the negative impact of disability on mental health Dunn et al., 2004. In

contrast, males may be more likely to adopt avoidant coping strategies, which could potentially contribute to higher levels of depression Plach et al., 2016. These coping differences may have implications for the gender disparities in depression within the disabled population.

The hypothesis proposes that males will have higher levels of hardiness compared to females. Research on gender differences in hardiness has produced mixed findings, with some studies suggesting that males have higher levels of hardiness, while others find no significant differences between genders. For example, a study by Bartone et al., 2005 examining military personnel found that males had higher levels of hardiness compared to females. However, other studies have reported no significant gender differences in hardiness Sheard & Golby, 2006. Therefore, it is important to consider the variability in findings when examining the relationship between gender and hardiness.

Socio-cultural factors may contribute to the perception of gender differences in hardiness. Traditional gender roles and expectations may influence the development of certain personality traits, including hardiness. For instance, societal norms often encourage males to be self-reliant, tough, and resilient, which aligns with the concept of hardiness Maddi, 2002. These gendered expectations may shape the expression and development of hardiness and contribute to the perception that males possess higher levels of hardiness.

Research suggests that personality traits associated with hardiness, such as control, commitment, and challenge, may be influenced by gender. For instance, a study by Costa et al., 2001 found that males scored higher than females on measures of control and assertiveness, which are components of hardiness. These gender differences in underlying personality traits may contribute to variations in hardiness levels between

males and females.

Socialization processes can also influence the development of hardiness and may differ between genders. Early childhood experiences, family dynamics, and societal reinforcement may shape the development of hardiness-related characteristics differently in males and females Bartone et al., 2005. For example, research suggests that girls may be socialized to prioritize interpersonal relationships and empathy, which may impact the development of traits associated with hardiness.

Limitations of the Study

The study had a relatively small sample size of 150 participants. The findings may not be representative of the entire population of young adults with disabilities, and generalizing the results to a larger population should be done with caution. A larger and more diverse sample would strengthen the study's findings. The study relied on self-report measures for both depression and cognitive hardiness. Self-report measures are subjective and susceptible to social desirability bias, where participants may provide responses, they believe are more socially acceptable. The accuracy and reliability of self-report data could be influenced by participants' understanding of the questions or their willingness to disclose their true feelings and experiences.

The study did not include non-disabled individuals for comparison. This limits the ability to assess whether the observed relationships between hardiness, depression, and gender differences are specific to the disabled population or could be attributed to other factors. The study only focused on the relationship between hardiness, depression, and gender differences. Other relevant factors, such as socio-economic status, social support, or specific types of disabilities, were not included in the analysis. The exclusion of these variables may limit the understanding of the complex nature of the relationship between disability, depression, and hardiness.

The study lacks information regarding the participants' specific disabilities, severity, duration, or treatment history. These contextual factors may influence the levels of depression and hardiness experienced by the individuals and could provide valuable insights into the observed results.

Recommendations/Implications

The study found that there is a significantly negative association between hardiness and depression among young adults with disabilities. This suggests that individuals who possess higher levels of hardiness tend to experience lower levels of depression. This finding highlights the importance of developing and fostering hardiness traits, such as resilience, control, and commitment, as potential protective factors against depression in this population.

Contrary to the initial hypothesis, the study revealed that males had higher levels of depression than females among young adults with disabilities. This finding challenges the stereotype that females are more prone to depression. It underscores the need for healthcare professionals and researchers to be cautious about assuming gender differences in depression, as these differences may vary based on specific populations and contexts. The study provides valuable insights into the relationship between disability, depression, and cognitive hardiness among young adults. However, further research is needed to explore additional factors that may contribute to depression in this population, such as social support, self-esteem, and environmental factors. Longitudinal studies can also help understand the dynamic nature of these relationships over time and inform the development of targeted interventions. Findings of the study will also be useful for developing intervention plan for better psychological well-being of disable individuals.

The study focused solely on measuring the association between hardiness,

depression, and gender differences, but did not explore interventions or potential pathways for improving outcomes. Further research could investigate the effectiveness of interventions targeting hardiness and depression among young adults with disabilities.

Conclusion

In conclusion, this study examined the relationship between hardiness, depression, and gender differences within the context of individuals with disabilities. The findings revealed significant negative associations between hardiness and depression, suggesting that higher levels of hardiness were related to lower levels of depression.

However, the hypothesis proposing higher levels of depression among females with disabilities compared to males was not supported, as the study found higher levels of depression among males. These results are contrary to the existing literature suggesting higher depression rates among females. The study highlighted potential factors that could influence depression rates in males with disabilities, including societal expectations, traditional gender roles, and the reluctance of males to seek help for mental health issues.

Coping strategies and socio-cultural factors were also identified as potential contributors to gender disparities in depression within the disabled population. Regarding gender differences in hardiness, the study found mixed findings, with some studies indicating higher levels of hardiness in males and others showing no significant differences. Socio-cultural factors and gendered expectations were suggested as possible influences on the perception of gender differences in hardiness. Overall, this study provides insights into the complex relationship between hardiness, depression, and gender within the context of individuals with disabilities, emphasizing the need for further research to better understand these dynamics and develop targeted interventions for promoting mental well-being.

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APPENDICES

Appendix A
Informed Consent

باخبر رضامندی فارم

میں سمجھتا ہوں کہ یہ مطالعہ کیپیٹل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی اسلام آباد کے شعبہ نفسیات کے طالب علم نے تحقیقی منصوبے کے ایک حصے کے طور پر کیا ہے۔

میں اس کے ذریعے اس منصوبے میں رضاکارانہ طور پر اپنی شرکت کی تصدیق کرتا ہوں۔ میں جانتا ہوں

کہ تحقیق سے نتائج حاصل کرنے کے بعد تحقیقی رپورٹس میں میرا نام یا کسی بھی آبادیاتی معلومات کو

ظاہر نہیں کریں گے اور ساتھ ہی یہ کہ ایک شریک کے طور پر میری رازداری برقرار رکھی جائے گی۔

مجھے یہ حق حاصل ہے کہ جب بھی مجھے ضرورت ہو، بغیر کسی جرمانے کے اپنی شرکت سے

دستبردار ہو جاؤں اور اسے بند کر دوں۔

کسی بھی سوال کی صورت میں رابطہ کریں۔

anoshailyas19@gmail.com

_____ دستخط:

_____ تاریخ:

Appendix B
Demographic Sheet

Demographic Information

Form For the following items, please select the response that is most descriptive of you or fill in the blanks as appropriate.

Gender (صنف): Male (مرد) Female (عورت)

Age (عمر):

Education (تعلیم): _____

Housing Type: Hostel with Parents with Guardian

(رہائش کی قسم) (ہاسٹل) (والدین کے ساتھ) (گارڈین کے ساتھ)

Cause of Disability: By Birth Disease Accident

(معذوری کی وجہ) (پیدائش) (بیماری) (حادثہ)

Type of Disabilities:

Polio(پولیو)

Cerebral Palsy(دماغی فالج)

Paralysis(فالج)

Blindness(اندھا پن)

Low Vision(کم بینائی)

Deaf (بہرا)

Hard of Hearing(سننے میں مشکل)

Late deafened(مرحوم بہرا)

Other _____

Appendix C

Major Depression Inventory Scale

Major Depression Inventory Scale

مندرجہ ذیل سوالات اس بارے میں پوچھتے ہیں کہ آپ گزشتہ ہفتے کے دوران کیسا محسوس کر رہے ہیں۔

براہ کرم باکس میں ایک ٹک لگائیں جو آپ کیسا محسوس کر رہے ہیں اس کے قریب ترین ہے۔

بلا تاخیر	کچھ وقت	آدھے وقت سے تھوڑا کم	آدھے وقت سے تھوڑا زیادہ	زیادہ تر وقت	ہر وقت
0	1	2	3	4	5

5	4	3	2	1	0	1. کیا آپ نے اپنے آپ کو کمزور یا اداس محسوس کیا ہے؟
5	4	3	2	1	0	2. کیا آپ نے اپنی روزمرہ کی سرگرمیوں میں دلچسپی کھو دی ہے؟
5	4	3	2	1	0	3. کیا آپ نے توانائی اور طاقت کی کمی محسوس کی ہے؟
5	4	3	2	1	0	4. کیا آپ نے خود پر اعتماد کم محسوس کیا ہے؟
5	4	3	2	1	0	5. کیا آپ کا ضمیر خراب ہے یا احساس جرم ہے؟
5	4	3	2	1	0	6. کیا آپ نے محسوس کیا ہے کہ زندگی جینے کے لائق نہیں تھی؟
5	4	3	2	1	0	7. کیا آپ کو توجہ مرکوز کرنے میں دشواری ہوئی ہے جیسے کہ اخبار پڑھتے ہوئے یا ٹیلی ویژن دیکھتے ہوئے؟
5	4	3	2	1	0	a8. کیا آپ نے بہت بے چین محسوس کیا ہے؟
5	4	3	2	1	0	b8. کیا آپ نے خود کو دبا یا سست محسوس کیا ہے؟
5	4	3	2	1	0	9. کیا آپ کو رات کو سونے میں پریشانی ہوئی ہے؟
5	4	3	2	1	0	a10. کیا آپ کو بھوک کم لگتی ہے؟
5	4	3	2	1	0	b10. کیا آپ کو بھوک میں اضافہ ہوا ہے؟

Appendix D

Author's Permission for Major Depression Inventory Scale

Author's Permission for Major Depression Inventory Scale

Bech et al. *BMC Psychiatry* (2015) 15:190
DOI 10.1186/s12888-015-0529-3



RESEARCH ARTICLE

Open Access



Psychometric evaluation of the Major Depression Inventory (MDI) as depression severity scale using the LEAD (Longitudinal Expert Assessment of All Data) as index of validity

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Abstract

Background: The Major Depression Inventory (MDI) was developed to cover the universe of depressive symptoms in DSM-IV major depression as well as in ICD-10 mild, moderate, and severe depression. The objective of this study was to evaluate the standardization of the MDI as a depression severity scale using the Visual Analogue Scale (VAS) as index of external validity in accordance with the LEAD approach (Longitudinal Expert Assessment of All Data).

Methods: We used data from two previously published studies in which the patients had a MINI Neuropsychiatric Interview verified diagnosis of DSM-IV major depression. The conventional VAS scores for no, mild, moderate, and severe depression were used for the standardization of the MDI.

Results: The inter-correlation for the MDI with the clinician ratings (VAS, MES, HAM-D₁₇ and HAM-D₆) increased over the rating weeks in terms of Pearson coefficients. After nine weeks of therapy the coefficient ranged from 0.74 to 0.83. Using the clinician-rated VAS depression severity scale, the conventional MDI cut-off scores for no or doubtful depression, and for mild, moderate and severe depression were confirmed.

Conclusions: Using the VAS as index of external, clinical validity, the standardization of the MDI as a measure of depression severity was accepted, with an MDI cut-off score of 21 for mild depression, 26 for moderate depression severity, and 31 for severe depression.

Trial registration: Martiny et al. *Acta Psychiatr Scand* 112:117-25, 2005: None – due to trial commencement date. Straaso et al. *Acta Neuropsychiatr* 26:272-9; 2014: ClinicalTrials.gov ID NCT01353092.

Keywords: LEAD, Standardization, Major depression inventory, Hamilton depression scale, Melancholia scale, Visual analogue scale

Background

The Major Depression Inventory (MDI) was developed [1, 2] to cover the universe of depressive symptoms in DSM-IV major depression [3] and in ICD-10 depression [4] (mild, moderate, severe). Consequently the time frame (window) for the MDI is the past two weeks to accord with DSM-IV and ICD-10.

The MDI can be used as a diagnostic scale by following the algorithms in accordance with DSM-IV or ICD-10. Using as index of diagnostic validity the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) [5] administered by experienced psychiatrists, we obtained a sensitivity of 90 % and a specificity of 82 % for DSM-IV major depression [5].

Via its summed total score the MDI can also be a measure of depression severity analogue to the Zung Self-rating Depression Scale (Zung-SDS, [6]) or the Beck Depression Inventory (BDI, [7]). However, we have

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Appendix E
Cognitive Hardiness Scale

Cognitive Hardiness Scale

نیچے ایسے عقیدوں کی فہرست دی گئی ہے جو آہ طور پر لوگ رکھتے ہیں۔ ہر جملے سے آپ کتنا متفق یا

لگائیں (O) (غیر متفق ہیں - درست جواب لگائیں - درست جواب والے نمبر کے گرد داہرہ

بہت زیادہ متفق = 1

متفق = 2

نا متفق نا ہی غیر متفق = 3

غیر متفق = 4

بہت زیادہ غیر متفق = 5

سیریل نمبر	جملے	بہت زیادہ متفق	متفق	متفق نا ہی غیر متفق	غیر متفق	بہت زیادہ غیر متفق
1	میرا کام کے علاوہ دوسرے کاموں اور مشاغل میں شامل ہونا مجھے زندگی میں معنی اور مقصد کا - احساس دالتا ہے	1	2	3	4	5
2	لوگوں کے سیاسی اور سماجی کاموں میں بھرپور حصہ لینے سے لوگ دنیا میں ہونے والے واقعات اور سیاست پر گہرا اثر ڈال سکتے ہیں	1	2	3	4	5
3	جب ہر طرف مایوسی ہوتی ہے تو میں ہمیشہ اپنے گھر والوں اور دوستوں سے مدد اور سہارا - مانگ سکتا ہوں	1	2	3	4	5
4	میں ایسے کاموں کو ترجیح دیتا ہوں جو خطرناک، دلچسپ اور بہادری کے ہوں بجائے اس کے کہ وہی کی وہی پرسکون معمول کیطرز زندگی کی پابندی کروں۔	1	2	3	4	5
5	کامیاب ہونے کا زیادہ تر تعلق محنت سے کام کرنے سے ہے۔ قسمت کا اس میں معمولی یا کوئی کردار نہیں ہے۔	1	2	3	4	5
6	میری ذات کے ایسے بہت کم پہلو ہیں جن میں میں غیر محفوظ، بہت زیادہ حساس یا اعتماد کی کمی محسوس کرتا ہوں۔	1	2	3	4	5
7	عام طور پر زندگی کی زیادہ تر چیزوں کے بارے میں میرا رجحان تھوڑا سا تنقیدی، مایوسانہ اور نک چڑا ہو جاتا ہے۔	1	2	3	4	5

5	4	3	2	1	8	میرے نوکری کے موجودہ حالت میں بہت ہی تھوڑی سی تبدیلی میرے اپنے موجودہ ادارے کو چھوڑ دینے کی وجہ بنے گی۔
5	4	3	2	1	9	میں اپنی روزمرہ کی سرگرمیوں اور اپنے خاندان اور دوستوں کی صحتمندی سے مطمئن محسوس نہیں کرتا۔
5	4	3	2	1	10	عام طور پر میں چیزوں کی اچھی طرح سے منصوبہ بندی کرنے کو ترجیح دوں گا نہ کہ نامعلوم (صورتحال) سے نمٹنے کو۔
5	4	3	2	1	11	زندگی کا زیادہ تر حصہ بے مقصد چیزوں میں ضائع ہو جاتا ہے۔
5	4	3	2	1	12	میل جول کے لیے دوسروں کے ساتھ بات کرتے ہوئے میں اکثر عجیب، بے چین، یا غیر محفوظ محسوس کرتا ہوں۔
5	4	3	2	1	13	میں بہت کم اپنے آپ کو کہتے یا سوچتے ہوئے پاتا ہوں کہ میں اتنا اچھا نہیں جتنا ہونا چاہیے یا کچھ حاصل کرنے کے قابل نہیں ہوں۔
5	4	3	2	1	14	میں اپنی نوکری اور جن سرگرمیوں میں مصروف ہوں ان کی ذمہ داری نبھاتا ہوں۔
5	4	3	2	1	15	میں کام کے زیادہ تر (حصے) زندگی کی تبدیلیوں، مایوسیوں اور دھچکوں کو چینج کے طور پر لینے کے بجائے خطرناک، نقصان دہ اور ذہنی دباؤ کے طور پر لیتا ہوں۔
5	4	3	2	1	16	میں صرف وراثتی کے لیے ایسی جگہوں کے نئے اور مختلف راستے ڈھونڈتا ہوں جہاں میں باقاعدگی سے جاتا ہوں جیسا کہ
5	4	3	2	1	17	دوسرے اپنے ذاتی مفاد کے مطابق کام کریں گے چاہے میں ان پر اثر ڈالنے کے لیے کچھ بھی کہنے یا کرنے کی کوشش کروں۔
5	4	3	2	1	18	اگر مجھے یہ دیکھنے کا موقع ملے کہ دوسروں نے کس طرح کوئی چیز کی ہے یا یہ دیکھنے کا موقع ملے کہ کیا کرنا ہے مجھے یقین ہے کہ میں تقریباً یاب ہو سکتا ہوں۔
5	4	3	2	1	19	میں یہ توقع رکھتا ہوں کہ چیزیں کبھی کبھار غلط ہو سکتی ہیں مگر اپنے راستے میں آنے والی ہر چیز سے مؤثر انداز میں نمٹ سکنے کے بارے میں میرے ذہن میں کوئی شک نہیں۔

5	4	3	2	1	20	مجموعی طور پر زیادہ تر چیزوں جن میں، میں شامل ہوں جیسے کے) نوکری، معاشرہ سماجی تعلقات (بہت زیادہ حوصلہ افزاء پر لطف اور فائدہ مند نہیں ہیں۔
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5	4	3	2	1	21	اگر میرے منصوبے میری امید کے مطابق واضح نہیں ہوتے، یا اگر چیزیں اس طرح نہیں ہوتیں جیسے میں واقعی چاہتا ہوں تو میں ما یوس اور پریشان ہو جاتا ہوں۔
5	4	3	2	1	22	میرے محنت سے کام کرنے اور جو کامیابی اور عزت مجھے ملے گی اس میں براہ راست تعلق ہے۔
5	4	3	2	1	23	مجھے ایسا نہیں لگتا کہ میں نے حال میں بہت کچھ (ایسا حاصل کیا ہے جو میرے مستقبل کے گول اور زندگی کے مقاصد کے لیے بہت زیادہ (goal ضروری یا با معنی ہو۔
5	4	3	2	1	24	میں اکثر سوچتا ہوں کہ ان لوگوں کی نسبت میں نااہل، نالائق یا کم اہم ہوں جن کے ساتھ میں کام کرتا ہوں اور جن کو جانتا ہوں۔
5	4	3	2	1	25	بہت دفعہ مجھے ایسا محسوس ہوتا ہے کہ میرا اپنے ساتھ ہونے والی چیزوں پر بہت تھوڑا یا کوئی قابو اور اثر نہیں ہے۔
5	4	3	2	1	26	میں محسوس کرتا ہوں کہ اگر ابھی اسی وقت میری زندگی میں کچھ بھی بدل جاتا ہے یا غلط ہو جاتا ہے تو ہو سکتا ہے میں اس سے مؤثر انداز میں نمٹنے کے قابل ہوں۔
5	4	3	2	1	27	جب گھر یا نوکری میں کوئی تبدیلی آتی ہے تو میں اکثر خود کو سوچتا ہوا پاتا ہوں کہ بدترین چیز رو نما ہونے والی ہے۔)
5	4	3	2	1	28	اس وقت گھر یا نوکری پر چیزیں کافی حد تک توقع کے مطابق ہیں اور کوئی مزید تبدیلی سنبھالنا بہت زیادہ مشکل ہو گا۔
5	4	3	2	1	29	آپ یقیناً سکتے کیوں کہ لوگوں پر یقین نہیں کر سکتے کیوں کہ زیادہ تر افراد آپ کو استعمال کر کے اپنی فالج اور خوشی کے راستے تلاش کر رہے ہوتے ہیں۔
5	4	3	2	1	30	زندگی کے زیادہ تر معنی، کامیابی، حاصل کردہ مقصد اور ذاتی اطمینان کی بیرونی تعریف کے بجائے انسان کے اپنے اندر سے آتے ہیں۔

Appendix F

Author's Permission for Cognitive Hardiness Scale

Author's Permission for Cognitive Hardiness Scale**Ken Nowack** Yesterday

to me ▾



Anosha,

Thank you for your interest in my Cognitive Hardiness scale for use in your research study.

You have my permission to use this scale for your study and it is attached with scoring information.

The Cognitive hardiness scale was developed on working adults but has been used in several young adult research studies--you will need to edit the references from "work" to "school" on several items/questions to make it appropriate for your study sample.

I would be very interested in your results to share with me if possible when you are completed with your study.

Please email me with any questions about this scale and I am also attaching a very recent summary of some research with both adults and students you might want to reference.

I wish you success in your study! Be well...

Ken

Kenneth Nowack, Ph.D.
Chief Research Officer
Organizational Psychologist PSY 13758
Envisia Learning, Inc.
1336 Moorpark Rd. #136
Thousand Oaks, CA 91360
800-335-0779 Toll Free

Appendix G
Support Letter for Data Collection

Support Letter for Data Collection



Capital University of Science and Technology
Islamabad

Islamabad Expressway, Kahuta Road,
Zone - V, Islamabad, Pakistan
Telephone : +92-(51)-111-555-666
 : +92-51-4486700
Fax: : +92-(51)-4486705
Email: : info@cust.edu.pk
Website: : www.cust.edu.pk

Ref. CUST/IBD/PSY/Thesis-345
February 6, 2023

TO WHOM IT MAY CONCERN

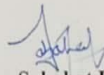
Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Anosha Ilyas, registration number **BSP193072** is a bona fide student in BS Psychology program at this University from Fall 2019 till date. In partial fulfillment of the degree, she is conducting research on "Relationship between disabilities with depression and role of hardiness among young adults". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,


Dr. Sabahat Haqqani
Head, Department of Psychology
Ph No. 111-555-666 Ext: 178
sabahat.haqqani@cust.edu.pk

Appendix H
Plagiarism Report

Plagiarism Report

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