Relationship between Depression, Anxiety, Stress and Self Harm: Moderating role of Trait Emotional Intelligence

MS Scholar:

Asad Raza

Reg. No: 139-FSS/MSCP/F14

Research Supervisor:

Dr. Najam ul Hasan Abbasi

Assistant professor of Psychology

Department of Psychology

Faculty of Social Sciences

International Islamic University, Islamabad

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Asad Raza

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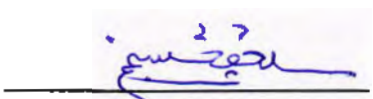
By

ASAD RAZA

Registration No. 139-FSS/MSCP/F14

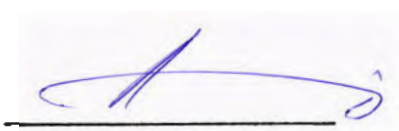
Dissertation Approved

By



Supervisor

Internal Examiner



External Examiner

Chairman Department of Psychology

Dean Faculty of Social Sciences

INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD (PAKISTAN)

CERTIFICATE

It is certified that MS research thesis entitled ***"Relationship between Depression, Anxiety, Stress and Self Harm: Moderating role of Trait Emotional Intelligence"***, prepared by **Mr. Asad Raza,** MS Scholar registered with 139-FSS/MSCP/F14 in the department of Psychology, Faculty of Social Sciences, Islamic International University Islamabad, has completed all requirements of research under my supervision. It is certified that his work is according to rule and regulation which are suggested by American Psychological Association (APA).

Dr. Najam ul Hassan

Supervisor

Dedication

I dedicated this thesis to my family: the symbol of love and giving for me. This leads me through the valley of darkness with light of hope and support.

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Acknowledgements

In the name of **Allah**, the most merciful, the most beneficent, who is entire source of all knowledge and wisdom endowed to mankind and who bounteously blessed me such environment and resource, which enabled me to complete this research successfully.

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Abstract

The aim of present study was to assess the relationship between depressions, anxiety, and stress and self-harm. Moderating role of trait emotional intelligence on the relationship between depression, anxiety stress and self-harm was also assessed. A cross-sectional survey research design was used. A sample of 400 was selected using purposive sampling out of which 322 participants (128 male and 194 female students) completed the survey. Deliberate Self-harm Inventory was used to measure self-harm behaviors, Depression, Anxiety and Stress Scale was used to assess depression, anxiety and stress while trait emotional intelligence was examined using Trait Emotional Intelligence Questionnaire-Adolescent Short Form. Descriptive and inferential statistics were used to analyze the data. Results indicated that a slightly negative correlation exist between depressions, anxiety, and stress and self-harm ($(p < 0.5, r = -.357)$. While overall trait emotional intelligence did not play any moderating role in the relationship of these study variables. Among demographic variables, residential area, family system, year of education and family monthly income did not show any difference with respect to depression, anxiety and stress. But they revealed a statistical significant difference with respect to gender ($p = .005$, $p < 0.05$). Females report slightly more score on depressive, anxiety and stress (17.03) than Male (14.77).Similarly gender, family system, family monthly income and educational year did not effect on the score of self-harm. Self-harm revealed a statistically significant difference with respect to residential area. Urban students use more self-harming behaviors than rural students with a mean of 33.37.

***Keywords*:** depression, self-harm, anxiety, trait emotional intelligence, stress

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Deliberate self-harm (DSH) is a condition in which individual deliberately injure him/herself. This behavior creates damage to sufferer. (Flige, 2009).Researchers have described self- harm differently. It is also famous with the name of Para suicide, self - mutilation, non- suicidal self-injury, auto aggression and self- abuse etc. According to Gratz (2003) self-harm is annihilation or transformation of structure of the body without desire to kill him or herself.

Deliberate Self harm (referred to as DSH afterwards) and suicide are different and cannot be used interchangeably .In deliberate self-harm, an individual does not have a desire to kill him/ her but on the other hand in suicide the individual wants to take his/ her life. It means that in DSH, there is no desire to kill one. But It does not mean that self-harm may not cause suicide. If self-injurious behavior becomes chronic it can lead towards suicide. DSH and suicide have correlation. (Cooper et al., 2005); In extreme situation where self-mutilation does not serve the purpose of unloading emotional burden, the concerned individual go towards suicide to heal negative emotional states. (Walsh, 2006)

DSH typically has its onset in early adolescence and is strongly correlated with psychiatric symptoms, but it can also occur in many different disorders, as well as in non-clinical samples (Heath, et al. 2008; Nock, et al., 2006). DSH is generally viewed as a dysfunctional coping mechanism or as a non-adaptive strategy to regulate tension and other negative emotions used by some people (Klonsky, 2007).

There are different methods used in self-harming. Which include the behavior to wound, burn skin; carve into skin, punching the body behaviors have been described, ranging from skin cutting, skin burning, head or fist hitting, to eye nucleation, genital mutilation and even of tongue and/or ear.

Adolescents are mostly involved in the act of self-harm, have emotional problems and lack the adequate coping mechanism to handle emotions. In order to heal emotional pain, they use mechanism of coping. They express those thoughts on the canvas of skin which they can't express verbally. (Hawton, 2003).Most of the individuals who use self-harm seek it as an emotional regulation strategy to handle the emotions which are disturbing them and creating pain and difficulties for them. (Mental Health Foundation 2006).It is also reported that 10% of the adolescents from general population use non suicidal self-injury.

Everyone wants to escape from painful emotions and remain calm and relax. The act of self-injury release endorphin hormone which is a natural painkiller (Blasco Fontecilla et al., 2010). It makes the emotions numb and creates a state of wellbeing and relaxation for short time. But after its effects are over, the individual feels painful emotions again and want to heal them. So it is considered an unhealthy coping technique which creates psychological and social impairments. (Mikolajczak & Jane, 2008)

Muhammad, Muhammad & Badar (2014) studied the mode of self-harm in patients visiting public and private hospitals in Karachi and found that most of the patients who self-harmed had a tendency to avoid sharing their problems with others.

Morey, Corcoran, Ella & Perry (2008) conducted a cross sectional survey on Irish adolescents to assess the prevalence of self-harm. On the basis of their findings, they concluded that 9.1% adolescents reported life time history of DSH. Girls had high prevalence of self-harm than boys, they also have more thoughts about self- harm than boys. No significant difference in self-harm due to age was observed. Students living with one parent had high ratio of self-harm.

1.1.1 Theories of self-harm

There are a number of important theories which help to understand the self-harm behavior; some of them are described here.

A. Experiential Avoidance Model

Hyes, Wilson, Gifford, Follette, and Troshal (1996) proposed experiential avoidance model of self-harm. Experiential avoidance includes any sort of behavior that is performed in order to avoid or runaway from negative internal emotional states or external conditions that are effecting on them. Individual feeling negative emotional states (caused by any event) want to regulate or avoid these feelings because they evokes anger, shame and frustration etc. Individual lacking the ability to regulate these feelings, poor tolerance and vulnerability to stress wants to avoid these stimuli and associated feelings. For that purpose, he/she injure himself/herself in search of relief. But this relief remains temporarily and this relief works as a negative reinforcements. Repeated stimuli and lack of necessary coping skills creates a need to yield relief and self-injury is done for that purpose. Over the time, DSH becomes an automatic response by creating a vicious cycle.

B. Affect Regulation Model of Self Harm

Psychodynamic theories argued that self-harm serves the purpose of affect regulation (Suyemoto and McDonals, 1995). According to this theory, individuals harm themselves in order to control or manage their affective states. They feel difficulty in controlling painful or disturbing emotions and injure themselves to handle these painful feelings. It is like coping mechanism which is used to cope with stressful situations. Because of deficiencies in healthy coping strategies, individuals use this maladaptive coping strategy to regain control on their emotions.

C. Trauma genic Model of Self Harm

Yates (2004) described a trauma genic model about causes of self-injurious behavior. He proposed that childhood trauma or maltreatment creates painful memories. Self -harm results from that trauma induced disruption and it is like a, compensatory regulatory and relational strategy, it may be an adaptive function to manage painful past experiences. In this model, self-injury is considered an effective tool for protecting the wholeness of self and regulates affective states.

D. Social Learning Theory

Theory of social learning was presented by Albert Bandura in 1977. According to this theory one learn from observing others. Individual observe others behavior and if the behavior is being rewarded with reinforcement and the observing individual want to achieve this reward, the action is repeated. Individual have interaction with a lot of people like parents and other members of family. Neighbors or teachers are also involved in the situation. Individuals observe others behaving in different actions.

This theory proposed that self-harm behavior is learnt by others. Just like learning any other normal behavior. With the advent of modern technology and media, individuals observe models live or on TV harming themselves and by watching them, act in the same way they learn to harm themselves like models because they found it relieving. This kind of learning can occurs within social groups like family, peers groups, and the larger community as well as indirect observation like media magazines etc.

learn the way of harm. This learning can occurs within social groups like family, peers groups, and the larger community and also indirect observation like media magazines etc.

So the question is that whether observational learning could apply to self-harm. A research by Taiminen, Kallio -Soukainen, Nokso-Koivisto, Kaljonen, & Helenius (1998)

could answer this question. They studied non suicidal injury in an adolescent psychiatric ward in Finland for a period of twelve months. Percipients were 12 patients having 90 days hospitalization period. During this period 64 self-harming behaviors were observed among them 37 were considered as a result of modeling. Among them, 6 subjects were involved in multiple modeling i.e. modeling from different sources. The surprising results were that there were two subjects who never used non suicidal self-injury. But in the company of self-harmers and by the process of observation they started to harm themselves. These two were also the youngest; it shows that young people may be at risk that faces with self-harm.

Recent studies also confirm these findings. Non suicidal self-injury is a socially contagious phenomenon (Prinstein et al., 2010). The behavior of self-harm transmitted through one to another by social learning or social contagion. (Jarvi, Jackson, Lance Swenson, and Crawford , 2013). Social contagion is also observed in the patients admitted in hospitals for the treatment of medical health issues resulting from self-harm. (Matthews, 1968; Nock & Prinstein, 2005; Rosen & Walsh, 1989; Walsb & Rosen, 1985).

Similarly, One study (Hawton, Harriss & Rodham, 2010) on self-harm in 41 schools of England revealed that in addition to depression anxiety and other problems self-harm by friends and family members was the reason behind that behavior. (Hawton, Harriss & Rodham, 2010). There are also a few studies suggesting social learning effects among children. Krishnakumar and colleagues (2011) found that some children in their study learned 8 non suicidal self-injurious behaviors from real life models, two from newspapers and seven through television.

Psychological characteristics (depression and anxiety) have a link with self-injurious behaviors in young age. (Evans , Hawton & Rodham , 2004). It has been found to be strongly and positively correlated with the symptoms of depression. (Andrews & Lewinsohn ,

1992). Anxiety is also positively correlated with self-harm .But when it occurs with depression it increases the tendency to harm oneself. (Foley, Goldston , Costello & Angold , 2006). Similarly, stress has been reported to increase the risk of self-harm which increase the risk. (Hawton & Harriss , 2008). On the other-hand, social relations with self-harmers also make individual more prone to it. (Brent & Mann, 2006).

A recent study (Hoeksema, 2008) revealed that depression affects the females more often than the males, also the symptoms of depression are more evident in individuals with the age of 15-24 years than others. There are many theories about causes of depression, among them some popular theories are described below.

i. Biological Theories

According to these theories, factors that may cause depression are in the structure and function of the brain. Any problem or imbalance in them can cause depression. A neurotransmitter serotonin plays important role in depression. The decrease in that hormone set the condition of depression. To treat this problem SSRI medications are used (Kauffman, 2009). On the other hand small size of hippocampus and genes are also important in depression (Jacobs, 2004).

ii. Psychoanalytical Theories

Psychoanalytical theory is based on the work is based on the work of Sigmund Freud. According to Freud, civilizations stop to fulfill basic needs which inhering in human personality (Armstrong, 2012) .This deprivation leads towards maladaptive behavior. Cultural norms compel people to abide by superego. Some followers of Freud consider that depression is like a protest for social norms. In these theories, the conflict

of id, ego and superego set the stage for depression. When desires of id are suppressed by ego into un-conscious, it creates tension for the individual.

iii. Existential Theories

Based on the work of Yaloom (1980), its focus is on the existence of individuals and how he/she experiences the world and its forces (Smith, 2012). All humans face existence problems that threaten their unique existence and create hopelessness and depression. These saw humans as active and have control over the choices and experiences he/she made.

Freedom is very valuable factor that all individuals want or needs to have. It gives humans alternatives and choices and so gave the power to select choices and change the destiny. But when individual have no choices then he/she feel hopelessness and that's create depression (Moore, & Goldner, 2009).

iv. Cognitive behavior Theories

These theories consider the behavioral and cognitive aspects of humans. In behavioral aspect they examine the roe of learning, and modeling to shape behaviors. Similarly, cognitive aspect assesses the thought processes, schemas, prejudice, negative thinking and its effect on human wellbeing. Depression is a negative view about self and others. This distorted view is termed as automatic negative thoughts and that's the main cause behind depression. In the cognitive therapy, therapist try to change this thought cycle and to develop insight, hope, optimism and coping strategies in the client. On the other- hand in behavioral therapy conditioning cause depressive symptoms. So in therapeutic process behavior shaping is done with the help of several behavioral techniques like systematic desensitization. Home assignments are also given between the sessions and assess the success of ongoing treatment.

1.1.2. Theories of Stress

a. Transactional model

Lazarus (1966) proposed transactional model of stress. According to Lazarus, stress does not arise from the demands that people face, rather, it arises when individuals perceive the situation as exhausting their resources. every stress does not necessarily give rise to negative emotions because the coping strategies that individual adopt matters in this case.

According to appraisal model stress involves two stages or processes: Primary and secondary. In first stage; one draws a picture of the stressful to whether it includes harm/loss, threat or challenge or not. While in the secondary stage, the appraisal process stage, an individual checks out what he/ she can do with that stress, as well as what resources and strategies are available

b. General Adaptation Syndrome

According to Selye and Hans (1950), our body reacts when it face threat. At first stage it labels the stimuli as threat and wants to fight or avoid from it. In second phase, body restores the hemostasis or balance of the body. Para sympathetic nervous system helps in this process. At last stage, if the stress is chronic and long term it damage the hemostasis of body and creates health and survival related issues.

1.1.3 Theories of Anxiety

a. Behavioral Theories

The most famous theory of anxiety is behavioral theory. According to behaviorism, learning and conditioning are the reasons behind anxiety disorders. The work is based on the idea of Pavlov, Watson and Skinner. They explain behavior in term of reinforcement and conditioning. Three mechanisms lay behind the cause of anxiety. The 1st one is classical conditioning: in which conditioned response takes place of natural response to natural

stimuli. In operant conditioning, individual learn from the consequences of their behaviors. The last one is observational learning, in which on learn from observing others. These are the root causes of anxiety because anxiety is learned behavior. In behaviorism, these problems can be treated through re-learning.

b. Psychoanalytical Theories

On the other hand Freud proposed a very different view on anxicty. Freud says that anxiety is a conflict between the id impulses and superego moral standards. Id tries to fulfill its desires through any means. But sometimes these demands are contradictory to moral standards and superego wants to inhibit it. But id exerts power to satisfy its demands. In this way, a state of conflict occurs and ego resolves it by adopting a defense mechanism. Freud also described anxiety in three types. Neurotic anxiety: the tension that person will lose the ability to control his/her impulses. The real anxiety: in which any real event or object which is threatening creates anxiety. Similarly, when individual have fear that he/she cannot fulfill moral standers of the society this is called moral anxiety.

c. Biological theories

Biological theories of anxiety argued that cause of anxiety is in the limbic system which control fear reaction. When fear is perceived, amygdala conveys message to hypothalamus which regulate adrenal glands through pituitary. Adrenal glands produce adrenaline hormone to fight of flight against fear. According to cognitive theory, negative appraisal of situations can cause anxiety.

Emotional intelligence (EI) is the capability to identify emotions, interpret them and use to support thoughts. It is used to control emotions in order to enhance survival and growth (Mayer & Salovey, 1997).

1.1.4. Theories of Emotional Intelligence

The work of Thorndike (1920) on social intelligence and Gardner (1983) on multiple intelligence paved the way for theories in the field of emotional intelligence. The theories by Salovey Mayer, Reuven Bar-On and Daniel Goleman are the most famous theories of emotional intelligence.

Salovey and Mayer (1997) used the term emotional intelligence for first time. According to them; emotional intelligence is a cognitive ability associated with general intelligence. They divided it into four domains: perception of emotion, emotional facilitation, understanding emotions, and management of emotions. These domains are categorized in stepwise forms which come with the passage of age and maturity (Mayer & Salovey, 1997). Emotion perception is the capability to perceive emotions in one and other individuals including verbal and non-verbal communication or stimuli. Emotional facilitation is described in term of differentiating between different types of emotions like angry or sad and how they are effecting. Understanding emotions contain the capability to understand emotional and to differentiate among different emotions from which one is effecting: feeling a shift from depressed and anxious mood. The most important and last one is Managing emotions. It is the ability to control one's emotions and also of others as desired (Mayer & Salovey, 2003).

Reuven Bar-On (1988) first time used terminology of "Emotion Quotient (EQ). Bar-On has described items of emotional intelligence which are intrapersonal, interpersonal, adaptability, stress management, and general mood. According to him, the ability of emotional intelligence could be developed and improved with the help of exercises, training and programs relating to emotions. This ability helps individuals to adjust and get success in adapting environmental demands. Those persons who have high EQ scores can easily fulfill

environmental needs. But on the other hand low EQ people face difficulty in managing these environmental changes and fall in unhealthy and maladaptive ways and coping skills to manage stress, solve problems, take decision and get achievements in life. They become psychologically ill.

The last important theory is Daniel Goleman's theory (1995). According to them, Emotional Intelligence is divided into 5 main areas .First is self-awarencss. The ability of identification an emotion as it fcels. It is sureness about personal abilities and talent. The second is self-regulation. It means one has control over his/ her motives. desires and urges. The third is motivation: to drive him/herself for any aim. The 4fourth is empathy: capability to of perception of others, feelings. The last one is social skills: the building up of appropriate social skills (Goleman, 1995).

Mikolajczak, Petrides & Hurry (2009) conducted a study to assess the relation between self-harm and trait emotional intelligence. They stated that high emotional intelligence was negatively correlated with self-harm. Coping strategies play a protective role in the correlation between emotional intelligence and self-injury. They also stated that individuals who have high level of emotional intelligence used more adaptive coping strategies.

Mahajan, Navkiran, Mahajan & Devinder (2014) studied the emotional intelligence and coping strategies of adolescents with self-harm at Dayanad medical college and hospital Ludiana. On the base of findings, they concluded that adolescents who self-harm have low level of emotional intelligence and maladaptive coping styles.

Stressful life events have a significant relation with self-harm. Those adolescents who have stressful life events but high level of emotional intelligence were significantly less associated with DSH. (Tang, Yang, Ahmed, 2016).

In this study, links between psychological characteristics (depression, anxiety and stress) and self-harm would be investigated. It is further investigated that this association would be mediated by trait emotional intelligence. Its mean that, having low score on trait emotional intelligence will make people more susceptible to harm oneself.

Nicola, Hawton, McMahon & Corcoran (2011) Proposed that higher levels of depression and anxiety were positive correlated with self-harm episodes. They also found increase in self-harm with the increase in number of stressful incidents of past life.

Current study aimed at assessing the moderating role of trait emotional intelligence with self-harm, depression, anxiety and stress. It is hypothesized that emotional intelligence play a protective role in decreasing the behavior of self-harm and occurrence of anxiety. stress and depression. Because adolescents who injure themselves have low emotional intelligence that who do not harm. They also show difficulty in managing their own emotions (Kulikowska & Pokorski, 2008).

Research has revealed that relationship between suicidal attempts, ideation and stressful life events are moderated by emotional intelligence. It means that individuals having stressful life events will not be engage in suicidal attempt if they have high emotional intelligence (especially ability to interpret and handle emotions). On the other hand presence of low emotional intelligence and stressful life events creates tendency to manage these emotions through escaping from reality i.e suicidal ideation (Cha Christine and Marine Nowak, 2009).

It has seen that E.I protects from self-injurious behaviors in the presence of stressful life events. Accordingly, in this study, the protective role of E.I in self-harm in the presence of depression, anxiety and stress.it mean that if individual is having problem of depression, stress and anxiety will not engage in self-harm because of high score on E.I. Contrarily, if

he/she have depression, anxiety ,stress but low E.I he/she will be prone to self-harm. Because research has proposed a strong correlation of anxiety, stress, depression and self-harm in performing self-harming behavior.

1.2. Literature Review

Nicole Madge et al., (2011) conducted a survey through case studies from 6 European countries and Australia. Survey was conducted on 30477 students with age range from 14-17 years. 6% students reported a history of deliberate self –harm. There was a positive correlation between self-injury and gender but it was not strong. A very significant correlation was found between anxiety and depression while male having more anxiety symptoms than females. A weak gender difference was also found between stressful life events. Which means that higher the stress, higher the symptoms of anxiety, depression and self-harm.

Astrid Muller et el., (2016) conducted a study to assess the correlates of self-harm in general, population in Germany and found that younger participants had higher scores on SHI. The study also found the positive correlation between self-harm and symptoms of anxiety and depression

Mikolajczak & Jane (2008) concluded that students who self-harm had low level of emotional intelligence. But selection of coping strategies had a mediating effect on this relation. The reason behind the self-harming behavior was to regulate emotion i.e. the expressing of their emotions to others which are not expressed verbally.

Agnieszka, Anna & Karolina (2012) assessed the stress, coping strategies and emotional intelligence in psychiatrically treated self-harming adolescents. They proposed that

there is strong positive correlation among maladaptive coping, low emotional intelligence and self-harm.

Kulikowska & pokorski (2008) assessed the social competence, emotional intelligence, and coping strategies among adolescents who harmed themselves. They found that those who harm themselves had low scores on EI and social competence than the healthy persons and used more emotion focused strategies than non-Self-injury participants.

Nasir and Masrur (2010) examined the relationship of emotional intelligence with gender and concluded that Emotional Quotient (EQ) and academic achievements are correlated .They also proposed that EQ differed by gender in the domain of stress management. Male students have high stress management ability than females. This study signifies the importance of emotional intelligence in managing stress and educational achievements.

Garg and Pastogi (2009) studied emotional intelligence and its relation with stress resiliency and proposed that emotional intelligence and stress resiliency are correlated with each other. Furthermore stepwise regression analysis revealed that stress resiliency depends on emotional intelligence. The high score on emotional intelligence can lead towards higher ability to manage or handle stress.

Sunil and Roorpai (2009) revealed that emotional intelligence and stress and anxiety are negatively correlated. Through regression analysis, it was revealed that ability to handle stress and regulate anxiety depends on emotional intelligence. Having high score on emotional intelligence predict high stress management and low anxiety at workplace.

In another study, Zetterqvist et al., (2014) examined the role of bad past experiences in the performance of non-suicidal self- injury. Results show that 70% participants reported at

least one incident of self-harm while remaining was involved in multiple episodes. Regression analysis explored that emotional abuse; depressive symptoms, anxiety and female gender were the predicting factors. These variables are leading cause behind creating a need to punish or injure oneself.

While, Andrea et el., (2011) assessed the effects of age and gender on self –injurious behaviors from the sample of 665 schools students age range from 7-16. They concluded that female students engaged in self-injurious behaviors 3 times more than male students. Methods of self- harm were also differed by gender: girls reported cutting and carving and boys reported hitting themselves most often.

Richard, Frazier and Prinstein (2014) conducted a study to assess stress and self-injurious behaviors. Data was collected by a sample of 110 adolescent inpatients. These participants completed 3 scales of NSSI, depressive symptoms and life events .These measures were applied in three consecutive time periods: 1 for 1st time. 2nd was after 6 months and 3rd time was after 9 months of initial assessment. Hierarchal liner modeling was used to analyses the results. Individuals who reported engagements in self-harm also experience high level of stressful life events than those who were not engage in NSSI during that time. Results also revealed that female gender is more prone to self-harm. They concluded that stress and female gender both are risk factors for self –harm.

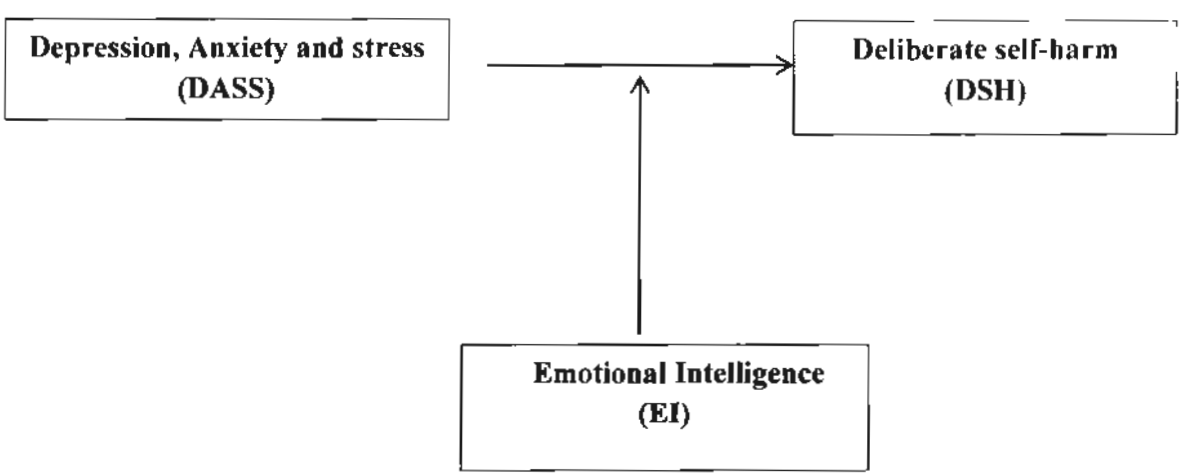
Salovey & Mayer (2003) examined the level of emotional intelligence of adolescent students in Guwahati. They observed an average level of EI in students with a mean of 46. Gender differences in the level of EI were found with girls having high level of EI than boys. The difference between EI of English medium schools and adolescents of Assamese medium schools is found but this difference was not significant.

In another study, Berrocal, Cabello, Castillo & Extremera (2012) assessed the emotional intelligence with respect to the gender. Findings showed that female had higher score on EI than men. On the other side EI scores increases with the age of participants.

Kavana, Venkatappa, Shetty, Sparshadeep & Parakandy (2012) identify the gender differences in emotional intelligence among 1st year medical students. Emotional quotient self-assessment checklist was used to measure EI. Majority of students had good EI scores having meant of 63.57%, 68.5% & 66.04% of males, females and the total sample respectively). EI was significantly more in females as compared to males.

Jadoon et al., (2008) observed that 43.89% students suffered from anxiety and depression by conducting cross- sectional study. The 1st year students reported a very significant prevalence of anxiety and depression, while a very low prevalence was observed in 4th year students. No effect of marital status, locality and nationality were observed on the prevalence of research variable.

1.3. Conceptual Framework



1.4. Rationale

Current study described the relationship between depressions, anxiety, and stress and self-harm among 1st to 4th year students as well as the moderating role of trait emotional intelligence. More importantly, this study addressed the different domains of emotional intelligence and their moderating relation with self-harm. In this way, detailed information about depressions, anxiety, stress and emotional intelligence was obtained. Self-harm is a serious issue and the underlying causes of the self-harm are not known precisely. In the current study, the author has explored the link between emotional intelligence and self-harm. It was hypothesized that emotional intelligence has a moderating and significant negative correlation with self-harm, which mean that higher emotional intelligence the lower the level of self-harm, while the lower levels of emotional intelligence the higher probability of self-harm. The study expected that students having problem of depression, anxiety, or stress may not involve in harming oneself if they have high score on emotional intelligence. The results of the current study would help in better understanding the underlying mechanisms of the relationship between depressions, anxiety, stress, emotional intelligence and self-harm in Pakistani context.

The current study has found that depression, anxiety and depression may not be the leading cause of self-harm but there are others variables which are effecting on this relationship.

The study also adds in the current knowledge on the scarce researches available on this topic in Pakistani context. More importantly, most of the researches available on Pakistani population have employed and are based on emotional intelligence, while the current study focused on trait emotional intelligence. This is new approach on understanding

the relationship of self-harm with depressions, anxiety, and stress with moderating role of trait emotional intelligence.

In addition, some socio-demographic characteristics and their relation with depressions, anxiety, and stress and self-harm were also assessed. This has revealed important information about the role of these characteristics in the study of self-harm.

1.5. Objectives

- To explain the relationship between depressions, anxiety, stress and self-harm.
- To assess the moderating role of trait emotional intelligence in depression, anxiety, stress and self-harm.
- To compare the gender differences in depression, anxiety, stress and self-harm.
- To assess whether the level of education has an impact on depression, anxiety, stress and self-harm.
- To explore the family system differences in depression, anxiety, stress and self-harm.
- To explore and compare, whether the socioeconomic structure has an impact on depression, anxiety, stress and self-harm.
- To explore whether people from urban and rural area differ on depression, anxiety stress and self-harm.

CHAPTER TWO

METHODS

2.1. Research Design

Current study is correlational study in order to measure depression, anxiety, stress and self-harm and the moderating role of trait emotional intelligence among students. A cross-sectional survey research design is used to assess the variables.

2.2. Sample

A sample of 400 had be taken 1st to 4th year classes in different colleges of Jhelum using purposive sampling technique. Questionnaire were distributed to 400 students by taking their consents.38 students did not return the questionnaires while 40 questionnaires were incomplete. So, 322 questionnaires were included in the analysis. The participants are asked to fill out a consent form. The confidentiality and other ethical considerations were taken into account as recommended by the ethics committee of IIU.

2.3. Hypotheses

- A significant positive correlation will exist between depression, anxiety, stress and self-harm.
- Relationship between depression anxiety, stress and self-harm would be negatively moderated by high score on trait emotional intelligence.
- Female students would have high score on depression, anxiety, stress and self-harm than male students.
- Students from urban area will show higher level depression, anxiety stress and self-harm than the rural area.
- Students from upper socio-economic class will show high level of depression, anxiety, and stress and self-harm than those belonging to lower socio-economic class.

- Students from joint family system will show high level of depression, anxiety, stress and self-harm than the nuclear family system.

2.4. Tools and Instruments

a. Demographic Form

Demographic form consisted of the information regarding: gender, age, educational year, siblings, birth order, father education, mother education, family system, residential area and family monthly income. Physical and psychological illness variable were also included in the form.

b. Depression Anxiety Stress Scale (DASS)

The DASS is a set of three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. Each of the three DASS scales contains 14 items, divided into subscales of 2-5 items with similar content. The Depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, and lack of interest/involvement, anhedonia, and inertia. The Anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The Stress scale is sensitive to levels of chronic non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient. Subjects are asked to use 4-point severity/frequency scales to rate the extent to which they have experienced each state over the past week. Scores for Depression, Anxiety and Stress are calculated by summing the scores for the relevant items.

c. Deliberate Self-Harm Inventory (DSHI)

It is a self-report questionnaire developed by Kim & Gratz (2001) to assess DSH. The DSHI is based on the conceptual definition of deliberate self-harm as the deliberate, direct destruction or alteration of body tissue without conscious suicidal intent, but resulting in

injury severe enough for tissue damage (e.g., scarring) to occur. This measure assesses various aspects of deliberate self-harm, including frequency, severity, duration, and type of self-harming behavior. The specific acts of deliberate self-harm listed in the questionnaire were based on clinical observations, numerous testimonies of individuals who engage in self-harming behavior, and common behaviors reported in the literature. DSHI has high internal consistency (.82) and test retest reliability and valid instrument for measuring self-harming behaviors.

d. Trait Emotional Intelligence Questionnaire-Adolescent Short Form (TEIQue-ASF)

TEIQue–ASF is a short version of the adult short form of the TEIQue developed by Petrides, Sangareau, Furnham, & Frederickson (2006). It is a simplified version in terms of wording and syntactic complexity. It consists 30 items rated on a 7-point Likert scale (1¼ strongly disagree to 7¼ strongly agree). The short form does not yield subscale scores but provides a global score, which correlates .95 with the global score of the long version (Petrides, unpublished data). The TEIQue-LF has been shown to have excellent psychometrical properties and high predictive and incremental validity, even regarding biological criteria (Mikolajczak & Roy, 2007). The internal consistency of the TEIQue-ASF is .83.

CHAPTER THREE

RESULTS & DISCUSSION

3.1 Data Analysis

Descriptive statistics were used to calculate the frequencies and percentages of demographic variables. Inferential statistics were used to assess the objective of study. Pearson Product-movement Correlation was used to assess the relation between depressions, anxiety, stress, emotional intelligence and self-harm. Regression analysis was used to examine the moderating role of trait emotional intelligence on the relationship between depression, anxiety, stress and self-harm. T-test was be used for investigation of differences between genders, type of family system (joint/ nuclear), place of residence (rural/ urban) and depression, anxiety, stress and self-harm. One-way ANOVA was applied to see that differences in depression, anxiety, stress due to change in educational year and family monthly income of the students.

3.2 Ethical Considerations

It was ensured that all ethical principles were followed. The ethical issues which were followed are: Informed consent for the confidentiality/privacy, no hazards to participants and deception was signed after making sure that it was read and understood by the participants. All the participants of study were briefed with the aims of the research and no hazard and deception to participants was given. Privacy of the participants kept in mind and information taken from them only used for academic purposes.

It was ensured that all ethical principles would be followed and no one could be violated. The ethical issues which are followed are: Informed consent confidentiality/privacy, no hazards to participants and deception. All the participants of study were briefed with the aims of the research and no hazard and deception to participants was given. Privacy of the participants kept in mind and information taken from them only used for academic purposes.

3.3 Results

Current chapter include the results of the study in which socio-demographic characteristic are also illustrated. Differences among depression, anxiety, stress and, self-harm, emotional intelligence and gender, year of education, family system, residential area and family monthly income are explored by using statistics techniques.

Table 3.1

Socio Demographic Characteristics of Participants (N=322)

Variable	M	SD	Frequency	Percentage
Age	17.5	.7	322	
16-17			125	38.8
18-19			152	47.2
20-21			42	13.0
22-23			03	.9
Gender	1.60	.49	322	
Male			128	39.8
Female			194	60.2
Educational year	2.39	1.16	322	
1st			98	30.4
2nd			81	25.2
3rd			61	18.9
4th			82	25.5
Siblings	2.43	.82	322	
1-2			34	10.6
3-4			147	45.7
5-6			112	34.8
7-8			26	8.1
9-10			03	.9

Among 322 students, 128 (40%) were males and 194 were females (60%). 125 (39%) percent students were 16-17, 152 (47%) were 18-19, and 42 (13%) were 20-21 years and 03(.9%) were 22-23 old respectively. 98 (30%) students were in class 1st year,81(25%) were in 2nd , 61(20%) were in 3rd and 82(25%) were in 4th year respectively.

Table 3.1.1

Socio Demographic Characteristics of Participants (N=322)

Variable	M	SD	Frequency	Percentage
Brothers	1.24		322	
Non			19	5.9
1-2		.59	211	65.5
3-4			85	26.4
5-6			07	2.2
Sisters	1.37	.70	322	
Non			21	6.5
1-2			178	55.3
3-4			103	32.0
5-6			20	6.2
Birth order	2.86	1.71	322	
1			77	23.9
2			83	25.8
3			67	20.8
4			42	13.0
5			28	8.7
6			14	4.3
7			05	1.6
8			03	.9
9			02	.6
10			01	.3

19 participants have no brother while 211 have 1-2, 85 have 3-4 and 07 have 5-6 brothers respectively.21 subjects have no sister although 178 have 1-2, 103 have 3-4 and 20 have 5-6 sisters. Among 322 students 77 have 1st birth orders and 77, 83, 67, 42, 28, 14, 05, 03, 02 and 01 have birth orders 2 to 10 respectively.

Table 3.1 .2

Socio Demographic Characteristics of Participants (N=322)

Variable	M	SD	Frequency	Percentage
Father education	1.61	.95	322	
Matric or below			205	63.7
F.A			59	18.3
B.A			33	10.2
M.A or above			25	7.8
Mother education	1.37	.73	322	
Matric or below			240	74.5
F.A			50	15.5
B.A			24	7.5
M.A or above			08	2.5
Father occupation	5.28	1.22	322	
Doctor			04	1.2
Teacher			15	4.7
Armed Forces			24	7.5
Police			06	1.9
Business			66	20.5
Any other			207	64.3
Mother occupation	1.22	.72	322	
House wife			291	90.4
Doctor			01	.3
Teacher			17	5.3
Any other			13	4
Family System	1.68	.46	322	
Joint			101	31.4
Nuclear			221	68.6
Residential Area	1.59	.49	322	
Rural			132	41
Urban			190	59

101(31.3%) percent belonged from joint family system and 221(68.8%) belongs from nuclear system. 132 (41%) students belonged from rural and 190(59%) from urban residential area.

Table 3.1 .4

Socio Demographic Characteristics of Participants (N=322)

Variable	M	SD	Frequency	Percentage
Family Monthly Income	1.58	.89	322	
30 or below			198	61.5
31-50			83	25.8
51-70			17	5.3
Above 70			24	7.5
Physical Illness	1.98	.11	322	
Yes			04	1.2
No			318	98.8
Diabetes			-	-
Asthma			-	-
Heart Disease			-	-
Obesity			-	-
Any other		4		1.2
Psy. Illness	1.97	.15	322	
Depression			03	
Mood disorders			01	
Anxiety			03	
Epilepsy			01	
Any other			-	

Majority of students did not report any physical illness except 4. 8 students report history of psychological illness including 3 report depression 1 mood disorder 3 anxieties and 1 epilepsy respectively. Students have family monthly income: 198 (30 or below), 83 (31-50), 17 (51-70) and 24 above 70.

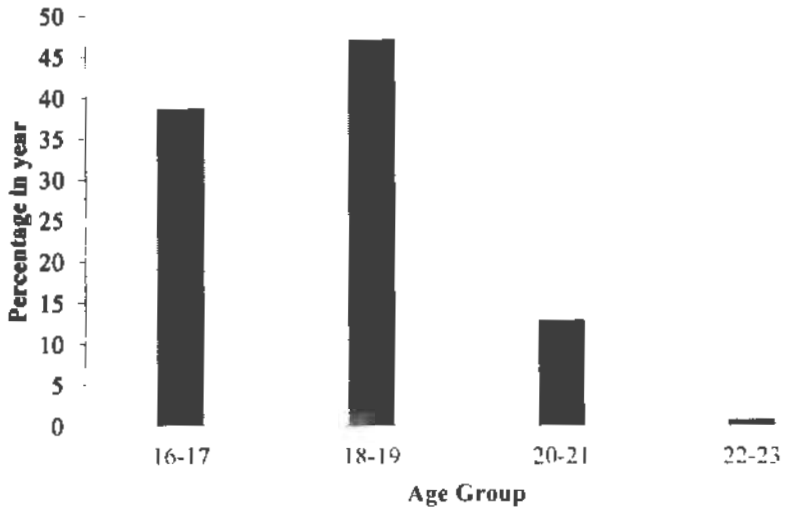


Figure.1 Bar chart showing age categories

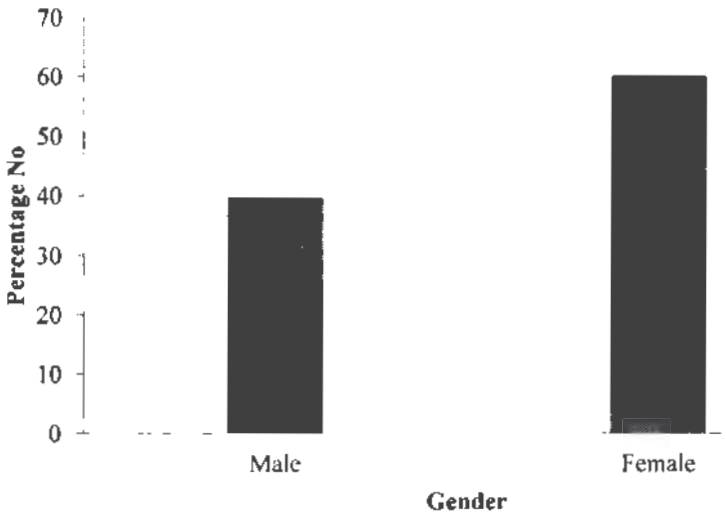


Figure.2 Bar chart showing gender differences

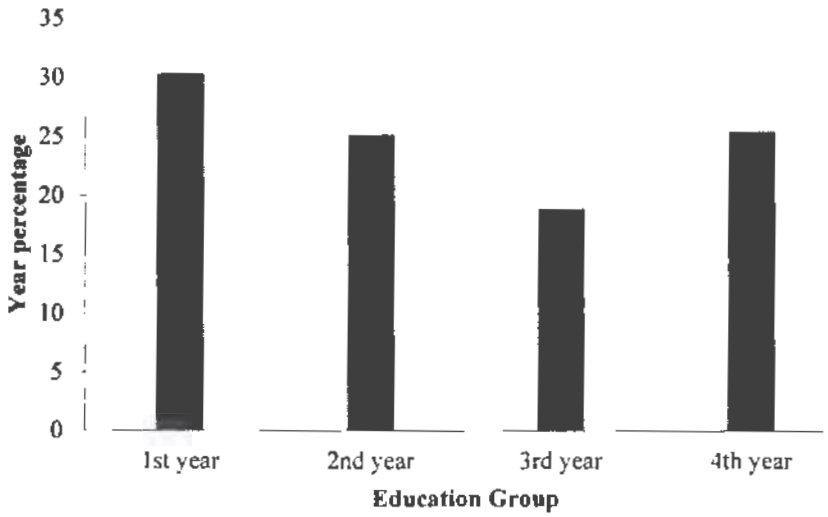


Figure.3 Bar chart showing frequencies of educational year

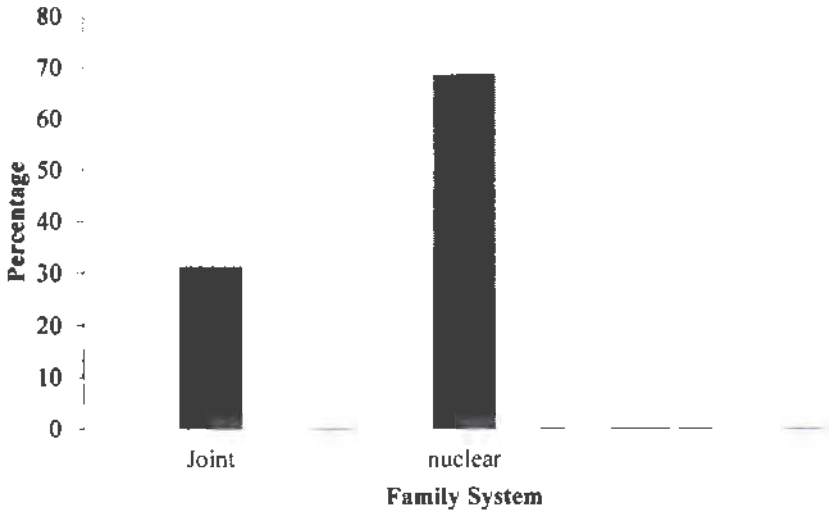


Figure.4 Bar chart showing frequencies of family system

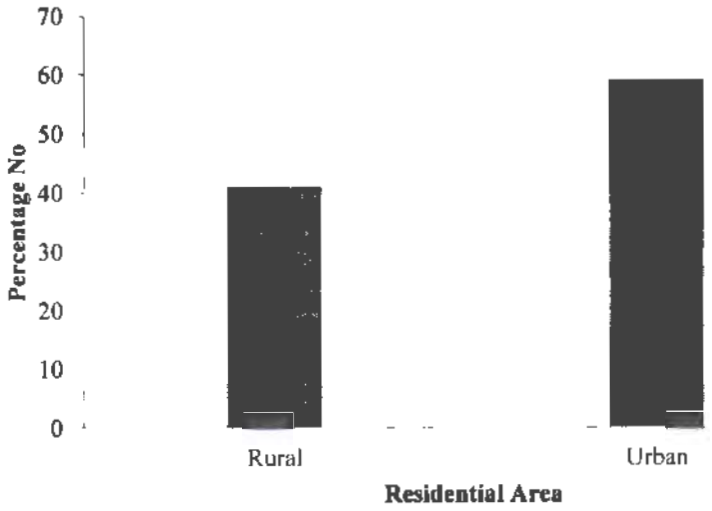


Figure.5 Bar chart showing frequencies of residential area

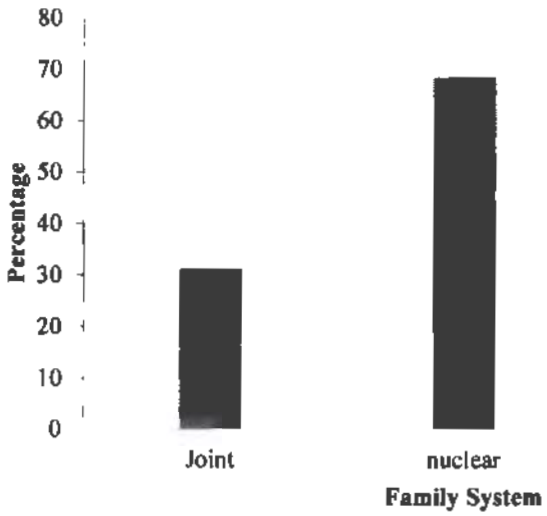


Figure.6 Bar chart showing frequencies of family monthly income

Table 3.2

Level of Self-harm among Students

Self-Harm	Frequency	Percentage
Single episode	26	8.07 %
Multiple episodes	73	22.67 %
Need for medical treatment	04	1.24 %
Total	114	35.04 %

Among 322 students 114 (35%) report history of deliberate self-harm. Among them, 3 students report multiple episode of self-harm and 1 student report single DSH need to take medical treatment in consequences of DSH. 26 students reported past history of single episode among them 3 students recently engage in single self-harm episode. 73 students have multiple episode of past self-harm, among them 30 students are recently done this.

Table: 3.3

Correlation between Self-Harm and Depression, anxiety and stress (DASS) (N=322)

Measure	1	2	M	SD
DSHI	-		33.21	1.46
DASS	-.357**	-	16.13	9.58

Note. ** $p < .01$.

To explore the relation between deliberate self –harm and depression, anxiety and stress, Pearson Product-movement Correlation was used. Results has shown that There is negative correlation between self-harm and depression, anxiety and stress. But this correlation is not significant. Mean score of students on DSHI scale was 33.21 while on DASS it was 16.13.

Table: 3.3.1

Correlation between Self-Harm and Depression (N=322)

Measure	1	2	M	SD
DSHI	-		33.21	1.46
Depression	-.298***	-	11.57	6.73

Note. *** $p < .001$.

When the correlation of depression alone is assessed it has revealed that depression is negatively correlated with the history of self- harm among students.

Table: 3.3.2

Correlation between Self-Harm and Anxiety (N=322)

Measure	1	2	M	SD
DSHI	-		33.21	1.46
Anxiety	-.340***	-	12.46	6.98

Note. *** $p < .001$.

A negative correlation was observed between anxiety and self-harm.

Table: 3.3.3

Correlation between Self-Harm and Stress (N=322)

Measure	1	2	M	SD
DSHI	-		33.21	1.46
Stress	-.339***	-	8.03	5.52

Note. *** $p < .001$.

A negative correlation was observed between stress and self-harm.

Table: 3.4

Moderating role of Trait Emotional Intelligence in the Relationship between DASS and DSHI (N=322)

Variables	Coefficients (β)	Standard errors	T values	P values
DSHI	34.47	.569	60.60***	.000
DASS	-.057	.009	-6.38***	.000
EI	-.002	.004	-.705*	.481
R-Square=.127				
F Value=23.522				

Note. $^{*}p < .05$ $^{***}p < .001$

Linear Regression analysis has revealed that self-harm (DSHI scores) depends on Depression, anxiety and stress (DASS). But that dependence is negative: self-harm decrease because of increase in depression, anxiety and stress scores. Findings also proposed that Trait Emotional Intelligence did not play moderating role in the relationship between self-harm and depression, anxiety and stress.

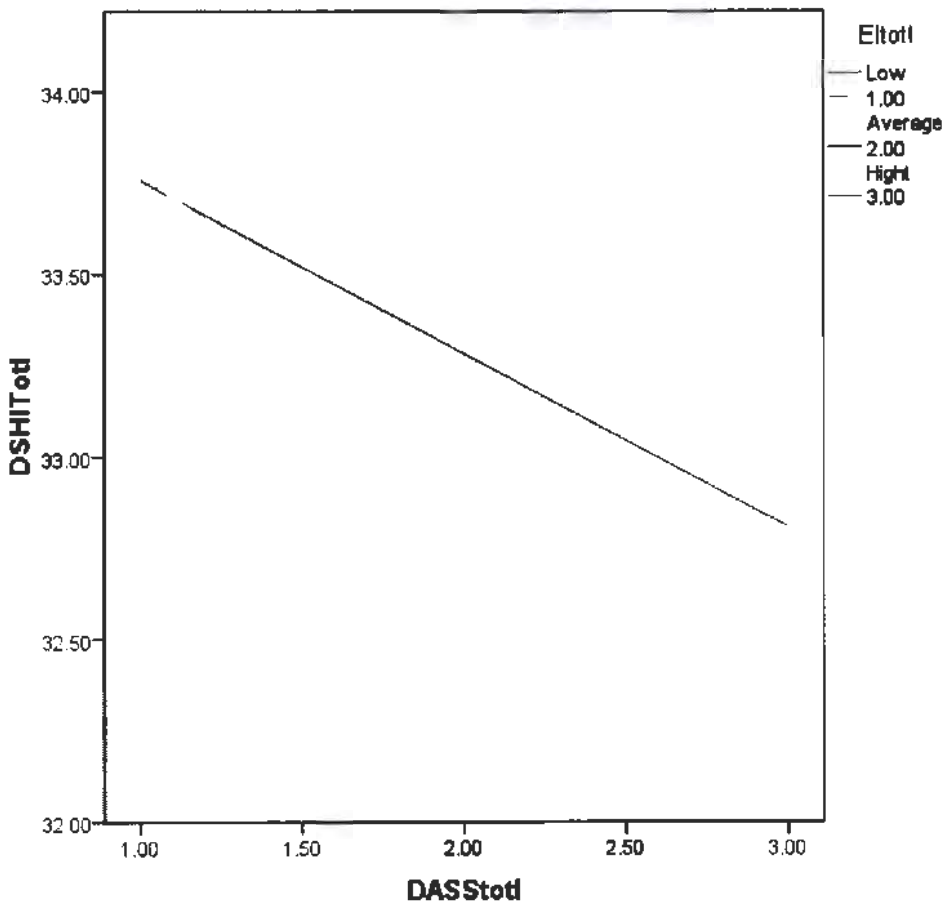


Figure 7. Graph showing interaction effect between variables

Table: 3.4.1

Linear regression analysis showing the effect of factors of Emotional Intelligence on the prediction of Self-harm (N=322)

Variables	Coefficients (β)	Standard errors	T values	P values
DSHI	32.11	.493	65.189***	.000
Wellbeing	.014	.014	.996*	.320
Self-control	.017	.014	1.22*	.223
Emotionality	.009	.013	.717*	.474
Sociability	-.004	.015	-.263	.793
R-Square=.019				
F Value=1.508				

Note. $*p < .05$ $***p < .001$

To assess the dependence of self-harm on factors of Trait Emotional Intelligence the Linear regression was used. Results suggest that self-harm have some degree of negative dependence on the score on the domain of sociability. But it was not significant.

Table: 3.4.2

Linear regression analysis showing the effect factors of Emotional Intelligence on the prediction of Depression, Anxiety and Stress (N=322)

Variables	Coefficients (β)	Standard errors	T values	P values
DASS	40.29	2.900	13.894***	.000
Wellbeing	-.357	.083	-4.307**	.000
Self-control	-.247	.083	-2.978**	.003
Emotionality	.001	.076	.010	.992
Sociability	-.274	.089	-3.081**	.002
R-Square=.209				
F Value=20.917				

Note. **$p < .01$ ***$p < .001$*

To assess the dependence of depression, anxiety and stress on facet of trait emotional intelligent linear regression was used. Results suggest that score on depression, anxiety And stress have some degree of negative dependence on the score on the domain of sociability. But it was also not significant.

Table 3.4.3

Linear regression analysis showing the effect facets of Emotional Intelligence on the prediction of Self-harm (N=322)

Variables	Coefficients (β)	Standard errors	T values	P values
DSHI	32.564	.510	68.810***	.000
Adaptability	.015	.030	.486	.627
Assertiveness	.043	.023	1.824*	.069
Emotional Perception	.010	.033	.305	.760
Emotional Expression	.047	.027	1.730	.085
Emo. Management	-.060	.031	-1.918*	.056
Emotional Regulation	.052	.028	1.85*	.065
Impulse Control	-.050	.029	-1.74*	.083
Relationship	.009	.031	.285*	.776
Self-esteem	.025	.026	.929*	.354
Self-Motivation	-.007	.030	-.231	.817
Social Awareness	-.044	.030	-1.47*	.142
Stress Management	.0533	.030	1.78*	.075
Trait Empathy	-.025	.026	-.96*	.334
Trait Happiness	.053	.033	1.59*	.112
Trait Optimism	-.043	.031	-1.39*	.116
R-Square=.092				
F Value=2.064				

Note. $*p < .05$ $***p < .001$

Results of linear regression suggest that self-harm have some degree of negative dependence on the score on the some facets among 15. These facets are emotional management, impulse control, self-motivation, social awareness, empathy and trait optimism. But dependence of self-harm on these facets was not statistically significant.

Table 3.4.4

Linear regression analysis showing the effect facets of Emotional Intelligence on the prediction of Depression, Anxiety and Stress (N=322)

Variables	Coefficients (β)	Standard errors	T values	P values
DASS	38.46	2.92	13.16***	.000
Adaptability	-.53	.18	-3.08**	.002
Assertiveness	-.53	.18	-4.01***	.000
Emotional Perception	.28	.18	1.49*	.-137
Emotional Expression	-.18	.15	-1.77*	.240
Emotional Management	.165	.17	.92*	.355
Emotional Regulation	-.085	.16	-.52	.597
Impulse Control	-.195	.15	1.18*	.238
Relationship	-.161	.17	-.91*	.368
Self-esteem	-.070	.15	.45	.647
Self-Motivation	-.139	.17	-.80*	.423
Social Awareness	-.184	.17	-1.07*	.282
Stress Management	-.205	.17	-1.20*	.229
Trait Empathy	.15	.15	1.00*	.316
Trait Happiness	-.603	.19	-3.17*	.002
Trait Optimism	-.11	.17	-.62	-.532
R-Square=.308				
F Value=9.066				

Note. $*p < .05$ $**p < .01$ $***p < .001$

Regression analysis of DASS on 15 facets of trait emotional has revealed that depression, anxiety and stress depends on all the facets but significant dependence was observed only in assertiveness.

Table 3.5

Comparison of Males and Females on DASS and DSHI (N=322)

	Male (N=128)	Female (N=194)		
Variable	M ± SD	M ± SD	T	P
DASS	14.77± 9.17	17.03 ± 9.76	-2.08*	.038
DSHI	33.12 ± 1.48	33.26 ± 1.44	-.85*	.391

Note. M=mean; SD=standard deviation; *$p < .05$.

In order to investigate the gender differences in self-harm and depression, anxiety and stress t-test was applied. Females report slightly more score on depressive, anxiety and stress than Male with the mean of 17.03 on DASS than male 14.77. This difference was significant showing P value <.05: .038. No significant differences were observed in the score of self-harm which the mean of 33.12for male and 33.26 for females showing P value >.05.

Table 3.6

Comparison of Rural and Urban Students on DASS and Self-harm (N=322)

	Rural Students (N=132)	Urban Students (N=190)		
Variable	M ± SD	M ± SD	T	P
DASS	16.13 ± 10.25	15.71 ± 9.08	.93**	.349
DSHI	32.97 ± 1.68	33.37 ± 1.26	-2.41*	.016

Note. M=mean; SD=standard deviation; *$p < .05$. **$p < .01$.

Results of t-test have revealed that residential area does not cause any difference in the symptoms of depression, anxiety and stress. It has revealed that living in rural or urban area does not influence the symptoms of depression, anxiety and stress. But a significant difference was observed in the deliberate self-harm. Urban students use more self-harming behaviors than rural students with a mean of 33.37.

Table: 3.7

Comparison of DASS with Respect to Family Monthly Income (N=322)

Family monthly income	N	M ± SD
Below 30	198	15.91 ± 8.79
31-50	83	17.37 ± 11.65
50-70	17	13.11 ± 5.87
Above 70	24	15.79 ± 9.93

Variable	SS	df	MS	F	*P*
Between group	294.57	3	98.19	1.07*	.362
Within group	29180.68	318	91.76		
Total	29475.25	321			

Note. C.I. = confidence interval; N=number of students; M=mean; SD=standard deviation; MS = mean square; SS = sum of square; df = degree of freedom; F=ratio; *$p < .05$.

One way ANOVA is used to compare DASS scores of students having different family monthly income. Findings have revealed that there is no significance difference among these variables. Students having family monthly income below 31-50 thousands (lower middle) have higher mean (17.37) than others but that was not significant .On thc other-hand students having monthly income of 51-70 thousands (upper middle class) have low mean on depression, anxiety and stress but it was also not significant showing P value>.05.

Table: 3.8

Comparison of Self-harm with Respect to Family Monthly Income (N=322)

Family monthly income	N	M ± SD
Below 30	198	33.28 ± 1.42
31-50	83	33.08 ± 1.47
50-70	17	33.23 ± 1.92
Above 70	24	33.00 ± 1.41

Variable	SS	df	MS	F	*P*
Between group	3.58	3	1.19	.556	.644
Within group	682.05	318	2.14		
Total	685.64	321			

Note. C.I. = confidence interval; N=number of students; M=mean; SD=standard deviation; MS = mean square; SS = sum of square; df = degree of freedom; F=ratio

One-way ANOVA was used to compare DSHI scores of students having different family monthly income. On the basis of the findings, it is revealed that there is no significant difference among these variables. Students having family monthly income below 30 thousands scored high on DSHI than others with the mean of 33.28. But that was not significant.

Table: 3.9

Comparison of on DASS and Self-harm with respect to family system (N=322)

	Joint (N=101)	Nuclear (N=221)		
Variable	M ± SD	M ± SD	T	P
DASS	15.74 ± 9.10	16.31 ± 9.80	-.494*	.621
DSHI	33.18 ± 1.41	33.22 ± 1.48	-.191	.849

Note. M=mean; SD=standard deviation; *$p < .05$.

Results revealed that family system did not have any significant on the self-harm behavior and symptoms of depression, anxiety and stress. Mean score of nuclear students on DASS and DSHI is a little bit more than urban student but this minute difference is not significant, both type of students used similar score on both scales.

Table: 3.10

Comparison of Self-harm with Respect to Educational Year (N=322)

Educational Year	N	M ± SD
1st	98	33.05 ± 1.52
2nd	81	33.23 ± 1.40
3rd	61	33.42 ± .99
4th	82	33.21 ± 1.70

Variable	SS	df	MS	F	*P*
Between group	5.38	3	1.79	.839	.473
Within group	680.25	318	2.13		
Total	685.64	321			

Note. C.I. = confidence interval; N=number of students; M=mean; SD=standard deviation; MS = mean square; SS = sum of square; df = degree of freedom; F=ratio

One-way ANOVA was applied to assess the differences in self-harm and educational year. Descriptive statistics has revealed that the mean of the students of all educational years is: 33.05, 33.23, 33.42, and 33.21 for respectively. Results show that level of education does not influence students' self-harm behaviors.

Table: 3.11

Comparison of DASS with Respect to Educational Year (N=322)

Educational Year	N	M ± SD
1st	98	15.59 ± 8.79
2nd	81	15.69 ± 8.38
3rd	61	16.40 ± 10.16
4th	82	17.01 ± 11.12

Variable	SS	df	MS	F	*P*
Between group	112.53	3	37.51	.406*	.749
Within group	29362.69	318	92.33		
Total	29475.25	321			

Note. C.I. = confidence interval; N=number of students; M=mean; SD=standard deviation; MS = mean square; SS = sum of square; df = degree of freedom; F=ratio; *$p < .05$.

One-way ANOVA was applied to assess the differences in depression, anxiety and stress and educational year. Descriptive statistics has revealed that the mean of the students of all educational years is: 15.59, 15.69, 16.40, and 17.01 for respectively. Results show that level of education has no significant influence on students' symptoms of depression, anxiety and stress. There is some increase in the mean scores as the students' progress from 1st to 4th year class but it is minute and is not significant

CHAPTER FOUR

DISCUSSION

This section gives some input on the contents about the results of the present study and their link with the studies conducted before it. Some results are supported by the previous literature showing that current research has extended the findings of the previous studies. But some results have proved contrary to previous literature. Present study has some limitations but their recommendations are also proposed and these are valuable for consideration for future studies so that future studies can avoid the problems confronted during this study.

4.1 DISCUSSION

The present study examined the relationship between self-harm and depression, anxiety and stress, while assessing the: moderating role of trait emotional intelligence on the same variables among students. Demographic aspects of the students were also assess in order to explore the variables related with self-harm and depression, anxiety and stress. Results have shown that there is a negative correlation between self-harm and depression, anxiety and stress. But this correlation was not significant. Moderating role of trait emotional intelligence was also examined .Regression analysis showed that trait emotional intelligence did not have significant effect on the relationship between these two variables.

The first objective of the study was assessed by using Pearson Product-movement Correlation. The results in table 4.2 revealed that there is a negative correlation between depression, anxiety, stress and self-harm. But that correlation was not significant. These results relates with the study conducted by Partha Pratim Das et al.in 2008.They argued that52 % of students report self-harm have psychological problems (depression). But 48% subjects engaging in self-injurious behaviors did not have any symptoms of depression.

Ulla Ralsanen (2013) also argued that not everyone who engage in self-mutilation have depression. There are also individuals who harm themselves but they do not have depression. When people have anxiety, they want to get cure from it. Some engage in self-

mutilation but others go to use drugs and exercise to heal it. So anxiety may be the reason behind it but it is not always the case.

On the other hand, students who engage in multiple episode of self-harm have high score on depression, anxiety and stress than single episode. Those students who need medical treatment after self-harm had more symptoms of depression, anxiety and stress than others.

The second objective of current study was to examine the moderating role of trait emotional intelligence in the relationship between depressions, anxiety, and stress and self-harm. Findings revealed that Trait Emotional Intelligence did not play moderating role in the relationship between self-harm and depression, anxiety and stress. These results were contradictory to the previous literature on that topic. Previous studies showed that emotional intelligence protect from self-harm and psychological problems. Resurreccion, Salguero and Ruiz Aranda (2014) argued that negative correlation is found between emotional intelligence and depression, anxiety and substance use. High score on emotional intelligence protect individuals from these problems.

Laura E. Kwako (2011) theorized that subjects who have symptoms of major depression and trauma have low emotional intelligence than others.

But current study did not confirm the previous literature. This may be because of the relation one has in Pakistani culture with the other family members. Sharing, support seeking and religion are mostly used formulas to solve problems especially in rural areas. According to Jennifer Wolff (2013) subjects using non-suicidal self-injury showed low perceived social support than who did not involve self-injurious behaviors. There may be some other reasons behind this phenomenon like spirituality or religiosity etc.

But when Emotional Intelligence was assessed in term of 4 factors it had revealed

that the factor of sociability have played protective role for self-harm but it was not significant. So the 15 factors of emotional intelligence were examined. Some of these facets also show moderating role that was also not statistically significant. When the moderating role of 4 factors of emotional intelligence was assessed in depression, anxiety and stress. It revealed that high score on well-being protect individuals from suffer from symptoms of depression, anxiety and stress. Facets of assertiveness play significant moderating role in depression, anxiety and stress.

The third objective of the present study was to compare the scores of depression, anxiety, stress and self-harm with respect to gender. Table 4.4 has reveals that gender differences were found in these variables. Females report slightly more score (17.03) on depression, anxiety and stress than males (14.77) on DASS.This is consisted with the study conducted by Christopher F. Sharpley and Therese C. Melhem (2010). They proposed that female students had more symptoms of anxiety and depression than male students. Similar findings were proposed by Yasmin Farooqi and Maria Habib (2010) in Pakistan. These variables also have positive correlation with each-other.

Table 4.2 shows no significant differences in the score of self-harm for male and female students. These findings relate with the study of Teresa Kirchner et al., (2015), on school going students. This also found no gender differences in self-harm. Male and female students also did not differ with respect to suicidal ideations.

Ingrid Van Camp, Mattias Desmet and Paul Verhaseghe (2011) measured that male use banging more to injure themselves while female use more cutting and scraping method to inflict pain. But overall, no gender differences were found in the history of self- injurious behaviors. The findings also in accordance with the study of Louise Harriss and Keith Hawton (2008), who argued that high number of self –harm among females in psychiatric

clinics can be due to the reason that female are more prone to seek treatment after self-harm than male. Laurence Claes et al. (2015) also proposed that male and female did not differ on non-suicidal self-injury. Ralph et al. (1991) found no gender differences in non-suicidal self-injury.

The fourth objective of the study was to assess the differences in self-harm and DASS with respect to residential area. Significant differences were found in self-harm and rural students. Being a resident of urban region was a factor which was associated with engaging in self-injurious behavior. Similar results were also proposed by Harriss and Hawton (2011), who argued that urban students have more psychological problems. They also reported more symptoms of non-suicidal self-injury in urban students than students living in rural areas.

Recent year have witnessed a rapid rise in urbanization which is causing some Sorts of problems of psychological nature alongside other social and cultural problems. Urban areas have more stressors, environmental pollution and low social support system. These factors negatively affect wellbeing of individuals (Kalpana Srivastava, 2009) But in the current study no significant difference was observed in the scores of DASS. Area of living did not have any effect on the symptoms of depression, anxiety and stress. These findings were in accordance with the findings of Prachet R (2015) found that area of residence does not cause any differences in the scores of depression, anxiety and stress. Although there was some mean differences of 27.71 and 24.46 for urban and rural students but that was not significant.

Frank, Christine and Renee (2003) also concluded that level of stress reported by urban and rural students was same. But an urban and rural students differed in the deliberate self-harm. Urban students involve in deliberate self-harm more than rural students. Partha

Pratim Das et al., (2008) also proposed similar findings. They reported that majority of individuals who harm themselves belong to the urban areas.

The fifth objective of the study was to compare the differences of DASS and self-harm with respect to family monthly income. It has been found that there is no significance difference among these variables. The current findings are in accordance with the results of Chom kim et al., (2015). They proposed that no association exists between anxiety levels of students with family monthly income.

This finding relate with the findings of Inam, Saqib and Alam et al., (2003). According to them monthly income, and monthly expenditure did not create any difference in the scores of anxiety and depression. Similarly no significance difference in self-harm because of family monthly income.

The last objective of the study was to measure the differences in DASS and self-harm because of educational year. Students in high classes have a lot of stress because of academic difficulties. Studies suggest that depression increase with the increase in level of education (Jane Collingwood). But in current study, students mean score increase with the increase in their level of education. But this difference is not significant. No significant difference was observed in stress and anxiety.

4.2 Limitations

Like every study, current study has a fair share of its own limitations as well. Because this study only focused on students of Jhelum, one can question that whether the findings are able to be generalized on students of other areas of Pakistan. Similarly like any survey, present study has relied only on self-report measures which may lead to biasness in data. It means that those individuals who are involved in the act of self-harm or have symptoms of anxiety, stress or depression may have not answer honestly.

Similarly multiple informants like friends and class fellows are not used. Open ended interviews and other qualitative methods of data collection might give more detailed information and may reveal more aspects of the variables, which are not used in data collection of this study. There may be some others variables which are effecting on the students self-harm behavior and its relation with their depression, anxiety and stress symptoms.

The cross-sectional survey research design employed in the present study prevents us from making causal inferences and assessing the changes in variables across the time. Thus a mixed-method approach in the future research can be more beneficial in overcoming the inbuilt limitation of the design of the present study.

4.3 Recommendations

Future studies in the area of self-harm should focus on longitudinal study so that the relation between developmental level and these variables can be assessed. A negative correlation has observed between self-harm and depression, stress and anxiety but it has not proved by this study that whether self-harm protects student from depression, anxiety stress or other variables affect this relationship. So it is suggested that others variables (that are not addressed in this study) should also be included in future study.

Similarly, emotional intelligence plays moderating role when it is studies in its facets. But there may be some other variable which may affect the study variables. Those variables should also studied by future researchers.

Most of the results of the current study relates with previous literature available. But some results are not proved by previous studies and the researcher suggests that multiple measures can be used to better amplify the results with previous findings or explore the difference in details.

Implications

The present study helps in understanding the relation between symptoms of depression, anxiety, stress and self-harm and emotional intelligence. It enhances current knowledge on these variables. The findings of the current study can be applied for different purposes in different fields.

On the base of findings, skill based workshops can be conducted to teach the students how to face problem of self-harm. Administration can use the results of present study to make decisions about students.

A preventive approach can be applied for avoiding the problem of self-harm from occurring. For that purpose, efforts can be done to improve the domain of emotional intelligence that protect from psychological problems. Community counseling help for that purpose. Individuals, couples, families and also communities should be helped to better understand and face the phenomenon.

The study is also helpful in clinical field by giving information about the self-harm. It suggests that evidence based approaches like dialectic behavioral therapy should be used to heal this issue.

4.4 Conclusions

Present study suggest that there is slightly negative correlation between self-harm and depression, anxiety and stress. Overall trait emotional intelligence did not show any moderating role in the relationship between these variables. But when emotional intelligence is assessed in domains, it has shown that the sociability domain have a negative link with self-harm. Self-harm did not differ with respect to gender but residential area that students belonged showed significant effect on self-harm. Also female students had more scores on depression, anxiety and stress than male.

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APPENDICES

APPENDIX A

Distribution of Sample

Year	Total
1st	98
2nd	81
3rd	61
4th	82
Total	322

APPENDIX B

Consent Form

I _____ agree to participate in the research entitled *" **Relationship Between Depression, Anxiety and Stress: Moderating Role of Trait Emotional Intelligence"*** conducted by Asad Raza student in Department of Psychology, Islamic International University, Islamabad, under the supervision of Dr. Najam ul Hasan. He has communicated the objectives and nature of the study to me.

Participant's signature _____

Researcher's signature _____

Date _____

APPENDIX C

Demographic Form

Age…….. Gender : Male /Female

Educational year: (semester)……. Siblings……

Brothers……..Sisters…… Birth order ……..

Father's education …….. Mother's education……..

Father's profession …….. Mother' profession ……

Family system: Joint /Nuclear Residential area: Rural / Urban

Family monthly income: ……..

Any physical illness Yes No

(If yes then mention the name of illness): ……..

Any psychological illness Yes No

(If yes then mention the name of illness): ……..

APPENDIX D

DASS-21 Score Interpretation

	Depression	Anxiety	Stress
Mild	0-9	0- 7	0-14
Moderate	10-13	8- 9	15-18
Severe	14-20	10-14	19-25
Extremely severe	21-27	15-19	26-33
	28 +	20 +	34+

APPENDIX E

DASS 21

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There is no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0	Did not apply to me at all	Never
1	Applied to me to some degree, or some of the time	Sometimes
2	Applied to me to a considerable degree, or a good part of time	Often
3	Applied to me very much, or most of the time	Almost always

1	I found it hard to wind down	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I found it difficult to work up the initiative to do things	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I experienced trembling (eg, in the hands)	0	1	2	3
8	I felt that I was using a lot of nervous energy	0	1	2	3
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting agitated	0	1	2	3
12	I found it difficult to relax	0	1	2	3
13	I felt down-hearted and blue	0	1	2	3
14	I was intolerant of anything that kept me from getting on with	0	1	2	3

	what I was doing				
15	I felt I was close to panic	0	1	2	3
16	I was unable to become enthusiastic about anything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life was meaningless	0	1	2	3

APPENDIX F

DSHI

This questionnaire asks about a number of different things that people sometimes do to hurt themselves. Please be sure to read each question carefully and respond honestly. Often, people who do these kinds of things to themselves keep it a secret, for a variety of reasons. However, honest responses to these questions will provide us with greater understanding and knowledge about these behaviors and the best way to help people.

Please answer yes to a question only if you did the behavior intentionally, or on purpose, to hurt yourself. Do not respond yes if you did something accidentally (e.g., you tripped and banged you head on accident). Also, please be assured that your responses are completely confidential.

1	Have you ever intentionally (i.e., on purpose) cut your wrist, arms, or other area(s) of your body (without intending to kill yourself)? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	Yes	No
2	Have you ever intentionally (i.e., on purpose) Burned yourself with a cigarette? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	Yes	No
3	Have you ever intentionally (i.e., on purpose) Burned yourself with a lighter or a match? If yes, I. How old were you when you first did this?	Yes	No

	II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?		
4	Have you ever intentionally (i.e., on purpose) Carved words into your skin? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
5	Have you ever intentionally (i.e., on purpose)Carved pictures, designs, or other marks into your skin? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
6	Have you ever intentionally (i.e., on purpose)Severely scratched yourself, to the extent that scarring or bleeding occurred? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
7	Have you ever intentionally (i.e., on purpose) Bit yourself, to the extent that you broke the skin? I. How old were you when you first did this? If yes, I. How old were you when you first did this?	**Yes**	**No**

	II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?		
8	Have you ever intentionally (i.e., on purpose) Rubbed sandpaper on your body? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
9	Have you ever intentionally (i.e., on purpose)Dripped acid onto your skin? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
10	Have you ever intentionally (i.e., on purpose) Used bleach, comet, or oven cleaner to scrub your skin? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
11	Have you ever intentionally (i.e., on purpose)Stuck sharp objects such as needles, pins, staples, etc. into your skin, not including tattoos, ear piercing, needles used for drug use, or body piercing? If yes,	**Yes**	**No**

	I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?		
12	Have you ever intentionally (i.e., on purpose) Rubbed glass into your skin? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
13	Have you ever intentionally (i.e., on purpose)Broken your own bones? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
14	. Have you ever intentionally (i.e., on purpose) Banged your head against something, to the extent that you caused a bruise to appear? I. How old were you when you first did this? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
15	Have you ever intentionally (i.e., on purpose) Punched yourself, to the extent	**Yes**	**No**

	that you caused a bruise to appear? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) VII. Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?		
16	Have you ever intentionally (i.e., on purpose) Prevented wounds from healing? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) **VII.** Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**
17	Have you ever intentionally (i.e., on purpose) Done anything else to hurt yourself that was not asked about in this questionnaire? If yes, what did you do to hurt yourself? If yes, I. How old were you when you first did this? II. How many times have you done this? III. When was the last time you did this? IV. How many years have you been doing this? (If you V. are no longer doing this, how many years did you VI. do this before you stopped?) **VII.** Has this behavior ever resulted in hospitalization or injury severe enough to require medical treatment?	**Yes**	**No**

APPENDIX G

TEIQue-ASF

Instructions: Please answer by putting a circle around the number that best shows how much you agree or disagree with each sentence below. If you strongly disagree with a sentence, circle a number close to 1. If you strongly agree with a sentence, circle a number close to 7. If you're not too sure if you agree or disagree, circle a number close to 4. Work quickly, but carefully. There is no right or wrong answers.

1	It's easy for me to talk about my feelings to other people.	1	2	3	4	5	6	7
2	I often find it hard to see things from someone else's point of view	1	2	3	4	5	6	7
3	I'm a very motivated person.	1	2	3	4	5	6	7
4	I find it hard to control my feelings.	1	2	3	4	5	6	7
5	My life is not enjoyable.	1	2	3	4	5	6	7
6	I'm good at getting along with my classmates.	1	2	3	4	5	6	7
7	I change my mind often	1	2	3	4	5	6	7
8	I find it hard to know exactly what emotion I'm feeling.	1	2	3	4	5	6	7
9	I'm comfortable with the way I look.	1	2	3	4	5	6	7
10	I find it hard to stand up for my rights.	1	2	3	4	5	6	7
11	I can make other people feel better when I want to.	1	2	3	4	5	6	7
12	Sometimes, I think my whole life is going to be miserable.	1	2	3	4	5	6	7
13	Sometimes, others complain that I treat them badly.	1	2	3	4	5	6	7
14	I find it hard to cope when things change in my life.	1	2	3	4	5	6	7
15	I'm able to deal with stress.	1	2	3	4	5	6	7
16	I don't know how to show the people close to me that I care about them.	1	2	3	4	5	6	7
17	I'm able to "get into someone's shoes" and feel their emotions.	1	2	3	4	5	6	7
18	I find it hard to keep myself motivated.	1	2	3	4	5	6	7
19	I can control my anger when I want to.	1	2	3	4	5	6	7
20	I'm happy with my life.	1	2	3	4	5	6	7
21	I would describe myself as a good negotiator.	1	2	3	4	5	6	7

22	Sometimes, I get involved in things I later wish I could get out of.	1	2	3	4	5	6	7
23	I pay a lot of attention to my feelings.	1	2	3	4	5	6	7
24	I feel good about myself.	1	2	3	4	5	6	7
25	I tend to "back down" even if I know I'm right.	1	2	3	4	5	6	7
26	I'm unable to change the way other people feel.	1	2	3	4	5	6	7
27	I believe that things will work out fine in my life.	1	2	3	4	5	6	7
28	Sometimes, I wish I had a better relationship with my parents.	1	2	3	4	5	6	7
29	I'm able cope well in new environments.	1	2	3	4	5	6	7
30	I try to control my thoughts and not worry too much about things.	1	2	3	4	5	6	7