RELATIONSHIP BETWEEN PSYCHOSOCIAL STRESSORS AND RESILIENCE AMONG STUDENTS OF FLOOD AFFECTED AREAS

By:

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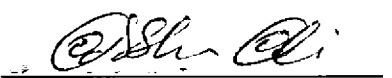

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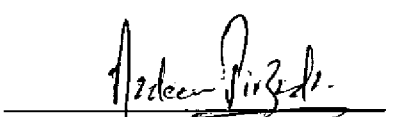

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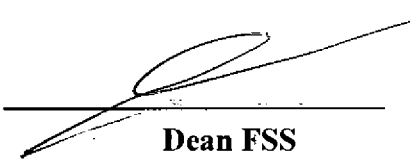

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CERTIFICATE

It is certified that MS dissertation entitled "relationship between psychosocial stressors and resilience among students in flood affected areas" prepared by Mr. Muhammad Azeem is approved for submission to the Department of Psychology, Faculty of Social Sciences, International Islamic University Islamabad.

Dr. Asghar Ali Shah

Supervisor

Dedicated to

My loving parents & my teachers

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ABSTRACT

The aim of the present study was to examine the relationship between resilience and psychosocial stressors including depression, anxiety, stress, and post-traumatic stress disorder. Ego Resiliency Scale (ERS) developed by Block and Kremen (1996), Depression Anxiety Stress Scale (DASS) developed by Lovibond and Lovibond (1995), and PTSD Symptom Scale Interview (PSSI)developed byFoa, Riggs, Dancu and Rothbaum (1993) were used to collect the information in the present study. Sample of the present study consisted of 200 college and university students from the flood affected areas of the south Punjab. Pearson correlation and independent sample t-test was applied to test the hypotheses. All the hypotheses are supported in the present study. The findings indicate that resilience has significant negative correlation with depression, anxiety, stress and post-traumatic stress disorder. Students directly affected by the flood significantly scored low on resilience as compared to non-affected students. Students directly affected by the flood significantly scored high on depression, anxiety, stress and post-traumatic stress disorder as compared to non-affected students. Male students significantly scored high on resilience as compared to female students. Female students significantly scored high on depression, anxiety, stress and post-traumatic stress disorder as compared to male students. Overall the study is pretty insightful in understanding the role of resilience in psychological stressors.

Chapter-I

INTRODUCTION

Stress is a burning issue of today's life which is still unyielded by this age of science and technology. This stress is outcome of number of events which occur off and on in men's life. Such type of stress is considered stressors. Intensity of these stressors creates anxiety, depression, and post traumatic stress disorders. Nature has dealt with these issues through resilience with variable intensity in different human beings.

There are many internal as well as external factors that cause stress in human beings. External factors include adverse physical problems like pain or severe temperature as well as stressful psychological environment which include working conditions etc. Internal factors can also be physical or psychological but these are very uncommon in most animals except human beings. Although positive adjustment, competence and coping are all conceptually related to resilience, they can all be exhibited in the absence of adverse or traumatic circumstances and without confidence that resilience would follow were aversive event to occur. Strong resilience power can manage and handle these stressors. It is well known that stress is a significant health issue in the modern world that can detrimentally affect people's health and productivity.

Resilience

Resilience is a common magic, designed to understand regulatory processes associated with the development of human skills (Masten, 2001). Garmezy, Masten, and Tellegen (1989) operationalized resilience as the manifestation of competence, despite the impact of stressful events for children. The scientific interest in resilience has expanded beyond the area of child development to the study of risk versus stress resistance in the adult population, with special

emphasis on resilience as a protective factor against the development of post-traumatic stress disorder. It is also examined resilience as the natural tendency of adults to overcome stress cause by external factors such as the death of certain relatives of some violent state in maintaining healthy level of mental and physical functioning (Agaibi & Wilson, 2005; Bonnano, 2004; Connor, 2006; Hoge, Austin, & Pollack, 2007).

Most of the researcher consider resilience and recovery synonyms and classifies the results as single category (King, D. W., King, L. A., Foy, D. W., Keane, T. M., & Fairbank, J. A. 1999).

Different approaches have been adopted by different investigator to identify qualities and characteristics necessary for resilience. Such investigators were used different terminology to explain the level of resilience.

It is studied resilience using hardship as guiding principle and stated that psychological resilience is the result of obligation, mechanism and contest. Resilience was also different from groups' dynamics perspective. They identified four essential processes that are group's belief system, pattern of organization, particular communication process and broader communication pattern (Maddi and Khoshaba, 2005).

Resilience is conceived as ordinary magic to understand regulatory processes associated with the development of human competency (Masten, 2001). Garmezy, Masten, and Tellegen (1989) operationalized resilience as manifestations of competence in children despite exposure to stressful events. Resilience is also defined as facing stress at a time and in a way that allows self-confidence and social competence to increase through mastery and appropriate responsibility (Rutter, 1985). Scientific interest in resilience has expanded beyond the field of child development to include the study of risk versus resilience to stress in adult population, with

particular attention to resilience as a protective factor against the development of post-traumatic stress disorder (Agaibi& Wilson, 2005; Bonnano, 2004; Connor, 2006; Hoge, Austin, & Pollack, 2007). Bonanno (2004) also considered resilience as the ability of adults in otherwise normal circumstances who are exposed to isolated and potentially highly disruptive events such as death of a close relation or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning as well as the capacity for generative experiences and positive emotions. Trauma theorists typically use the terms resilience and recovery interchangeably pooling the two outcomes into a single category (King, King, Foy, Keane, & Fairbank, 1999).

In an effort to identify qualities and characteristics essential to resilience, different investigators have adopted different approaches and have employed different terminologies (Walsh, 2002; Maddi & Khoshaba, 2005). Maddi and Khoshaba (2005) examined resilience under the rubric of hardiness and concluded that three factors form the basis of psychological resilience that is, commitment, control, and challenge. Resilience was also explained from a family and group dynamic perspective and four processes essential to group resilience were identified that is, the group's belief system, its organizational pattern, its specific communication process, and its broader interaction pattern (Walsh, 2002).

Philosophical Pattern

The philosophical pattern refers to an individual's worldview or life paradigm. This can include various beliefs that promote resilience, such as the belief that positive meaning can be found in all experiences, the belief that self-development is important, the belief that life is purposeful.

Factors that Promote Resilience

Following factors have been implicated in studies of both civilians and police: demographic variables (Pole, Best, Metzler &Marmar, 2005) absence of family history of psychopathology and who are low on neuroticism but high extraversion personality facets (Hart, Wearing, & Headey, 1995).

Model of Resilience

Compensatory Model: A compensatory factor is variable that neutralizes exposure to risk. This implies that it does not interact with a risk factor; rather it has a direct and independent influence on the outcome of interest. Both the risk and compensatory factors contribute addictively in the prediction of the outcome (Marten, 1988).

Challenge Model: Rutter (2000) explains that a stressor or risk factor is a potential enhancer of successful adaptation, provided that it is not excessive. In this model, little stress is not challenging enough, and very high levels render the individual helpless which may result in maladaptive behavior. Moderate levels of stress; however provide the individual with a challenge that, when overcome, strengthens competence. If challenge is successfully met, this helps prepare the individual for the next difficulties.

Protective Factor Model: A protective factor is a process that interacts with a risk factor in reducing the probability of a negative outcome. It works by moderating the effect of exposure to risk, and acts as a catalyst by modifying the response to a risk factor (Cowen & Work, 1988; Brook, Nomuca, & Cohen, 1989; Garmezy, Masten & Tellegan; 1989). A protective factor may have a direct effect on an outcome but its effect is stronger in the presence of the stressor.

It refers to the protective factor model as immunity-versus vulnerability model. This model appears to be the most widely studied of resiliency models. Brook, Brook and Whiteman (1990) propose two mechanisms for how protective effects may function, risk/protective or protective/protective. A risk/protective variable functions to mitigate the negative effects of a risk factor. A protective/protective mechanism works by enhancing the protective effects of variable found to decrease the probability of negative outcomes.

As models of resilience have shifted in focus from solely individuals to the interactions between individuals and their environments (Theokas, 2005), it has become clear that resilience is not static trait. While individual characteristics (e.g., hardiness) play a role in resilience, they are not the only factors to consider. Fergus and Zimmerman (2005) state that resilience is defined by the context, the population, the risk, the protective factor, and the outcome (p.404). Research showed that having positive relationships later in life can promote healthy outcomes despite the presence of risk factors in childhood (Conger, Rueter, & Elder, 1999; Laub & Sampson, 2003; Vaillant& G. E., 2003).

As resilience is not a static personality trait, but rather is part of dynamic process that includes individual's interactions with their surrounding environments. Resilience can be situation specific and therefore, it is unlikely that an individual will demonstrate resilience across all situations (Luthar, 2006).

Research in resilience was initially rooted in medical or deficits model that sought of identify, reduce, and prevent factors associated with unhealthy development. Much approaches proved limiting, however, and recent research as focused on strengths-based models that emphasize identifying and building upon already existing strengths of promote healthy developmental outcomes (Benson, Mannes, Pittman & Ferber, 2004).

Resilience is conceptualized differently depending on the population being examined. In children, resilience is most often looked at from developmental perspective and seeks to identify variables most likely to produce positive outcomes (e.g., healthy development and adjustment) in the face of adversity. In contrast, resilience in adults is conceptualized as factors that allow an individual to successfully cope with traumatic event, while maintaining a healthy level of functioning (Bonanno, 2004). Finally, resilience in adolescents appears to combine these two approaches. Available research suggests that resilience in youth is determined not only by their environment, but also by individual differences. Developmental systems theory recognizes the individual and the context is being dynamically interactive in youth are seen is active participants in shaping the environment which in turn increase their own individual competencies (Theokas, 2005). Therefore, research in this area usually focuses on assets and resources. Assets are conceptualized as intrinsic factors that promote resilience i.e., coping skills and self-efficacy while resources are those factors external of the adolescent that also promote resilience i.e., supportive parents and communities (Fergus & Zimmerman, 2005).

Early studies focused on identifying the sources of invulnerability but this notion proved too simplistic and was replaced by the construct of resilience. Current models of resilience emphasize three elements in research suggest that characteristics of the person i.e., biological, cognitive, social attributes and support from the family, and support from larger contexts, such as neighborhoods, organization, communities, and societies are very important. People who display resilience following adversity tend to share two common characteristics. First, they tend to have good cognitive ability, which makes it possible or them to recognize, understand, assess, learn from, and react to their experiences. Second, they tend to have temperaments that facilitate good social relationships by, making it easier for them to maintain supportive relationships and successfully seek comfort or assistance from others (Condly, 2006; Luthar, 2006).

Research on resilience in adults has proceeded along a somewhat different course than research in children and adolescents. Research in adults has focused more on personal characteristics. As well as resilience in adults has been observed mostly in response to traumatic events or disasters, while resilience in children and adolescents has been understood largely in relation to chronic stressors such as parental illness or neglect, impoverishment, or community violence (Bonanno, 2005).

Study by Walsh (2007) found out that adults have been studied most often as parents whose behavior affects the resilience of children or adolescents, although more recent studies have focused on adults as individuals. Research on parents has shown that children are more likely to display resilience when their parents exhibit positive attitude, flexibility, taking initiative, and effective coping skills. Research on adults as individual has focused heavily on hardiness which is a personality trait predicts resilience in difficult situations. Hardiness comprises three elements which are sense of purpose in life, sense of personal control over situations, and welcoming attitude toward change (Kobasa, Maddi, & Kahn, 1982). Other studies have shown findings similar to studies of adolescents that relevant personal characteristics of adults include cognitive ability, flexibility, optimism, effective social kills, and the ability to complete tasks.

Several studies have focused on hardiness in military members as factor predicting responses of combat trauma. Bartone (1999) found that stressful life events and exposure to combat trauma strongly predicted later psychological symptoms but researcher found out that hardiness was also significant predictor. Research indicated that hardiness not only predicted symptoms by itself but it weakened the power of life events and combat exposure to produce later psychological symptoms. Resilience focuses on responses to adverse events there is considerable overlap between the study of resilience in adults and the study of coping. It was

found that it is very common for studies of coping that help to find that active coping strategies that focus in solving the problem are more effective than strategies that focus on managing emotions, some studies have unexpectedly found that individuals displaying resilience resist expressing negative emotions in favor of more positive ones. While this behavior of resilience would sometimes be labeled denial and considered problematic, in the aftermath of adverse events it may be adaptive by reducing personal trauma and isolation from others.

It is suggested that resilient individuals are less likely consolidate emotional memories and have a greater ability to extinguish traumatic memories (Charney, 2004). Research showed that in stress full and threatening situations, sympathetic nervous system becomes activated and adrenaline and noradrenalin are released. Unrestrained activation of the sympathetic nervous system, leading to hypervigilance, anxiety and intrusive memories (Southwick, S. M., Vythilingam, M., &Charney, D. S. 2005) and resilient individuals are able to restrict sympathetic activation only dangerous or stressful situations (Morgan 2000).

Polk (1997) has synthesized different patterns of resilience from the individual resilience.

Dispositional Pattern: The dispositional pattern relates to physical and ego-related psychosocial attributes that promote resilience. These entail those aspects of an individual that promote a resilient disposition towards life stressors, and can include a sense of autonomy or self-reliance, a sense of basic self-worth, good physical health and good physical appearance.

Relational Pattern: The relational pattern concerns an individual's roles in society and his/her relationships with others. These roles and relationships can range from close and intimate relationships to those with the broader societal system.

Situational Pattern: The situational pattern addresses those aspects involving a linking between an individual and a stressful situation. In addition to these factors theorists have begun

to acknowledge that resilience is a function not only of the individual but also of the circumstances and environment in which she or he finds her or himself. To that end it is considered important to examine exposure to duty-related and non–duty-related trauma (Carlier, Lamberts, & Gersons, 1997) and exposure to non-traumatic routine work stress as potential detractors from resilience.

Psychosocial Stressors

Several stress factors affect and are affected by resilience. The major categories of stressors include anxiety, depression, stress and post-traumatic stress disorder. The detailed description of stress factor is given below:

Depression

Depression is one of the oldest recognized disorders of mental life. It is also one of the most common. It has been estimated that 1 in 10 people experience one or more major affective episodes in his life (American Psychiatric Association, 1975). As a clinical syndrome, depression is characterized by change: Previously gratifying activities seem to lose their appeal; actively seeking individuals become torn by doubts and indecision and interest and involvement carried apathy and withdrawal. Hoping severe form can turn into desperation and pathological findings may in self-destruction (Kendall & Hollon, 1979).

Depressive feelings are emerging due to the factors of personal loss. The next step of this depression moved to frustration. The negative mood may be combined with other factors such as decreased energy, pessimism and motives. In addition, depression and other forms of psychopathology, such as anxiety disorders occur simultaneously.

Theories of Depression

There are many reasons of depression. Sometimes depression is a consequence of some external events like death or loss of a loved one or a few major financial crises or professional reverse. Other times it manifests itself has no overt reasons. Theoretical perspectives are varied, ranging from biochemical deficits and hereditary deficits, constitutional deficiencies by making assumptions about the internal psychological factors or minor disturbances in patterns of exchange between organism and the environment (Kendall & Hollon, 1979). Considering being an affective disorder, most descriptions focus on cognitive changes and behavioral components such as vegetative and motivational components. It attempts to assimilate these different theories with this consistent clinical illness and suggested that any of these theoretical factors may obtain the same psychological process. Once triggered, this process takes on a life of its own. This "common final pathway" model was adopted that act mostly through a biochemical mechanism and less responsive to psychosocial interventions.

Biological Theories: Biological theories usually focus on alleged imbalances in biogenic amines, such as non-adrenaline (Schildkraut, 1965), or indoleamines, such as serotonin (Glassman, 1969). Both substances are used as neurotransmitters in the brain, conduction of impulses from one nerve to another via the synaptic gap between the nerves. These specific neurotransmitters are concentrated in the limbic system, which seems to be a center for the mediation of various motivational systems. According to Hirschfield depression is due to deficiency of monoamine neurotransmitters or chemicals come from nerve cells in the brain and deliver a message in the synapses (Nemeroff, 1998).

The hormonal abnormalities are alleged to have contributed to the development of depression. Deregulation of the hypothalamic-pituitary-adrenal (HPA), the system that manages

the body's response to stress has been shown to contribute to depression (Goodyear, Herbert, and Tamplin, 2003).

Research into the biology of depression suggests that in earlier times of childhood and youth, the neuro-control system is not equal to that of adults. Biological indicators later in development, for example, older adolescents who are more severely depressed, may be more similar to those of depressed adults. Therefore, although many workers continue to find evidence of biological dysfunction in childhood depression, a simple implementation of the outcomes of adults is not sufficient.

Psychoanalytic Theories: In Mourning and Melancholia, Freud compared melancholia with normal grief (Davison & Neale, 2001). While both may occur as a reaction to the loss of an object of love, melancholy can occur in persons specially crafted in reaction to a loss or imaginary vaguely perceived that without the ego. The melancholic's self-accusations were seen as manifestations of his hostility toward the dear lost object. Freud explained this phenomenon as the narcissistic identification of the ego with the object through introjection, a regression to the oral stage of erotic development. (In his further examination of psychic introjection, Freud laid the "faculty of self-criticism" of the ego, the bases for his latest concept of superego. He hesitated to generalize too widely about it, due to his uncertainty regarding the somatic aspects of melancholy.)

Psychoanalysts says that anger create a depression. A typical situation in which transformation has been thought to play useful describes this theory. Neurotic parents that are contrary, careless, lacking in sympathy, aggressive create unsafe world for child (Saler & Skolnick, 1992). So, the child feels never fell happiness and confidence, and develops a "despised" and "self-concept". In this time parents try to make a feasible environment for the

children they also try to create ideal and relax environment for the children. But the children feel perpetual sense that they are not good and try to such the ideal environment. They feel the environment is not acceptable for them.

It is considered depression as an affective state characterized by a loss of self esteem. He felt that a predisposition to depression stemmed from the traumatic experiences of early childhood and this depression stems from conflicts or tensions within the same egos rather than a conflict between the ego and superego. He indicated that depression was an expression of feeling or awareness of the ego of his helplessness and powerlessness.

Hammerman (1962) a distinction between depression in which the role of "sadistic superego" is prominent and self-esteem collapses due to fault in transgressing the rules of the superego and depression due to a lack of organization. The sadism of the superego assumes the existence of a relatively well developed and the structure of the ego psychic information; defective ego development because of very early trauma, early loss or faulty reports the results of in a distorted self-image and lack of self-esteem because of the lack of measuring up to a narcissistic ego ideal.

The Existential Theories: The existential theories of depression are summarized by Arieti (1959). He points out that, according to the existentialists, the ambivalence of the manic-depressive patient is different from that of the schizophrenic. Considering that the schizophrenic can hate and love at the same time, alternating between manic-depressive love and hate.

The question of the depressed patient versus time has occupied the attention of many existential writers. They stressed that the time seems to have slowed for the depressed patient. In his subjective experience, only the past matters. Painful Memories dominate his thinking and remind him of his unworthiness and inability to achieve.

Cognitive Theories: Cognitive theory posits that depression is the consequence of a negative cognitive set. Depressed individuals are seen as evidencing Beck's negative cognitive trait: negative beliefs regarding themselves, their world, and their future. Systematic distortions in information processing are seen as maintaining belief in the validity of these views despite contradictory environmental evidence. Cognitive theory postulates that negative self-perceptions make individuals vulnerable to depression. The majority of research testing the diathesis-stress component of Beck's (1967, 1983) theory has used cross-sectional designs. In these studies, dysfunctional attitudes, stressful events, and depressive symptoms are all assessed at the same point in time and the researchers hypothesize that dysfunctional attitudes will interact with current level of stress to predict depressive symptoms in adult as well as adolescence populations. Some studies employing this concurrent diathesis-stress design have found support for this hypothesis (Kuiper, Olinger, & Martin, 1988). Although schemata are hypothesized to originate early in life, some theorists and researchers have claimed that schemata do not become consolidated until adolescence or even young adulthood after repeated learning experiences have reinforced the schemata.

Depressed children and adolescents have cognitive distortions, negative attributions, hopelessness, and a tendency to blame outcomes on external forces beyond their control. When a child or adolescent is faced with a stressful event, it is the negative or dysfunctional interpretations made about these events that create and maintain a depressed mood (Asarnow, Jaycox, & Thompson, 2001).

Although much of Beck's theory of cognitive psychotherapy is based on observations from his clinical work, he and his colleagues have also been somewhat influenced by other theories of psychotherapy, cognitive psychology, and cognitive science. Because of his training as a psychoanalyst, Beck drew some concepts from psychoanalysis into his own work.

Beck's cognitive theory suggests that dysfunctional beliefs and distorted information processing styles serve both to depress mood and to lead to behavioral passivity. If one were as impoverished and the future as bleak as believed by depressed individuals, then their sadness and apathy would seem both logical and attuned to reality. Cognitive theory argues that it is aberrant thinking that leads predictably and inexorably to what may seem to an outside observer to be unexplainable dysphasia and self-defeating passivity (Kendall &Hollon, 1979).

Anxiety

Anxiety is a fearful feeling but this fear is unnecessary. Anxiety is general disorder competitively other disorder.it is sudden reaction and during anxiety the defensive mechanism become weak. People involve in such situation that normal life disturb and normal performance start to going downfall. There are two type of anxiety one is trait anxiety and other is state anxiety. Unnecessary fearful feelings disturb normal life person always involve in uncertain condition. Anxiety is a psychophysiological response. We cannot say that anxiety is a fear but it is a distinguish form of fear. It is a state of apprehension and consisting relative ambiguity. Fear in real like in a situation lion is coming definitely fear feel but in anxiety situation there is no lion but fear is still present. So this type of fear considers anxiety. One option is to describe fear as true anxiety, an instant danger or risk, and anxiety as a universal non-immediate understanding (Hunt, 1999).

Anxiety related disorders are very common in adolescents (Costello et al. 2003) showing lifetime prevalence of anxiety disorders to be about 29% (Kessler et al. 2005). This high prevalence is quite disturbing due to the fact that anxiety related psychological disorders have negative impact on different areas of life (McGee & Stanton, 1990), and also these disorders usually show a chronic course for a significant proportion of young people suffering, and also

increase the threat for other types of mental disorders (Cole, Peeke, Martin, Truglio, and Seroczynski, 1998).

Anxiety is an unpleasant emotion described by a feeling of ambiguous, not mentioned harms. Like panic, cause a formal of physical disorder, distinct fear, is called by the deficiency of appearing reason and the statement that causes anxiety is concealed and innovative to the person. Some people might be biochemically exposed to an extreme form of anxiety consider as panic attacks.

Anxiety itself is a powerful physical experience that can lead to increased heart rate or heavy breathing difficulties, tremors, sweating, dry mouth, tightness in the chest, sweaty palms, dizziness, weakness, nausea, diarrhea, cramps, insomnia, fatigue, headache, loss of appetite and sexual disturbances (Vasudevan, 2006). These symptoms can easily be mistaken for physical illness. Furthermore, the anxiety results in a narrowing of its perspective time so that only the elements present. There is also the inability to participate in more than one task at a time or to organize thoughts and projects effectively. Low levels of anxiety may temporarily increase the ability of a person to do a simple task, because of increased vigilance and a narrowing of attention associated with anxiety, but with the increase of anxiety, behavior becomes more disorganized and ineffective (Vasudevan, , 2006).

Theories of Anxiety

There are many theories of anxiety and many views about anxiety which is detailed below. Anxiety is .a sudden thing in which people never feels satisfaction and disturbs in daily matter and think always and feel ambiguous .In this condition relaxation level down.

Biological Theories: Some medications, called anxiolytics, lead to the hope that anxiety can be understood physiologically. The exact metabolic pathways remain incompletely known,

however, and appear to be quite complex. Among the currently most used chemicals are the later benzodiazepines and the serotonin-reuptake inhibitors. Evidence exists that some persons may be biochemically vulnerable to an extreme form of anxiety known as "panic attacks." Some medications relieve the panic, leading to the hope that anxiety can be understood physiologically, but the metabolic pathways are unknown and may be quite complex (Vasudevan, 2006).

Researchers have discovered a receptor in the brain for benzodiazepines that is linked to the inhibitory neurotransmitter gamma-amino-butyric acid (GABA). In normal fear reactions, neurons throughout the brain fire and create the experience of anxiety. This neural firing also stimulates s the GABA system, which inhibit this activity and thus reduces anxiety. Anxiety may results from some defect in the GABA system so that anxiety is not brought under control. Similarly, drugs that block or inhibit the GABA system lead to increases in anxiety.

The Psychoanalytic View: Two types of anxiety are recognized in psychoanalysis. The first, traumatic anxiety, results from overstimulation. Events happen faster than the mind can comprehend them. This produces a feeling of crisis. Sigmund Freud believed that this feeling has a physical basis in the capacity of the nervous system and that birth throws every child into a state of traumatic anxiety. In his view, this birth trauma becomes the template for later episodes of anxiety. The second type of anxiety, signal anxiety, is believed to arise from a person's need to guard against traumatic anxiety. The ego appraises its ability to cope with external demands and the push of internal drives. When normal methods of coping with these pressures threaten to fail, the ego responds with anxiety, which then mobilizes the person to take new action. The small-scale discomfort of signal anxiety helps to avoid a more devastating experience (Vasudevan, 2006).

Sigmund Freud's primary concern was with the effects of anxiety on the individual. For those who become disturbed, the environment overwhelms them and causes massive anxiety. According to Freud, a certain amount of anxiety is natural. However when unaccepted id impulses buried in the unconscious try to break through, massive anxiety is generated (Davison & Neale, 2001). Such anxiety creates problems and symptoms that apparently express two things:

First, they represent the undesirable impulse itself, as in the case of a man who keeps smashing up his wife's car because he really wants to do her harm. Second, the energy that is connected with the undesirable acts finds an outlet in physical pains, nervous symptoms, and so on. Abnormal behavior is thus symbolic in the sense that it represents what is going on beneath the surface; it externally represents a seething cauldron of unacceptable energy impulses trying to free themselves.

The Humanistic View: According to humanists, from the beginning, each of us has something inside that strives towards a meaning to life. It is through negative forces in the environment which are blocked by this. In other words, we all have an active will toward health, an impulse towards growth and the pursuit of our potential. Normal healthy people are those who have a sense of identity and have become one with the world, knowing that their own desires, needs and capacities of destination (Maslow, 1968). Disturbance, then, is the loss of the ability to read the signals sent by healthy psychological forces within us and appreciate the world. Therefore, the obsessive person that still believes in the evil deeds fills his or her mind with these thoughts, so to speak, to the exclusion of the good signs desperately trying to make them known. Compulsions fill time and help prevent anxiety, but also prevent the very positive aspects of change and growth. Such people cannot enjoy themselves and the world. Like the phobic person

who is afraid of elevators and other enclosed spaces, people eager to live in a restricted psychological can not appreciate what the world and the others have to offer.

The core of the problem, according to the humanists, is in the loss of contact with our inner selves, becoming artificial agents play rather than real people. Once we lose sight of who we really are, we created a great void in our lives and fail to note the significant existence. Feelings of meaninglessness, in turn, increases our anxiety and life becomes a little more closely and confusion. From this point of view, when we can not allow ourselves to be genuine, real, real human beings, with faults, we become people without authenticity. We are alienated, that is, we need commitment, purpose, meaning, or control, and no longer have a clear vision of who we are or what others need.

Learning Theories: The point of view of learning is that anxiety arises from the association and repetition. Countless studies within this framework have sought to establish the point that the emotional reaction may be conditional as anything else possible. For example, fear is a reaction to pain and motivates the individual to avoid offending stimulus. Fear, of course, will create anxiety, anxiety itself the result of anticipation or expectation of a scary situation. When a situation resembles a previously a painful, there is a potential danger or threat. Anxiety, then, reflects the preparation of the body to fight this danger.

Cognitive Theories: In the control of anxiety, some psychologists have focused on the role of cognition as the origin of anxiety. Cognitive theories emphasize the process of appraisal and the often unnoticed internal dialogue that amplifies emotional response. Experiments have shown that the interpretation of a situation determines whether a person feels anxiety or some other emotion. Learning to substitute benign reappraisals for unrealistically negative "self-talk" reduces anxiety.

Beck and Emery (1985) outlined the cognitive features of several individuals anxiety disorders, anxiety researchers have extended these models further and increased their specificity. For example, Clark elaborated on their cognitive model of panic by introducing the term, "catastrophic misinterpretation of bodily sensations" (Clark, 1986). Wells (1995) distinguished between two types of worry in his cognitive model of generalized anxiety disorder (GAD)—Type I worry refers to worry about external events, whereas Type II worry refers to negative appraisals about their own worry activity. Specific cognitive models have been proposed for other anxiety-related pathologies not considered in Beck and Emery's book, such as compulsive checking (Rachman, 2002) and posttraumatic stress disorder. Moreover, Beck and Clark (1997) extended the Beck and Emery (1985) model by proposing a three-stage sequence of information processing, such that processing moves from being automatic to being strategic and driven by the activation of cognitive schemas.

Several empirical lines of research have been designed to validate aspects of these cognitive theories. For example, Beck and Emery (1985) described the manner in which anxious individuals narrow their attention on threat at the expense of safety cues. Studies using Emotional Stroop and probe detection tasks have found that anxious individuals selectively attend to threatening semantic and pictorial stimuli (Mogg& Bradley, 2002). Moreover, studies employing masked stimuli of threatening and neutral contents have revealed that attentional biases occur outside of awareness (Mogg, Bradley, Williams, & Mathews, 1993); confirming Beck and Emery's notion that these biases are automatic and often not under one's volition. In addition, Beck and Emery (1985) indicated that anxious individuals inaccurately appraise situations as dangerous. Many studies have confirmed that when anxious individuals are presented with ambiguous scenarios that involve potential harm, they rate negative or

catastrophic explanation for the events as being more likely than nonanxious individuals (Amir, Foa, & Coles, 1998).

In sum, Beck and Emery's (1985) cognitive perspective on anxiety disorder and phobias spawned twenty years of theoretical and empirical work. Newer cognitive models of anxiety disorders share many central features that Beck and Emery had originally proposed, such as a schema or cognitive set that predisposes individuals to process information in a biased manner, attentional biases toward threat, and catastrophic misinterpretations of ambiguous stimuli. Their model has generated numerous testable hypotheses, and its longevity speaks to its significant explanatory power in accounting for the phenomenology of anxiety and anxiety disorders.

Stress

Selye (1976) is the first who applied stress to human conditions and popularized the word stress. Now days the term is mostly used to see the level of stress people feel in their minds from the demands arising out of their jobs, relationships and responsibilities in their daily lives (Seaward, 2002). According to Selye (1976) a significant feature of stress is that a large range of different situations are able to produce the stressing reactions, such as weakness , discomfort, panic, stress and success. We experience different stresses in daily life and it is a routines matter but its intensity is different and depend patience level. It is difficult to define that what is stress because it is individual matter and depend on particularly on individual perception According layman definition of stress can be defined as a bit nervous, anxious, and worried or have the blues. However, it is clear that something more negative instead of positive (Saleem, 2004).

Psychological stress is a negative emotional state that is a supplement to threat calculation, damage and loss. The bad emotion was included in a study, but unfriendly, annoying, short-tempered and disturbing. Lazarus and Folkman (1984) found that only the event

is perceived as harmful to the proceeds of a resource person and the person is a danger or threat to personal well-being. This means that the events are not inherently painful, which thus becomes only because of the way in which they are interpreted. Psychological stress arises from a considerable call e.g. stressor and insufficient resources to diminish any pal damage (Lazarus and Folkman, 1984). It is simply a manifestation of the inevitable demands of life and may threaten certain that you meet a person of wealth and, therefore, involve a negative stress (Schafer, 1992).

According to Merriam Webster Dictionary Collegiate (1993) stress is a force which influence or impact our body and mental functions and in reaction create tension physically and mentally as well. Stress can be both physically and mentally. One may feel physical stress which is the result of overwork, poor diet or the effects of a disease. Stress can also be mental, when a person worries in term of wealth, health and, environmental changes and many more which is related to emotions (Saleem, 2004).

There are some of the symptoms with which we can measure by which we can judge that if a person is stressful or not. These are the symptoms of stress that can be observed and on the basis of which a person can be named as stressed. These symptoms include shaking hands, upset stomach, narrow shoulder, lower back pain, nervousness, anxiety, depression, poor concentration, confused thinking, accelerated speech, irritability and short temper. These symptoms act as warning signs that something is wrong and must be changed. Fewer signs of stress such as trembling hands, and tension headaches acts as a warning, so these signs in immediate need to respond in a way that would not result in major distress signals, but if these signs are not treated properly that a person becomes afflicted. Every time a person becomes stressful he or she must pay the cost of stress. It never comes alone. Not just takes a lot of physical and psychological problems with it, but it also affects social functioning, educational and vocational identity. Physical illness lowers the energy, decreased productivity at work or

school, wasted potential, lack of career advancement, decreased life satisfaction, work and relationships, lowered self-esteem, no involvement in public issues the absence of play and fun, the loss of interest in sex and nonsense are the packet associated with the psychological distress. Unfortunately, the cost of stress does not stop for the person. They keep on adding and creating more problems for the individual. It can even be a potential to be converted into emergency, and in most severe conditions may lead to even death of an individual (Schafer, 1992).

Theories of Stress

Like many other ideas in the field of behavioral research, the concept of stress has been traced back to the physical sciences. Most recent century capacity it can be describe like an external force such as metal. Stress is the influence of the internal force on the surface on which the applied force. The term strain has been described as a disorder of the material being acted as a building becomes a floor. In the 19th century, the term stress has been applied to humans started in the medical literature (Schafer, 1992).

The Yerkes-Dodson Law: The Yerkes-Dodson law was formulated in 1908 (Yerkes & Dodson, 1908). The model focuses on the association between arousal and performance. The law states that up to that specific point excitement increases performance. After a peak of excitement, however, optimal performance falls as excitement continues to rise. At very high levels of arousal, performance cannot be better than if the persons were not aroused at all. People usually perform well if mental and physical arousal is moderate. The model describes that this is not quite confirm in every case but it may be change with change of case. But with good health it may be like routine. Challenge of a person is to determine the optimal level excitation. Another is to learn the techniques, including their style of life itself, to create and maintain the optimal level of stress.

Walter Cannon: Fight or Flight: Walter Cannon proposed the first real application of stress for the human experience. He considered the stress of being a disturbance of homeostasis (balance or stamina) under conditions oxygen deprivation, cold, warm, low blood sugar and the like. It focuses on the role of nervous system during times of trouble. The main contribution of the model was to determine the response of fight, the mobilization of body to deal with an external threat. A cluster of physiological changes related to prepare a ground to stand and fight or to escape danger by flight (Schafer, 1992).

Hans Selye: The General Adaptation Syndrome: Based on the work of Cannon, Hans Selye proposed a detailed account of the body's response to changing external conditions. Selye's initial attention was on the syndrome of being just bad. He said the term general adaptation syndrome. In response to the local infection or contusion, the body experiences a series of adjustment, which is known as the local stress response. The main objective of Selye is not the specific response rather than the overall response which is defined as stress response by him. Given the focus on general nature of response Selye defined stress as a nonspecific response of the organism to any demand made upon it (Selye as cited in Schafer, 1992).

Maddi and Kobasa: Hardiness and Stress Resistance: It is proposed that their explanation for the experience of exposure to concentrations that stress-resistant individuals have a set of attitudes and beliefs, which they called as a hardiness. Hardy individuals show three C's: challenge, control and commitment. All thrive on difficulty and force, transforming these practices to possible fears into challenges and opportunities. They are highly committed and involved in everything they did, and have a strong belief that they will be able to influence events in the life and control their responses to events. Their work has made major contributions to understanding the susceptibility, vulnerability to disease and illness in a fast changing world. It

shows that environmental pressure and stress are not just issues of stimulus-response Rather, personal perceptions and interpretations can make the real difference (Schafer, 1992).

Antonovsky: Sense of Coherence and Generalized Resistance Resources: Antonovsky (1979) has proposed the theory of stress susceptibility and resistance based on the concept of sense of coherence. He suggested that the sense of coherence is crucial for the inconvenience since it is a universal, long permanent way of seeing the world . In other words, the greater presence of a sense of rationality, more resistant strain will be a person, a group or a society. Connected with the concept of sense of consistency, Antonovsky's concept of generalized resistance resources, he said that the sense of consistency is likely to improve to the range that general resistent syndrome are present in our lives. Thus, generalized resistance syndrome is defined as any characteristic of the person, group, or the environment that can facilitate effective management of the tension. In short Antonovsky position is that stress and stress-related illness develop to the extent that lack of generalized resistance resources, which in turn develop into a weak sense of coherence. Conversely, health in part is a product of generalized resistance resource and sense of coherence (Schafer, 1992).

The theory also focuses that controllable events are less painful than to uncontrollable events. This is because if the events are interpreted as uncontrollable, the person usually is concluded that all efforts will not bring a change. In this way the personal resources to address soon are overwhelmed by perceived demands of the environment. On the other hand, presenting the opportunity for beneficial, controllable events is likely to expand learning opportunities for optimism (Seligman as cited in Schafer, 1992). Since helplessness and attribution styles are learned, it is obvious that educational and therapeutic program can succeed in teaching the learned optimism and attribution styles set on the interpretation of the non-global, external and unstable are to be successful. The theory also throws light on the complex interaction of

individuals and to the emergence of the discomfort and the person's response to deal with it. It is clear that the personal and the situational factors must be recognized (Schafer, 1992).

Family Life Cycle Theory: The stressors and/or crises can be separated into normative and non-normative life events. The major differences between normative and non-normative life events are that normative changes or transitions are expected, predictable, short term, and occur in most families. Non-normative changes include situations such as a chronic illness, unemployment, death, or natural disaster, which are sudden, unpredictable and can be overwhelming. The family life cycle theory focuses on growth and transitions of the families as they move through time historically, developmentally, emotionally, and socially (Turnbull, Summers, &Brotherson, 1987).

Family Development Theory: The amount of stress families experience varies according to the stage of the family development. They divide the family life into eight stages using criteria of a major change in the family to the developmental stage of the older child and the work status of the breadwinner. Individual in a family experience developmental tasks and responsibilities at different stages in their life cycle. At each stage of development, family member faces lots of difficulties or stress in response to various changes in life. The crises for one family member are critical for another family member. Some changes include marriages, parenthood, single parental families, and blended families, stages in child and adult development and retirement.

Post-Traumatic Stress Disorder (PTSD)

According to the DSM-1V of mental disorders in PTSD the person practiced, observed or was challenged with one or more events relating death or serious injurers and other serious problems. The response of the person is brought by intense fear, helplessness or horror. The traumatic event is insistently hard, disturbing and unpleasant memories of painful events, including imagoes previous life, Loses of past unpleasant and dreams which never come to true.

DSM-IV specifies that estimates of lifetime prevalence (PTSD) from community samples varies between 1% and 14%, and prevalence among high risk groups (eg emergency services, veterans combat) varies between 3% and 58%. They note that the variability of these figures is due to differences in study methodology. Breslau, Davis, Andreski and Peterson (1991) found prevalence rates of PTSD of 9.2% for adults who belong to an urban health maintenance organization.

Post-traumatic Stress Disorder occurs in 32-60% of adult survivors and 26% to 95% of the surviving children who were evaluated after earthquakes (Garbarino, & Kostelny, 1993). Instead of being an event limited to a defined endpoint, earthquakes tend to produce a series of events that continue to affect people's lives for a long time. Disorders of persistent or recurrent earthquake significantly contribute to the persistence of mental health problems. The overall level of psychological distress after an earthquake appears to have stabilized after about 12 months, but posttraumatic stress reactions do not stabilize until 18 months after the earthquake. In some individuals, there is a high probability of permanent exposure to psychological symptoms following the earthquake. This is especially true of those with the highest level of exposure and the highest concentration of personal loss and damage from the earthquake. Cope with stress by using avoidance measures (eg, withdrawal of the situation, isolation, trying to avoid additional stressors) appears to contribute to ongoing distress and PTSD. The elderly and those with a history of mental health problems seem more likely than others to experience post-traumatic stress following an earthquake. Also at risk are (1) rescuers with high levels of catastrophic exposure and (2) people who, in response to the earthquake, they tend to "dissociate" or become "numb", and a feeling of being separated from their emotions and bodily experiences over a long period of time (Flynn, & Nelson, 1998).

In another study, 82% of survivors have characteristics of PTSD 35 days after the explosion of a bomb. In a study of PTSD after a rape was reported in 94% of women immediately after the assault, and 47% after 3 months (Rothbaum, Foa, Riggs, Murdock, & Walsh, 1992). These results are consistent with the results of specific research on hurricanes and other forms of trauma that have examined the factors that predict whether a person develops chronic PTSD. Two main factors influencing recovery are subsequent life stress and social support of others. Recent research with survivors of assault and motor vehicle accidents has consistently demonstrated that the presence of negative social support to prevent recovery.

The incidence of posttraumatic stress disorder (PTSD) and depression among earthquake survivors living in prefabricated housing sites following the earthquake in Turkey in 1999, estimated rates of PTSD and major depression was 39% and 18%, respectively. The worst symptoms of posttraumatic stress disorder related to greater fear during the earthquake, female gender, advanced age, participation in rescue work after being trapped under the rubble, and personal history of psychiatric illness. More severe depressive symptoms related to old age, female gender, loss of family, single marital status, past psychiatric illness, the experience of previous trauma, and family history of psychiatric illness. These results suggest that catastrophic earthquakes in the long term psychological consequences, particularly for survivors with high levels of trauma exposure (Salcioglu, Basoglu, & Livanou, 2003).

A study conducted by Aslam (2007) after the earthquake of October, 2005 in Pakistan showed high prevalence of depression, anxiety and post-traumatic stress disorder in individuals living in earthquake affected areas in comparison to individuals living in non-affected areas. Ego resiliency among individuals living in affected areas was inversely related with the level of PTSD, depression, anxiety and stress.

A study by Basharat (2010) on families of missing persons showed an inverse correlation between psychological distress and resilience among such families. The results also showed that women experienced more depression, anxiety and stress as compared to men whereas non-significant difference was found between men and women on resiliency and coping strategies. The overall results showed that women were more prone to using emotion focused coping strategies to cope with distress.

A study by Mujeeb (2009) to explore resilience and internalizing problems among (e.g. depression, anxiety and stress) among internally displaced persons showed that men and women differed in their experience of internalizing problems and resilience. Results also revealed significant inverse correlation between resilience and internalizing problems. It was also observed that family loss during internal displacement was found to be significantly related with internalizing problems and resilience.

Rationale of the study

The present study aims to investigate the relationship between resilience and psychosocial stressors among the students of flood affected areas. No significant amount of research is available on the topic that is why this area of study is very significant in the present time due to recent flood devastation faced by southern Punjab region of Pakistan. As these areas are among the most backward regions of the country with availability of very few basic life facilities including health and education so it becomes very important to determine the effects of traumatic events on the psychological health of people belonging to these regions. It is also important to see the effect of education on the psychological health of individuals belonging to these areas of limited opportunities especially college and university students. The present work also aims to provide a baseline by first time assessing the tolerance and resilience in the victims

of flood affected areas in order to have comparisons in case of second time occurrence of any traumatic event. The present study will provide a base for the future work especially policy issues related to implementation rehabilitation and prevention programs in order to minimize the harmful psychological reactions in people to any future catastrophes.

Objectives

1. To examine the relationship between resilience and psychosocial stressors including depression, anxiety, stress, and post-traumatic stress disorder.
2. To examine the mean differences in study variables among the victims and non-victims of flood.
3. To investigate the gender differences in resilience, depression, anxiety, stress, and post-traumatic stress disorder among students of affected areas.

Hypotheses

1. Resilience is negatively correlated with depression among the students of flood affected areas.
2. Resilience is negatively correlated with anxiety among the students of flood affected areas.
3. Resilience is negatively correlated with stress among the students of flood affected areas.
4. Resilience is negatively correlated with post-traumatic stress disorder among the students of flood affected areas.
5. Direct victims of flood exhibit less resilience as compared to non-victims of flood.
6. Direct victims of flood exhibit more depression, anxiety, stress, and post-traumatic stress disorder as compared to non-victims of flood.

7. Male students of the flood affected areas exhibit more resilience as compared to female students of the flood affected areas.
8. Female students of the flood affected areas exhibit more depression, anxiety, stress, and post-traumatic stress disorder as compared to male students of the flood affected areas.

Chapter-II

METHOD

Research Statement

The study was conducted to examine the relationship of resilience with psychosocial stressors of students in flood affected areas. Psychosocial stressor is a variety of life events such as moving, change, divorce, loss of anything that may contribute to a psychiatric presentation. These stressors create depression, anxiety, stress and post-traumatic stress disorders. Therefore, this study examines the relationship of resilience with depression, stress, anxiety and post-traumatic stress disorder.

Research Design

The present study is based on cross-sectional research design. Cross-sectional research is a research method often used in developmental psychology but also utilized in many other areas including social science and education. Survey technique has been used in this research. In this study, resilience measure through ego resilience scale, depression, anxiety and stress through depression anxiety scale and posttraumatic stress disorder through PSSI and then we compare resilience with stress, anxiety, depression, post-traumatic stress disorder.

Population

Students of affected or non-affected areas of southern Punjab are selected. The data were collected within one month duration after flood.

Sample

Sample of the present study comprised of 200 students from flood affected areas of southern Punjab. Both flood affected students (n = 100, 50%) and non-affected students (n = 100, 50%) were included in the sample. Both male students (n = 100, 50%) and female students (n = 100, 50%) were included in the sample. Purposive sampling technique was used to collect the information from the participants.

Operational Definitions

Resilience

Psychological resilience in an individual's tendency to cope with stress and adversity. This coping may result in the individuals bouncing back to previous state of normal functioning, or simply not showing negative effects.

For the present research Resilience among the students of flood affected areas was measured through Ego Resiliency Scale (Block & Kremen, 1996). High scores on the scale

indicate high resilience and low scores on the scale indicate low resilience among the students of flood affected areas.

Depression

Depression may be described as feeling sad, blue, unhappy, and miserable or down in the dumps most of us feel this way at one time or another for short periods.

For the present research depression among the students of flood affected areas was measured through Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995). High scores on the subscale measuring depression indicate high level of depression and low scores on the subscale indicate low level of depression among the students in the flood affected areas.

Anxiety

Anxiety is a psychological and Physiological state characterized by somatic, emotional, cognitive and behavioral components it is the displeasing feeling of tear and concern.

For the present research anxiety among the students of flood affected areas measured through Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995). High scores on the subscale measuring anxiety indicate high level of anxiety and low scores on the subscale indicate low level of anxiety among the students of flood affected areas.

Stress

Stress typically described a negative concept that can have an impact on one's mental and physical wellbeing, but it is unclear what exactly defines stress and whether or not stress in cause, as effect, or the process connecting the two.

For the present research stress among the students of flood affected areas was measured through Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995). High scores on the subscale measuring stress indicate high level of stress and low scores on the subscale indicate low level of stress among the students of flood affected areas.

Post-Traumatic Stress Disorder

Post-Traumatic Stress Disorder is a type of anxiety disorder. It can occur after you have seen or experienced a traumatic event that involved the threat of injury or death.

For the present research Post-traumatic stress disorder among the students of flood affected areas were measured through PTSD symptoms scale interview (PSSI) (Foa, Riggs, Dancu & Rothbaum, 1993). High scores on the scale indicate high resilience and low scores on the scale indicate low resilience.

Measuring Instruments

Ego Resiliency Scale (ERS)

The Ego Resiliency Scale (ERS) was developed by Block and Kremen (1996). The ERS is a 4 point Likert type scale which is comprised of 14 items. Findings from a study by Letzring, Block and Funder (in press) suggest that the ego resiliency scale scores are related to personality characteristics in a theoretically coherent manner. The potential usefulness and applicability of this scale is quite broad.

Depression Anxiety Stress Scale (DASS)

The Depression Anxiety Stress Scale (DASS) was developed by Lovibond and Lovibond (1995). The scale comprised of 21 items and three subscales including depression, anxiety and stress. Each subscale consists of 7 items. The scale was based on five point Likert type response pattern. In the present study, depression subscale was used. Past research in the indigenous context indicate that Depression Anxiety Stress Scale is a reliable and construct valid instrument to measure depression among disaster victims (Aslam, 2007, cited in Aslam and Tariq, 2010).

PTSD Symptom Scale Interview (PSSI)

The PTSD Symptom Scale Interview (PSSI) was developed and validated by Foa, Riggs, Dancu and Rothbaum (1993). This scale was used to measure the presence of PTSD in patients. The test is comprised of 17 items. A check list was used in this test to identify the traumatic events of the respondents. The scale was based on four point Likert type response pattern.

Procedure

In the present study, educational institutions in the flood affected areas were identified and institutional approval was obtained from the concerned authorities. Data was collected from colleges and universities. The authorities in the targeted institutions were instructed regarding the objectives and importance of the study. Informed consent was obtained in written form from the institutional authorities and participants. Data was collected during the working hours in order to increase the response rate. In the end the participants were thanked for cooperation in the study.

RESULTS

Table 1

Descriptive statistics for all study variables (N = 200)

Study variables	*Minimum*	*Maximum*	*M*	*SD*
Resilience	35	70	52.09	6.75
Depression	7	34	15.53	5.25
Anxiety	6	31	14.01	4.12
Stress	6	33	14.77	4.95
Post-traumatic stress disorder	22	81	52.36	10.99

The alpha coefficients of all study variables indicate that all the scales have high internal consistency.

Table 2

Alpha reliability coefficients for all study variables (N = 200)

Study variables	No. of Items	Alpha coefficients
Resilience	14	.79
Depression	7	.88
Anxiety	7	.81
Stress	7	.79
Post-traumatic stress disorder	17	.85

Table 2 shows alpha reliability coefficients of Ego Resilience Scale (ERS), Depression Anxiety Stress Scale (DASS), and Post-Traumatic Stress Diagnostic Scale (PTSDS). The reliability coefficients indicate that all the scale have satisfactory internal consistency and therefore appropriate for use in the present study.

Table 3

Pearson correlation between resilience and depression, anxiety and stress (N = 200)

Study variables	1
1. Resilience	-
2. Depression	-.21*
3. Anxiety	-.48**
4. Stress	-.51**

*p<.05, **p<.01

Table 3 shows the results of Pearson correlation between resilience and psychosocial stressors including depression, anxiety and stress. The findings indicate that resilience has significant negative correlation with depression, anxiety, and stress.

Table 4

Pearson correlation between resilience and PTSD (N = 200)

Study variables	1	2
1. Resilience	-	-.33**
2. Post-traumatic stress disorder		

**$p<.01$

Table 4 shows the results of Pearson correlation between resilience and symptoms of post-traumatic stress disorder. The findings indicate that resilience has significant negative correlation with post-traumatic stress disorder ($r = -.033, p < .01$)

Table 5

Mean, standard deviation and t-values for flood affected and non-affected students on resilience (N = 200)

	Affected students (n = 100)		Non-affected students (n = 100)			
Study variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Resilience	50.19	6.40	52.95	7.17	2.41	.007

Table 5 shows the mean, standard deviation and *t*-values for flood affected and non-affected students on resilience. The findings indicate that non-affected students significantly scored high on resilience as compared to affected students.

Table 6

Mean, standard deviation and t-values for flood affected and non-affected students on depression, anxiety and stress (N = 200)

	Affected students (n = 100)		Non-affected students (n = 100)			
Study variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Depression	15.81	5.10	14.28	5.02	2.98	.046
Anxiety	14.31	4.11	13.15	3.96	1.97	.049
Stress	14.55	4.99	13.21	4.01	2.02	.049

Table 6 shows the mean, standard deviation and *t*-values for flood affected and non-affected students on depression, anxiety, and stress. The findings indicate significant difference among affected and non-affected students on depression anxiety and stress scale.

Table 7

Mean, standard deviation and t-values for flood affected and non-affected students on post-traumatic stress disorder (N = 200)

	Affected students (n = 100)		Non-affected students (n = 100)			
Study variables	*M*	*SD*	*M*	*SD*	*T*	*p*
Post-traumatic stress disorder	53.03	11.26	51.22	10.69	2.88	.000

Table 7 shows the mean, standard deviation and *t*-values for flood affected and non-affected students on post-traumatic stress disorder. The findings indicate significant difference among affected and non-affected students on post-traumatic stress disorder.

Table 8

Mean, standard deviation and t-values for male and female students on resilience (N = 200)

	Male students (n = 100)		Female students (n = 100)			
Study variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Resilience	52.46	6.94	51.60	6.50	1.89	.049

Table 8 shows the mean, standard deviation and *t*-values for male and female students on resilience. The findings indicate significant difference among affected and non-affected students on resilience.

Table 9

Mean, standard deviation and t-values for male and female students on depression, anxiety and stress (N = 200)

	Male students (n = 100)		Female students (n = 100)			
Study variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Depression	14.01	5.00	16.66	5.22	3.63	.000
Anxiety	13.47	4.24	14.28	5.42	2.01	.039
Stress	12.58	5.24	14.11	6.42	2.17	.005

Table 9 shows the mean, standard deviation and *t*-values for male and female students on depression, anxiety, and stress. The findings indicate significant difference among male and female students on depression anxiety and stress scale

Table 10

Mean, standard deviation and t-values for male and female students on post-traumatic stress disorder (N = 200)

	Male students (n = 100)		Female students (n = 100)			
Study variables	*M*	*SD*	*M*	*SD*	*t*	*p*
Post-traumatic stress disorder	49.27	11.47	54.65	10.08	3.51	.001

Table 10 shows the mean, standard deviation and *t*-values for male and female students on post-traumatic stress disorder. The findings indicate significant difference among male and female students on post-traumatic stress disorder.

Chapter-III

DISCUSSION

The present study was conducted to examine the relationship of resilience with psychosocial stressors. These psychosocial stressors develop depression, anxiety, stress and post-traumatic stress disorder. Therefore this study examines the relationship of resilience with depression, stress, anxiety and post-traumatic stress disorder The other objective of the study was to examine the mean differences in resilience, depression, anxiety, stress and post-traumatic stress disorder among directly flood affected students and non-affected students. Beside this, the study investigated the gender differences in study variables.

The alpha coefficients of all study variables indicate that all the scales have high internal consistency. The alpha coefficients ranged from .79 to .88. Thus, the alpha coefficients indicate that the scales including Ego Resilience Scale (ERS), Depression Anxiety Stress Scale (DASS), and PTSD symptom scale interview (PSSI) are satisfactory in the present study.

The relationship between the subscales of Depression Anxiety Stress Scale (DASS) is also theoretically consistent and therefore indicating appropriate construct validity. The findings indicate that depression has significant positive correlation with anxiety and stress whereas anxiety has significant positive correlation with stress. Thus the correlations between the subscales of Depression Anxiety Stress Scale (DASS) are in line with the underlying theory.

The findings of the study indicate that all the hypotheses are supported in the present study. The first hypothesis "resilience will be negatively correlated with depression among students of flood affected areas" was supported in the present study. The findings are in line with

the past research. It is discovered that resilience was negatively associated with depression in disaster affected areas of Kashmir (Aslam, 2007).

The second hypothesis "resilience will be negatively correlated with anxiety among students of flood affected areas" was supported in the present study. The findings are in line with the past research. It is discovered that resilience was negatively associated with anxiety among the people of disaster affected areas of KPK (Mujeeb, 2009).

The third hypothesis "resilience will be negatively correlated with stress among students of flood affected areas" was supported in the present study. The findings are in line with the past research. The researchers discovered that resilience was negatively associated with stress among the individuals in the areas affected with natural and man-made disaster (Aslam, 2007; Mujeeb, 2009).

The fourth hypothesis "resilience is negatively correlated with post-traumatic stress disorder among the students of flood affected areas" was supported in the present investigation. The findings are present consistent with the past research indicating the trait based ego resiliency has significant negative effect on post-traumatic stress disorder among the people living in the areas affected by natural disaster (Aslam, 2007).

The fifth hypothesis "direct victims of flood will exhibit less resilience as compared to non-victims of flood" was supported in the present study. The findings are consistent with the past research. In an investigation with families of missing persons in Pakistan, it is discovered that such families exhibited less resilience and more distress (Basharat, 2010).

The sixth hypothesis "direct victims of flood will exhibit more depression, anxiety, stress, and post-traumatic stress disorder as compared to non-victims of flood" was supported in the

present study. The findings are in line with the past research indicating that direct victims of disaster have high levels of depression, anxiety and stress as compared to non-affected students of the disaster affected areas. The researcher discovered that the victims of natural and man-made disaster displayed more post-traumatic stress disorder as compared to non-victims (Aslam, 2007).

The seventh hypothesis "male students of the flood affected areas will exhibit more resilience as compared to female students of the flood affected areas" was supported in the present investigation. Past research on the people residing in the disaster affected locales indicate that male appears to be more resilient than their female counterparts both in natural and man-made disasters (Aslam, 2007). Flood is one of the important natural disasters.

The eighth hypothesis "female students of the flood affected areas will exhibit more depression, anxiety, stress, and post-traumatic stress disorder as compared to male students of the flood affected areas" was supported in the present research. The findings are in line with the past research. It is found that female disaster victims exhibited more depression, anxiety and stress as compared to male disaster victims (Mujeeb, 2009).

Limitations and Suggestions

1. The present research was conducted in the limited locale of north Punjab. It would be more appropriate to include the other flood affected regions of the country including Sindh and KPK in order to make broad generalizations.
2. The self-report measures were used that resulted in single source biasness.

Conclusion

The present study was sought to examine the relationship of resilience with depression, anxiety, stress and post-traumatic stress disorder among the students of flood affected areas. All the hypotheses were supported in the present study. The findings indicate that resilience has significant negative correlation with depression, anxiety, stress and post-traumatic stress disorder. Students directly affected by the flood significantly scored low on resilience as compared to non-affected students. Students directly affected by the flood significantly scored high on depression, anxiety, stress and post-traumatic stress disorder as compared to non-affected students. Male students significantly scored high on resilience as compared to female students. Female students significantly scored high on depression, anxiety, stress and post-traumatic stress disorder as compared to male students.

REFERENCES

Agaibi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: a review of the literature. *Trauma, Violence, and Abuse, 6*, 195-216.

American Psychiatric Association (1975). Washington DC: American Psychiatric Association Publishing, Inc.

Amir, N., Foa, E. B., & Coles, M. E. (1998).Automatic activation and strategic avoidance of threat-relevant information in social phobia.*Journal of Abnormal Psychology, 107*, 285-290.

Antonovsky, A. (1979). *Heath, stress and coping: New perspectives on mental and physical well-being.* San Francisco: Jossey-Bass Publishers

Arieti, S. (1959). *American Handbook of Psychiatry.* New York.

Asarnow, J. R., Jaycox, L. H., & Thompson, M. C. (2001). Depression in youth: Psychosocial interventions. *Journal of Clinical Child Psychology, 30,* 33–47

Aslam, N. (2007). Psychological disorders and resilience among earthquake affected individuals (MPhil. Dissertation, Dr. Muhammad Ajmal, National Institute of Psychology, Quaid-e-Azam University, Islamabad, Pakistan)

Aslam, N. & Tariq, N. (2010) Trauma, depression, anxiety, and stress among individuals living in earthquake affected and un affected areas. *Pakistan Journal of psychological research.*.25(2).

Bartone, P. T. (1999). Hardiness protects against war-related stress in Army Reserve forces. *Consulting Psychology Journal: Practice and Research, 51*(2), 72-82.

Baharat, A. (2010). Psychological distress, resilience, and coping strategies among families of missing persons. (Master Dissertation, Dr. Muhammad Ajmal, National Institute of Psychology, Quaid-e-Azam University, Islamabad, Pakistan)

Beck, A. T. (1967). Depression: *Causes and treatment*. University of Pennsylvania Press.

Beck, A. T. (1983). Cognitive therapy of depression: New perspectives. In P. J. Clayton & J. E.

Beck, A. T., & Clark, D. A. (1997). An information processing model of anxiety: Automatic and strategic processes. *Behaviour Research and Therapy, 35,* 49-58.

Beck, A. T., & Emery, G. (1985). Anxiety disorders and phobias: A cognitive perspective. New York: Basic Books.

Block, J., & Kremen, A. M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70, 349–361.

Bonanno, G. A. (2005). Resilience in the face of potential trauma.*Current Directions in Psychological Science*, *14*(3), 135-138.

Bonanno, G.A. (2004) Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *American Journal of Psychology,59*, 20 – 28.

Breslau, N., Davis, G.C., Andreski, P., & Peterson, E. (1991).Traumatic events and posttraumatic stress disorder.In R.Yehuda (Ed.) *Psychological Trauma.Review,* (Vol.17).American Psychiatric Press.

Brook, F. Brook, C. A., & Whiteman, A. (1990).Risk and resilience in individuals with learning disabilities: lessons learned from the Kauai Longitudinal Study. *Learning Disabilities Research and Practice 8* (1), 28–34.

Brook, J. S., Nomuca, C., & Cohen, P. (1989). A network of influence on adolescent drug involvement: neighborhood, school, peer and family. *Genetic, Social and General Psychology Monograph, 113,* 125-143.

Carlier, I., Lamberts, R., &Gersons, B. (1997). Risk factors for posttraumatic stress symptomatology in police officers: A prospective analysis. *Journal of Nervous andMental Disease, 185*, 498-506.

Charney, D.S. (2004) psychobiological mechanisms of resilience and vulnerability: implication for successful adaptation to extreme stress. *American journal of Psychiatry,* 154, 624-629.

Clark, D. M. (1986).A cognitive approach to panic (1986).*Behavior Research and Therapy, 24,* 461–470.

Cole, D. A., Peeke, L. G., Martin, J. M., Truglio, R., &Seroczynski, A. D. (1998). A longitudinal look at the relation between depression and anxiety in children and adolescents.*Journal of Consulting and Clinical Psychology, 66,* 451–460.

Condly, S. J. (2006). Resilience in children: A review of literature with implications for education. *Urban Education, 41*(3), 21- 34.

Conger, R. D., Rueter, M. A., & Elder, G. H. (1999).Couple resilience to economic pressure.*Journal of Personality and Social Psychology, 76,* 54-71.

Connor, K. M. (2006).Assessment of resilience in the aftermath of trauma.*Journal of Clinical Psychiatry,67*, 46-49.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., &Angold, A. (2003).Prevalence and development of psychiatric disorders in childhood and adolescence.*Archives of General Psychiatry, 60,* 837–844.

Cowen, E. L. & Work, W. C. (1988).Resilient children, psychological wellness and primary prevention.*American Journal of Community Psychology, 16,* 591-607.

Davison, G. C., & Neale, J. M. (2001).*Abnormal psychology* (8th ed.). John Wiley & Sons, Inc.

Ellis, A. (1962). *Reason and emotion inpsychotherapy.* New York: Lyle Stuart.

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annual Review of Public Health, 26*(1), 399-419.

Flynn, B.W., & Nelson, M.E. (1998).Understanding the needs of children following large-scale disasters and the role of government.*Child and Adolescent Psychiatric Clinics of North America, 7*(1), 211.

Foa, E., Riggs, D., Dancu, C. & Rothbaum, B. (1993) Reliability and validity of a brief instrument for assessing post-traumatic stress disorder, *Journal of Traumatic Stress, 13, 181-191.*

Garbarino, J., &Kostelny, K. (1993).Children's response to war. In L. A. Leavitt & N. A. Fox (Eds.), *The psychological effects of war and violence on children* (pp. 23-40). Hillsdale, NJ: Lawrence Erlbaum Associates.

Garmezy, N., Masten, A. S., &Tellegen, A. (1989). The study of stress and competence in children: A building block for developmental psychopathology. *Child Development, 55,* 97-111.

Glassman, A. (1969). *Indoleamines and affective disorders.* Psychosomatic Medicine, 31, 107-120.

Goodyear, I. M., Herbert, J., &Tamplin, A. (2003).Psychoendocrine antecedents of persistent first-episode major depression in adolescents: A community-based longitudinal enquiry. *Psychological Medicine, 33*(4), 601–610.

Hammerman, S. (1962).Ego Defect and Depression. Paper presented at Philadelphia Psychoanalytic Society.

Hart, P. M., Wearing, A. J., &Headey, B. (1995). Police stress and well-being: Integrating personality, coping, and daily work experiences. *Journal of Occupational andOrganizational Psychology, 68,* 133-156.

Hoge, E. A., Austin, E. D., & Pollack, M. H. (2007). Resilience: research evidence and conceptual considerations for post-traumatic stress disorder. *Depression and Anxiety, 24,* 139-152.

Hunt, A. (1999). Anxiety and social explanation: some anxieties about anxiety. *Journal of Social History, 24,* 314-122.

Insell, T. R. (1986). *The Neurobiology of Anxiety.* New York: Plenum.

Kendall, P. C., &Hollon, s. D. (1979). Cognitive-behavioral interventions: *Theory, research, and procedures.* New York: San Francisco, London.

Kendall, P. C., &Hollon, s. D. (1979). Cognitive-behavioral interventions: *Theory, research, and procedures.* New York: San Francisco, London.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., &Walters, E. E. (2005).Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Study replication.*Archives of General Psychiatry, 62,* 593–602.

King, D. W., King, L. A., Foy, D. W., Keane, T. M., & Fairbank, J. A. (1999). Posttraumatic stress disorder in a national sample of femen and men Vietnam veterans: risk factors, war-zone stressors, and resilience-recovery variables. *Journal of Abnormal Psychology, 108,* 164-170.

Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology, 42,* 168-177.

Kuiper, N. A., Olinger, L. J., & Martin, R. A. (1988).Dysfunctional attitudes, stress, and negative emotions.*Cognitive Therapy and Research, 12,* 533-547.

Laub, J. H., & Sampson, R. J. (2003).*Shared beginnings, divergent lives: Delinquent boys to age 70.* Cambridge, MA: Harvard University press.

Lazarus, R. S., &Folkman, S. (1984). *Stress, appraisal and coping.* New York: Springer

Letzring, T. D., Block, J. & Funder, D. C. (in press). Ego-control and ego-resiliency: Generalization of self-report scales based on personality descriptions from acquaintances, clinicians, and the self. *Journal of Research in Personality.*

Lovibond, S. H. & Lovibond, P. F. (1995) Manual for the depression and anxiety stress scale. Ed. 2nd, Sydney, Psychology Foundation.

Luthar, S. S. (2006). Resilience in development: A synthesis of research across five decades. *Developmental Psychopathology: Risk, Disorder and Adaptation* 2(3), 739-795.

Maddi, S., &Khoshaba, D. (2005).*Resilience at Work: How to Succeed No Matter What Life Throws at You.* New York: Amacom.

Marten, A., 1988. Resilience in individual development: successful adaptation despite risk and adversity. *Challenge and Prospects.* Hillsdale, New Jersey, pp. 3–25.

Maslow, A.H. (1968).*Toward a Psychology of Being* (2nd ed.). John Wiley & Sons, Inc.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56,* 227-238.

McGee, R., & Stanton, W. R. (1990). Parent reports of disability among 13-year olds with DSM-III disorders. *Journal of Child psychology and Psychiatry and Allied Disciplines,* Merriam Webster's Collegiate Dictionary. (1993). (10th ed). Springfield, MA: Merriam Webster

Mogg, K., & Bradley, B. P. (2002). Selective orienting of attention to masked threat faces in social anxiety. *Behaviour Research and Therapy, 40,* 1403-1414.

Mogg, K., Bradley, B. P., Williams, R., & Mathews, A. (1993).Subliminal processing of emotional information in anxiety and depression.*Journal of Abnormal Psychology, 102,* 304-311.

Morgan, C. A. (2000). Relationships among plasma and dehydroepiandrosterone sulfate and cholesterol levels, symptoms of dissociation, and objective performance in humans exposed to acute stress. *Journal of Medicine, 61,* 819–825.

Mujeeb, A. (2009). Resilience and internalizing problems among internally displaced persons affected by armed conflict. (Master Dissertation, Dr. Muhammad Ajmal National Institute of Psychology, Quaid-e-Azam University, Islamabad, Pakistan)

Nemeroff, C. B. (1998). The neurobiology of depression.*Scientific American, 278*(6), 42–49.

Piaget, J. (1977). *The development of thought: Equilibration of cognitive structures.* New York: Viking.

Pole, N., Best, S. R., Weiss, D. S., Metzler, T., Liberman, A. M., Fagan, J. (2005).Effects of gender and ethnicity on duty-related posttraumatic stress symptoms among urban police officers.*Journal of Nervous andMental Disease*, *189*, 442-448.

Polk, L. V. (1997). Toward middle range theory of resilience.*Advances in Nursing Science, 19*(3), 1-13.

Rachman, S. (2002).A cognitive theory of compulsive checking.*Behaviour Research and Therapy, 40,* 624-639.

Rice, P. L. (1992*). Stress and Health* (2nd ed.). Pacific Grove, CA: brooks/ Cole Publishing company

Roman J. A., & Sharma, M. (2000).*Practical stress management* (2nded.). Needham Heights, MS: Allyn& Bacon

Rothbaum, B.O., Foa, E.B., Riggs, D.S., Murdock, T., & Walsh, W. (1992).A prospective examination of post-traumatic stress disorder in rape victims.*Journal of Traumatic Stress, 5*(3), 455-476.

Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorders. *British Journal of Psychiatry, 147*, 598-611.

Rutter, M., 2000. Resilience in the face of adversity: protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry 147*, 598–611.

Salcioglu, E., Basoglu, M., &Livanou, M. (2003).Long-term psychological outcome for non-treatment-seeking earthquake survivors in turkey.*Journal of Nervous & Mental Disease,191*(3), 154-160.

Saleem, N. (2004). *Relationship of Stress and Copin among University Stuudents.*(Unpublished master's thesis). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

Saleem, N. (2004). *Relationship of Stress and Copin among University Stuudents.*(Unpublished master's thesis). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

Saler, S., & Skolnick, L. N. (1992). Childhood parental death and depression in adulthood: roles of surviving parent and family environment. *American journal of orthopsychiatry, 62* (44), 504-516.

Schafer, W. (1992).*Stress management for wellness* (2nd ed.) Austin: Harcourt Brace publishers

Schildkraut, J. (1965). The catecholamine hypothesis of affective disorders. *American Journal of Psychiatry, 122,* 509-522.

Seaward, B. L. (2002).*Managing stress: Principles and strategies for health and wellbeing* (3rd ed.) New York: Jones and Bartlett Publishers

Selye, H. (1976). Effects of severely mentally retarded children family integration.*Monograph for the society for Research Child Development, 24,* 71-7

Southwick, S. M., Vythilingam, M., &Charney, D. S. (2005). The psychobiology of depression and resilience to stress: implications for prevention and treatment. *Annual Review of Clinical Psychology, 1,* 255–259.

Theokas, C. (2005). Conceptualizing and modeling individual and ecological asset components of thriving in early adolescence.*Journal of Early Adolescence*, *25*(1), 113-143.

Turnbull, A. P., Summers, J., &Brotherson, M. J. (1987). Family life cycle.In J. J, Gallagh& P. M, Vietze (Eds.), *Families of handicapped person* (pp 45-64).Baltimorte, MD: Paul H. Brooks Publishing Co., Inc

Vaillant, G.E., (2003). Mental health.*American Journal of Psychiatry 160,* 1373–1384.

Vasudevan, S. (2006).*Different Theories of Anxiety.*Cambridge University Press.

Walsh, F. (2002). A family resilience framework: innovative practice applications. *Family Relations*, *51*, 130-139.

Walsh, F. (2007). Traumatic loss and major disasters: Strengthening family and community resilience. *Family Process*, *46*(2), 207-227.

Wells, A. (1995). Meta-cognition and worry: A cognitive model of generalized anxiety disorder. *Behavioural and Cognitive Psychotherapy, 23,* 301-320.

Yerkes, R. M., & Dodson, J. D. (1908).The Relation of strength of stimulus to rapidity of habit-formation.*Journal of comparative Neurology and Psychology, 18,* 459-482.Retrieved from http://www.psychexchange.co.uk/resource/1536/

ANNEXURE I

DEPARTMENT OF PSYCHOLOGY, INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD

Informed Consent Form

I am student of MS Psychology and conducting research to explore the relationship between resilience and psychological stressors among students of flood effected area. Your views will help us in understanding the consequences of the resilience and psychological stressors among students of flood effected area. All in-formations will be used purely for purpose of the scientific research and your support will help us to understand the phenomenon.

We assure you that information given by you will be treated as strictly confidential and will be used only for research purpose. Your help/ support and honest participation will highly be appreciated.

I am willing to participate in the study.

Signature:

_____

Thank you for your participation in the research.

ANNEXURE II

EGO RESILIENCY SCALE

(Block & Kremen, 1996)

Statements	Does not apply at all	Applies slightly	Applies somewhat	Applies very
1. I am generous with my friends.				
2. I quickly get over and recover from being startled.				
3. I enjoy dealing with new and unusual situations.				
4. I usually succeed in making a favorable impression on people.				
5. I enjoy trying new foods I have never tasted before.				
6. I am regarded as a very energetic person.				
7. I like to take different paths to familiar places.				
8. I am more curious than most people.				
9. Most of the people I meet are likable.				
10. I usually think carefully about something before acting.				
11. I like to do new and different things.				
12. My daily life is full of things that keep me interested.				
13. I would be willing to describe myself as a pretty "strong" personality.				
14. I get over my anger at someone reasonably quickly.				

ANNEXURE III

DEPRESSION ANXIETY AND STRESS SCALE

(Lovibond & Lovibond, 1995)

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I found it hard to wind down					
2. I was aware of dryness of my mouth					
3. I couldn't seem to experience any positive feeling at all					
4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)					
5. I found it difficult to work up the initiative to do things					
6. I tended to over-react to situations					
7. I experienced trembling (eg, in the hands)					
8. I felt that I was using a lot of nervous energy.					
9. I was worried about situations in which I might panic and make a fool of myself.					
10. I felt that I had nothing to look forward.					
11. I found myself getting agitated.					
12. I found it difficult to relax.					
13. I felt down-hearted and blue myself as a pretty "strong" personality.					
14. I was intolerant of anything that kept me from getting on with what I was doing.					
15. I felt I was close to panic.					
16. I was unable to become enthusiastic about anything.					
17. I felt I wasn't worth much as a person.					

18. I felt that I was rather touchy.					
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).					
20. I felt scared without any good reason.					
21. I felt that life was meaningless.					

ANNEXURE IV

PTSD SYMPTOM SCALE INTERVIEW (PSSI)

(Foa, Riggs, Dancu & Rothbaum, 1993)

Index trauma (describe): _____

_____

_____

Ask, "in the past two weeks" (if < 2 weeks since trauma, ask "Since the [trauma]"). Probe all positive responses (e.g., "How often has this been happening?")

0	1	2	3
Not at all	Once per week or less/a little	2 to 4 times per week/somewhat	5 or more times per week/very much

RE-EXPERIENCING (need one): [probe, then quantify]

1. Have you had recurrent or intrusive distressing thoughts or recollections about the trauma?

2. Have you been having recurrent bad dreams or nightmares about the trauma?

3. Have you had the experience of suddenly reliving the trauma, flashbacks of it, acting or feeling as if it were re-occurring?

4. Have you been intensely EMOTIONALLY upset when reminded of the trauma (includes anniversary reactions)?

5. Have you been having intense PHYSICAL reactions (e.g., sweaty, heart palpitations) when reminded of the trauma?

AVOIDANCE (Need three): [probe, then qualify]

6. Have you persistently been making efforts to avoid thoughts or feelings associated with the trauma?

7. Have you persistently been making efforts to avoid activities, situations, or places that remind you of the trauma?

8. Are there any important aspects about the trauma that you still cannot recall?

9. Have you markedly lost interest in free time activities since the trauma?

10. Have you felt detached or cut off from others around you since the trauma?

11. Have you felt that your ability to experience the whole range of emotions is impaired (e.g., unable to have loving feelings)?

12. Have you felt that any future plans or hopes have changed because of the assault (e.g., no career, marriage, children, or long life)?

INCREASED AROUSAL (need two): [probe then quantify]

13. Have you had persistent difficulty falling or staying asleep?

14. Have you been continuously irritable or have outbursts of anger?

15. Have you had persistent difficulty concentrating?

16. Are you overly alert (e.g., check to see who is around you, etc.) since the trauma?

17. Have you been jumpier, more easily startled, since the trauma?