

POST TRAUMATIC STRESS DISORDER, DISSOCIATIVE SYMPTOMS AND COMORBID
SYMPTOMS OF DEPRESSION AND ANXIETY AS A CONSEQUENCE OF TRAUMATIC
EVENTS



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2016



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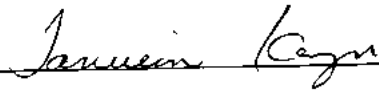
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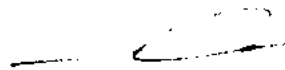
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It is certified that the MS dissertation entitled "Post traumatic stress disorder, dissociative symptoms and comorbid symptoms of depression and anxiety as a consequence of traumatic events" prepared by Mr. Saadat Ullah has been approved for submission to International Islamic University Islamabad, Pakistan.

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DEDICATION

This thesis is dedicated to my family

For their endless love, support and encouragement

Abstract

Background: The unwavering flow in violence in several parts of the world in general and the current situation in Pakistan in particular has overwhelmed lives of the people. Subsequently in response to traumatic events Post-traumatic stress disorder, dissociative symptoms, depression and anxiety are prevailing in our society. So the present study aims to post traumatic stress disorder, dissociative symptoms and comorbid symptoms of depression and anxiety as a consequence of traumatic events.

Method: In the present study self-reported questionnaires were used for the collection of data. A total of 303 participants (male 158 and female 145) of colleges and universities students of Khyber Pakhtunkhwa with the age range of 18-33 years were collected through convenient sampling.

Results: Our findings indicated a significant increase in post-traumatic stress, dissociative symptoms and comorbid symptoms of depression and anxiety in response to the frequent traumatic exposures. Alongside, results highlighted association between traumatic exposure, post-traumatic stress and dissociative symptoms. Similarly, a significant positive correlation were found among PTSD, dissociative symptoms, comorbid depression and anxiety symptoms ($p < .01$).

Conclusion: Our results indicated the relationship between traumatic exposures and mental health problems. This study suggests a great concern about mental health problems and related comorbidities in response to traumatic events in Pakistan in addition to sectarianism; terrorist attacks, target killing, earthquake, and flood induced psychological problems in Pakistan.

Key words: Traumatic events, PTSD, Dissociation, Comorbidity, Pakistan.

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Abbreviations

APA	American Psychological Association
APS	Army Public School
AWKUM	Abdul Wali Khan University Mardan
BKUC	Bacha Khan University Charsadda
CBT	Cognitive Behavioral Therapy
CIDI	Composite International Diagnostic Interview
CPT	Cognitive Processing Therapy
DASS	Depression Anxiety Stress Scale
DES	Dissociative Experiences Scale
DSM	Diagnostic and Statistical Manual of Mental disorders
IIUI	International Islamic University Islamabad
KUST	Kohat University of Science and Technology
LEC	Life Events Checklist
NET	Narrative Exposure Therapy
NGO	Non-Government Organization
PCL	Post-traumatic stress disorder Checklist
PFA	Latent Profile Analysis
PTSD	Post-Traumatic Stress Disorder
SPSS	Statistical Package for the Social Sciences
TV	Television
UOP	University of Peshawar
WTC	World Trade Center

Introduction

Post-traumatic stress disorder, Dissociative symptoms and comorbid symptoms of Depression and Anxiety as a consequence of Traumatic events

The Psychological ailments have been investigated in the people of Pakistan due to the following stressors like bombing, mass shooting, criminal acts, floods and earthquakes (Khokhar, 2013). Despite this, some factors such as, sectarianism, terrorist attacks, target killing, earthquake, and flood are instrumental to developing of Post-traumatic stress disorder (PTSD) in Pakistan. 21st century is the century of violence, massacres, war, crime, discrimination, racism and prejudice for most parts of the world (Khalily, Fooley, Hussain, & Bano, 2011). Pakistan is a developing country facing mental health problems in the last few decades at an extraordinary level following the current violent environment and disruptive social structure of Pakistani society. Nonetheless, exposure to traumatic events in a great amount is linked to the greater prevalence of psychological problems. Depression and anxiety were the most common disorders followed by post-traumatic stress disorder. The present situation of violence in Pakistan is not a common phenomenon and a remarkable increase was observed in the last five years (Khalily, 2011). The news and magazines of Pakistan highlighted, the annual death rate in this country due to terrorism indicated 3315 individuals in the year 2009 while, gradually decreased to 2314 individuals in the year 2014. Beside this, Natural disasters became the major reason of displacement of 771000 individuals while 1800000 individuals became internally displaced in response to man-made disasters. Nevertheless, in the year of 2008, a number of 889 individuals found killed and 2072 injured in 59 inhuman suicide bomb attacks. The disasters resided country, following the same year, 34 drone attacks killed rebels and many civilians in Pakistan (Hussain, 2015). Moreover, on 16th of December 2014, the massacre of mass shooting at Army Public

School (APS) in Peshawar executed more than 140 individuals including 132 children. Such an event leads to long lasting psychological problems in Peshawar and across the nation (Majeed, 2014).

Despite various scientific, organizational improvements and globalization the warfare, racial viciousness, criminality, massacres, bigotry, inequality and intolerance endures mostly nearly everywhere in the world. Though, the determined surge in violence in several parts of the world following 9/11 and specifically current situations of Pakistan has overwhelmed lives of the people. Suicide bombing, fire and explosions even safety parameters such as long time boundedness by security persons have produced damage (Khalily, 2011).

A traumatic experience is a case that results in bodily, mental or psychological and emotional impairment. Mostly, the individuals are going through disturbing, unsafe and nervous events or situations. In several cases, they do not know how they can respond, or they deny the influence such as experienced earlier. Social support and time will be essential to redeem psychological and emotional balance. Traumatic experiences include: death of (loved one's), physical harm, injury, war, divorce, disease, natural calamity (such as hurricane, flood, tornado, and fire), manmade disaster, internal displacement in the country, negligence from the parents, watching someone's death, traumatic exposures such as home abuse, rape, jailed (Khalily, 2011). It is evident that chronic violence produces prolong effects than natural tragedy or miss happenings (Schenlger, Caddell, Ebert, Jordan, Rourke, Wilson, & Kulka, 2002). Still, a group of researchers approved the psychological consequences of the populations resistant generally, not a psychological illness (Galea, Ahern, Resnick, Kilpatrick, Bucuvalas, Gold, & Vlahov, 2002). Nonetheless, maximum traumatic exposure (Galea, Vlahov, Resnick, Ahern, Susser, Gold, &

Kilpatrick, 2003), a spontaneous violence and life threat has a destructive outcomes to the psychological wellbeing of some people generally and specially in Pakistani community in a large amount (Khalily, Gul, Mushtaq, & Jahangir, 2012).

Alongside, another study by Myers and Wee highlighted that Natural disasters negatively affected the lives of various people around the world. The affected individuals faced numerous calamities in the form of mortality, economic loss, physical injuries and psychological problems. Post-traumatic stress disorder (PTSD) is the most general psychological problem as a response to traumatic events. PTSD (Clark, 1997) 60.7% of men and 51.2% of women have experienced minimum one traumatic event in the lifetime. The effects of disasters on human life is immeasurable and had affected humans heavily. All over the world, 128000 people were found dead every year due to disasters and 85% of the 3 billion population were found affected due to disasters in the world from 1967 to 1991, in Asia (Myers & Wee, 2005). Walsh (1994) stated that "Post traumatic stress disorder (PTSD) is usually provoked by a traumatic event that is out of range of usual human experiences such as bereavement, chronic illness, business losses or marital conflicts." PTSD is a result of direct or indirect exposure to warfare, physical violence, and natural calamities such as, hurricane, flood and earthquake (Smith, 2003). A flood is an intense natural disaster and it "can result in direct economic and property loss, physical injuries, death and psychological injuries" (Huang, Tan, Liu, Feng, & Chen, 2010). Another study was conducted on school students resulted in 66.7% PTSD following the earthquake in Bam, Iran (Ziaddini, Nakhaee, & Behzadi, 2009). Many studies have calculated that intense or high frequency of exposure to traumatic events maximize the PTSD rate (Breslau, Koenen, Luo, Agnew-Blais, Swanson, Houts, & Moffitt, 2014; Cao, McFarlane, & Klimidis, 2003; Frans, Rimmö, Åberg, & Fredrikson, 2005; Neuner, Schauer, Karunakara, Klaschik, Robert, & Elbert,

2004; Norris, Friedman, Watson, Byrne, Diaz, & Kaniasty, 2002). It is also evident that kind of event and perception of the person about the event matters whether the problem develops or nothing (Creamer, McFarlane, & Burgess, 2005; Frans et al., 2005; Norris et al., 2002).

Beside, all this, some studies have found that social support works as a protecting agent against psychological problems in response to traumatic events but this protection varies in case of gender in various studies (Ahern, Galea, Fernandez, Koci, Waldman, & Vlahov, 2004; Farhood, & Noureddine, 2003; Koenen, Harley, Lyons, Wolfe, Simpson, Goldberg, & Tsuang, 2002; Koenen, Stellman, Stellman, & Sommer Jr, 2003; Norris et al., 2002). Most of the studies indicated that traumatic events exaggerate mental health problems but the most common and associated disorder among these problems is PTSD (Simeon, Greenberg, Nelson, Schmeidler, & Hollander, 2005).

Post-Traumatic Stress Disorder

PTSD is a psychological disorder that one should develop following direct or indirect exposure, such as, physical injury, abuse, threatening situation or sexual (APA, 2013). To explore the psychological responses of the recovery workers in the earthquake of 2005 in the northern area of Pakistan. More than 40% individuals reported clinically significant levels of PTSD, high level of emotional problems and round about 20% produced anxiety and depression significantly (Ehring, Razik, & Emmelkamp, 2011). Hence, individuals who were not present at the time when the event occurred reported less post-traumatic stress disorder symptoms (Naeem, Ayub, Masood, Gul, Khalid, Farrukh, & Chaudhry, 2011).

In line with the above literature, a study was conducted to find out the outcomes of real life trauma events and watching violence on television (TV), a survey was conducted to collect data from the population of Islamabad in 2009. Real life trauma experiences during last year were 34.8%. 45.3% Individuals who experienced real life trauma and watched violence on TV produced PTSD symptoms, 20.8% produced PTSD symptoms only due to watching violence on TV. Analysis in that group also found depression and disability and urged to live in combine family system (Maqbool, 2012). Moreover, the death of the important one's due to traumatic events destroys the interpersonal relations (Joseph, Willian & Yule, 1995). The joint family performs as a blocking tool against psychological symptoms in Pakistani culture and an important base of support (Naeem et al., 2011). Meanwhile, society may become united and consistent as they share similar feelings of context. The worse event may produce opportunity of building newly relationships in response to cope with the event. Pakistani society addresses another concept of resilience, acts as a protection techniques and they need such strengths for the prevention of psychological disorders and mental health advancement (Khokhar, 2013). The most general among trauma is the damage or loss of property 65%, death 9% and other multiple losses (Livanou, Kasvikis, Başoğlu, Mytskidou, Sotiropoulou, Spanea, & Voutsas, 2005; Van Griensven, Chakkraband, Thienkrua, Pengjunter, Cardozo, Tantipiwatanaskul, & Sabin, 2006).

Although, several studies have shown significant levels of psychological problems associated with multiple traumatic experiences or cumulative traumatic exposure (Green, Goodman, Krupnick, Corcoran, Petty, Stockton, & Stern, 2000; Mollica, McInnes, Poole, & Tor, 1998). In conflict ridden and post conflict communities PTSD rate of prevalence in the civilians will be higher (Cardozo, Bilukha, Gotway, Wolfe, Gerber, & Anderson, 2005; Eytan, Gex-Fabry, Toscani, Deroo, Loutan, & Bovier, 2004).

Trauma is the term derivative of the word "wound" from the Greek language, stories of trauma and its severe results are evident from the writings in ancient times. First of all at the end of 19th century Sigmund Freud and Pierre Janet provided the manuscript on the classifications and clinical inferences of traumatic events. In the middle of 1980s, they wrote alike theories of the hysteric etiology, namely exposure to psychological trauma, mainly rape trauma (Herman, 1992) and as time passed an excess of study is existing and ensure PTSD as a consequence of trauma (Khalily, 2011).

A distressing progress occurrence of psychological problems following a persistent tendency of political chaos, violence and recurrent variations in the social relations in numerous countries all over the world (Saxena, Sharan, Garrido, & Saraceno, 2006) resulting in variety of psychiatric diseases, like drugs and alcohol misuse, depression, bipolar disorders, psychotic disorders and PTSD (Khalily, 2011).

PTSD diagnostic criteria contains a past history of traumatic experiences that lights particular conditions and symptoms. One must contain symptoms from each 4 clusters of symptoms: disturbance, escaping, negative changes in thoughts and mood, and variations in stimulation and response. Criterion number sixth elaborates the symptoms duration; functioning assessment is on seventh; and, last criterion is for the clarification that the symptoms are not due to a medical condition or substance use (APA, 2013). However in substitution to PTSD other psychological disorders, dissociative symptoms have been identified also as a result of traumatic exposure. The subtype inclusion recognizes alterations in psychological and neurological in the people (Felmingham, Kemp, Williams, Falconer, Olivieri, Peduto, & Bryant, 2008) and needs appropriate clinical attentions. Almost 30% female participants and 15% male participants

allocated to the dissociative class (depersonalization, derealization symptoms) (Lanius, Brand, Vermetten, Frewen, & Spiegel, 2012).

Another study by Stein and his colleagues found dissociative symptoms in 14.4% of the sample in 1 year DSM-IV/Composite International Diagnostic Interview (CIDI) for PTSD and no difference was found on the basis of low/middle and high income states. Dissociative symptoms in PTSD were linked with high sums of re-experiencing symptoms and total of these symptom calculations with male, PTSD onset in childhood, great exposure to previous (PTSD onset) traumatic happenings and difficulties in childhood, prior separation anxiety and specific phobia history, intense character impairment, and suicidal tendencies (Stein, Koenen, Friedman, Hill, McLaughlin, Petukhova, & Bunting, 2013). Moreover, participants presented a large figure of comorbidity of Axis I disorders and extra major account of abuse and negligence in early age in the dissociative subgroup (Steuwe, Lanius, & Frewen, 2012). Consequent use of Latent Profile Analysis (PFA) of indexing items of Dissociative and PTSD symptoms severity (as distinct by derealization, depersonalization and reduced awareness), and presented that around 12% of trauma experienced persons with PTSD recorded exclusively high on depersonalization and derealization symptoms. A dissociative group were found in the participants different from the participants with severe PTSD and no dissociative symptoms and mild PTSD with no dissociation. These individuals also scored high on the clinician-administered flashbacks and higher number of sexual assault in adulthood and childhood in contrast to remaining groups (Wolf, Lunney, Miller, Resick, Friedman, & Schnurr, 2012).

According to Ladwig "victims of a psychotraumatic event may protect themselves against the overwhelming exposure of threatening stimuli by inhibiting information processing"

(Ladwig, Marten-Mittag, Deisenhofer, Hofmann, Schapperer, Weyerbrock, & Schmitt, 2002). Moreover, cognitive investigation of dissociation is needed and the must consist of the patient with dissociation. This kind of study of study will not only contribute to the literature, but ultimately adds to the treatment of dissociation (Giesbrech, Lynn, Lilienfeld, & Merckelbach, 2008).

Dissociative symptoms are significant psychological phenomena that should become a goal of treatment or should inhibit with PTSD interventions. Highly dissociative individuals might have problem in recovery in trauma-focused therapy if dissociative symptoms interfere during the process of memories connected to trauma and linked cognitions and emotions. Until now, no research had exactly evolved if the dissociative subtype, as defined by DSM-5, influence PTSD intervention outcomes or development of the disorder. Some researches identifying dissociation as an inhibitor of PTSD treatment. Recently two studies have provided delicate variances in treatment outcomes of PTSD among dissociative persons, however both studies has failed to investigate the time at which dissociation interferes with the treatment of PTSD. Moreover, dissociation assessed after treatment points out that it interferes with PTSD severity. Individuals with higher post treatment dissociation coped efficiently with the help of skills training treatment type (Cloitre, Petkova, & Wang, 2012). Another study found no dissociation with respect to time in PTSD treatment response but those individuals with high level of dissociative symptoms, carrying depersonalization specially, proved a quick reduction in symptoms of PTSD when they were treated with Cognitive Processing Therapy (CPT), (Resick, Suvak, Johnides, Mitchell, & Iverson, 2012).

Dissociation is the term describing various phenomena since the last decades of the 19th century (Dalenberg, & Paulson, 2009; Holmes, Brown, Mansell, Fearon, Hunter, Frasilho, & Oakley, 2005). Pierre Janet, a French psychiatrist and philosopher systematically observed and studied and defined the term for the first time (Putnam, 1989; Van der Kolk, Brown, & Van der Hart, 1989). Janet studied patients with hysteria using hypnotic techniques, which was observed as a result of traumatic background (Ellenberger, 2008; Putnam, 1989). Specially, Pierre believed traumatic experiences result in dissociation (van der Hart et al., 1989) and a number of individuals were more prone to dissociative symptoms than else (Ray, 1996). Though Janet assumed that dissociative symptoms were rare in normal individuals, later on he stated that dissociative symptoms are present in most of the people to some extent (Putnam, 1989). Hence, for several years' research have identified the relationship between PTSD and dissociative symptoms and documented dissociative symptoms both as nonpathological and pathological. Some controversies are still present in the construct studies.

Traumatic events and dissociative symptoms

Traumatic events and dissociative symptoms seem basically related. Two key theories support this relationship. A theory proposed that some individuals are capable to dissociate and this capability resists against the effects of bad life events (Van Dyck, & Spinhoven, 1994).

In this case, dissociative symptoms will be a coping strategy with adverse side effects, because diverse traumatic events like, unwanted sensory, motor and intensely effectively induced events have a tendency to disrupt consciousness. Disruptions lead to primary or higher complex emotional dissociative symptoms of the person. The emotional aspect reveals in dissociations like, nightmares, dissociative flashbacks and re-experiences of traumatic events (Nijenhuis, Van

der Hart, & Steele, 2002). Another study proposes lack of assimilation, signals directed towards traumatic experiences will provoke various mental problems forms for various dissociative patterns of personality (Reinders, Nijenhuis, Paans, Korf, Willemsen, & Den Boer, 2003). Siddique and her colleagues conducted a study to find out the comorbidity among the patients with dissociative disorders. 100 patients with dissociative disorder were included, 51% of the participants showed comorbid results. 11.76% depressive and mixed anxiety symptoms, 19.61% moderate level depression, 37.25% mild level depression and 31.37% of the participants showed generalized anxiety disorder. Furthermore, research reported that social support was existing to 85% of the participants (Siddique, Docar, Haider, & Afzal, 2015). Results have shown that maximum traumatic experiences ends in various negative psychological outcomes counting PTSD. Dissociative symptoms, which contains disturbance in memory, perception and identity, is an element of PTSD, specifically among those with the history of childhood traumatic experiences (Powers, Cross, Fani, & Bradley, 2015)

Dissociative symptoms

Researches have repeatedly identified the ambiguous definition of dissociation, accredited in respect to the varied experiences comprised in the concept (Dalenberg, & Paulson, 2009; Eisen, & Carlson, 1998; Holmes et al., 2005; Waller, Putnam, & Carlson, 1996). General definition of dissociation is “loss of information or control over mental processes that, under normal circumstances, are available to conscious awareness, self-attribution, or control” (Cardeña, & Carlson, 2011). To end this vagueness of the term, the study distinguished dissociation into two classes “pathological” and “nonpathological” dissociation (Dalenberg, & Paulson, 2009; Waller et al., 1996). The criteria varies throughout the literature when it

differentiates between pathological and nonpathological dissociation. but the main categorization is on the basis of “Absorption”, “depersonalization/derealization” and amnesia symptoms (Bernstein, & Putnam, 1986; Dalenberg, & Paulson, 2009).

More than a century, dissociation has been documented as a consequence of trauma (Carlson, Dalenberg, & McDade-Montez, 2012; Ellenberger, 2008; Van der Kolk et al., 1989), and more updated study has resulted that experiences of dissociation are obviously followed by a traumatic history (Briere, 2006; Carlson et al., 2012; Chu & Dill, 1990; Dalenberg, Brand, Gleaves, Dorahy, Loewenstein, Cardena, & Spiegel, 2012; Dalenberg, & Palesh, 2004; Foote, Smolin, Kaplan, Legatt, & Lipschitz, 2006; Irwin, 1999; Thomson, Keehn, & Gumpel, 2009). Specifically, physical and sexual history of abuse leads to dissociative symptoms (Boysan, Goldsmith, Cavuş, Kayri, & Keskin, 2009; Foote et al., 2006). It is remarkable that many people with a history of trauma did not produce significant dissociation (Briere, 2006). In a University, clinical and community sample of 1326 individuals Briere (2006) observed the relationship between trauma and dissociation where dissociative symptoms of clinical significance were found in a high prediction of traumatic history.

Beside, dissociative and PTSD symptoms, comorbid symptoms of depression and anxiety were also found including emotional problems in Pakistan. A considerable number of individuals reported clinically significant emotional problems, PTSD symptoms (42.6%), depressive symptoms and anxiety symptoms (20%) after 2 years of the 2005 earthquake (Ehring, Razik, & Emmelkamp, 2011). Mostly, research studies worked on psychological problems in the west. There is lack of research on the problems such as PTSD, depression and anxiety. A study, concluded that due to terrorism in Pakistan, individuals experienced clinically relevant symptoms

were 15% and symptoms of depression and anxiety were 11-16% (Razik, Ehring, & Emmelkamp, 2013). Many researches, documented that traumatic experiences result in potential PTSD and related psychological problems everywhere in the world including Pakistani population, produced heightened amount of PTSD symptoms along with depression, anxiety and stress (Khalily et al., 2012). Likewise, symptoms of comorbid depression and anxiety along with PTSD and dissociative symptoms increased with the frequent 9/11 experiences, and the highest level of prevalence was (25.3%). Anywhere, if there was a social support an increase was found as no comorbidity (38.8%) and one (24%) of them with social support scored the most prevalence of PTSD and depression comorbidity. The history of 9/11 trauma was highly correlated with comorbidity prevalence of PTSD and depression. Results showed that among enrolled persons experienced 1 life event of trauma following 9/11 was (11.3% or >1 (19.7%). In recovery and rescue workers comorbidity of PTSD and depression were higher (Caramanica, Brackbill, Liao, & Stellman, 2014). In Iran-Iraq war (1980-1988), mortality and morbidity were measured as a result of chemical weaponries. In a cross-sectional study in July 2004, civilians were included in the study to assess long-lasting psychological influence of chemical weaponry and warfare in three towns in the northwest area of Iran: Oshnaviyeh (low threshold conventional war), Rabat (high threshold conventional war), and Sardasht (both high threshold conventional war and chemical weaponries). Mean age of respondents were 45 years. Among respondents experienced both high threshold war and chemical weaponries, lifetime PTSD rate of prevalence was 59%, present PTSD was 33%, major symptoms of anxiety were 65% and severe symptoms of depression were 41% (Hashemian, Khoshnood, Desai, Falahati, Kasl, & Southwick, 2006). Exposure for a long period of time in the war zone created PTSD in a combination with other

psychological disorders (Britvić, Antičević, Kaliterna, Lušić, Beg, Brajević-Gizdić, Igna, & Pivac, 2015).

Moreover, in 2008-2009 conflict, young Israeli civilians were included in a longitudinal 3-wave) study to assess the psychological consequences. PTSD, major depression, generalized anxiety were the results at the time of war, two months after war and 4 months after war (Neria, Besser, Kiper, & Westphal, 2010).

PTSD, Depression and Anxiety

In most cases PTSD is comorbid with other psychological constructs such as, depression and generalized anxiety (Gadermann, Alonso, Vilagut, Zaslavsky, & Kessler, 2012).

Traumatized individuals with comorbid depression and PTSD were associated with heightened functional deficiency, poor life quality, reduced satisfaction of life, severity of greater symptom and impairment related to only one condition (Ikin, Creamer, Sim, & McKenzie, 2010). Under the title of characteristics the disorder co-exist with depression, anxiety, dissociation and personality disorders (Frans, 2003; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995).

In a research, 4 to 6 years after 9/11 of firefighters, exposed to World Trade Center (WTC) calamity, PTSD and depression co-occurrence were found in above 70% cases (Chiu et al., 2011). After 5 years of 9/11, 4.7% recovery and rescue workers excluding firefighters of WTC reported possible PTSD with panic or depression symptoms, 1.7% presented possible PTSD with both panic and depression symptoms (Stellman, Smith, Katz, Sharma, Charney, Herbert, & Harrison, 2008); in the similar longitudinal research of 9/11, 5.1% recovery and rescue persons presented both PTSD and depression symptoms after 9 years (Wisnivesky,

symptoms and about 20% showed clinically significant anxiety and depression (Ehring et al., 2011).

The traumatic situation in the Province of Khyber Pakhtunkhwa, Pakistan and particularly in Peshawar is unprecedented. Consequently a severe psychological trauma in the survivors is inevitable. It is also evident from the previous researches that emotional and psychological reactions to such tragedies are unavoidable. However, the current violent situation in Pakistani society is not a simple phenomenon. The current study will examine the prevalence, comorbidity and symptoms of the disorders mentioned in the topic.

Rationale of the study

A great deal of individuals is experiencing traumatic events in Pakistan for the last few decades, either in the form of direct exposure or indirect exposure as a consequence of terrorism, suicide bombing, target killing, shooting. Subsequently, their worse Psychological affects individuals in particular and society at large. However, there is a dearth of research on such problems in Pakistan to have a profound understanding of this problem. There are many studies where they explore the prevalence of PTSD in the trauma survivors, however, PTSD and its association with dissociative symptoms needs to be explored. So this study was carried out to investigate post-traumatic stress disorder, dissociative symptoms and comorbid symptoms of depression and anxiety as a consequence of traumatic events.

The Prevalence of the symptoms were found at a great level specifically, dissociative symptoms were found in the students due to traumatic events in line with PTSD symptoms

which indicates the dissociative subtype of PTSD. Moreover, depression and anxiety symptoms were also found, and identified as comorbid symptoms with PTSD.

In this study, the dissociative and comorbidity symptoms were greater than the earlier studies in Pakistan. These symptoms might play a potential blocking role in the personality development, grooming, cognitive functioning and academic performance/career of the students. These mental health issues need the attention of Government authorities and Non-Government Organizations (NGO) to start projects in the educational institutes and overcome these problems. We assume that this study will help mental health experts in the accurate psychological assessment and treatment interventions. Another implication of this study is, mental health awareness programs at college/University and community level are needed.

Objectives

1. To determine the relationship between traumatic events and dissociative symptoms.
2. To assess PTSD as a result of traumatic exposure.
3. To investigate the PTSD and comorbid symptoms of depression and anxiety.

Hypotheses

1. Traumatized individuals will produce dissociative symptoms along with comorbid depression and anxiety.
2. There is a relationship between trauma exposure and dissociative symptoms.
3. Individuals with frequent traumatic experiences report PTSD, dissociative symptoms and co morbid symptoms of depression and anxiety.

Method

Design

The study design was Self-report (Critchfield, Tucker, & Vuchinich, 1998) questionnaires (Gault, 1907; Society, 1839) method. These questionnaires : 1) Life Events Checklist-5 (LEC-5), 2) Post traumatic stress disorder Checklist-5 (PCL-5), 3) Dissociative Experiences Scale (DES) and 4) Depression Anxiety Stress Scale (DASS) were used to find out the symptoms of PTSD, dissociation and comorbid symptoms of depression and anxiety as well.

The population of the study was university college students above age 18 years. In this study the sample was drawn out from the University of Swat (UOS), Abdul Wali Khan University Mardan (AWKUM), Kohat University of Science and Technology (KUST), Bacha Khan University Charsadda (BKUC), University of Peshawar (UOP), Islamia College University Peshawar, Jehanzeb College Swat, Islamia College Peshawar and Government College Swabi.

Participants

A sample of 303 participants 158 male (52%) and 145 female (48%) was drawn out from different Colleges and Universities of Khyber Pakhtunkhwa. Sample was collected through convenient (Polit & Beck, 2013) sampling method. Age range of the sample was 18-33 years.

Inclusion criteria

1. University and college students of Khyber Pakhtunkhwa.
2. Students above age of 18 years.

Exclusion criteria

1. Students with drug usage were excluded.
2. Students below age of 18 years were excluded.
3. Participants who left the questionnaires partially unfilled were excluded from the study.

Instruments

The following four self-report questionnaires were administered:

Life Events Checklist (LEC-5): The LEC-5 is a 17-item self-report measure designed to screen for potentially traumatic events in a respondent's lifetime, developed by Weathers and his colleagues (2013). The checklist consists of the names of traumatic events, needs a response on a 6-point scale (happened to me, witnessed it, learned about it, part of my job, not sure and doesn't apply). The mean kappa for all items of the previous version is .61, and the retest correlation is $r = .82$, $p < .001$. The largest correlation coefficients were yielded by the LEC's associations with the PCL (Gray, 2004). There are three versions of the LEC-5. The standard self-report version (Urdu) is used to screen for potentially traumatic events.

Post-traumatic stress disorder checklist-Civilian version (PCL-5): It is a 20-item self-report checklist that assesses the symptoms of PTSD specifically designed for adults. A 5-point

scale (ranging from 0= Not at all, to 4 = extremely). Urdu version of the PCL-5 was used to assess PTSD symptoms. The internal consistency for the PCL previous version (Urdu) total scores and for each of the three sub scores was measured by Cronbach alpha using the total sample ($n = 144$). Alpha Reliability Coefficient of PCL-5 is .86 for sub scales it has been, Re-experiencing, .80, for Avoidance, .76, for Hyper-arousal. .80. Test retest Reliability with two week's interval is .88 (Mushtaq, & Rehman, 2005). Possible score range is 0-80, and proposed cut off score is 38.

Depression Anxiety Stress Scale (DASS-42): DASS was translated to Urdu by (Zafar & Khalily) and originated by Lovibond in 1995. A 42 items Likert-type self-administered scale. Scoring: Responses are made on a 4-point severity/frequency scales to rate the extent to which the respondents have experienced each state over the past week. The Urdu version of DASS is a set of 42 items; three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. Alpha Reliability Coefficient of the translated version were reported as .83 for overall DASS and .63, .60, and .60 for depression, anxiety, and stress scales, respectively.

Dissociative Experiences Scale (DES): This scale was developed by Eve Bernstein Carlson in 1986. It is a 28 items brief, self-report 10 points measure response range from 0% to 100% of the frequency of dissociative experiences. The scale was administered on 183 participants (65 college students' late adolescents and young adults, 14 alcoholic and 24 phobic/anxious patients, 29 agoraphobic and 10 PTSD patients, 20 schizophrenic and 20 with personality problems). Test re-test Reliability Coefficient was 0.84. Spearman rank-order correlation coefficient between items was .64, ranged from .50 to .79 (Bernstein, et al. 1986). The

DES total score consists of the arithmetic mean of all 28 items and can vary between 0 and 100. Higher values imply an increased frequency of dissociative experiences. Values above 25 or 30 are thought to indicate potential dissociative psychopathology (Putnam, et al. 1996). Urdu version of the scale will be used to collect the data. This scale translated by (Lewis, Musharraf, Dorahy, & Lewis, 2013).

Procedure

The head of each department was briefed about the purpose aim and process of the study. Inform consent was secured through the permission letter also requested to facilitate and provide support in collection of data from the students. The students were briefed about the study, explained the confidential limits, purpose of the study and asked their consent and willingness to participate. After this, a short introduction were given about the response type of each scale and consideration of the time period or duration of the symptoms each scale measures.

The permission of the Head of Institution were sorted out through a letter from the department of Psychology International Islamic University Islamabad (IIUI). Ethics board of Psychology Department, International Islamic University Islamabad granted the ethical clearance. Approval for data collection of this research was attained from the Chairpersons/Principals of the colleges/departments of University of Swat, Abdul Wali Khan University Mardan, Kohat University of Science and Technology, Bacha Khan University Charsadda, University of Peshawar, Islamia College University Peshawar, Jehanzeb College Swat, Islamia College Peshawar and Government College Swabi. Approval letters signed by heads are available in appendix. Participants were ensured about the confidentiality and privacy and every one was free to leave at any time if they do not want to participate in the study. These

measures Demographic sheet, LEC-5 Urdu version, DES Urdu version, PCL-5 Urdu version, and DASS Urdu version were administered.

Statistical analysis

The data analysis were done through IBM SPSS statistics New York version 22.0. Descriptive analysis of the data like mean, standard deviation, percentages, minimum and maximum scores were carried out for demographic characteristics of the subjects. For parametric data the independent sample t-test was applied to compare the mean difference between groups, and to find out the association between traumatic events, PTSD symptoms, dissociative symptoms and comorbid symptoms of depression and anxiety were calculated by Pearson correlation coefficient. Psychometric properties for each scale were measured through reliability analysis.

Results

Table 1

Sociodemographic Characteristics of Participants (n = 303)

Variables	Categories	N	%
Age			
	18-33 years	303	100
Gender			
	Male	158	52
	Female	145	48
Marital Status			
	Single	282	93
	Married	21	7
Family Status			
	Nuclear	138	45.5
	Joint	165	54.5
Socioeconomic Status			
	Lower Class	29	9.6
	Middle Class	258	85
	Upper Class	16	5.4
Education			
	Bachelor	97	32
	Master	171	56.4
	M Phil, PhD	35	11.6

Age mean 22 (SD=2.8) Min 18 Max 33

Table 1 shows that sociodemographic characteristics of sample 303 students 158 (52%) were male and 145 (48%) were female with the age range 18-33 and mean of the age was 22 years.

Marital status of 282 (93%) was single. 138 (45.5%) students were living in nuclear family system and 165 (54.5%) reported joint family system. of 29 (9.6%). 258 (85%) of them belong to socioeconomic status middle class. According to Pakistani Education levels, 97 (32%), 171 (56.4%) and 35 (11.6%) were bachelors, Masters and MPhil/PhD respectively.

Figure 1

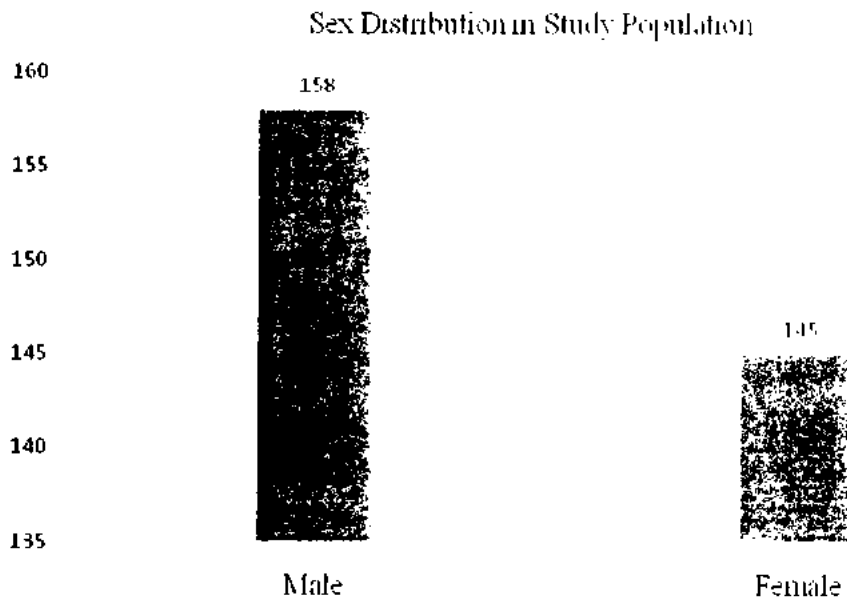


Figure 2

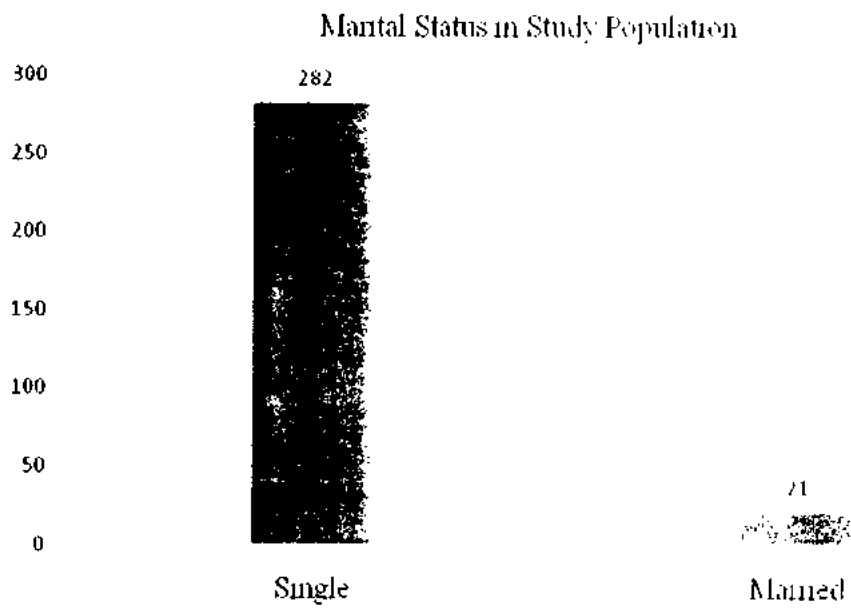


Figure 3

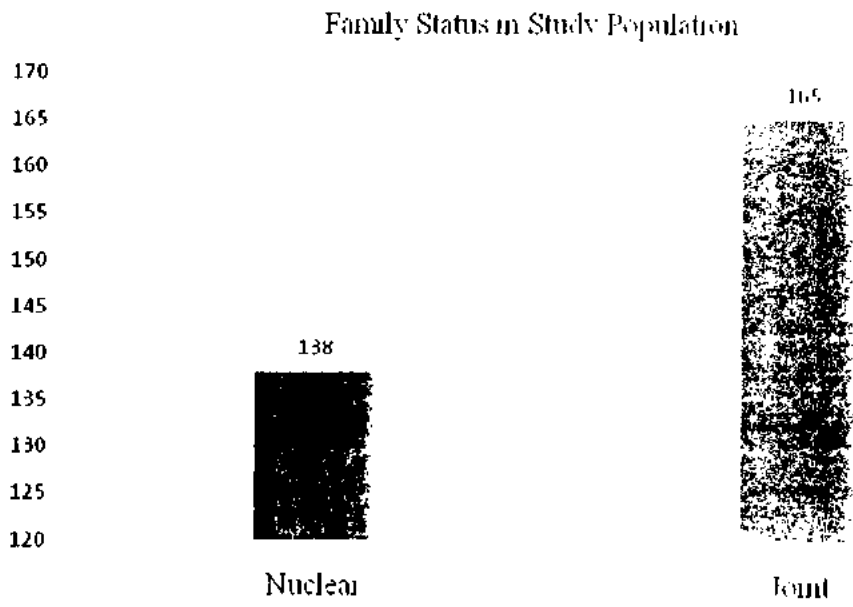


Figure 4

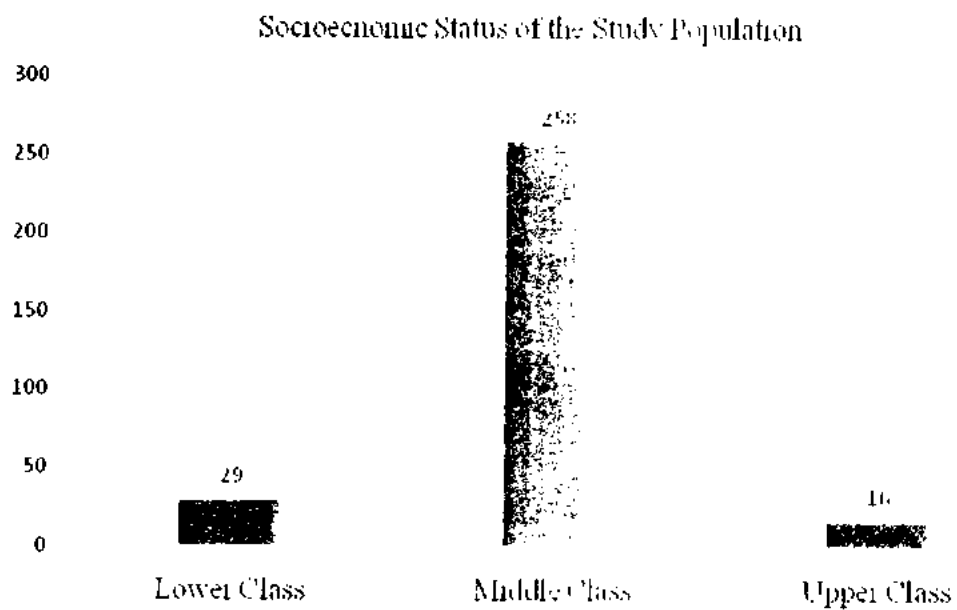


Figure 5

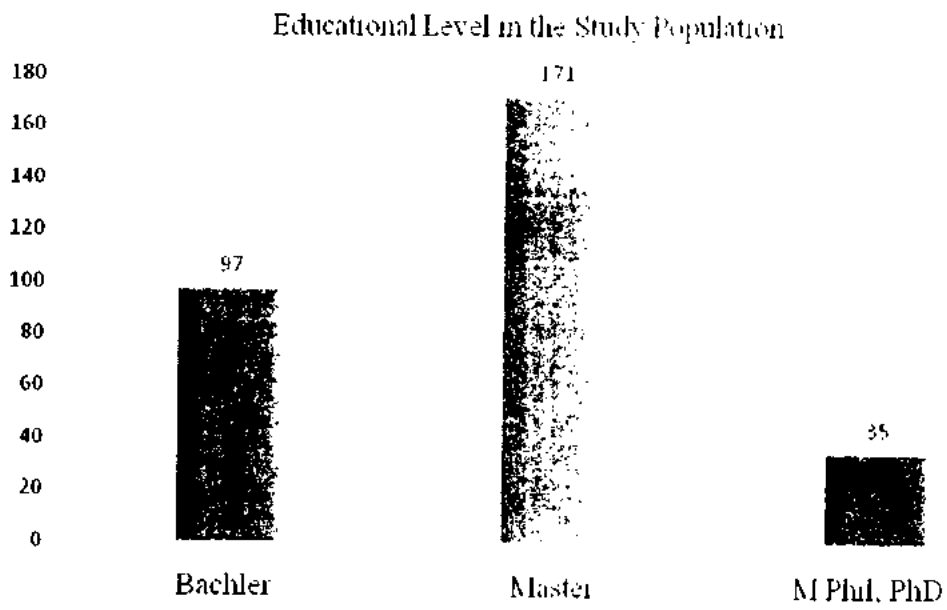


Table 2

Psychometric Properties of the Major Study Variables

Scales	N	M	SD	α	Min	Max	Skew
LEC-5	303	22.65	12.5	.80	0	53	.31
PCL-5	303	25.81	14.3	.89	0	66	.58
DES	303	76.48	47.5	.94	1	227	.52
DASS	303	41.53	21.8	.94	0	107	.51
Depression	303	12.98	7.43	.85	0	37	.48
Stress	303	15.22	8.09	.83	0	50	.66
Anxiety	303	13.32	7.60	.85	0	36	.63

Note M= Mean; SD= Standard Deviation; N= Number of participants; α = Alpha reliability; LEC-5= Life Events Checklist-5; PCL-5= Post traumatic stress disorder Checklist-5; DES = Dissociative Experiences Scale; DASS= Depression Anxiety Stress Scale.

Table 2 showed the psychometric properties of the data of 303 respondents. Reported life events on LEC-5 mean score was 22.65 (SD= 12.5), minimum score was 0, maximum score was 53 and alpha reliability was .80. Post traumatic symptoms were reported on PCL-5 mean score was 25.81 (SD= 14.3), minimum score was 0, maximum score was 66 and alpha reliability was .89. DES mean score was 76.48 (SD= 47.5), minimum score was 1, maximum score was 227 and alpha reliability was .94. DASS over all mean score was 41.53 (SD= 21.8), minimum score was 0, maximum score was 107 and alpha reliability was .94. DASS's subscale for depressive symptoms showed that mean score was 12.98 (SD= 7.43), minimum score was 0, maximum score was 37 and alpha reliability was .85. Stress subscale's mean was 15.22 (SD= 8.09), minimum score was 0, maximum score was 50 and alpha reliability was .83. Anxiety subscale of the DASS showed mean score 13.32 (SD= 7.60), minimum score was 0, maximum score was 36 and alpha reliability was .85.

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Table 3

Percentage of the mean scores on each scale (Considering the highest possible score on each scale =100)

Variable	N	Mean	Percent %
LEC-5	303	22.65	33.23
PCL-5		25.81	32.25
DES		76.48	27.32
Depression		12.98	30.95
Stress		15.22	36.19
Anxiety		13.32	31.66

Note: Each Scale has maximum 100 scoring points. % = Intensity of the symptoms.

Table 3 showed that percentage of the symptoms intensity drawn from mean scores of the 303 participants was 33.23%, 32.25%, 27.32%, 30.95%, 36.19% and 31.66% for LEC-5, PCL-5, DES, Depression, Stress and Anxiety respectively.

Table 4

t-test analysis between male & female on variable of LEC-5, PCL-5, DES and DASS

Variable	Male		Female		<i>t</i> (301)	<i>P</i>	95% CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			LL	UL	
1. LEC-5	25.50	12.57	19.53	11.85	4.25	.000	3.21	8.75	0.49
2. PCL-5	24.28	13.93	27.48	14.66	-1.95	.052	-6.43	.03	0.22
3. DES	82.70	47.73	69.71	46.49	2.39	.017	2.32	23.65	0.27
4. DASS	39.58	21.02	43.65	22.66	-1.62	.106	-9.00	.87	0.18

Note: *M*= Mean; *SD*= Standard Deviation; *CI*= confidence interval. *LL* = lower limit. *UL* = upper limit.

Table 4 showed that LEC-5 score mean was significantly higher for male ($M= 25.50$, $SD= 12.57$) than female ($M= 19.53$, $SD= 11.85$) $t(301) = 4.25$, $p < .01$. And DES score mean was also significantly higher for male ($M= 82.70$, $SD= 47.73$) than female ($M= 69.71$, $SD= 46.49$) $t(301) = 2.39$, $p < .05$. There was no significant difference found on PCL-5 mean scores, between male ($M= 24.28$, $SD= 13.93$) and female ($M= 27.48$, $SD= 14.66$) $t(301) = -1.95$, $p > .05$. Also, there was no significant difference found on DASS mean scores, between male ($M= 39.58$, $SD= 21.02$) and female ($M= 43.65$, $SD= 22.65$) $t(301) = -1.62$, $p > .0$

Table 5

t-test analysis between nuclear & joint family on variable of LEC-5, PCL-5, DES and DASS

Variable	Nuclear family		Joint family		<i>t</i> (301)	<i>P</i>	95% CI		Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			LL	UL	
1. LEC-5	22.06	12.88	23.15	12.32	-.75	.452	-3.95	1.76	0.07
2. PCL-5	27.38	14.30	24.50	14.29	1.75	.041	-.36	6.13	0.20
3. DES	73.84	47.90	78.70	47.21	-.88	.376	-15.65	5.93	0.10
4. DASS	44.75	23.79	38.84	19.90	2.32	.021	.89	10.92	0.26

Note. *M*= Mean; *SD*= Standard Deviation; *CI* = confidence interval, *LL* = lower limit, *UL* = upper limit.

Table 5 showed that PCL-5 score mean was significantly higher for nuclear family members ($M= 27.38, SD= 14.30$) than joint family members ($M= 24.50, SD= 14.29$) $t(301) = 1.75, p < .05$. And DASS score mean was also significantly higher for nuclear family members ($M= 44.75, SD= 23.79$) than joint family members ($M= 38.84, SD= 19.90$) $t(301) = 2.32, p < .05$. There was no significant difference found on LEC-5 mean scores, between nuclear family members ($M= 22.06, SD= 12.88$) and joint family members ($M= 23.15, SD= 12.32$) $t(301) = -.75, p > .05$. Also, there was no significant difference found on DES mean scores, between nuclear family members ($M= 73.84, SD= 47.90$) and joint family members ($M= 78.70, SD= 47.21$) $t(301) = -.88, p > .05$.

Table 6

Bivariate Correlations between the LEC, PCL, DES, Depression, Stress and Anxiety

Variables	1	2	3	4	5	6
1. LEC-5	1					
2. PCL-5	.310**	1				
3. DES	.299**	.444**	1			
4. Depression	.272**	.672**	.470**	1		
5. Stress	.260**	.676**	.448**	.834**	1	
6. Anxiety	.264**	.636**	.499**	.864**	.828**	1

Note: Correlations marked with an asterisk (**) were significant at $p < .01$

Table 6 showed that LEC-5 was significantly positive correlated with PCL-5 ($r = .310, p < .01$), DES ($r = .299, p < .01$), Depression ($r = .272, p < .01$), Stress ($r = .260, p < .01$) and Anxiety ($r = .264, p < .01$). PCL-5 was significantly positive correlated with DES ($r = .444, p < .01$), Depression ($r = .672, p < .01$) and Anxiety ($r = .636, p < .01$).

Table 7

Cross Language and Test-retest Reliability of LEC-5 & PCL-5

Variables	N	1 st Administration	2 nd Administration	r
LEC-5	100	Urdu	English	.94**
PCL-5	100	Urdu	English	.93**

**p < .01

Table 7 Shows test retest reliability of LEC-5 and PCL-5. Both scales LEC-5 and PCL-5 are administered in Urdu Language in first trial and in the second trial these scales were administered in English language. Test-retest reliability of LEC-5 is 0.94 and PCL-5 is 0.93 which indicates that both sales are highly reliable.

Table 8

Cronbach Alpha Reliability Coefficients and Psychometric properties of LEC-5 & PCL-5

Variables	Categories	n	No.of Items	M	SD	α	r
Group I							
	LEC5-E	100	17	25.43	10.73	.88	.42**
	PCL5-E	100	20	26.29	13.87	.74	
Group II							
	LEC5-U	100	17	22.09	13.26	.82	.34**
	PCL5-U	100	20	22.63	13.43	.88	
Group III							
	LEC5-E	100	17	26.15	9.47	.68	.63**
	PCL5-E	100	20	33.66	13.55	.86	
	LEC5-U	100	17	25.44	9.53	.69	.46**
	PCL5-U	100	20	32.52	13.74	.87	

**p < .01

Note: Group I= Participant reported on original (English version) scales; Group II= participants reported on translated (Urdu version) scales; Group III= participants reported on both English and Urdu versions of the scales; LEC5-E= Life Events Checklist-5 (English version); PCL5-E= Post-traumatic stress disorder Checklist-5 (English version); LEC5-U= Life Events Checklist-5 (Urdu version); PCL5-U= Post-traumatic stress disorder Checklist-5 (Urdu version).

Table 8 showed that group I mean score on LEC5-E was 25.43 (SD= 10.73), alpha reliability was .88, PCL5-E mean score was 26.29 (SD= 13.87), alpha reliability was .74 and correlation between LEC5-E and PCL5-E was $r = .42$. Group II mean score on LEC5-U was 22.09 (SD= 13.26), alpha reliability was .82, PCL5-U mean score was 22.63 (SD= 13.43), alpha reliability was .88 and correlation between LEC5-U and PCL5-U was $r = .34$. Group III mean scores on LEC5-E and LEC5-U was 26.15 (SD= 9.47) and 25.44 (SD= 9.53) respectively. Group III mean scores on PCL5-E and PCL5-U was 33.66 (SD= 13.55) and 32.52 (SD= 13.74) respectively.

Group III alpha reliability of LEC5-E, LEC5-U, PCL5-E and PCL5-U was .68, .69, .86 and .87 respectively. Correlation between LEC5-E and PCL5-E was $r = .63$, and correlation between LEC5-U and PCL5-U was $r = .46$

Table 9

Inter-scales Correlation of LEC-5 and PCL-5

Variables	M	SD	1	2	3	4
1. LEC5-E	26.15	9.47	1			
2. PCL5-E	33.66	13.55	.639**	1		
3. LEC5-U	25.44	9.53	.939**	.563**	1	
4. PCL5-U	32.52	13.74	.548**	.935**	.465**	1

** p < .01

Table 9. Shows that the correlation between scores of LEC5-E, PCL5-E, LEC5-U and PCL5-U, which was significant. The correlation between the LEC5-E and LEC5-U was $r = 0.93$, $p < .01$, correlation between PCL5-E and PCL5-U was $r = 0.93$, $p < .01$ and correlation between LEC5-U and PCL5-U was $r = .46$, $p < .01$.

Discussion

This research highlighted significant life events that are considered the potential root cause for some of the mental health problems in Pakistan. These findings submitted that the potential outcomes of the traumatic events (flood, earthquake, explosion, fire, bombing, mass shooting, physical assault, sexual assault, life threatening illness, severe human sufferings and sudden homicide or suicide of others) are PTSD symptoms, dissociative symptoms and along with these symptoms comorbid symptoms of depression, anxiety and stress at a great scale.

In this study of 303 students 158 (52%) were male and 145 (48%) were female with the age range 18-33 and mean of the age was 22 years (Table 1, Figure 1), 282 (93%) were single (Table 1, Figure 2), 165 (54.5%) were from joint family system (Table 1, Figure 3), 258 (85%) of them belong to middle class (Table 1, Figure 4). According to Pakistani Education levels 97 (32%), 171 (56.4%) and 35 (11.6%) were bachelors, Masters and MPhil/PhD respectively (Table 1, Figure 5).

Exposure to traumatic events, severity and symptoms of the problems in this study was confirmed by the questionnaires Life Events Checklist (LEC-5), Post-traumatic stress disorder Checklist (PCL-5), Dissociative Experiences Scale (DES) and Depression Anxiety Stress Scale (DASS) filled by the participant. Psychometric properties of the main variables of this study included LEC-5 mean, SD, Cronbach's alpha reliability was 22.65, 12.5 and .80 respectively. Mean, SD and Cronbach's alpha of PCL-5 was 25.81, 14.3 and .89 respectively. DES mean was 76.48, SD was 47.5 and Cronbach's alpha reliability was .94. DASS also provided over all mean 41.53, SD 21.8 and alpha reliability .94. Alpha reliability for sub scales of depression, anxiety and stress of DASS was .85, .85 and .83 respectively (Table 2). These results indicated that

traumatic life events had a great effect on the lives of the people and produced psychological problems. Similar findings were also reported in the studies of (Schenlger et al, 2002; Galea et al, 2002; Galea et al, 2003; Khalily et al, 2010).

Furthermore, the severity of the symptoms of each problem and association of those symptoms with life events were not obvious because of the different scoring methods and highest possible score of each scale. The highest possible score for LEC-5, PCL-5, DES and DASS was 68, 80, 280 and 126 respectively. The difference among means of the scores were assessed through percentage formula as shown in (Table 3). The percentage of the severity and symptoms ranges from 27% to 36%.

In present study the findings showed that the mean score of LEC-5 in male students was significantly higher ($M= 25.50, SD= 12.57$) than female students ($M= 19.53, SD=11.85$) $t(301) = 4.25, p < .01$. Beside this male students mean score on DES was significantly higher ($M= 82.70, SD= 47.73$) than female ($M= 69.71, SD= 46.49$) $t(301) = -2.39, p < .05$. (Table 4). These findings indicated potential difference between the traumatic events experienced by male students as compared to female students, alongside, male students produced more dissociative symptoms than female students. Results showed consistency with other studies of (Maqbool, 2012; Naeem et al., 2011). Result also indicated that joint and nuclear family system also matters in producing Post-traumatic, depression, anxiety and stress symptoms. Joint family members reported less Post-traumatic, depression, anxiety and stress symptoms because of the social support from the family. On PCL-5 participants belong to nuclear family score was significantly higher. ($M=27.38, SD=14.30$) than joint family members ($M= 24.50, SD=14.29$) $t(301) = 1.75, p < .05$. On DASS the mean score of nuclear family members was significantly higher ($M= 44.75, SD=23.79$) than joint family ($M= 38.84, SD=19.90$) $t(301) = 2.32, p < .05$. (Table No. 5), the

result supported by (Siddique et al., 2015; Ahern et al., 2004; Farhood&Noureddine, 2003; Koenen et al., 2002; Koenen et al., 2003; Norris et al., 2002; Simeon, Greenberg, Nelson, Schmeidler, & Hollander, 2005).

This research supported all the hypothesis based on main variables of the study. Main variables of the study; traumatic events (LEC-5) with post traumatic symptoms (PCL-5) ($r = .310, p < .01$), dissociative symptoms (DES) ($r = .299, p < .01$), comorbid depressive symptoms ($r = .272, p < .01$) and comorbid anxiety symptoms ($r = .264, p < .01$) were significantly positive correlated. Also individuals with traumatic symptoms were significantly positive correlated with dissociative symptoms (DES) ($r = .444, p < .01$), comorbid depressive symptoms ($r = .672, p < .01$) and comorbid anxiety symptoms ($r = .636, p < .01$) (Table 6). The same results were found in the study of (Schenlger et al, 2002; Myers & Wee, 2005; Huang, 2010; Ziaddini, 2009; Breslau, Chilcoat, Kessler, & Davis, 2014; Cao, McFarlane, & Klimidis, 2003; Frans, Rimmö, Åberg, & Fredrikson, 2005; Neuner et al., 2004; Norris et al., 2002). This study found higher symptoms on DES which is expected as a result of frequent traumatic exposure (Table 3) like studies of (Nijenhuis et al., 2002) by and mean of DES in this study is higher than earlier studies.

Despite the above main variables in the present study, two of the scales were translated in Urdu language i.e. Life events checklist 5 (LEC 5) and Traumatic stress disorder checklist 5 (PCL 5). LEC 5 was published by Weathers and colleagues (2013) whereas PCL 5 was published by Weathers and his colleagues (2013). These scales originally were in English language. These scales were translated in Urdu language so that they can be easily used for Pakistani population because majority of the Pakistani population understands and speak Urdu. The traumatic situation in the Province of Khyber Pakhtunkhwa, Pakistan and particularly in Peshawar is unprecedented. Consequently a severe psychological trauma in the survivors is inevitable. It is

also evident from the previous researches that emotional and psychological reactions to such tragedies are unavoidable. However, the current violent situation in Pakistani society is not a simple phenomenon. These two scales are translated to Urdu language for the purpose of understanding and collection of authentic data from the above population. Before starting the translation process, consent was taken from the author of the scales. Oblique translation techniques (Mason, 1994) were used for these scales. Once the translation is done for these scales, these scales were administered on respondents. Respondents were of the view that tornado and hurricane from LEC-5 item no. 1 were irrelevant in this setting. Results shows good reliability of both scales LEC 5 and PCL 5 which is 0.94 and 0.93 respectively. Inter scale correlation is also significant i.e. correlation between LEC5-E and LEC5-U, $r = 0.93$ ($p < .01$) while the correlation between PCL5-E and PCL5-U was $r = 0.93$ ($p < .01$). The inter-scale correlation between both Urdu version of LEC and PCL was $r = .46$ ($p < .01$). The study findings suggest that these Urdu version scales can be used in Pakistani settings now (Table 7, 8 & 9).

This study has the following limitations: This research was limited to government colleges and Universities of Khyber Pakhtunkhwa, which may weaker the value of representative sample, because a great amount of students get education from private universities and colleges. Current study did not include general population and children sample.

Conclusion and recommendations

Psychological stressors in the form of man-made and natural disasters like bombing, mass shooting, physical and sexual abuse, flood, earthquake, warfare and domestic violence has affected the people of Pakistan. This study emphasized on the psychological effects of the above traumatic events. This study highlighted Psychological problems such as, dissociation, PTSD, depression, anxiety and stress were found significant. Two of the demographic characteristics; family system and gender were found significantly different on PTSD symptoms, dissociation, depression and anxiety.

Psychological interventions can be improved for the treatment of Pakistani population who reported the above problems as a result of traumatic events highlighted in the study. Institutes of Pakistan especially in Khyber Pakhtunkhwa need to facilitate the students with psychological services in the form of seminars, workshops, counselling cells and awareness of mental health. The main findings of the study urge for the attention of concerned government departments to provide resources and initiate projects in the colleges, schools and universities of Pakistan both on state and provincial levels. Two of the scales were translated to Urdu language which facilitates the researchers in this area. Validation of the findings of this study and exploring other influential problems as a result of traumatic experiences, further studies in future a representative sample of general population including children needs to be conducted, covering various related and diverse perspectives from this study. Also, it is clear to the researchers and authorities to find out the effects of such problems on the education performance, student teacher relationship and personalities of the students.

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Appendices

Appendix A

LIFE EVENTS CHECKLIST - 5

نیچے دی گئی زندگی کے واقعات پر مشتمل فہرست کو پڑھیں اور اس سے اپنے لیے ایسے واقعات کو منتخب کریں جن سے آپ کو شدید پریشانی ہو سکتی ہے۔ (مثلاً، اگر آپ کو کسی حادثے سے پریشانی ہو رہی ہے تو اسے منتخب کریں۔) (a) آپ کے پاس کوئی ایسی چیز ہے جس سے آپ کو شدید پریشانی ہو سکتی ہے۔ (b) آپ نے کوئی ایسی چیز کو ہٹا دیا ہے جس سے آپ کو شدید پریشانی ہو سکتی ہے۔ (c) آپ نے کوئی ایسی چیز کو ہٹا دیا ہے جس سے آپ کو شدید پریشانی ہو سکتی ہے۔ (d) آپ نے کوئی ایسی چیز کو ہٹا دیا ہے جس سے آپ کو شدید پریشانی ہو سکتی ہے۔ (e) آپ کو کوئی ایسی چیز ہے جس سے آپ کو شدید پریشانی ہو سکتی ہے۔ (f) آپ کو کوئی ایسی چیز ہے جس سے آپ کو شدید پریشانی ہو سکتی ہے۔

نمبر	واقعات	میرے ساتھ ہوا	ایسا ہونے سے پہلے	میرے ساتھ ہونے سے پہلے	میرے ساتھ ہونے سے پہلے	میرے ساتھ ہونے سے پہلے
1	قدرتی آفت (مثلاً، سیلاب، زلزلہ، آگ)					
2	آگ یا دھماکا					
3	تعمیراتی کام (مثلاً، گھر کی تعمیر، گاڑی کی مرمت، گھر کی مرمت)					
4	کام سے وقت گزرنے پر یا کسی اور کام سے وقت گزرنے پر					
5	زیر زمین یا مٹی کی تعمیراتی کام (مثلاً، گھر کی تعمیر، گاڑی کی مرمت)					
6	جسمانی صدمہ (مثلاً، مارنا، گھبراہٹ، حادثے، یا کسی اور طرح کا صدمہ)					
7	بھینسے سے صدمہ (مثلاً، گھبراہٹ، یا کسی اور طرح کا صدمہ)					
8	جنسی مزاحمت (مثلاً، جنسی تشدد، یا کسی اور طرح کا صدمہ)					
9	اداسی یا غم سے پیدا ہونے والی کیفیت (مثلاً، کسی شخص کی موت)					
10	نوائی یا کسی کے بعد ان کی موت (مثلاً، کسی شخص کی موت)					
11	حجرت (مثلاً، کوئی اور جگہ پر رہنا، یا کسی اور جگہ پر رہنا)					
12	مستند یا کسی کی موت					
13	شدید درستی یا کسی کی کیفیت					
14	سپاؤں یا کسی کی موت (مثلاً، کسی شخص کی موت)					
15	اپنی کسی یا کسی کی موت					
16	شدید درستی یا کسی کی کیفیت (مثلاً، کسی شخص کی موت)					
17	کوئی بھی چیز یا کسی کی موت					

Appendix B

POST TRAUMATIC STRESS DISORDER CHECKLIST - 5 (Urdu)

ہدایات:

زیں میں درج فہرست تشکیف دہا واقعات سے نمٹنے کے بعد روزانہ سونے والی ملاہے اور تکلیف سے متعلق ہے۔ برائے مہربانی ہر ایک بیان کو دیکھ کر سے پانچ میں اور گزشتہ ایک، دو کے دوران آپ اس حد تک تکلیف سے نمٹ رہے ہیں اس کے بارے میں سامنے دیکھنے کے خاتون میں سے مناسب جوابات میں سے کسی ایک پر نشان (✓) لگا کر لیں۔

آپ سے نیچلی صورت صرف تحقیق سے نمٹنے کے لئے ہے۔ ان میں سے کسی ایک پر آپ کو اپنی شخصیت کو مرتبے پر ظاہر نہیں کیا جائے گا۔ آپ کے تعاون پر ہم آپ کے شکر گزار ہیں۔

نمبر شا	حالات	بالکل نہیں	کسی حد تک	منا سبب تک	بہت زیادہ
1	تشکیف دہا واقعات کے متعلق یاد آئے والی چیزیں کو یاد کرنے میں تھکاوٹ اور تھوڑے؟				
2	تشکیف دہا واقعات کے متعلق یاد آئے والے پریشان کن خواب؟				
3	اپنا تکلیف دہا واقعات کے تشکیف دہا واقعات کو یاد کرنے سے روکنا یا بھولنے سے (جیسے کہ اس میں سے دو یا زیادہ روکے ہیں)۔				
4	بہت پریشان ہو جانا جب کوئی چیز آپ کو تشکیف دہا واقعات یاد دلائے۔				
5	جب کوئی چیز آپ کو تشکیف دہا واقعات یاد دلائے تو سانس نہ لے سکیں یا غصہ ہو یا مٹھلاؤں کا ڈوبنا، سانس لینے میں دشواری ہونا یا پیٹ بھرنے کا۔				
6	تشکیف دہا واقعات کے بارے میں سوچنے پر تھکنا یا بھولنا یا ان واقعات سے اجتناب کرنے سے روکنا؟				
7	ان کاموں اور صورت حال سے گریز کرنا، جنہوں نے آپ کو تشکیف دہا واقعات یاد دلائی؟				
8	تشکیف دہا واقعات کے اثرات کو دیکھ کر یا یاد کرنے میں دشواری ہونا؟				
9	اپنے اور سے فکروں اور باتوں کے بارے میں اپنی اپنی فکری سوچ بھولنا جیسے (میں برا ہوں، میرے ساتھ شہید چڑھائی ہے، کسی بھی چیز میں تھوڑے سے بچنا، مٹھلاؤں کا ڈوبنا، سانس لینے میں دشواری ہونا یا پیٹ بھرنے کا۔)				
10	اپنی یاد دہا واقعات کے بعد بھولنا یا بھولنے سے روکنا یا بھولنے سے روکنا یا بھولنے سے روکنا۔				
11	انسانی فکری احساس جیسے خوف، ڈر، غصہ، متھلاؤں کا ڈوبنا، سانس لینے میں دشواری ہونا۔				
12	ایسے کام جو آپ کے سے پریشان کن، ان میں سے کوئی بھی چیز؟				

					13. دوسرے لوگوں سے فاصلہ یا علیحدگی محسوس کرنا؟
					14. مثبت احساسات میں دشواری پیش آنا، پیسے خوشی محسوس نہ کرنا یا اپنے قریبی لوگوں کے لیے محبت کے جذبات نہ رکھنا؟
					15. تپ چھاپن محسوس کرنا اور غصہ کے باہر آنا؟
					16. بہت سے خطرات میں جینا ایسے کام میں جو آپ کو نقصان پہنچا سکیں؟
					17. بہت محتاط، چونکا اور چونکس محسوس کرنا؟
					18. اورمان دکھانا ہو جانا یا جلدی گھبرا جانا؟
					19. توجہ مرکوز کرنے میں دشواری پیش آنا؟
					20. نیند آنے میں یا نیند کے دوران دشواری محسوس کرنا؟

9۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

10۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

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11۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

12۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

13۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

14۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

15۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

16۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

17۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

18۔ کچھ لوگوں کو گھبراہٹ سے کہیں کی زندگی کے بعض اہم اوقات مثلاً شادی، رخصتی، عرس، شادی، شادی میں گھنٹوں نہیں۔

(میش) 0% 10 20 30 40 50 60 70 80 90 100% (کبھی نہیں)

Appendix D

ذی اسے ایس ایس (سکیل)

ہر اوقات میرے مورائی پر تجربے کا مطالعہ کریں اور ایک سے 2 تا 10 درجہ تک کے درجہ پر علامت لگائی جاتی ہے۔ اگر علامت لگائی جاتی ہے تو اسے 1 سے 3 تک درجہ تک لگایا جاتا ہے۔ اگر علامت لگائی جاتی ہے تو اسے 1 سے 3 تک درجہ تک لگایا جاتا ہے۔ اگر علامت لگائی جاتی ہے تو اسے 1 سے 3 تک درجہ تک لگایا جاتا ہے۔

0 = مجھ پر کوئی بھی اثر نہیں ہوتا
 1 = مجھ پر کئی حد تک اثر ہوا ہے
 2 = مجھ پر کافی حد تک اثر ہوا ہے
 3 = مجھ پر بہت حد تک اثر ہوا ہے

نمبر	تقریر	بالکل لاگو نہیں	کسی حد تک	کامل حد تک	بہت حد تک
1	میں نے اپنے آپ کو کسی بھی چیز سے پریشان نہیں کیا	0	1	2	3
2	میں ہمارے ملک ہونے کے بارے میں پشیمان ہوں	0	1	2	3
3	میں کسی بھی قسم کے شہرے میں نہیں رہتا	0	1	2	3
4	مجھے سانس لینے میں دشواری ہے، یا میرا دل دھڑکنے لگتا ہے، یا میرا دل دھڑکنے لگتا ہے، یا میرا دل دھڑکنے لگتا ہے	0	1	2	3
5	میں خود کو مارنے کے لیے مستعد ہوں	0	1	2	3
6	میرا دل میں صورتوں کی نگاہوں سے ڈرتا ہوں	0	1	2	3
7	مجھے آنکھوں سے آنسو بہنے لگتا ہے (میں انہیں دیکھتا ہوں)	0	1	2	3
8	مجھے پشیمان رہنا مشکل محسوس ہوتا ہے	0	1	2	3
9	میں نے خود کو کسی کو مارنے میں پورا کرنے کے لیے تیار کیا ہے	0	1	2	3
10	مجھے محسوس ہوتا ہے کہ میں اپنے آپ کو مارنے کے لیے تیار ہوں	0	1	2	3
11	میں نے محسوس کیا کہ میں میری پریشان ہونے لگا ہوں	0	1	2	3
12	میں نے محسوس کیا کہ میں اپنے آپ کو مارنے لگا ہوں	0	1	2	3
13	میں نے خود کو قتل کرنے اور اپنے محسوس ہونے	0	1	2	3
14	جب بھی مجھے کسی معاملے میں پریشان کرنے کے لیے کوئی شخص یا چیز آتی ہے	0	1	2	3
15	مجھے بے ہوشی کا احساس ہوتا ہے	0	1	2	3
16	مجھے کسی حادثے میں سے بچنے میں دشواری محسوس ہوتی ہے	0	1	2	3
17	مجھے کسی حادثے میں سے بچنے میں دشواری محسوس ہوتی ہے	0	1	2	3
18	مجھے کسی حادثے میں سے بچنے میں دشواری محسوس ہوتی ہے	0	1	2	3
19	میرا دل دھڑکنے لگتا ہے، یا میرا دل دھڑکنے لگتا ہے، یا میرا دل دھڑکنے لگتا ہے (میں انہیں دیکھتا ہوں)	0	1	2	3

3	2	1	0	20	میں نے بغیر کسی مناسب وجہ کے خوف محسوس کیا
3	2	1	0	21	مجھے احساس ہوا کہ زندگی بڑی بے وقعت ہے
3	2	1	0	22	مجھے ہر وقت گراہٹا ہوا محسوس ہوا
3	2	1	0	23	مجھے گھنے میں دشواری کا سامنا ہوا
3	2	1	0	24	مجھے اپنے کئے کو سونے یا مہموں سے کسی حلف و قسم کا احساس ہوا
3	2	1	0	25	کسی بھی جسمانی مشقت کی غیر موجودگی میں، میں اپنے دل کی حرکات سے آگاہ ہوا (مثلاً دل کی دھڑکن یا دھڑکن کا احساس دل کی دھڑکن میں ہے تاکہ دل کی دھڑکن)
3	2	1	0	26	میں نے بے دلی اور اپنی محسوس کی
3	2	1	0	27	مجھے احساس ہوا کہ میں بہت بے رحم ہوں
3	2	1	0	28	مجھے احساس ہوا کہ میری پریشانی حد سے زیادہ ہے
3	2	1	0	29	جب بھی کسی بات نے مجھے پریشان کیا اس کے بعد مجھے احساس ہوا کہ میں دشواری کا سامنا کر رہا ہوں
3	2	1	0	30	مجھے یہ بات یاد آئی کہ میں کسی مضمون کو پڑھنے یا دیکھنے میں دلچسپی نہیں لے سکتا
3	2	1	0	31	میں کسی بھی چیز کے بارے میں پوچھنے سے گریز کرتا ہوں
3	2	1	0	32	میں نے اپنے کام کے دوران مداخلت نہیں کی اور نہ ہی کسی شخص کو محسوس کیا
3	2	1	0	33	میں مصیبتی کام کی حالت میں تھا
3	2	1	0	34	میں نے محسوس کیا کہ میں کافی غیر اہم تھا
3	2	1	0	35	میں نے ایسی کسی بھی بات پر دلچسپی نہیں لی جو میرے کام یا دیکھنے سے متعلق تھی
3	2	1	0	36	میں نے خود کو خوار محسوس کیا
3	2	1	0	37	مجھے مستحکم نہیں لگتا تھا اور میں کسی بھی چیز سے متعلق نہیں لگتا تھا
3	2	1	0	38	مجھے محسوس ہوا کہ زندگی بے معنی ہے
3	2	1	0	39	میں نے خود کو بے یقینی محسوس کیا
3	2	1	0	40	میں ان صورتحال کے بارے میں پریشان تھا اور میں خود کو بے یقینی اور خوار محسوس کرتا تھا
3	2	1	0	41	میں نے کبھی اپنے محسوس کی (مثلاً، تمہیں میں)
3	2	1	0	42	میں نے کسی بھی کام کے بارے میں متعلق محسوس کیا

Appendix E

LEC-5

Listed below are a number of difficult or stressful things that sometimes happen to people. For each event check one or more of the boxes to the right to indicate that (a) it happened to you personally, (b) you witnessed it happen to someone else, (c) you learned about it happening to a close family member or close friend; (d) you were exposed to it as part of your job (for example, paramedic, police, military, or other first responder), (e) you're not sure if it fits, or (f) it doesn't apply to you.

Be sure to consider your entire life (growing up as well as adulthood) as you go through the list of events.

Event	Happened to me	Witnessed it	Learned about it	Part of my job	Not Sure	Doesn't Apply
1. Natural disaster (for example, flood, hurricane, tornado, earthquake)						
2. Fire or explosion						
3. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)						
4. Serious accident at work, home, or during recreational activity						
5. Exposure to toxic substance (for example, dangerous chemicals, radiation)						
6. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)						
7. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)						
8. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)						
9. Other unwanted or uncomfortable sexual experience						
10. Combat or exposure to a war-zone (in the military or as a civilian)						
11. Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)						
12. Life-threatening illness or injury						
13. Severe human suffering						
14. Sudden violent death (for example, homicide, suicide)						
15. Sudden accidental death						
16. Serious injury, harm, or death you caused to someone else						
17. Any other very stressful event or experience						

Appendix F

Post-Traumatic Stress Disorder Checklist-5 (PCL-5)

Below is a list of problems that people sometimes have in response to a very stressful experience. Keeping your worst event in mind, please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

In the past month, how much were you bothered by	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as "I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous")?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behavior, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being "superalert" or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

PCL-5 (R/14/2013) Weathers, Litz, Keane, Palmieri, Marx, & Schnurr -- National Center for PTSD

Appendix G. I



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
FACULTY OF SOCIAL SCIENCES
Department Of Psychology
051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

Dear Sir/ Madam

Greetings from Department of Psychology, International Islamic University, Islamabad. May I introduce Mr. Saadat Ullah, he is an MS scholar in the department of Psychology, International Islamic University- Islamabad. He is working on his MS dissertation titled as **"PTSD, DISSOCIATIVE SYMPTOMS AND COMORBID SYMPTOMS OF DEPRESSION AND ANXIETY AS A CONSEQUENCE OF TRAUMATIC EVENTS"** under my supervision. In this regard, your cooperation is highly needed. If you kindly allow Mr. Saadat Ullah to collect data from your prestigious Institution, it would be a great assistance to our student to accomplish his research study. He will also acknowledge your kind cooperation in his dissertation and, upon your request, would share the findings of his research study.

Looking forward for the growing cooperation

Regards


Dr. Muhammad Tahir Khalily

Appendix G. II



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
FACULTY OF SOCIAL SCIENCES
Department Of Psychology
051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

Dear Sir/ Madam

Greetings from Department of Psychology, International Islamic University, Islamabad. May I introduce Mr. Saadat Ullah, he is an MS scholar in the department of Psychology, International Islamic University- Islamabad. He is working on his MS dissertation titled as "PTSD, DISSOCIATIVE SYMPTOMS AND COMORBID SYMPTOMS OF DEPRESSION AND ANXIETY AS A CONSEQUENCE OF TRAUMATIC EVENTS" under my supervision. In this regard, your cooperation is highly needed. If you kindly allow Mr. Saadat Ullah to collect data from your prestigious Institution, it would be a great assistance to our student to accomplish his research study. He will also acknowledge your kind cooperation in his dissertation and, upon your request, would share the findings of his research study.

Looking forward for the growing cooperation

Regards


Dr. Muhammad Tahir Khalily

Handwritten note:
Mr. Saadat Ullah
14/9/15

Appendix G. III



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
FACULTY OF SOCIAL SCIENCES
Department Of Psychology
051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

Dear Sir/ Madam

Greetings from Department of Psychology, International Islamic University, Islamabad. May I introduce Mr. Saadat Ullah, he is an MS scholar in the department of Psychology, International Islamic University- Islamabad. He is working on his MS dissertation titled as **"PTSD, DISSOCIATIVE SYMPTOMS AND COMORBID SYMPTOMS OF DEPRESSION AND ANXIETY AS A CONSEQUENCE OF TRAUMATIC EVENTS"** under my supervision. In this regard, your cooperation is highly needed. If you kindly allow Mr Saadat Ullah to collect data from your prestigious Institution, it would be a great assistance to our student to accomplish his research study. He will also acknowledge your kind cooperation in his dissertation and, upon your request, would thank you for his research study.

Looking forward for the growing cooperation

Regards


Dr. Muhammad Tahir Khalily

Handwritten note:
07/09/2015

Appendix G. IV



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
 FACULTY OF SOCIAL SCIENCES
 Department Of Psychology
 051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

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Looking forward for the growing cooperation

Regards

Dr. Muhammad Tahir Khalily

*My student to collect
 information on
 subject using with out
 involve me & disturbance
 classes.*

[Signature]
 17/9/15

Appendix G. V



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
 FACULTY OF SOCIAL SCIENCES
 Department Of Psychology
 051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

Dear Sir/ Madam

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Looking forward for the growing cooperation

Regards


 Dr. Muhammad Tabir Khalily

*No objection you are
 welcome to get the
 cooperation you might be needing.
 07/09/2015*

Appendix G. VI



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
FACULTY OF SOCIAL SCIENCES
Department Of Psychology
051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

Dear Sir/ Madam

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Looking forward for the growing cooperation

Regards


Dr. Muhammad Tabir Khalily

Handwritten note: 12/09/2015

Appendix G. VII



INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
 FACULTY OF SOCIAL SCIENCES
 Department Of Psychology
 051-9019790

No.HOD/PSY-2015

Dated: 07-09-2015

Dear Sir/ Madam

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Looking forward for the growing cooperation

Regards


 Dr. Muhammad Tahir Khalifa

Handwritten notes:
 Mr. Saadat Ullah
 17/9/15