PSYCHOLOGICAL IMPACT OF SUICIDAL ATTACKS ON IIUI STUDENTS (2009)



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CONTENTS

Acknowledgements Abstract List of Tables List of Appendixes

CHAPTER-I: INTRODUCTION

Defining Terrorism

Early History of Terrorism

Inequality and Terrorism

Definition of Suicidal Attacks

Terrorism

Defining Terrorism

The Terrorism

Suicidal Attacks

The Terrorist

Impact of War on Terror

Individual Differences

Social Impact of Terrorism

Consequences of exposure to terrorism

Relation between Terrorism and other Traumatic experiences

Exposure to terror

Emotional Reaction to Terror

Depression

Psychological Well-being

Rationale of the study

CHAPTER-II: METHOD

Objectives

Hypothesis

Operational Definition of variables

Sample

Instruments

Procedure

CHAPTER-IV: RESULTS

CHAPTER-IV: DISCUSSIONS



Conclusion

Limitation and suggestions

REFERENCES

APPENDIXES 73

Dedicated to

My Parents

Abstract

The aim of the study was to examine the impact of suicidal attack on the students of international Islamic University Islamabad (IIUI). The sample of 100 students consisted of 50 male, and 50 female. This sample was also categorized into the form of exposed comprised 25 male, and 25 females, whereas none exposed, 25 female and 25 male. Beck Depression Inventory II, Post Traumatic Stress Diagnostic Scale and Psychological Well-being Scale were used to collect data. T-test, mean and standard deviation were computed for analysis. Mean differences on well-being, PTSD, and depression were found to be significant. Results indicated that the exposed students showed high scores than those of non exposed students. Over all results indicated the significant mean difference among the variables. Certain limitations and implications of the current have been discussed in the context of Pakistani culture.

INTRODUCTION

As an increasing number of suicide attacks rock Pakistan's major cities, concern for the country's security is rising. Violence in Pakistan has been on the rise. According to South Asia Terrorism Portal, a terrorism database, approximately 1800 civilians have been killed in the first ten months of 2009. Pakistan has suffered from the killing of non-combatants since 1978. But the recent terror acts which took place at International Islamic University Islamabad on 20, Oct, 2009 was more nerve breaking and harmful in nature. In these acts at least 6 innocent students were martyred and the university, students and the whole nation was under shock. This kind of terror acts are very destroying in nature and nation will face material; physical, religious, social, moral and psychological loses to a great extent.

All kind of damagers are very horrible and unbearable but with the passage of time they may recover except the psychological damages. Infect, all the acts of terrorism are design to weaken the enemy psychologically and their main target is to topple the government and the moral of the whole nation. After any kind of disaster or act of terror the affected population, first of all, face a variety of psychological and behavioural problems e.g. fear, stress, phobia, anxiety, depression, post traumatic stress disorder and low psychological well-being.

All the psychological effects are for-reaching in nature and to a great extent permanent, but the depression, post traumatic stress disorder and low well –being seem to be very serious and long lasting. The depression, post traumatic stress disorder and low well-being affect the students physically as well as psychologically.

The innocent minds of the students are vulnerable to all kinds of psychological problem after facing such situations but depression, post traumatic stress disorder and low well-being brutally affect the whole personalities of these inexperienced young people.

This research is mainly concerned with these three, aforementioned areas of clinical psychology. In this research we shall try to find out the after effects of these horrible acts of terrorism in which many precious lives are lost and rest of the lives are under the constant danger of suffering from these killing enemies. We shall not be in a better position to suggest the cure able steps for them until we grasp the fundamental psychological impacts of such horrible terror attacks.



international and eye-catching issue for the scholars, politicians and researchers in all disciplines including social sciences, natural sciences, arts and humanities etc. Particularly, those disciplines involve scientific observation and empirical study the mind and behavior of the young students who have become the victim of such a horrible phenomenon. This hotly discussed issue has remained quite successful in capturing the attention of researchers around the globe for last two decades (Cairns, 1996; Danieli, 1996; Osofsky, 1997; Punamaeki, Qouta, & Sarraj, 1997).

Although terrorism has sprung out as an issue of great significance in the present world after the occurrences of 9/11 in America, yet this problem is as old as the origin of mankind. In connection to example of Cain and his real brother Abel may be cited as a proof.

Defining Terrorism

Although this concept has been discussed in the political arena, defining and conceptualizing terrorism is, in fact, a theoretical dilemma. This theoretical problem has become a major hindrance in the struggle against terrorism (Crenshaw, 2001; Gold, 2004; Lodge, 1982; Velter & Perlstein, 1991).

Researchers have found 120 different definitions of terrorism. Although most of them have similar concepts, yet all academicians and politicians tend to define terrorism differently. There is no agreement among either academicians or politicians on the definition of terrorism (Schmid & Jongman, 1988).

A concrete definition for terrorism is fundamental to the fight against it. Since terrorism has already become one of the most serious global problems of modern times, a universally developed and accepted definition has become a matter of sheer importance.

In order to have understanding of terrorism, study has to focus on the definition of terrorism and its wildly accepted concept. Thus, the researcher thought that overlapping concepts in those definitions can be a guide to form the bases of an agreement on the definition of terrorism. For instance, after a thorough review of the literature, the following are proven to be common concepts in many definitions whether they are institutional, national, or individual: violence, political motivation of the perpetrators, and indiscriminate target selection practices.



According to Hoffman's perspective on terrorism, terrorism is defined as "the deliberate creation and exploitation of fears through violence or the threat of violence in the pursuit of political change" (Hoffman, 1998).

Early History of Terrorism

The initial recorded terrorist groups and activities took place at the start of the first century. One of the earliest known terrorist movements was the Zealots in Jerusalem (Laqueur, 1999). Zealots were active during the Roman occupation of the Middle East. The Zealots a Jewish group, received their name from the short dagger which they used to commit assassinate. They openly opposed the Roman rule and denied to pay levy (Teymur, 2003).

In the early history of terrorism, the "Assassins" was another extremist group that used violence during the1st century in Middle East (Hurwood, 1970). "Assassins" were not allowed to run away after they killed their enemy, in order to create extra fear. Their emotionless state created the reputation of "Hashashins" (Hashish users) among their enemies, while some groups claimed that they carried out their missions under the influence of hashish (Long, 1990). Assassins killed important rival figures, often at the cost of their own lives. This may be one of the earliest examples of suicide attacks (Hurwood, 1970; Laqueur, 1999).

The French Revolution, in the latter 18th century, was one of the bloodiest times in recorded history. In order to implement the new order, thousands of French were victimized during the French Revolution, causing fear. The term "terrorism" was used in 1795 in reference to the Reign of Terror by the revolutionary government (Carter, 1982; Combs, 1997; Koseli, 2006; Velter & Perlstein, 1991; White, 1998).

Russian Anarchists were also active during the late 19th century. They overthrew the Russian Czar Alexander II in 1881, believing that killing the aristocrats will demolish governments. This belief helped in use of terrorism as a mean to successfully change political activities. Even though Russian Anarchists selected their targets and did not aim to harm innocents, this type of action soon died out and was replaced with terrorism, in which all people were indiscriminately targeted (Yaroslansky, 1937).



In short, after the September 11, 2001 attacks, the world has become more aware of the threat of terrorism. However, as outlined above, "terrorism has been a dark feature of human behavior since the dawn of recorded history" (Martin, 2004). And, in order to understand the nature of terrorism, it is necessary to first review the overarching goals of terrorism and the concepts of equality, equity, and justice, which have been commonly viewed as an excuse for terrorists' violent actions.

Definition of Suicide Attacks

A terrorist who blows himself up in order to kill or injure other people. A person who has a bomb hidden on their body and who kills themselves in the attempt to kill others someone who attacks a person or a place with a bomb and who intends to die while killing or destroying them, usually for political aims (Akyol, 2000).

Suicide attack is characterized as completed suicide attacks and uncompleted suicide attack. Former refers to the suicide attack in which the perpetrators detonate the explosive (not only detonator) regardless of suicide bombers' killing their target or not and later refers to the phrase is used to indicate the suicide attacks in which the explosive is not detonated by any reason (Nikbay, 2002).

Impact of war and terror

The response of uncertainty produced by war and terrorism on children and adolescents has been studied comprehensively (Cairns, 1996; Danieli, 1996; Garbarino, Kostelny, & Dubrow, 1991; Garbarino & Kostelny, 1996; Jensen, 1996; Osofsky, 1997). Offspring are perceived in the literature as being affected by war and terrorism not only if they are killed or wounded, but also if they undergo from psychosocial distress. Exposure to uncertainty, militaristic socialization, or inhumane behaviour affects their psychosocial development and their ability to love, to care, or to feel solidarity (Jensen, 1996).

Research pointed out that the intensity of exposure to traumatic situations is directly related to the level of psychosocial damage. (Cicchetti & Toth, 1992; Punamaeki et al. 1997). It has been found that being exposed to traumatic events of war and terror reduces the ability of adult support systems to be attuned and available to children. In turn, children's level of stress rises, while their well-being and school performance decline (Garbarino & Kostelny, 1996; Punamaeki,



exposure to traumatic events affects not only specific areas of life, but also the general well being of children and teenagers (Garbarino et al., 1991; Osofsky, 1997; Slone & Hallis, 1999).

Individual differences in level of stress, depression, post traumatic stress disorder and well-being are attributed to personality as well as social variables. Lazarus (1996) introduced the concept of appraisal as the cognitive mediation of stress reactions. Appraisal determines the impact of the events on level of stress, as well as on personal well-being. Thus, when studying the effect of political uncertainty, it is important to understand not only the severity, but also the appraisal of the specific event. One main aspect of such appraisal might be related to the political orientation of the individual, which may or may not account for difficulties created as the result of a political event. Considering that the exposure of teenagers to war and threat of terror affect their entire life experience, it seems reasonable to expect that it may also have an impact on their satisfaction with life. Life satisfaction can be perceived as the other side of the coin to stress. Traditionally, the measure of life satisfaction was used as an indicator of adjustment (Bradburn, 1969; Bradburn & Caplovitz, 1965; Campbell, 1976). However, life satisfaction is perceived as an indicator of subjective well being (Dunman, 2003; Myers, 2000).

Empirical studies over the last two decades have vividly shown that the exposure to war or acts of terrorism has severe and destructive consequences on all the age groups specially for children and adolescents, such as the development of post traumatic stress disorder, behavioural problems and symptoms of depression (Davis & Siegel, 2000; Paardekooper, De Jong, & Hermanns, 1999).

There is a war going on in northern areas of Pakistan since 2005, based on a conflict between Taliban and government forces. The most prominent aspect of this war is suicidal attacks by the terrorist. The war experiences may range from participating in or witnessing terror attacks, bombardments, killings, beating and fightin g in civilian area to witnessing the death of close family members, and exposure to dead bodies (UNICEF, 1996, 1998; Women's Commission report, 2001).

Terrorism relies on mindless violence to achieve its object ties. Historically it has been employed as a conscious strategy to retain or ac



purportedly legitimate governmental bodies and their opponents. Modern terrorists have begun to refocus their efforts on disruption of the social fabric.

Exposure to terror attacks

When investigating adolescents' mental health outcomes in the context of terrorism, most research to date has quite naturally considered direct, physical exposure to the attacks as being a primary factor in determining subsequent post traumatic stress disorder (PTSD), emotional and behavioral problems. Several studies have demonstrated that higher levels of physical exposure to terrorist attacks elicit more adverse psychological reactions, such as higher rates of PTSD, anxiety and functional impairment (Hoven et al., 2002). However, after terrorist attacks this type of exposure appears to explain a limited amount of variance in youth's mental health problems (Pfefferbaum et al., 2001). An additional type of exposure via relationship with a victim has been postulated as a significant moderating variable especially when focusing on children or adolescents, given that youth's developmental status may render them more vulnerable to the loss of loved-ones (Pynoss & Eth, 1985). Several studies showed that adolescents who knew a victim experienced more PTSD and stress related symptoms than those who did not know a victim (Hoven et al., 2002; Pfefferbaum et al., 1999; Ronen, Rahav, & Appel, 2003). In the context of terrorism, subjective exposure was studied less. However, reports of initial fears and worries for safety of family members and friends after the Oklahoma City and Nairobi bombings seemed to be significant predictors of PTSD (Pfefferbaum et al., 2002; Pfefferbaum et al., 2003). In addition, when subjective exposure was defined by fear levels, adolescents who were more exposed physically were not always found to report higher sense of fear (Solomon, Laufer, & Lavi, 2005).

Pat Horenczyk (2003) addressed another concept of exposure, 'near miss' experience (e.g. miss the bus that later exploded). She found that youths who were less physically exposed and knew fewer people who were hurt in terrorist attacks, reported more PTSD symptoms, overall distress and malfunctioning in the domains of family functions and risk-taking behavior. A suggested explanation for these results may be that those adolescents reported more near miss experiences. Media exposure as an additional dimension of exposure seems to contribute to post traumatic stress symptoms even for those who weren't directly exposed (Pfefferbaum et al., 2001). A longitudinal study estimating the effects of the September 11th attacks on ado



concluded that while neither physical nor family exposure predicted change in mental health after September 11th, media exposure did predict an increase in PTSD symptoms (Aber, Gersho., Ware, & Kotler, 2004). These examples suggest that the media have significant role in determining mental health outcomes following terror attacks.

Emotional Reactions to Terror Attacks

Recent research of adolescents' responses to terrorist attacks and prolonged exposure to political violence has shown these incidents to have a substantial impact on their emotional and behavioral functioning. Adverse mental health outcomes are indeed found to vary widely both in terms of type and extent, ranging from mild stress reactions, through PTSD to psychopathological responses including somatic complaints, depression, anxiety, conduct disorder, functional impairment, panic attacks etc. (Hoven et al., 2002; Pat Horenczyk & Doppelt, 2005; Solomon& Lavi, 2005; Thabet &Vostanis 2002). Studies to date have mainly identified factors such as age, gender, prior trauma and type of exposure to diversely mediate these posttraumatic and mental health difficulties. However, these variables appear to explain only relatively limited amounts of the variance in mental health outcomes. For example, gender was found to explain about 12 % while different types of exposure explain 13% in youth's terror-related mental health difficulties across studies (Pfefferbaum et al., 2001; Pfeffrbaum et al., 2002; Solomon et al., 2005).

It is rightly said that the world is no longer a safe place to live due to the growing terrorism. According to the U.S. Department of State report, 'Terrorism is premeditated, politically motivated violence perpetrated against noncombatant targets by sub-national groups or clandestine agents, usually intended to influence an audience (Ruby, 2002). A universal medical and public health definition was proposed which is: "The intentional use of violence, real or threatened, against one or more non-combatants and/or those services essential for or protective of their health, resulting in adverse health effects in those immediately affected and their community, ranging from a loss of well-being or security to injury, illness or death (Arnold et al, 2003).

DiMaggio (2008) studied from a meta-analysis indicates that in a year following terrorist incidents, the prevalence of PTSD in directly affected populations varies between 12% and 16%. Kilpatrick (2003) conducted a national household survey on 4,023 people revealed six-months PTSD prevalence to be 3.7%



girls, Major Depressive Episode among boys was 7.4% and 13.9% in girls, Substance Abuse Disorder had a six-month prevalence of 8.2% among boys and 6.2% for girls. In a study by Wanda, children's responses to terrorism include acute stress disorder, posttraumatic stress disorder, anxiety, depression, regressive behaviors, and separation problems and sleep difficulties (Wanda, 2004).

Impacts of Terrorism and Individual Differences

There are profound individual differences in the health consequences of stressful life events and difficult circumstances. These differences are most evident through studies of the health outcomes of people subsequent to their exposure to very stressful circumstances, including shipwreck, concentration camp experience, and terrorist attacks. Some people adapt to stressful circumstances more successfully than others. Not all people exposed to adverse or even traumatic circumstance experience health change. Identification of what distinguishes people in the way they are able to manage stressful life events can aid understanding of disease susceptibility and inform the design and delivery of effective care to reduce the long-term health impact of events. For example, a brief questionnaire designed to distinguish the extent to which people are optimistic about their lives and future expectations has shown that optimists have a reduced risk from dying due to cardiovascular causes over a 15-year period and after consideration of traditional risk factors. More direct evidence of individual differences in the capacity to adapt to stressful life events has followed from work originally inspired by Aaron Antonovsky's (2004) study of survivors of the Holocaust. This work has revealed how, despite their horrific experiences, some Holocaust survivors had subsequently been able to rebuild their lives successfully. He defined sense of coherence, a theoretical construct based upon these observations, as a flexible and adaptive dispositional orientation enabling successful coping with adverse.

The terrorist climate effects almost all the areas of human life e.g. demographic, security and the cost of living, letter and spirit of the law, paramilitary, mantel health and the emergence of new, and aggravation of the old. But beside all other physical and materialistic damages, the mental health and behavioural damages are more severe and harmful in nature for the persons as well as for the whole society. These categories by no means exhaust the spectrum of areas of life to be affected



assume a real presence in the United States; rather, they are bench-marks from which further projections can be made in the future. However, little has been learned so far about how eventual terrorists are selected in the course of their political socialization. It is woefully unhelpful merely to point to religious schools as "factories" producing terrorists, or to assume that only the foolish or aberrant become terrorists, or to blame terrorists as evil souls or acclaim them as heroic (Myers, 2000)

Consequences of Exposure to Terrorism

Perhaps the best-known and most widespread consequences of exposure to terrorism are posttraumatic stress symptoms (PTS) and post-traumatic stress disorder (PTSD). After a thorough review of the available literature on terrorism it is reveled that besides the physical and material losses the best known and most widespread consequences in nature of exposure to terrorism are post traumatic symptoms and post traumatic stress disorder. (Joshi & O'Donnell, 2003; Pfefferbaum et al., 2005). In children who are exposed to war and terror, mostly depressive symptoms are commonly observable at all developmental stages. (Gurwitch, Sitterle, Young, & Pfefferbaum, 2002; Shaw, 2003). For example, a large-scale representative sample of New York City public school children 6 months after the September 11 terror attack revealed higher than expected rates of PTSD and major depression (Hoven, Duarte, & Mandell, 2003). Depressive and general distress symptoms are commonly associated with exposure to political violence. (Slone, Adiri, & Arian, 1998; Slone & Hallis, 1999). It is also searched out that the level of exposure to terror is directly related to the psychological consequences of terror activities (higher the level of exposure, the more negative is the psychological consequences). (Pfefferbaum et al., 2005; Pine & Cohen, 2002).

Relationship between Terrorism and Other Traumatic Experiences

Terrorism is a prototypic traumatic event i.e., it meets the objective and subjective criteria as defined according to the (DSM-IV) for those who directly experience a threat to their life or physical integrity or who experience loss, most notably, the sudden loss of a loved one. However, terrorism is not only about life threat to single individuals, or even a small group of people; it is designed to instill fear in society at large. Thus, in addition to those who experience the effects of terrorism firsthand, there are collateral effects. People who were not in proximity to the target where the terrorist event occurred and people who were not direc

of someone important to them can also be affected in terms of mental health outcomes, particularly because such events often receive repeated coverage on television and other media outlets. It is not known whether mental health consequences in people indirectly exposed to terrorism are qualitatively or quantitatively different from those who have been directly exposed. The additive effect of anticipatory anxiety is also not known, yet the real threat of imminent attack may be related to how quickly those exposed to terrorism can recover from its effects.

In applying knowledge from what has already been learned about the effects of other traumatic stressors, it is clear that a key variable in considering pathological outcomes is the passage of time. Although there are certainly immediate symptoms following any traumatic event, there is debate about whether and how to intervene in the acute aftermath of any trauma because, in most cases, such symptoms abate within weeks and months, and the consequences of interfering with the natural healing processes are unknown. One difference between terrorism and other traumatic events is that a single act of terrorism may represent the beginning or continuation of a situation or threat. In the context of an ongoing terrorist threat, identifying a persistent disorder may be more accurately defined only after the immediate threat of terrorism is substantially reduced in reality. This caveat does not suggest that people do not have mental health needs that should be met within this time frame; rather, it acknowledges that pathological responses that are defined by persistence and chronic need to be considered in the context of actual ongoing threat.

The high rate of spontaneous recovery in the aftermath of terrorism raises an important question with respect to how initial symptoms should be understood and treated. If the initial symptoms are understood as transient reflections of distress, it is not clear that such symptoms require mental health intervention. Alternatively, it can be argued that treating early symptoms, even in those who will experience spontaneous recovery, might help prevent long-term responses and who generally remain symptomatic or deteriorate as the broad population begins to improve. Clarifying the causes of high levels of immediate and long-term symptoms will no doubt lead to ideas about potential preventative treatments because it is now clear that the intensity of the exposure to trauma does not sufficiently predict who will develop or sustain symptoms.

In the absence of a linear relationship between acute stress reactions and longerterm adjustment, there are two theoretical models for patholo



aftermath of a trauma. The first defines a pathological response to trauma by the persistence of the same symptoms that within a specified period of time immediately following the event would otherwise be considered normal. The second defines posttraumatic pathology by the presence of a fundamentally different initial response to stress, resulting in persistent symptoms of hyper arousal, recollection of intrusive events, and avoidance of reminders. Both models are consistent with the idea that posttraumatic mental health consequences are based on a failure to recover from the universal distress in the immediate aftermath of trauma. In the first case, the persistence of symptoms probably results from post exposure factors that prevent recovery, such as lack of social support or other coping resources. In contrast, the second model implies that the initial symptoms are fundamentally different at the outset and probably result from pre- or peritraumatic factors. Supporting the idea that persistent responses are simply continuations of initial reactions are the findings that people who show highmagnitude posttraumatic stress disorder (PTSD) symptoms (i.e., intrusive, avoidance, and hyper arousal) in the first few days and from 1 to 2 weeks after the event are those at greatest risk for subsequent symptom severity. However, many researchers performing longitudinal studies of acute trauma survivors have not been able to identify specific symptoms that can convincingly predict pathological mental health outcomes. More promising clinical predictors appear to be the presence of a panic attack and/or intense dissociation during or immediately after a trauma, which suggests additional or fundamentally different immediate responses. Both panic attacks and dissociative responses reflect catastrophic or negative interpretations of the event. Such interpretations may further perpetuate arousal associated with stress responses and reduce the body's ability to achieve homeostasis following the trauma. The presence of catastrophic attributions e.g., that posttraumatic symptoms signify a major problem and will not ultimately resolve, provides a way of drawing a distinction between being terrorized and being terrified. People exposed to a traumatic event are not traumatized unless they are deeply distraught at the time of the event and then make catastrophic interpretations that may result in fundamentally different biological stress responses.

Indeed, although trauma exposure certainly results in the release of stress hormones such as catecholamine and cortisol, it has been noted that dissociation and panic attacks are specifically associated with increased catecholamine levels. It may be that a peritraumatic panic attack or other intense distress during and immediately after the traumatic event leads to higher levels of stress-hormone



strengthen traumatic memories and increase the probability of intrusive recollections. On the other hand, extreme reactions of panic and dissociation may be facilitated by relatively lower levels of stress hormones, such as cortisol, that play an important role in containing the catecholamine response to stress (Young & Breslau, 2004).

Terrorism and Depression

Depression is a debilitating condition characterized by feelings of extreme sadness and loss of interest in daily activities. Whereas patients with depression or suicidal ideation soon after a terrorist event are likely to present with exacerbations of pre-existing conditions, people exposed to terrorism who develop PTSD also may be at increased risk of experiencing a depressive episode as a co-morbid condition. Indications that a patient may be experiencing a clinically significant depressive episode include feelings of hopelessness, thoughts of death, inability to concentrate, insomnia, and a blunted affect. Major depressive disorders carry with them an attendant risk of self-harming behavior. Terrorism often leads to adolescent depression, but little is known about protective factors," The study found that mothers' disaster-related psychological problems had a stronger impact on preschool children than children's direct exposure. Moreover, 9/11-exposed young children of moms with PTSD and depression, as documented by parent and teacher reports, were more likely to have clinically significant aggression, anxiety, depression, and sleep problems. Among adults in Manhattan subsequent to the September 11th attacks, rates of PTSD and depression were twice that of the normal incidence (Galea, 2002). The psychological response to disaster among adolescents most closely resembles that of adults; symptoms of depression and anxiety predominate (Pine & Cohen, 2002).

Depression is a state of low mood and aversion to activity. Depressed people may feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, or problems concentrating, remembering details or making decisions; and may contemplate or attempt suicide. Excessive sleeping, fatigue, loss of energy, or aches, pains or digestive problems that are resistant to treatment may be present (National Institute of Mental Health, 2009). Symptoms of depression were studied in refugee children in Croatia using the Child Depression Inventory (CDI; Kovacs, 1981). Children with high scores on the CDI were characterized both by higher rates of depression and anxiety. Scores for refugee children we



than in school children before the war. Scores did not differ, however, between the refugee children and a clinical sample of children who were treated before the war in a mental health institution for psychosomatic problems, school failure, depression, or anxiety. Moreover, 22% of refugee, compared to 18% of children from the clinical sample, had a score of 18 or higher, considered to be clinically significant (Zivcic, 1993). Depression is a serious mental health problem, with significant consequences in terms of human suffering, lost productivity, and even loss of life (Wells & Sherbourne, 1999; Wulsin, Vaillant, & Wells, 1999). Current estimates suggest that 16% of the population will experience an episode of depression at some point in their lives (Kessler et al., 2003). Moreover, individuals who experience a major depressive episode are at increased risk for future episodes, with each episode significantly increasing risk for subsequent episodes (Mueller et al., 1999). Exposure to traumatic and violent events results in expressions of fear, anxiety, and depression (Monson, 2002).

Theories of Depression in Relation to Terrorism

There are numerous theories of depression. There is no simple answer to what causes depression, because several factors may play a part in the onset of the disorder. These include: a genetic or family history of depression, psychological or emotional vulnerability to depression, biological factors, and life event or environmental stressors. Psychologically and socially stressful events such as the death of a loved one, severe abuse or trauma, marital separation, social failures, social isolation, or long-term care giving can also weaken our immune systems.

A family history of depression does not necessarily mean children or other relatives will develop major depression. However, those with a family history of depression have slightly higher vulnerability of becoming depressed at some stage in their lives. There are several theories to explain this phenomenon. A genetic predisposition alone, however, is unlikely to cause depression. Other factors, such as traumatic childhood or adult life events, may act as triggers.

Psychological Vulnerability

Personality style, and the way you have learned to deal with problems, may contribute to the onset of depression. If you are the type of person who has a low opinion of yourself and worries a lot, if you are overly dependent on others, if you are a perfectionist and expect too much from yourself or others, or if you tend to hide your feelings, you may be at greater risk of becoming depressed.

Biological Factors

Depression may appear after unusual physiological changes such as childbirth, and viral or other infections. This has given rise to the theory that hormonal or chemical imbalances in the brain may cause depression. Studies have shown that there are differences in the levels of certain biochemicals between depressed and non depressed subjects. The fact that depression can be helped by antidepressant medication and electroconvulsive therapy (ECT) tends to support this theory. There is much evidence available today to support the idea that psychological and social stressors can have a physical effect on the immune system. In humans, psychological pathogens also have the same effect on the immune system; the more intense the stressors become, the more our defensive systems are weakened. Even stress caused by relatively minor aversive events such as academic examinations can cause temporary increases in white blood cell counts to occur.

Chronic stressors that last over periods of one or more years compromise immune function, lead to an increased risk of developing physical illnesses and also create an increased likelihood of becoming depressed. In humans, chronic stress seems to influence the serotonin, nor epinephrine, and dopamine neurotransmitter systems, particularly in individuals who are socially isolated and/or have poor coping skills.

Life Events or Environmental Stresses

Some studies suggest that early childhood trauma and losses, such as the death or separation of parents, or adult life events, such as the death of a loved one, divorce, the loss of a job, retirement, serious financial problems, and family conflict, can lead to the onset of depression. Suffering several severe and prolonged difficult life events increases a person's chances of developing a depressive disorder. Once depressed, it is common for a person to remember earlier traumatic life events, such as the loss of a parent, or childhood abuse, which make the depression worse (APA, 1994).

Beck's Cognitive Theory of Depression

Beck's main argument was that depression was instituted by one's view of oneself, instead of one having a negative view of oneself due to depression. This has large social implications of how we as a group perceive each other and relate our dissatisfactions with one another (Nemade, Staats, & Dombeck, 2007)



Terrorism and Post Traumatic Stress Disorder (PTSD)

PTSD is not a new disorder. There are written accounts of similar symptoms that go back to ancient times, and there is clear documentation in the historical medical literature starting with the Civil War, when a PTSD-like disorder was known as "Da Costa's Syndrome." There are particularly good descriptions of posttraumatic stress symptoms in the medical literature on combat veterans of World War II and on Holocaust survivors. Posttraumatic Stress Disorder, or PTSD, is a psychiatric disorder that can occur following the experience or witnessing of life-threatening events such as military combat, natural disasters, terrorist incidents, serious accidents, or violent personal assaults like rape. People who suffer from PTSD often relive the experience through nightmares and flashbacks, have difficulty sleeping, and feel detached or estranged, and these symptoms can be severe enough and last long enough to significantly impair the person's daily life. PTSD was first described in the 1980s and included in the Diagnostic and Statistical Manual of Mental Disorders, 3rd edition (DSM-III), the diagnosis of PTSD arose largely in response to the experiences of war veterans. The authors suggested that the intensity of the early response seems to significantly determine the subsequent occurrence of PTSD. The study concluded, though, that once developed, terrorism-related and post-motor vehicle crash PTSD symptoms resolve in a similar way. The relationship between terrorism has found to be deepened and significant as a meta-analysis of terrorism-related mental health disturbance reported that in the year after a terrorist incident, PTSD prevalence in directly affected (DSM-IV)

Perhaps the best-known and most widespread consequences of exposure to terrorism are posttraumatic stress symptoms (PTS) and post-traumatic stress disorder (PTSD) (Joshi & O'Donnell, 2003; Pfefferbaum et al., 2005). Depressive symptoms are also common in children at all developmental levels exposed to war and terrorism (Gurwitch, Sitterle, Young, & Pfefferbaum, 2002; Shaw, 2003). For example, a large-scale representative sample of New York City public school children 6 months after the September 11 terror attack revealed higher than expected rates of PTSD (11%) and major depression (8%) (Hoven, Duarte, & Mandell, 2003).

The best available evidence suggests that mass trauma events that are incomprehensible and have obvious human intent, such as terrorist events, are associated with great mental health effects in the population. The mental health consequences of terrorism run along a continuum from general ur

to more formally defined psychiatric disease states such as panic disorder, acute stress disorder (ASD), anxiety disorders including post-traumatic stress disorder (PTSD), and mood disorders such as major depression.

Moreover, the importance of PTSD within paradigm of terrorism research emerged when DSM-IV indexed several anxiety disorders, three of which, panic disorder, acute stress disorder, and post-traumatic stress disorder (PTSD), are often associated with traumatic event exposures and are relevant in the post terrorism context.

Researchers found various associations including Empirical studies over the past 20 years have clearly shown that the exposure to war or acts of terrorism has serious and damaging consequences for children and adolescents, such as the development of PTSD, behavioural problems and depressive symptoms (Davis & Siegel, 2000; Paardekooper, de Jong, & Hermanns, 1999). Although only few studies have focused on the long-term psychological effects of adolescents being exposed to traumatic situations, their results suggest that PTSD symptoms may continue to be exhibited up to 17 years after the traumatic situation had taken place (Shaw, 2003). Researchers further found that as a consequence, many social, psychological, health and physiological disturbances have been shown to be related to the war experiences of adolescents, such as PTSD or PTSD-like complaints, depression, withdrawal, alienation, somatic complaints, behavioural problems and disturbance of interpersonal relationships (Janoff-Bulman, 1995: Joshi & O'Donnell, 2003; Kaplan, 2001; Smith, Perrin, Yule, Hacam, & Stuvland, 2002; Tedeschi, 1999). A few recent studies have examined resilience-related processes in the face of terrorism and war. Bonanno et al. (2005) found that high trait self-enhancers, who characteristically use unrealistic, self-serving biases, displayed greater resilience following the September 11 terrorist attacks. Galea et al. (2002), studied Manhattan residents following the September 11 attacks in New York, which revealed that over 40% did not report any PTSD symptoms. Similarly, Bonanno et al. (2006) found that 65.1% of the same Manhattan sample reported no or one symptom of PTSD in the 6 months following the World Trade Center attacks. Of those highly exposed in this sample, about one third remained resilient according to these strict criteria. Finally, Fredrickson, Tugade, Waugh, and Larkin (2003) found that many individuals even experience positive emotions in the aftermath of crises and that these limit depression and fuel thriving.

When investigating adolescents' mental health outcomes in the context of terrorism, most research to date has quite naturally considered direct, physical exposure to the attacks as being a primary factor in determining subsequen



behavioral problems. Several studies have demonstrated that higher levels of physical exposure to terrorist attacks elicit more adverse psychological reactions, such as higher rates of PTSD, anxiety and functional impairment (e.g. Hoven et al., 2002). Several studies showed that adolescents who knew a victim experienced more PTSD and stress related symptoms than those who did not know a victim (e.g. Hoven et al., 2002; Pfefferbaum et al., 1999)

Ronen, Rahav, and Horenczyk (2003) addressed another concept of exposure; 'near miss' experience (e.g. miss the bus that later exploded). They found that youths who were less physically exposed and knew fewer people who were hurt in terrorist attacks, reported more PTSD symptoms, overall distress and malfunctioning in the domains of family functions and risk-taking behavior. Another longitudinal study estimating the effects of the September 11th attacks on adolescents' mental health concluded that while neither physical nor family exposure predicted change in mental health after September 11th, media exposure did predict an increase in PTSD symptoms (Aber, Gershoff, Ware, & Kotler, 2004).

Theories of PTSD

Stress Response Ttheory

According to the Stress Response Theory, the two common responses to stress involve intrusion and avoidance. These two responses tend to oscillate during the same period. Avoidant behaviour serves to restore emotional equilibrium, prevent emotional flooding, and reduce conceptual disorganization. However, these defensive efforts are disrupted by intrusive experiences leading to a dread state. To restore stability, people react with heightened defensive control. Although avoidance of painful thought may reduce the state of dread. Such avoidance may also prevent adaptation to the traumatic experience and lead to persistent post-traumatic stress.

Social Cognitive Theory

The origin of social-cognitive model is based on three common assumptions regarded as the most significant in influencing response to trauma are; (1) the world is benevolent, (2) the world is meaningful, and (3) the self is worthy. That is, other people are in general well-disposed towards us, there are reliable rules and principles that enable us to predict which behaviors will produce which kinds of outcome, and we ourselves are personally good, moral, and well-meaning. Being attacked by a complete stranger without any provocation being created with involved in a serious road traffic accident when we have been obeying

putting our own survival ahead of anything else when our life is threatened are all situations that have the potential to be traumatic in that they may shatter deeply held and probably unexamined assumptions about how we believe the world and ourselves to be. People who have already been traumatized should have lost at least some of their protective illusions about the world. In discussing this point, research suggested two possible resolutions. The first was that people with the most positive assumptions have the greatest initial distress but recover more easily. This has not been tested empirically. Other suggestion was that previous trauma would be a risk factor to the extent that the victim had not re-established a stable and secure inner world. This introduces a quite new idea, namely, that trauma does not have to shatter illusions when they have been shattered already. Although the nature of this inner world that harbors psychological vulnerability has not been specified, it is clinically useful to place an emphasis on the role of prior beliefs on the processing of trauma and to focus on the deliberate updating of information in recovery (Grey et al., 2002; Janoff-Bulman, 1992).

Conditioning theory

Keane, Zimering, and Caddell (1985) proposed that a wide variety of associated stimuli would acquire the ability to arouse fear through the processes of stimulus generalization and higher order conditioning. Although repeated exposure to spontaneous memories of the trauma would normally be sufficient to extinguish these associations, extinction would fail to occur if the person attempted to distract themselves or block out the memories, rendering the exposure incomplete. Avoidance of the conditioned stimuli, whether through distraction, blocking of memories, or other behaviors, would be reinforced by a reduction in fear, leading to the maintenance of PTSD.

Information-processing Theories

Cognitive theories have focused mainly on the traumatic event itself rather than on its wider personal and social context. The central idea is that there is something special about the way the traumatic event is represented in memory and that if it is not processed in an appropriate way, psychopathology will result. Like social-cognitive theories, this approach emphasizes the need for information about the event to be integrated within the wider memory system. However, the difficulty in achieving this is attributed more to characteristics of the trauma memory itself than to conflict with preexisting beliefs and assumptions (Chemtobas Roitblat,



Twentyman, 1989; Creamer, Burgess, & Pattison,1992; Foa, Steketee, & Rothbaum, 1989; Litz & Keane, 1989).

Emotional Processing Theory

One development was to elaborate the relationship between PTSD and knowledge available prior to the trauma, during the trauma, and after the trauma. They proposed that individuals with more rigid pre-trauma views would be more vulnerable to PTSD. These could be rigid positive views about the self as being extremely competent and the world as extremely safe, which would be contradicted by the event, or rigid negative views about the self as being extremely incompetent and the world as being extremely dangerous, which would be confirmed by the event (Dalgleish, 1999).

Dual Representation Theory

Traumatic memory is an ordinary memory that has a particular structure (more response elements, stronger inter-element associations, etc.) is the idea that trauma memories are represented in a fundamentally distinct way. Trauma theorists suggested that pathological responses (for example, vivid and uncontrollable re-experiencing in the present) arise when trauma memories become dissociated from the ordinary memory system and that recovery involves transforming them into ordinary or narrative memories. However, they have not made clear whether ordinary memories of the traumatic event can exist alongside dissociated memories, and exactly how one form of memory is transformed into another (Janet, 1904; Terr, 1990; Van Der Hart & Horst, 1989; Van Der Kolk & Van Der Hart, 1991).

Terrorism and Psychological Well-Being

A state of emotional and psychological well-being in which an individual is able to use his or her cognitive and emotional capabilities, function in society, and meet the ordinary demands of everyday life. Well-being - a contented state of being happy, healthy and prosperous. Life satisfaction is perceived as an indicator of subjective well-being (Diener, 1994, 2000; Myers, 2000). This distress can lead individuals and communities to experience a constant, although perhaps not conscious, feeling of arousal and vigilance, which can have a profound affect on an individual's sense of well-being (Tramontin & Halpern, 2007).

Terrorist attacks, as well as threats of terrorism, can have a variety of impacts on people, from minimal to acute distress, and even debilitating



families, communities, and whole nations, disrupting people's behavior, cognition, and psychological well-being. Brewin (2004). The intensity of exposure to traumatic events affects not only specific areas of life, but also the general well-being of children and teenagers (Garbarino et al., 1991; Osofsky, 1997; Slone & Hallis, 1999). In general, the findings of the relatively low number of studies examining the relationships between political attitudes and stress, as well as well-being as a whole, are mixed (Sagy & Antonovsky, 1986; Punamaeki, 1996; Punamaeki et al., 1997; S agy, 1998).

This distress can lead individuals and communities to experience a constant, although perhaps not conscious, feeling of arousal and vigilance, which can have profound affect on an individual's state of well-being (Beutler, Reyes, Franco & Housley, 2007; Tramontin & Halpern, 2007) Most of the findings point to the existence of a relationship between political attitude and teenagers' well-being under the threat of war and terror. Despite the limited knowledge regarding the relationship between political attitude and well-being, it is still possible to discern a direction for understanding.

Significant increase of anxiety and worse well-being was observed at the time of geomagnetic disturbances and increase of anxiety and aggression at the time of changes in IMF polarity (Lasswell, 1965) postulated that individuals derive a significant portion of their identity through their allegiance to their country, thus, when their country is struggling, the sense of well-being of the citizens declines (as cited in Cheney, 1993). Cairns and Wilson (1993) suggested that failure to use denial, or distance oneself from violence, could lead to lower levels of psychological well-being.

Well-being refers to "how good one feels," psychologically and physiologically. One construct of well-being often examined is depression. A number of studies examine depression in relation to Terrorism (Britt & Blies, 2003). Norris and his colleagues (2002) explored that, the greater the exposure to the events surrounding the WTCD, the poorer the person's psychological well-being, even after controlling for demographic characteristics, other stressors, and social psychological resources. Exposure was only weakly related to physical well-being, once other factors were taken into account. The findings clearly show that individuals who experienced greater exposure to the WTCD have more psychological problems than those who had less exposure 1 year after the attacks. Exposure did not seem to have such severe consequences for physical well-being. The events of September 11, 2001, signaled a majorichan



context in the United States, highlighting the salience of political terrorism as a continuing threat to individuals' sense of safety and well-being. A sizable literature has demonstrated that the September 11 attacks adversely affected the mental health of individuals across the nation 13–16 as well as those most directly affected in New York, Washington, DC, and western Pennsylvania. 17–19.

Others studies have asserted that community-wide disasters have remarkable effects on psychological and physical health, especially in instances where it was a significant loss of life, extensive property damage, and severe economic disruptions of people's lives and subjective well-being (Adams et al., 2002; Erikson, 1976; Freedy, Kilpatrick, & Resnick, 1993; Green, 1995; Norris et al., 2002).

Previous post-disaster research has already documented a high prevalence of psychological symptoms and disorders among residents of NYC: 7.5% of those living south of 110th Street in Manhattan reported symptoms related to PTSD and 9.7% had symptoms of depression 1 month after the attacks (Boscarino, Galea, Ahern, Resnick, & Vlahov, 2002; Galea et al. 2002; Galea et al. 2003).

Self Determination Theory and Well-being

Self determination theory (SDT) is a macro theory of human motivation, personality development, and well-being. The theory focuses especially on volitional or self - determined behaviour and the social and cultural conditions that promote it. SDT also postulates a set of basic and universal psychological needs, namely those for autonomy, competence and relatedness, the fulfillment of which is considered necessary and essential to vital, healthy human functioning regardless of culture or stage of development.

Desire Theories of Well-being

According to desire theories, peoples well-being as consisting in the satisfaction of preferences or desires. The simplest version of a desire theory one might call the *present desire* theory, according to which someone is made better off to the extent that their current desires are fulfilled. Comprehensive desire theory, according to which what matters to a person's well-being, is the overall level of desire-satisfaction in their life as a whole. A *summative* version of this theory suggests that the more desire-fulfillment in a life the better.(Stanford Encyclopedia of Philosophy)



Objective List Theories of Well-being

It is also worth pointing out that objective list theories need not involve any kind of objectionable authoritarianism or perfectionism. First, one might wish to include autonomy on one's list, claiming that the informed and reflective living of one's own life for oneself constitutes a good. Second, and perhaps more significantly, one might note that any theory of well-being in itself has no direct moral implications. There is nothing logically to prevent one's holding a high conception of well-being alongside a strict liberal view.

Rational of the Study

The literature review of depression, post traumatic stress disorder and psychological well-being, has provided strong evidence of relationship between terrorism and above mentioned variables. In recent year an incessant wave of terrorism paved long-lasting effects on every faction of life. So this phenomenon attracted scholars throughout the world to investigate several dimensions rooted in it. This hotly discussed issue has remained quite successful in capturing the attention of researchers around the globe for last two decades (Punamaeki, Qouta, & Sarraj, 2007)

As Pakistan is one of most effected countries of terrorism. Yet a less attention has been devoted by research scholars. It is unanimously acknowledged by experts of every field that terrorist suicidal attacks exert multidimensional psychological, social and emotional problem among effected individuals. It has almost been impossible to eliminate terrorist organizations by killing prosecution policies; importance of coping with the underlying causes of terrorism becomes more important in counter terrorism studies (Teymur, 2004). It is not possible to maintain or execute coping strategy with terror victims unless their psychological health discussed. The present study aims to see the exposure to terror and its psychological impacts on IIUI university students. It also aims to strengthen insight into the process of adjustment cognitively and emotionally to ongoing terror risks by investigating relationships between psychological well-being and exposure to suicidal attacks. During the war against terrorism in the northern areas of Pakistan, which started in late September 2005, the people of Pakistan have been confronted with a wave of terrorist attacks, including, among others, drive-by shootings, break-ins and suicide bombings. It has been evident through ample investigations that the higher the level of exposure to terrorist attack, the more negative would be the psychological consequences (Pfefferbaum et al., 2005; Pine & cohen, 2002). It is also of valuable interest to examine this occurrence in indigenous settin

been paid in past on it. The current study is indented to see the impact of exposure to terrorist attack among university students and their counterpart. The differences between exposed to terror and non exposed students on psychological well-being, depression, anxiety and stress would be identified, which ultimately would be used for prevention and treatment plan for victims.

METHODOLOGY

Objectives of the Study

In the present study we shall try to search out the main causes and reasons with special reference to psychological impact and outcome of this incident for this unexpected and useless attack on the innocent young scholars of this great institution. Further more the difference of exposed and non exp students to terror on PTSD, Depression and psychological-well being would be investigated. The present study was designed to investigate the impact of suicidal attacks on psychological affects among University students of International Islamic University Islamabad (IIUI). It focuses on the following objectives:

- 1. To find out differences on depression between exposed and non exposed students to suicidal attack.
- 2. To explore differences on anxiety between exposed and non exposed students to suicidal attack.
- 3. To find out differences on stress between exposed and non exposed students to suicidal attack.
- 4. To discover differences on well being between exposed and non exposed students to suicidal attack.

Hypotheses

Following hypotheses were formulated to achieve the objectives of the study:

- H1: Students who have exposure to terror will have high on Depression as compared to those students who have no exposure to terror.
- H2: Students who have exposure to terror will have high on PTSD as compared to those students who have no exposure to terror.
- H3: Students who have exposure to terror will have low on Psychological Wellbeing as compared to those students who have no exposure to terror.

Operational Definition of the Variables

The variables for the present research were operationally defined in the following way:

Created with



Exposure to Terror

Exposure to terror is defined as those respondents who are present at the suicidal event.

No Exposure to Terror

No exposure to terror is defined as those respondents who are not present at the suicidal event.

Post traumatic stress disorder

An anxiety disorder in which a particularly stressful event, such as military combat or a natural disaster, bring in its aftermath intrusive reexperiencings of the trauma, a numbing of responsiveness to the outside world, estrangement from others, a tendency to be easily startled, nightmares, recurrent dreams, and otherwise disturbed sleep.

For the current study scores on The Post-traumatic Stress Diagnostic Scale (PDS) has been operationalized as indicatives of PTSD (see Appendix B).

Psychological Well-being

Psychological well-being refers to ones positive sense of subjective well-being i.e. a person, who thinks positively about him/her self and about his/her life and reports positively, is thought to have positive psychological well-being. It is "a positively attitude towards one's self and life" (Andrew & Robinson, 1991, P.61).

In present study scores on Urdu version of Psychological Well-being adapted by Khan (2008) are operationalized as indicative of psychological well-being (see Appendix C).

Depression

An emotional state marked by great sadness and apprehension, feelings of worthlessness and guilt, withdrawal from others, loss of sleep, appetite, and sexual desire, or interest and pleasure in usual activities; and either lethargy or agitation. It is called major depression in DSM-III and unipolar depression by others. It can be associated symptoms of other disorder.

In present study scores on Beck Depression Inventory-II (BDI-II) are operationalized as indicative of depression (see Appendix D).

Sample

Sample for the present study comprised of (N = 100) students. It included (n = 50) males i.e. 25 exposed to terror and 25 non-exposed to terror and (n = 50) females i.e. 25 exposed to terror and 25 non-exposed to terror. The mean age of the participants was 27 years (range = 20 to 35 years). The sample was drawn from IIUI. The base line for educational level of the respondents was BS.

Instruments

Following are the scales used in current study:

The Post-traumatic Stress Diagnostic Scale (PDS)

PDS was developed and validated by Edna Foa (1995) to provide a brief but reliable self-report measure of post-traumatic stress disorder (PTSD) for use in both clinical and research settings. The scale is intended to screen for the presence of PTSD in patients who have identified themselves as victims of a traumatic event or to assess symptom severity and functioning in patients already identified as suffering from PTSD. The test is self-administered and can usually be completed within 10–15 min and requires a reading age of ~13 years. Test items mirror DSM IV criteria for PTSD and items are framed in accessible language. Questions relate to the frequency of distressing and intrusive thoughts, post-traumatic avoidance and hyper-arousal.

The PDS has 49 items. A short checklist identifies potentially traumatizing events experienced by the respondent. Respondents then indicate which of these events has troubled them most in the last month. Respondents then rate their response to this event at the time of its occurrence to determine whether the DSM IV stressor criteria are met (Criterion A1 'the person experienced, witnessed or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others' and Criterion A2, 'the person's response involves intense fear, helplessness, or horror'). Using a four-point scale, respondents then rate 17 items representing the cardinal symptoms of PTSD experienced in the past 30 days. Finally, respondents rate the level of impairment caused by their symptoms across nine areas of life functioning. A diagnosis of PTSD is made only when DSM IV criteria A to F are met. The PDS includes a symptoms severity score which ranges from 0 to 51 and this is obtained by adding up the individual's responses of selected items. The cut offs for symptom severity rating are 0 no rating, 1-10 mild, 11-20 moderate, 21-35 moderate to severe and >36 severe. Created with



The PDS has high face validity because items directly reflect the experience of PTSD with high internal consistency (coefficient alpha of 0.92). Test–retest reliability was also highly satisfactory for a diagnosis of PTSD over a 2- to 3-week period (kappa = 0.74). Test–retest using symptoms severity scores yielded a highly significant correlation (0.83). Analysis also revealed an 82% agreement between diagnosis using the PDS and the Structured Clinical Interview for DSM (Foa, Cashman, Jaycox, & Perry, 1997).

Beck Depression Inventory-II (BDI-II)

The BDI-II, originally developed by Beck (1978), was a 1996 revision of the BDI, developed in response to the American Psychiatric Association's publication of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, which changed many of the diagnostic criteria for Major Depressive Disorder.

Items involving changes in body image, hypochondria, and difficulty working were replaced. Also, sleep loss and appetite loss items were revised to assess both increases and decreases in sleep and appetite. All but three of the items were reworded; only the items dealing with feelings of being punished, thoughts about suicide, and interest in sex remained the same. Finally, participants were asked to rate how they have been feeling for the past two weeks, as opposed to the past week as in the original BDI.

Like the BDI, the BDI-II also contains 21 questions, each answer being scored on a scale value of 0 to 3. The cutoffs used differ from the original: 0–13: minimal depression; 14–19: mild depression; 20–28: moderate depression; and 29–63: severe depression. Higher total scores indicate more severe depressive symptoms.

One measure of an instrument's usefulness is to see how closely it agrees with another similar instrument that has been validated against clinical interview by a trained clinician. In this respect, the BDI-II is positively correlated with the Hamilton Depression Rating Scale with a Pearson r of 0.71, showing good agreement. The test was also shown to have a high one-week test-retest reliability (Pearson r = 0.93), suggesting that it was not overly sensitive to daily variations in mood. The test also has high internal consistency ($\alpha = .91$).

Psychological Well-being (Urdu Version)

Well-being was measured by two subscales of Anxiety Stress Questionnaire (House & Rizzo, 1972). The two subscales of somatic tension get



to measure the possible outcomes in terms of feeling or physical symptoms growing out of stress at work. The Urdu version adapted and validated by Khan (2008) consisted of 10-items ranging from 1 (strongly disagree) to 5 (strongly agree). Scores for all items were summed and could range from 10 to 50, with high scores indicating high level of well-being. Eight items are reverse scored. The alpha reliability coefficient for the present sample is .51.

Procedure

Data was collected from IIUI. Purposive convenient sampling technique was used to collect data. The informed consent of the respondents was taken before administration. After the permission, the researcher approached each participant individually to maintain the accuracy of data collection. Confidentiality of data was also ensured. The written as well as oral instructions were given along with booklet containing questionnaires and demographic data sheet (see Appendix A). It took about 30 minutes to fill all the scales. Participants were instructed to respond to each item without leaving anyone. The completed scales were checked and any missing information was obtained. Participants were assured that the provided information will be used only for research purposes. In the end, participants and authorities were thanked separately. Those students who wanted information about the results were given contact number to get in touch with the researcher.

RESULTS

The current study was conducted to see the psychological impact of suicidal attacks on IIUI students. Results are presented below.

Table 1

Mean, Standard Deviation, and Alpha Reliability Coefficients of Post Traumatic Stress

Disorder Scale, Psychological Wellbeing and Beck Depression Inventory-II (N=100)

Scales	No of Items	Mean	SD	Alpha Coefficient
PTSD	17	36.23	11.58	.88
Psychological Wellbeing	10	31.95	8.76	.51
BDI-II	21	15.10	11.52	.90

Note. Please read PTSD as Post Traumatic Stress Disorder, BDI as Beck Depression Inventory.

Descriptive statistics and alpha reliabilities for the scales used in the present study are reported in table 1. All scales reliabilities exceeded the .70 except psychological wellbeing. Table 1 indicates that the PTSD, Psychological Wellbeing and BDI-II measures have high alpha reliability coefficient estimates for our sample of study.

Table 2Means, and standard deviations for exposed and non-exposed to terror on PTSD Scale, Psychological Wellbeing and BDI-II (N=100)

		Exposed	Non Exposed		
	(n = 50)		(n = 50)		
Scales	M	SD	M	SD	
PTSD	40.32	12.64	32.14	8.77	
Well-being	28.18	6.15	35.72	9.39	
BDI-II	20.72	11.23	9.48	8.81	

Note. Please read PTSD as Post Traumatic Stress Disorder, BDI as Beck Depression Inventory.

The Table 2 shows the mean scores and standard deviation of exposed and non-exposed on PTSD, Well-being and BDI-II Scales. The findings indicate that mean scores of exposed on PTSD, Well-being and BDI-II are higher then the non-exposed students.

Table 3 $\textit{Mean, SD, t-analysis of gender differences on the Post Traumatic Stress Disorder scale } \\ (N=100)$

	Exposed		Non E	xposed		
	(n =	= 50)	(n = 50)			
Scales	M	SD	M	SD	t	p
PTSD	40.32	12.64	32.14	8.72	3.75	.000

Note. Please read PTSD as Post Traumatic Stress Disorder.

Table 2 shows the mean differences of the exposed and non-exposed to suicidal attacks on post traumatic stress disorder scale. The mean scores of exposed and non-exposed show that there is a significant differences in exposed and non-exposed. There is a significant difference between exposed and non-exposed regarding PTSD scale.

Table 4 *Means, standard deviations, and t-values by exposed and non-exposed on Psychological Wellbeing Scale (N = 100)*

	Exposed		Non-ex	kposed		
	(n =	50)	(n =	50)		
Scales	M	SD	M	SD	t	p
Psychological	28.18	6.15	35.72	9.39	4.74	.000
Wellbeing						

df = 98

The results of the *t*-test show that there is a significant difference between students who have exposure to suicidal attack and those who have no exposure to suicidal attack.

Table 5

Means, standard deviations, and t-values for the difference between students who have exposure to terror and those who have not exposure to terror, on BDI-II Scale (N=100)

	Exposed		Non-E	xposed		
	(n =	50)	(n = 50)			
Scales	M	SD	M	SD	t	p
BDI-II	20.72	11.23	9.48	8.81	5.56	.000

df = 98

Note. Please read BDI as Beck Depression Inventory

Table 5 shows a significant difference between exposure to terror and no exposure to terror on BDI-II scale, and the mean scores of exposure to terror is high as compared to those no have no exposure to terror. Therefore, significant different exists between exposed and non-exposed to terror.

DISCUSSION

The present study aimed at examining the impact of suicidal attacks on Posttraumatic Stress Disorder, Psychological Wellbeing and Depression among students of International Islamic University Islamabad (IIUI). Furthermore, it also investigated the differences on post traumatic stress disorder, depression and wellbeing between exposed and non-exposed students to suicidal attacks. Three scales used in the research were Post traumatic stress disorder, Psychological Wellbeing and Beck Depression Inventory II. Statistical analysis of the instruments indicates that the instruments are reliable measures (see Tables 1).

Results of descriptive statistics indicate that the students who have exposure to terror have high mean score on the PTSD scale as compared to those who have no exposure to terror (see Table 2).

Regarding the post traumatic stress disorder, literature review has showed that most widespread consequences of exposure to terrorism are posttraumatic stress symptoms (PTS) and post-traumatic stress disorder (PTSD) (Joshi & O'Donnell, 2003; Pfefferbaum et al., 2005). Therefore, it was hypothesized that students who have exposure to terror will be high on PTSD scale as compared to those students who have no exposure to terror. The analysis revealed that the significant differences exist because students who have faced the incident have more psychological impact of Post traumatic stress disorder and they have taken it seriously impact on their lives. Empirical studies over the past 20 years have clearly shown that the exposure to war or acts of terrorism has serious and damaging consequences for adolescents, such as the development of PTSD, behavioral problems and depressive symptoms (Davis & Siegel, 2000; Paardekooper, de Jong, & Hermanns, 1999). The hypothesis was supported by the finding of the current study. There is a war going on in northern areas of Pakistan since 2005, based on a conflict between Taliban and government forces. The most prominent aspect of this war is suicidal attacks by the terrorist. The war experiences may range from participating in or witnessing terror attacks, bombardments, killings, beating and fighting in civilian area to witnessing the death of close family members, exposure to dead bodies and the result is PTSD and depression (UNICEF, 1996, 1998; Women's Commission report, 2001). So there is great impact on students

suicidal attacks as there are most evident through studies of the health outcomes of people subsequent to their exposure to very stressful circumstances, including shipwreck, concentration camp experience, and terrorist attacks. When investigating adolescents' mental health outcomes in the context of terrorism, most research to date has quite naturally considered direct, physical exposure to the attacks as being a primary factor in determining subsequent PTSD, emotional and behavioral problems. Several studies have demonstrated that higher levels of physical exposure to terrorist attacks elicit more adverse psychological reactions, such as higher rates of PTSD, anxiety and functional impairment (e.g. Hoven et al., 2002). However, after terrorist attacks this type of exposure appears to explain a limited amount of variance in youth's mental health problems (Pfefferbaum et al., 2001). An additional type of exposure via relationship with a victim has been postulated as a significant moderating variable especially when focusing on children or adolescents, given that youth's developmental status may render them more vulnerable to the loss of loved-ones (Pynoss & Eth, 1985).

Several studies showed that adolescents who knew a victim experienced more PTSD and stress related symptoms than those who did not know a victim (e.g. Hoven et al., 2002; Pfefferbaum et al., 1999; Ronen, Rahav, & Appel, 2003). In the context of terrorism, subjective exposure was studied less. However, reports of initial fears and worries for safety of family members and friends after the Oklahoma City and Nairobi bombings seemed to be signi.cant predictors of PTSD (Pfefferbaum et al., 2002; Pfefferbaum et al., 2003). In addition, when subjective exposure was defined by fear levels, adolescents who were more exposed physically were not always found to report higher sense of fear (Solomon, Laufer, & Lavi, 2005). Adverse mental health outcomes are indeed found to vary widely both in terms of type and extent, ranging from mild stress reactions, through PTSD to psychopathological responses including somatic complaints, depression, anxiety, conduct disorder, functional impairment, panic attacks etc. (e.g. Hoven et al., 2002; Pat Horenczyk & Doppelt, 2005; Solomon& Lavi, 2005; Thabet &Vostanis 2002).

Depressive symptoms are common in children and adults regarding the levels exposed to war and terrorism (Gurwitch, Sitterle, Young, & Pfefferbaum, 2002; Shaw, 2003). For example, a large-scale representative sample of New York City public school children 6 months after the September 11 terror attack revealed



rates of PTSD (11%) and major depression (8%) (Hoven, Duarte, & Mandell, 2003). Exposure to political violence is similarly associated with depressive and general distress symptoms (Slone, Adiri, & Arian, 1998; Slone & Hallis, 1999) Furthermore, the higher the level of exposure, the more negative are the psychological consequences (Pine & Cohen, 2002; Pfefferbaum et al., 2005). Therefore, it was hypothesized that students who have exposure to terror will be high on Depression scale as compared to those students who have no exposure to terror. Depressed people may feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, or problems concentrating, remembering details or making decisions; and may contemplate or attempt suicide. Excessive sleeping, fatigue, loss of energy, or aches, pains or digestive problems that are resistant to treatment may be present (National Institute of Mental Health, 2009). The results of the present study shows significant difference on depression scale and it was proved that students who have exposure to terror have more depressive symptoms then those who have no exposure.

Regarding our last hypothesis it was hypothesized that those who have exposure to terror will be low on psychological wellbeing as compared to those who have no exposure to terror. A universal medical and public health definition was proposed which is: "The intentional use of violence, real or threatened, against one or more non-combatants and/or those services essential for or protective of their health, resulting in adverse health effects in those immediately affected and their community, ranging from a loss of well-being (Arnold, 2003). The result of the present study supported our hypothesis and it show that students who have seen the terrific incident have shown low psychological wellbeing and they have got more depression and symptoms of PTSD. Such types of incident always have negative effects on human life and that's why we can say that events like this take human life and lose of any thing so person's wellbeing is always lower as shown in the past literature.

Conclusion

On the basis of the findings of the present research, it can be concluded that those students who have exposure to terror have more symptoms of PTSD and Depression and they have low level of psychological wellbeing. In Pakistan it is first time that such type of bad event was occur and research was conducted to see the impact of this event on the students life and it is the need of fut

nation have low level of wellbeing and symptoms of PTSD and depression then how they can progress in their desired field for the battement of their country. Secondly, those who have exposure to terror and they have shown they symptoms needs to be treatment and they need higher motivation and good interest then they can progress in other fields and they should enrage things not to be criticizing them. Keeping in view the importance of healthy life and good psychological well-being, psychologist, psychotherapists and counselors can play effective role for the treatment aimed at changing one's orientation towards control. It is possible to change one, as it is not a static trait of personality.

Limitations

Although the study provided some very useful results, the study has also some limitations, which should be taken into consideration for further research in this field.

- 1. The sample was limited therefore; generalize the findings should be made with contagious. Another limitation of the present study could be that it covers the perspective of the exposure to terror and no exposure to terror, other studies on demographic variables may give a new dimension for the study.
- 2. The sample could not be randomly selected. Also, it was taken from few departments of the university and it was not nationally representative.
- 3. All participants were educated studying in different departments so the findings cannot be generalized to the educational community of Pakistan.
- 4. Due to lack of time and resources, the sample was limited to only those students who were studying in International Islamic University Islamabad. It did not include those respondents who faced.

Suggestions

- 1- The present research was a pioneer research in Pakistan in the area of terrorism; further researches are required in the domain of terror.
- 2- A nationwide sample should be selected from different provinces of the country where suicidal attacks are frequently occurring.



- 3- Sample should include both educated and uneducated persons to make it more representative of the nation of Pakistan.
- 4- Research in the area of interest is very important to solve different problems arising at this event. More studies should be designed to study student's related issues in depth.
- 5- Measures other than self-reports should be used to assess the affects.

The present study makes a significant contribution to the existing body of knowledge in the field of stress, PTSD and psychological wellbeing. The findings of the study are also same as investigates its impacts in the past in different countries.

The present study has demonstrated that suicidal events at university places play important role in students, teachers and staff as well. Suicidal events are significantly related to student's life (i.e., psychological well-being as well as PTSD and depression).

However, the results have provided support for the present construct in the relation between psychological issues among university students and suicidal attacks, and all the predictions related to the present study were supported by the data.

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