TERRORISM CATASTROPHIZING, PERCEIVED STRESS AND DEATH ANXIETY AMONG UNIVERSITY STUDENTS

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National Institute of Psychology
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The current research studied the impact of terrorism on university students through terrorism catastrophizing, perceived stress, and death anxiety. The study was based on cross-sectional research design. 430 university students (men = 183, women = 247) from universities of Peshawar, Islamabad, Rawalpindi, Multan, and Bahawalpur were recruited through purposive sampling. Terrorism Catastrophizing Scale (Sinclair & LoCicero, 2007), Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) and Death Anxiety Scale (Gorcja & Fervez, 2000) were used. Comparison was made among students regarding their gender and universities. Pearson correlation showed a high significant positive correlation between terrorism catastrophizing, perceived stress, and death anxiety. Results also indicated that both male and female students felt high terrorism catastrophizing and high stress; female students were found to be more anxious of death than male students. Students of Peshawar University were found to be more anxious about terrorism, catastrophizing, perceived stress as significant predictors of death anxiety among university students.

Keywords: terrorism, catastrophizing, perceived stress, death anxiety

Disasters, whether natural or man-made, have become the most striking issue of the 21st century. Terrorism, which is considered to be a man-made disaster and is much difficult to define, is most smoldering issue of the media. At present, the world is encountering terrorism in different forms and scenarios.

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The phenomenon of terrorism has significantly changed the socio-economic and geo-political set-up of the world after the event of 9/11 (Ali, 2008).

In Pakistan, terrorism has emerged as a social evil and a major problem especially in the year 2009. Pakistan is continuously confronting major terrorist attacks despite the fact that it is a country which is front line state in war against terrorism. These terrorist attacks have destroyed social fabric and economy and badly affected the political system of the country. Terrorist activities in the form of suicide bombings throughout Pakistan over the past few years have been a major issue. The scandalous technique adopted by terrorist groups has taken the lives of over 10,267 innocent people over the past five years, according to an estimate. During 2008, Pakistan was at the top of the countries with deaths by suicide bombing (Khan, 2009).

There are various definitions for the term “Catastrophizing”, as according to Sullivan, Bishop, and Pivik (1995), it involves an inflated negative orientation toward some deleterious stimuli. Chavez and Brown (1987) considered catastrophizing as the maximization of and worry about particular negative life events. Spanos, Radtko-Bodorik, and Ferguson (1979) have argued that catastrophizing involves thinking always focused on the negative events and it is one of the most basic causal mental process that can lead to diverse forms of psychopathology, in which anxiety and depression are common (Beck, Rush, Shaw, & Emery, 1979; Garnefski, Teerds, Kraaij, Legersteed, & Van den Kommer, 2004).

The model of psychopathology (Beck, Rush, Shaw, & Emery, 1979) is beneficial in comprehending particular phenomena which are a basis of how people arrange and compose their experiences and how particular forms of mental disorganization, which are also called cognitive distortions, can lead an individual to various mental diseases. Viewing terrorism under the perspectives explained by these models of catastrophizing, it is assumed that major mass-casualty attacks like 9/11 create an intense death salience that vitally changes public’s views about security and defense (as cited in Sinclair & LoCicero, 2007).

The devastation of terrorism is restricted to how people feel in wake of ongoing terror attacks. Apprehension of future terror attacks can also be enormously devastating in terms of cognitive functioning. There is a wide literature and polling evidence (Kramer, Brown, Spielman, Gilson, & Rothrock, 2005) on fear of future terrorism among public, although some studies conducted right after 9/11 have shown some declining of pathology and fear of terrorism after it rose immediately following the attacks (Galea et al., 2003; Schuster et al., 2003). These fears went up largely after major terrorist attacks, such as followed those in Bali in 2002, Madrid in 2004, and London in 2005 (Polling Reports, 2005). A research indicated that terrorism catastrophizing has proved to be a significant predictor of behavioral change and of symptom anxiety, depression, physiological stress and mortality salience among survivors of terror attacks (Sinclair & LoCicero, 2007).

Terrorist attacks in Pakistan have produced an immense and ongoing kind of insecurity among the public. This dread hampered their routine as well as financial setup. It was revealed in a Gallup survey conducted by the end of 2009 that nearly percent of citizens in Pakistan have insecurity and show hesitation in visiting crowded places. An important study conducted by Pakistan Institute for Peace Studies (PIPS) on the impact of terrorism on the activities of the people has shown that panic apprehension due to terrorism is a causal factor of dysfunctional behavior of people in which...
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The devastation of terrorism is not restricted to how people feel in the wake of ongoing terror attacks. Apprehension of future terrorist attacks can also be enormously devastating in terms of cognitive functioning. There is a wide literature and polling evidence (Kramer, Brown, Spielman, Giosan, & Rothrock, 2004) on fear of future terrorism among the public, although some studies conducted right after 9/11 have shown some declining of pathology and fear of terrorism after it rose immediately following the attacks (Galea et al., 2003; Schuster et al., 2003). These fears went up largely after major terrorist attacks, such as following those in Bali in 2002, Madrid in 2004, and London in 2005 (Polling Report, 2005). A research indicated that terrorism catastrophizing has proved to be a significant predictor of behavioral change and of symptoms of anxiety, depression, physiological stress and mortality salience among survivors of terror attacks (Sinclair & LoCicero, 2007).

Terrorist attacks in Pakistan have produced an immense and ongoing kind of insecurity among the public as this dread hampered their routine life as well as financial setup. It was revealed in a Gallup survey conducted by the end of 2009 that nearly 80 percent of citizens in Pakistan feel insecurity and show hesitation in visiting crowded places. An important study conducted by Pakistan Institute for Peace Studies (PIPS) on the impact of terrorism on the activities of the people has shown that panic or apprehension due to terrorism is a causal factor of dysfunctional behavior of people in which
commonly spread mental complications are stress, anxiety, depression and fear of death (Pakistan Security Report, 2009). Various psychiatrists in Karachi have shown their major worry over the growing number of patients suffering from mental and psychological diseases after a wave of terrorist attacks in the city at the holy procession of Ashora on 10th Moharram which claimed to have taken the lives of almost 43 people while 100 were injured. Medical experts have argued that patients suffering from psychological traumas need urgent treatment; besides, the psychological impacts also prevail in their families. Another manifestation of effects of terrorism is lack of tolerance, patience, and increase in cognitive stress in the country which can further increase fear of instability and anxiety (“Psychological Diseases”, 2010).

The word ‘stress’ comes from the Latin word *stringere*, which means 'to draw tight'. It encompasses a wide range of forms, i.e., from simple frustrations to major mental complications that can cause a real deterioration in health. The word may refer to a stimulus, a reaction to a stimulus, or the physical consequences of that response. According to Lazarus and Folkman (1984), stressors, or stressful life situations, as those conditions that might create danger for individual’s physical integrity (physical stressors) or psychological well-being (psychological stressors).

General Adaptation Syndrome (GAS; Selye, 1946) model described three stages which an individual faces in stressful situations: (i) alarm reaction, in which primary phase of lowered resistance is followed by counter shock, during which the individual’s defense mechanisms become aroused; (ii) resistance, is the utmost adjustment and might be a successful return to normal balance state for individual’s body. If, however, the stressor is ongoing and the defense mechanism does not work more, an individual will move on to a third stage; (iii) exhaustion, in which adjustable mechanisms disintegrate. Selye (1946) devised a model in which he divided stress into eustress and distress. When stress increases efficiency (physical or mental, such as through strength training or challenging work) it may be considered as eustress and when persistent stress that is not resolved through coping mechanisms or adaptation, it is called distress, which basically lead to anxiety or withdrawal behavior.

Studies conducted to assess terrorism’s psychological impact have shown that terrorist attacks have created ongoing and long term stressful conditions and have shocking consequences in the form of various symptoms in survivors of terrorist attacks such as distress, posttraumatic stress disorder, anxiety attacks etc. (Franklin, 2002). Differences in stressful experiences of terrorism regarding gender have also been noted for their personal experiences of stress at the moment of terrorist attack, which indicated that girls felt higher stress than boys (Plefferbaum et al. 1999).

As far as stressful conditions due to terrorist attacks in Pakistan are concerned, people are under distress. Senior psychiatrists and psychologists in the country have argued that people or families affected by suicide attack or any other sort of terrorist activities need immediate treatment because their panic afterwards results in serious psychological diseases. Even the doctors and paramedical staff serving in the different hospitals cannot flee from psychological impact of such terror incidents (“Psychological Diseases”, 2010).

Death Anxiety is considered to be a universal phenomenon and has been defined in a multiple conditions and scenarios. Biscoff (as cited in Ismail & Aqil, 1995) has argued that dying is merely not a process of separation from life rather it involves a complicated diversity of its contexts and situations. Moody (1975) considered death as the nonexistence of particular medically detectable symptoms and as a body state depicted by loss of major functions.

Anxiety and fear, both terms are most commonly used to define orientation towards death throughout the life time. Various studies conducted on death anxiety have typically hypothesized that the concept of death generally leads to anxiety. According to Neimeyer (1994) death anxiety relates to perception of threats/danger to life in daily routine rather than in acute situations. He argued that death anxiety has various components which include anticipating oneself as dead, fear of the process of dying and apprehension about death of relatives. According to Lonetto, Fleming and Mercer (1979), Templar’s two-factor theory of death anxiety encompasses two general factors in degree of death anxiety: (a) mental health of a person and (b) his life experiences related to the topic of death.

Terror Management Theory is impressive in explaining phenomena behind understanding how people respond under the danger of terrorist attacks (Pyszczynski, Solomon, & Greenberg, 2003). It proposes that following major terrorist attacks such as 9/11, death salience and the realization that death is unavoidable becomes generalized in public. As attacks keep occurring across the world and as common masses come to focus more on these threats, mortality salience and fear of death increases.

An important research finding is shown that adolescents investigated after the September 11, 2001 terrorist attacks have shown higher level of fear of death from simple natural causes like a tornado, or an earthquake as compared to the time when the adolescents were assessed yet before these attacks. Adolescents increasing perception of vulnerability to death has increased beyond terrorist attacks, and is widespread and distinct risks which are unrelated enough to include terrorism (Fells & Millstein, 2002). Literature regarding death anxiety and gender shows that females show greater scores on death anxiety scales than males. According to Hui, Chan and Chan (1989), it has been found that women show more death fear and anxiety than men which may be explained by their sex role socialization.

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Pakistan ranked highest among the countries badly hit by a surfeit of crises in 2009. Loss of human lives, decline in economy, damage to the
socio-cultural fabric in large swaths of the country, instability in politics and lack of trust among the stakeholders of the war on terror were the main issues of the year for Pakistan. 87 attacks in 2009 present an increase in terrorist attacks by 32 percent than the previous year. These attacks have taken the lives of 1,299 persons while 3,633 were injured. Whereas suicide attacks in 2008 attempted to target security forces and law enforcement agencies, in 2009 the terrorists increasingly chose to target general public (Pakistan Security Report, 2009).

Children and youngsters have unluckily also not been safe from exposure to terrorism and its pathological after effects. The suicide bombings targeting the business center of Moon Market which is one of the most crowded markets of Lahore, attacks in Meena Bazaar which is the busiest area of Peshawar, twin bomb blasts that targeted students of International Islamic University Islamabad on 20th October and a brutal attack on Parade Lane Mosque in Rawalpindi, are some important cases to consider (Iqbal, 2010). Even the hospitals where patients are already sufferings from diseases have not been safe from deadly terrorist attacks. A suicide attack in the provincial hospital in Quetta claimed to have taken the lives of one journalist, two DSPs and twenty seven common men ("Twin suicide blasts", 2010).

The focus of the current study is therefore to investigate the impact of terrorism on university students. Whereas terrorism has created a catastrophic situation in the country, its impact is especially deep on the youth after the suicide attacks on students of International Islamic University, Islamabad. Thus, an attempt was made to collect the data from students of different universities in different cities, during days when these terrorist attacks were more common, in order to analyze the true picture of their mental health.

The main objectives of the study were to examine relationship between terrorism catastrophizing, perceived stress and death anxiety among students and to explore gender and university-wise differences among students on main variables. It was hypothesized that:

1. Terrorism catastrophizing, perceived stress and death anxiety are positively correlated.
2. Female students will have higher level of terrorism catastrophizing, perceived stress and death anxiety as compared to male students.
3. Terrorism catastrophizing and perceived stress are associated with death anxiety among university students.

**Method**

**Participants**

Sample of the study included 430 university students (men, $n = 183$, women, $n = 247$) from universities of different cities, i.e., International Islamic University, Islamabad (data had been collected after one week of terrorist attack there), Quaid-i-Azam University, Islamabad, Peshawar University (data collection was under process when suicide attack in Meena Bazar took place), Bahauddin Zakariya University, Multan (data collection was under process when terrorist attack in Cantt Area took place) and Islamia University Bahawalpur, through purposive sampling technique. These students belonged to different age level, i.e., 16-40 years ($M = 22$ years), their educational level was from Graduation to PhD, and they were either day scholars ($n = 239$) or living in university dormitories ($n = 191$).

**Measures**

1. **Terrorism Catastrophizing Scale (TCS; Sinclair & LoCicero, 2007)**

Terrorism Catastrophizing Scale (Sinclair & LoCicero, 2007) consists of three subscales of catastrophizing, i.e., Magnification, Rumination, & Helplessness, with a total of 13 items. Item no. 01, 03, 05, 09 and 12 comprise the Rumination subscale; item no 06, 08 and 10 comprise the Magnification subscale, and item no 02, 04, 07, 11 and 13 comprise the Helplessness subscale. TCS is a five point Likert scale, ranging from Strongly Agree to Strongly Disagree with a range of 13 to 65 and a cut-off score of 33. The overall alpha coefficient reliability of TCS is 0.85 and test-retest reliability is 0.89.

2. **Perceived Stress Scale (PSS; Cohen, Kamarck, & Merlmeistein, 1983)**

Perceived Stress Scale (PSS; Cohen, Kamarck, & Merlmeistein, 1983) consists of 14 items. The response categories range from Never to Very Often (Never = 0, Almost Never = 1, Sometimes = 2, Fairly Often = 3 and Very Often = 4) where minimum score is 0 and maximum is 56. Items no. 04, 05, 06, 07, 09, 10 and 13 have reverse scoring. PSS was found to be internally consistent with $\alpha = 0.85$ and proved to be a better predictor of health related and stressful outcomes.

3. **Death Anxiety Scale (DAS; Goreja & Pervez, 2000)**

The Death Anxiety Scale developed by Goreja and Pervez (2000) consists of 20 items relating to the fear of personal death. The items included in the scale are categorized into five dimensions of death anxiety, i.e., concern over suffering and lingering death, subjective proximity to death, disturbing death thoughts, impact of the survivors, fear of punishment and fear of not being. Responses were obtained on a five point rating scale. Categories ranged from Always (Always = 5) 100%, Frequently (4) 75%, Sometimes (3) 50%, Rarely (2) 25% and Never (1) 0% with a cut off score of 50. The scale was found internally consistent with $\alpha = 0.89$.

**Procedure**

Students were approached in the university timings. They were briefed regarding the nature of the research being carried out, and about the consent and cooperation which was very important. A booklet containing informed consent and demographic sheet with all the questionnaires was given to them. They were requested to fill the questionnaires fairly and were assured that the collected information
Terrorism Catastrophizing, an aspect of anxiety, is associated with a higher level of perceived threat and anxiety among university students. Magnification and Rumination contribute to the associated threat and anxiety among university students.

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will be kept confidential and to be used for research purposes only.

**Results**

Data were analyzed using Pearson Correlation, independent sample t-test and step wise multiple regression analysis. Analysis regarding correlation of variables showed a highly significant positive correlation ($p < .01$, Table 1) between the three variables which revealed that if a person is high in catastrophizing terrorism (rumination, magnification and helplessness), he/she will also perceive high stress and have higher level of death anxiety.

Gender differences in students regarding terrorism catastrophizing (rumination, magnification and helplessness), perceived stress and death anxiety (Table 3) showed that both male and female students have equally high level of terrorism catastrophizing and perceived stress (as compared to the mean cut off score of TCS and PSS) but female students were found to be more anxious about death as compared to male students. University wise results regarding students' terrorism catastrophizing, perceived stress and death anxiety (Table 2) demonstrated that students of all universities feel equally high level of terrorism catastrophizing and perceived stress but Peshawar University students were found to be higher in death anxiety than rest of university students.

Stepwise multiple regression analysis (Table 4) showed that both terrorism catastrophizing and perceived stress significantly predict death anxiety in university students;

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### Table 1

**Relationship among Terrorism Catastrophizing (Subscales), Perceived Stress, and Death Anxiety in University Students (N=430)**

<table>
<thead>
<tr>
<th>Scales</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Terrorism Catastrophizing</td>
<td>-</td>
<td>.74**</td>
<td>.71**</td>
<td>.82**</td>
<td>.40**</td>
<td>.41**</td>
</tr>
<tr>
<td>Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rumination Subscale</td>
<td>-</td>
<td>.34**</td>
<td>.40**</td>
<td>.34**</td>
<td>.29**</td>
<td></td>
</tr>
<tr>
<td>Magnification Subscale</td>
<td>-</td>
<td>.36**</td>
<td>.29**</td>
<td>.34**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helplessness Subscale</td>
<td>-</td>
<td>.29**</td>
<td>.31**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceived Stress Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Death Anxiety Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**df = 428**

**Notes:**
- $**p < .01$
- $***p < .001$

### Table 2

**One Way ANOVA for students of 5 Universities on TCS, PSS and DAS (N=430)**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Source of Variation</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCS</td>
<td>Between Groups</td>
<td>251.864</td>
<td>62.96</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>20692.601</td>
<td>48.68</td>
<td></td>
</tr>
<tr>
<td>PSS</td>
<td>Between Groups</td>
<td>43.679</td>
<td>10.92</td>
<td>.384</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>12072.563</td>
<td>28.40</td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>Between Groups</td>
<td>2724.978</td>
<td>681.24</td>
<td>2.95*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>97906.799</td>
<td>230.36</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- TCS = Terrorism Catastrophizing Scale; Rmu = Rumination subscale; Mag = Magnification subscale; Help = Helplessness subscale; PSS = Perceived Stress Scale; DAS = Death Anxiety Scale

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### Table 3

**T-test Showing Gender Differences in TCS Subscales, PSS and DAS (N=430)**

<table>
<thead>
<tr>
<th>Scales</th>
<th>Men $(n = 183)$</th>
<th>Women $(n = 247)$</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. TCS Total</td>
<td>44.48</td>
<td>44.74</td>
<td>.735</td>
</tr>
<tr>
<td>Rumination Subscale</td>
<td>16.61</td>
<td>16.51</td>
<td>.373</td>
</tr>
<tr>
<td>Magnification Subscale</td>
<td>10.44</td>
<td>10.66</td>
<td>.829</td>
</tr>
<tr>
<td>Helplessness Subscale</td>
<td>17.43</td>
<td>17.57</td>
<td>.394</td>
</tr>
<tr>
<td>2 Perceived Stress Scale</td>
<td>28.30</td>
<td>29.02</td>
<td>1.38</td>
</tr>
<tr>
<td>3 Death Anxiety Scale</td>
<td>61.60</td>
<td>66.24</td>
<td>3.13</td>
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</table>

**df = 428**

### Table 4

**Predictors of Death Anxiety from Terrorism Catastrophizing and Perceived Stress among University Students (N=430)**

<table>
<thead>
<tr>
<th>Step</th>
<th>B</th>
<th>SE</th>
<th>$β$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCS</td>
<td>.911</td>
<td>.096</td>
<td>.415</td>
<td>9.45</td>
<td>.00</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCS</td>
<td>.783</td>
<td>.104</td>
<td>.357</td>
<td>7.51</td>
<td>.00</td>
</tr>
<tr>
<td>PSS</td>
<td>.419</td>
<td>.137</td>
<td>.146</td>
<td>3.06</td>
<td>.00</td>
</tr>
</tbody>
</table>

$R^2 = .173$ for Step 1; $d R^2 = .018$ for Step 2; $F (2,427) = 50.212$
Table 2
One Way ANOVA for students of 5 Universities on TCS, PSS and DAS (N=430)

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<td></td>
<td>Within Groups</td>
<td>20692.601</td>
<td>48.68</td>
<td></td>
</tr>
<tr>
<td>PSS</td>
<td>Between Groups</td>
<td>43.679</td>
<td>10.92</td>
<td>.384</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>12072.563</td>
<td>28.40</td>
<td></td>
</tr>
<tr>
<td>DAS</td>
<td>Between Groups</td>
<td>2724.978</td>
<td>681.24</td>
<td>2.95*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>97906.799</td>
<td>230.36</td>
<td></td>
</tr>
</tbody>
</table>

$df = 4,425$. *$P < .01$.
Note: TCS= Terrorism Catastrophizing Scale; Rum= Rumination subscale; Mag= Magnification subscale; Help= Helplessness subscale; PSS= Perceived Stress Scale; DAS= Death Anxiety Scale

Table 3
t-test Showing Gender Differences in TCS Subscales, PSS and DAS (N=430)

<table>
<thead>
<tr>
<th>Scales</th>
<th>Men $(n = 183)$</th>
<th>Women $(n = 247)$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>1. TCS Total</td>
<td>44.48</td>
<td>6.51</td>
<td>44.74</td>
<td>7.33</td>
</tr>
<tr>
<td>Rumination Subscale</td>
<td>16.61</td>
<td>2.46</td>
<td>16.51</td>
<td>3.01</td>
</tr>
<tr>
<td>Magnification Subscale</td>
<td>10.44</td>
<td>2.26</td>
<td>10.66</td>
<td>2.96</td>
</tr>
<tr>
<td>Helplessness Subscale</td>
<td>17.43</td>
<td>3.54</td>
<td>17.57</td>
<td>3.73</td>
</tr>
<tr>
<td>2. Perceived Stress Scale</td>
<td>28.30</td>
<td>4.75</td>
<td>29.02</td>
<td>5.68</td>
</tr>
<tr>
<td>3. Death Anxiety Scale</td>
<td>61.60</td>
<td>14.78</td>
<td>66.24</td>
<td>15.43</td>
</tr>
</tbody>
</table>

$df = 428$

Table 4
Predictors of Death Anxiety from Terrorism Catastrophizing and Perceived Stress among University Students (N=430)

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCS</td>
<td>.911</td>
<td>.096</td>
<td>.415</td>
<td>9.45</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCS</td>
<td>.783</td>
<td>.104</td>
<td>.357</td>
<td>7.51</td>
<td>.000</td>
</tr>
<tr>
<td>PSS</td>
<td>.419</td>
<td>.137</td>
<td>.146</td>
<td>3.06</td>
<td>.002</td>
</tr>
</tbody>
</table>

$R^2 = .173$ for Step 1; $\Delta R^2 = .018$ for Step 2, $F(2,427) = 50.212$
In step 1 terrorism catastrophizing alone predicted 17% of death anxiety ($R^2 = .173$) which increases to approx 19% in step 2 ($\Delta R^2 = .018$) when perceived stress is added as a second variable. However, role of perceived stress in predicting death anxiety in step 2 is very low.

### Discussion

The present study examined university students' level of terrorism catastrophizing, perceived stress and death anxiety. Moreover, it explored gender differences in students regarding these variables. Analysis regarding relationship of terrorism catastrophizing, perceived stress and death anxiety demonstrated highly significant positive relationship ($p < .01$) between the variables which strongly supports the hypothesis of the study. This finding is supported by a study conducted by Pakistan Institute for Peace Studies (PIPS) on the impact of terrorism on the common person which revealed that fear of terrorism is a causal factor in pathological tendencies in the society where stress, anxiety, depression and fear of death are common (Pakistan Security Report, 2009). The current finding is also supported by a study conducted in the New York metropolitan area following the September 11 attacks, that found psychological distress and fear of death to be largely prevalent (Galea et al., 2002; Schuster et al., 2001).

Analysis regarding gender differences on variables revealed that both male and female students have equally higher level of terrorism catastrophizing and perceived stress but female students were found to be more anxious towards death as compared to their male counterparts, thus partially supporting our hypothesis regarding gender differences. This finding is also supported by most of the recent and past studies on sex differences and gender which show that women have higher scores on death anxiety scales than men.

Next, university-wise differences were explored among the students on the three variables which showed non significant differences among students of all universities, revealing that they felt equally high level of terrorism catastrophizing and perceived stress; but as far as analysis of death anxiety is concerned, study found that students of Peshawar university were found to be different about death anxiety from rest of university students. This may be explained by the fact that Peshawar has been a continuous stage for terrorist activities. According to official figures, as many as 1,059 persons were killed while over 2,700 wounded in terrorist incidents which included 37 suicide attacks and NWFP alone from the beginning of 2008 till 25 March, 2009. Thus, youth of Peshawar city have remained under the continuous proximal contact of such terrorist activities. This finding is also supported by a study in which increased rates of psychopathology had been found in youth who come into close contact with terrorism. Increased rates of psychopathology have been found following the September 11, 2001, and in regions of continued political conflict, e.g., Guatemala, Israel, and Northern Ireland, during as well as following attacks (Brown & Goodman, 2005).

Analysis regarding the last hypothesis revealed through stepwise multiple regression that terrorism catastrophizing and perceived stress proved to be the significant predictors of death anxiety among university students, thus supporting our hypothesis, though terrorism catastrophizing contributed more as compared to perceived stress. This finding may well be explained by the tragic and fearful scenario of the country due to terrorism which has led the already stressful people towards more fear and anxiety of death. Anxiety about death is the obvious case if one sees the brutal deaths of people on daily basis due to terrorist attacks whether live or through electronic or print media. This finding is also supported by a study of Sinclair and LoCicero (2007), in which they discovered that terrorism catastrophizing proved to be a significant predictor of behavioral change and of symptoms of anxiety, depression, physiological stress and mortality salience.

### Limitations and Suggestions

Following are some limitations of the study:

1. Although the sample (university students) is quite literate to comprehend English language easily but even then questionnaires should have been translated in Urdu language for better understanding of students and to avoid biases.

2. Probability sampling technique could not be done for the present study because of short time period (as mentioned earlier that collection started right after the incident of terrorist attacks)

International Islamic University, Islamabad on 20th October, 2001

Here are some suggestions for future research:

1. Common men, women, child and especially police persons can also be taken as a sample for future study because these people have been the direct victims of terrorist attacks.

2. Some other variables regarding impact of terrorism may be studied for the future research such as instance, intolerance, and...
TERRORISM CATASTROPHIZING

Pathological impact of terrorism on mental health of youth can easily be assessed by the findings of present study. Catastrophe of terrorism not only has badly affected the mental health of youth but also the fear of anticipated terrorism has deteriorated their daily functioning. The indicators of death anxiety in them can be more fatal and pathological if these conditions persist. Furthermore, comparison regarding gender revealed that not only girls but boys also are fearful of terrorism. This study will be beneficial for clinical psychologists, social workers etc. in providing mental assistance to youth. The findings of this study can be used in comprehensive preventive programs of building resilience in youth.

Limitations and Suggestions

Following are some limitations of the study:

1. Although the sample (university students) is quite literate to comprehend English language easily but even then the questionnaires should have been translated in Urdu language for better understanding of the students and to avoid biases.

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Here are some suggestions for future research:

1. Common men, women, children, and especially police personnel can also be taken as a sample for future study because these people have been the direct victims of terrorist attacks.

2. Some other variables regarding impact of terrorism may be studied for the future research for instance, intolerance, anger,
insecurity, uncertainty, class performance of students, posttraumatic stress disorder, etc.

3. Future work can be done regarding terrorism and coping strategies adopted by the survivors of terrorist attacks.

Implications of the study

This research will be beneficial for the society especially for the clinical psychologists and social workers in providing them the true picture of students' mental health and to assist them in developing interventions and rehabilitation programs for youth's mental health. Parents and especially teachers can also play their role in developing some coping strategies for students and to assist them in maintaining their daily life activities.

References


Gender Differences in Anxiety, Depression and Stress among Survivors of Suicide Bombing

Yasmin Farooqi and Maria Habib
Department of Applied Psychology
University of the Punjab, Lahore, Pakistan

The present research studied gender differences for anxiety, depression and stress among survivors of suicide bombings in Lahore, Pakistan. The sample consisted of 120 adult survivors of suicide bombings (79 men and 41 women) in the vicinity of buildings occupied by Federal Investigation Agency (FIA), General Post Office and Lahore High Court which were rocked by a series of suicide bombing. Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995) was administered to all the research participants. The results indicated significant gender differences in depression, anxiety and stress reported by the survivors of suicide bombings. The findings further suggested that female survivors scored higher on depression, anxiety and stress than their male counterparts. Furthermore, positive significant relationship was found between stress and depression, stress and anxiety, depression and anxiety. The findings of this research have implications for promoting our knowledge of gender related differences in anxiety, depression and stress among survivors of suicide bombings so that effective counseling and psychotherapeutic interventions could be introduced for the survivors of traumatic events.

Keywords: anxiety, depression, survivors, suicide bombing

Unfortunately, Pakistan has been the target for a series of suicide bombing attacks since 9/11. Important buildings and places in Lahore—the provincial capital city of Pakistan—have especially been targeted. The buildings occupied by Federal Investigation Agency, General Post Office and Lahore High Court were targeted by the suicide bombers in 2008 resulting in death and destruction of innocent men, women and children which created massive feelings of helplessness, insecurity, panic, stress, sadness, anger, fear and horror among the survivors and their dear ones.

According to Moghaddam and Marsella (2004), terrorism is the form of violence that has pressurized endangered and damaged people, governments, nations or perhaps civilizations over the past seven years. Terrorism has killed, injured and permanently brutalized thousands of innocent people. Terrorist violence is always planned and is intended to produce fear in someone other than the victim as well.