# MEDIA EXPOSURE REGARDING TERRORIST EVENTS AND POSTTRAUMATIC STRESS DISORDER IN YOUTH

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## ABSTRACT

Throughout its history Pakistani citizens are bearing the losses resulting from terrorism. After 9/11, 2001, there is a rise in suicide attacks on public places in Pakistan especially in major cities. Media give massive coverage to these attacks and highlight all aspects in detail which create a great sense of fear in general public particularly in youth. These threats and fears can become serious psychological problems if not met with proper treatment. In this experimental study of media exposure regarding terrorist events and posttraumatic stress disorder in youth, depression level and posttraumatic stress disorder are assessed by using intervention among the 150 undergraduate students of three universities of Faisalabad, using the technique of cluster sampling. "Self-rating Inventory Posttraumatic Stress Disorder of 22 items" and Beck's Inventory Depression were used to measure the posttraumatic Stress Disorder in students. It showed 79% reliability while inter-items reliability was observed .807. Before using the intervention Mean score of Total Pretest Posttraumatic Stress Disorder was 14.31 which increased after intervention (14.86 - 14.32) = .54. It means there was significant psychological effect of exposure of terrorist events, which is really a sign of contemplate for media policy makers, owners and practitioners for telecasting terrorist event on screen because the psychiatrists recommend the prescription and coping strategies if the person score 10 on the Self-rating Inventory for Posttraumatic Stress Disorder. The findings also reveals that the total mean score of Posttraumatic Stress Disorder after intervention was 15.89 in female students which was higher than male students 13.96. Beck's Inventory Depression finds that the depression among female undergraduate students was higher than male undergraduate students after the usage of intervention. Both posttraumatic Stress Disorder and depression increase after the exposure of terrorist events which is a point of serious concern for media monitors in Pakistan.

**Key words:** media exposure, terrorist event, posttraumatic stress disorder PTSD, depression, youth

## **INTRODUCTION**

The main utility of media is to deliver information in a society about current events in a proper fashion to serve the public's interests. The news media of any country serve these basic human needs while providing the information about the current scenario in detail (Azeez, 2009). According to Schlesinger, et al. (1983), "public need more information in a chaotic situation" (p.114). This relay of people on news media is much increased when any society is experiencing terrorist attacks during the whole year; like Pakistan. Bassioni (1981) discerns that terrorists wish extreme publicity for their messages and emblematic actions. They carefully create these messages to attract the maximum coverage of news media (Jenkins, 1975). To support the theoretical understanding of Jenkins, Laqueur (1977) lights out terrorists know the paramount importance of media in their anti-societal campaigns. On the other hand according to Miller (1982, p.1), terrorism is media's stepchild; due to that media can neither completely ignore nor deny. Researchers use Galtung and Ruge's (1965) criteria of thirteen points which media use to know whether an event will be reported or not. This theoretical foundation gives us understanding of conventions which force media organizations to report terrorism. Crelinsten (1989) argues that terrorists identify the bonds and news gathering routines of the media, and they organize "their actions to fit the key news values of drama, violence and unexpectedness" (p.332). As International media, especially Pakistani media almost cover all the terrorist activities across the country. The extensive coverage of these violent acts raised many ethical issues on different platforms but little attention has been paid to psychological effects. According to Tufail (2010), the psychological effects of terrorism can cause complex and diverse post-traumatic stress disorders. Therefore there is dire need to study PTSD among the people who faced such a threatening situation. But PTSD is not the condition of stress found in people who have firsthand encounter with terrorist attacks but signs can also be present in people who view these events indirectly on media. As it is explored that, the terrorist events of 9/11 were traumatic for people living in USA, Propper, Stickgold, and Christman, (2007) suggested that people living in other parts of the world would experience increased stress because of their indirect exposure to these attacks on television screens. Similarly Schuster et al. (2001) and Silver et al. (2002) argued that the terrorist attacks on World Trade Centre in United States of America presented an opportunity to the researcher to examine the effects on viewers of exposure to a traumatic event. Because, several million people witnessed the event directly while infinite number of people were exposed to the event indirectly via extensive media coverage.

Pakistan's citizens have been a target of terrorism throughout its history in many forms; sectarian terrorism, ethnic terrorism, secessionist terrorism, political terrorism, and religious terrorism. After 9/11, the tendency of terrorism has increased tremendously targeting both civilian as well as government institutions. There was a drastic increase in the number of suicide attacks being carried out in public places both on security forces as well as on civilians. Since 2007 to July 14, 2013, there were 330 suicide attacks which butchered 5254 persons while 10698 were injured (South Asia Terrorism Portal, 2013).

Pakistani media gives extensive coverage to all the aspects of these incidents. Here the question arises that what are the effects of these events on the psychological health of young persons. Studies have been conducted in other countries such as Israel

and Palestine, to measure the influence of this continuous terror on the health of teenagers, since both countries inclined to develop psychosocial stress indications. While there is dearth of research studies on the psychological effects of these terror attacks in Pakistan. More importantly research having special focus on PTSD in Pakistan is evidently scarce. Present study will fill this gap, because Pakistan is facing the gravity of terrorism as a continuing threat to the public. Thus the aim of present study is to determine posttraumatic stress disorder (PTSD) in the suffering populace of Pakistan (especially the students) which has been shown repeated video clips of terrorist events on electronic media. The overtime effects of these video clips may include feelings of shock, anxiety, depression, or even emotional indifference. In the prevailing circumstances, these feelings may be more intense and prolonged than usual and can alter the young individual's emotional stability. Therefore this study focuses on undergraduate students because they are working professional of tomorrow. The researchers chose three universities of Faisalabad City; GC University Faisalabad, University of Agriculture, University of Faisalabad to determine the occurrence and concentration of PTSD in the students. The results will provide the guidelines to media policy makers, owners and practitioners for telecasting terrorist event on screen. It will also help concerned authorities for setting effective coping strategies after finding the levels of PTSD in students who are the future of the country.

## **Posttraumatic Stress Disorder (PTSD)**

American Psychiatric Association (2000) classified PTSD as an anxiety disorder. Lilienfeld, Waldman, and Israel (1994) explained that PTSD has high rates of lifetime association and co-occurrence with most of the anxiety disorders (p.78). Conversely, Breslau, Davis, Andreski, and Peterson (1991) positioned PTSD with major depressive disorder. According to Kessler, Sonnega, Bromet, Hughes, and Nelson (1995), major depressive disorder showed the highest rate of lifetime association with PTSD among women 48.5% and the second highest rate among men 47.9%. High rates of cooccurring PTSD and major depressive disorder have also been found across different trauma exposed populations, such as combat veterans (95% lifetime and 50% cooccurring (Bleich, Koslowsky, Dolev, & Lerer, 1997), motor-vehicle accident survivors 53% co-occurring (Blanchard, Buckley, Hickling, & Taylor, 1998), and physical assault survivors 49% co-occurring (Nixon, Resick, & Nishith, 2004). Furthermore, this co-occurrence is associated with a number of negative correlations and consequences including increased risk of suicidal attempt among effected population (Oquendo et al., 2005). According to the studies of Cox, Clara, and Enns (2002) and Slade and Watson (2006), Structural analyses of anxiety and mood disorders based on dichotomous data, have shown that PTSD has a stronger loading on a general distress construct than it does on a fear construct (defined by agoraphobia, panic disorder, simple phobia, and social phobia. Overall, the results suggest that PTSD includes a core general distress component that may be responsible for the extraordinary rates of PTSD and major depressive disorder co-occurrence.

Terrorism has become a worldwide phenomenon. According to García-Vera & Sanz, (2011) in recent years, terrorism has become one of the most severe and alarming problems worldwide. According to the data of the National Counterterrorism Center (NCTC) of the United States of America, in the four years 2005 – 2008, a yearly average of 12,933 terrorist attacks had occurred, causing approximately 18,406 deaths, 35,338 injured, and 15,141 hostages each year (National Counterterrorism Center, 2006, 2007, 2008, 2009). Although during this interval most of the terrorist attacks had been

concentrated in the Near East (approximately 46%) and in South Asia (approximately 30%), and, specifically, in countries like Iran, Afghanistan, Pakistan, or India, the plague of terrorism affected all regions of the world to a greater or lesser degree (NCTC, 2006, 2007, 2008, 2009). But there is less number of people who are actually present on the site of attack; more of them view them indirectly which increased their fear of possible terror attack. Schlenger, Caddle, Ebert, Jordan, Rourke, and Wilson, et al. (2002) and Smoller and Sokol J. (2001) defined the indirect relationship of viewing television programs that give extensive coverage to these incidences of terrorist attacks and their effects on mental health. Moreover, North & Pfefferbaum (2002) examined residents of an area far away from the location of a terrorist attack. The result of the studies of Galea et al., (2003), Schlenger et al., (2002), and Silver et al., (2002), showed that presence of probable PTSD was diagnosed as 11.2% in the individuals who were present at the site of 9/11 attacks and 4% among individuals who indirectly exposed through television. Although PTSD decreased with time in these persons but there were still some proportion of people who have significant ratio of PTSD 5.8% after six months (Silver et al., (2002).

Shoshani and Slone (2008) shed light on these indirect effects which resulted by exposure to television news of terrorism on viewers' emotional and attitudinal responses. They measure the impact of participation in either a terrorism or nonterrorism media condition on emotional and attitudinal behavior. The results reveal a significant effect e.g; the terrorism clip has an impact on anxiety, anger and the other variables. In comparison to the non-terrorism condition, the participants of the terrorism condition report more state anxiety and state anger as well as more stereotype attributes and perceptions of enemy hostility. Similarly in their survey, Lee, Lemyre, and Krewski (2010) examined and compared Canadians' perceptions of terrorism risk. The results of the survey revealed that terrorism was rated lower on perceived threat and perceived controllability, and higher on perceived uncertainty. They concluded that as compared to individual behavior terrorism is more associated with sociopolitical factors. Several studies proved significant positive relationships between terrorist incidence and enhanced psychological pressure and distress (Galea, S., Abein, J., Resnick, H., Kilpatrick, D., Bucuvalas, M., Gold, J., & Vlahov, D., 2002; Blanchard, Kuhn, Rowell, Hickling, Wittrock, & Rogers, et al, 2004; Schuster, Stein, Jaycox, Callins, Marshall, & Elliott, et al, 2001; and Sprang, 1999). PTSD is the most frequent disorder after the experience of a traumatic event, including a terrorist attack (DiMaggio & Galea, 2006; Garc í a - Vera & Sanz, 2008; Norris et al., 2002). Consequently, most research on the psychological treatment of the victims of terrorism has focused on this disorder.

In summary, common quality of terrorism is its capability to provoke immense fear, despite the fact that the actual probability of its occurrence is quite low. Terrorism has also the potential to negatively impact mental health. According to Comer et al. (2008, p. 568), research provides significant evidences that contact with terrorism is linked with psychological distress, traumatic stress symptoms, and posttraumatic stress disorder (PTSD). In addition to these mental health impacts, there are a number of negative behavioral responses. One such response is the avoidance of certain places or modes of transportation, generally referred to as avoidance behavior. So, it is concluded that exposure of terrorist events can be the causes of fear, anxiety, depression along with the Posttraumatic stress disorder in the population which is exposed to these events on national and international media. In this context present study will find the answers of following research questions

- 1. What is the level of Posttraumatic Stress Disorder (PTSD) in undergraduate university students of Faisalabad City
- 2. How much level of Posttraumatic Stress Disorder (PTSD) increases after the exposure of terrorist event content
- **3.** To what extent , level of depression relates to population having PTSD after exposure of terrorist events content, Which leads to set following hypothesis

H1 (i): There is positive relationship between the exposure of terrorist events and levels of PTSD in undergraduate students of Faisalabad City

H1. (ii): There is positive relationship between the levels of PTSD and levels of depression among the undergraduate students of Faisalabad City

The research on PTSD revealed one more important aspect that females have more tendency to develop PTSD after any traumatic incident and tend to use more coping strategies of avoidance focus than problem focused coping strategies compared to males (Endler & Parker, 1990; Matud, 2004). Similarly, in their experimental study, Lerner, Gonzalez, Small and Fischhoff (2003) revealed strongly similar patterns in teens and adults. Females reported less anger and more fear as compared to men. Therefore the second hypothesis is proposed as

H2. (i): Female students scores much PTSD as compared to male student after exposure of terrorist events

H2. (ii): Female Students scores much levels of depression as compared to levels of depression in male student after exposure of terrorist events. The present study is conducted under theoretical framework of Media Dependency Theory and Media Cultivation Theory. The framework provides the basis to analyze the functional role of the news media during terrorist events. The MSD theory provides the understanding that how media act meaningfully in an uncertain condition or environment (Ball-Rokeach, 1974). The origins of the structure, intensity, and scope of individuals' MSD relations are thus grounded in their social as well as their interpersonal and personal environs (Ball-Rokeach, 1985). Those environs are dynamic, i.e., changing over situation and time. Put briefly, the more problematic people's social environs, the more likely it is that the media information system will be a, if not the, major resource in people's efforts to understand and act meaningfully in those environs. The prime condition for media effects, then, is when there are problematic social environs that prompt asymmetric, intense, and broad-goal-scope MSD relations. It is in this sense that media effects are conceived to be an outcome of the nature of media-audience-society relations (Ball-Rokeach & De Fleur, 1976). In any society, developed or developing, the dependency of media increases in warlike situation. Same in the case of euphoric wave of terrorism in Pakistan the people rely more on media to get the latest report on any terrorist event. So as this theory provide the theoretical foundation to study PTSD among students. Similarly cultivation research suggests that there is direct relationship between people's viewing habits and the repeated message telecast on television screen. People perceive the reality as that shown on television screen. Much they watch on screen much they rely on the perception constructed by the media message on the screen. Much they perceive much they believe.

## METHOD

Experiments offer a unique opportunity to examine the nature and direction of causal relationships between variables. Experiment typically refers to laboratory studies in

which the investigator retains control over the recruitment, assignment to random condition, treatment, and measurement of participants. Control, in experimental design, involves holding constant or systematically varying extraneous variables (e.g., mediators, confounders, and suppressors) to minimize their effect on the focal causal relationship. Quasi-Experimental Designs was adopted for this study because sometimes such research situations can arise in which the random selection and assignment of research participants is not possible. Experimentation undertaken under such conditions can utilize quasi-experimental designs. These nonrandomized designs, while providing valuable information, must be recognized as involving basic faults that can influence data interpretation. The strongest and most widely used quasi-experimental design is the pre-test/post-test nonequivalent control group design. One- Group Pretest-Posttest design has one group, a pretest, a treatment, and a posttest. It lacks a control group and random assignment. The one-group pre-experimental design was selected as one that was the most viable for the present case study.

For this experimental study sample was taken from undergraduate students from four universities of Faisalabad. Two of the selected universities (G C University, Faisalabad, and University of Agriculture, Faisalabad) are public and one (University of Faisalabad) is private. Sample size is 150 students. Cluster sampling is used to draw the sample i.e. the universities are selected by their ranking in Faisalabad. One class of students is selected from undergraduate section of these universities. An equal sample of 50 students from each university is taken. Permission is sought from the Heads of the Department of the selected classes of the above mentioned universities, after which informed consent was obtained from each student. Participants' anonymity is maintained. Researchers gathered a total of 450 forms from all three institutes. There were 300 forms for pre-post The Self-rating Inventory for PTSD and 150 forms of Beck's Depression Inventory test. The Self-rating Inventory for Posttraumatic Stress Disorder and Beck's Depression Inventory Tests are conducted as a research tool.

The Self-rating Inventory for Posttraumatic Stress Disorder of 22 items was developed for use with populations without identified traumatic experiences. The inventory has been used extensively in survey research in Netherlands. The inventory showed good internal consistency, test-retest reliability, concurrent and discriminant validity, and high sensitivity and specificity. It appears to be valuable for research on posttraumatic stress in nonselected populations. As a screening device, high sensitivity for PTSD symptoms is evident even the traumatic event has not been defined (Hovens, et. al., 2005). Similarly Beck Depression Inventory the BDI (Beck, Ward, Mendelsohn, Mock, & Erbaugh, 1961) is a 21-item self-report inventory measuring depression severity over the past week. Each item consists of four self-evaluative statements scored 0 to 3, with increasing scores indicating greater severity of depression. The BDI has a split-half reliability of .93 (Beck et al., 1961) and correlates strongly with clinical ratings of 21 depression (r= .55 to .96; Beck, Steer, & Carbin, 1988). In this study, the BDI was used as an indicator for the major depressive disorder latent variable. The BDI takes approximately 10 minutes to complete, although clients require a fifth - sixth grade reading level to adequately understand the questions (Groth-Marnat, 1990). Internal consistency for the BDI ranges from .73 to .92 with a mean of .86. (Beck, Steer & Garbin, 1988). The BDI demonstrates high internal consistency, with alpha coefficients of .86 and .81 for psychiatric and non-psychiatric populations respectively (Beck et al., 1988).

A video clip of 10 minutes and 47 seconds was shown to undergraduate university students as an intervention for this experiment.

## RESULTS

						Cronbach's Alpha Based	
						on Standardized Items	N of Items
			.79	5		.807	22
						_	
Item-Total Statis	stics						
			Correcte				
	Scale	Scale	d Item-	Squared	Cronbac		
	Mean if	Variance	Total	Multiple	h's Alpha	1	
	Item	if Item	Correlati	Correlati	if Iten	1	
	Deleted	Deleted	on	on	Deleted		
Q.1.	13.43	16.380	.450		.784		
Q.2.	13.49	15.768	.563		.777		
Q.3.	13.53	15.915	.474		.780		
Q.4.	13.95	15.608	.471		.779		
Q.5.	13.46	16.237	.446		.783		
Q.6.	13.84	17.075	.076		.804		
Q.7.	13.40	17.221	.144		.795		
Q.8.	13.63	15.549	.507		.777		
Q.9.	13.77	17.509	028		.810		
Q.10	13.77	15.734	.417		.783		
Q.11.	13.63	16.544	.232		.794		
Q.12.	13.70	15.983	.363		.786		
Q.13.	13.73	15.381	.520		.776		
Q.14.	13.59	15.466	.561		.775		
Q.15.	14.10	16.413	.318		.789		
Q.16.	13.53	16.560	.272		.791		
Q.17.	13.64	16.890	.137		.799		
Q.18.	13.78	16.575	.200		.796		

Q.19.	13.43	15.924	.636	.776
Q.20	13.53	16.157	.397	.784
Q.21.	14.00	16.349	.285	.791
Q.22.	13.67	15.805	.418	.783

Table. 1. shows that the instrument "The Self-rating Inventory for Posttraumatic Stress Disorder of 22-items" when used on undergraduate university students shows more than 79% reliability on Cronbach's Alpha= .795 while inter-items reliability was observed .807. In social sciences research 70% reliability of instrument is handsomely acceptable. Table1.2. Total Pretest-Posttest Post Traumatic Disorder Score of undergraduate University Students

Statistics				
	Total	Total	University	Gender
	Pretest	Posttest	sity	
	Posttraum	Posttraum		
	atic Stress	atic Stress		
	Disorder	Disorder		
N Valid	150	150	150	150
Missing	0	0	0	0
Mean	14.31	14.86	2.00	1.47
Std. Error of Mean	.343	.434	.067	.041
Median	15.00	16.00	2.00	1.00
Mode	15	17	$1^{a}$	1
Std. Deviation	4.200	5.319	.819	.501
Variance	17.639	28.296	.671	.251
Skewness	-1.322	-1.449	.000	.135
Std. Error of Skewness	.198	.198	.198	.198
Kurtosis	2.154	1.678	-1.510	-
				2.009
Std. Error of Kurtosis	.394	.394	.394	.394
Range	20	21	2	1
Minimum	1	0	1	1
Maximum	21	21	3	2
Sum	2147	2229	300	220
a. Multiple modes exist.	The smalles	t value is sho	own	

Table. 1.2. Shows Total Pretest Posttraumatic Stress Disorder (N=150), M=14.31, Md=15.00, and Mode=15, Std. Error of Mean= .343, SD= 4.200, while observed var= 17.639, and sum= 2147, on the other hand after using the intervention (exposure of

terrorist event to students) Total Posttest Posttraumatic Stress Disorder (N=150), M=14.86, Md=16.00, and Mode=17, Std. Error of Mean= .443, SD= 5.319, while observed Var= 28.296, and sum= 2229. There is the sufficient evidence to accept the hypothesis "H1. (i): There is positive relationship between the exposure of terrorist events and levels of PTSD in undergraduate students of Faisalabad City". It means that Posttraumatic Stress Disorder is increased after the exposure of terrorist event in undergraduate university students of Faisalabad City.

 Table 1.3.
 University-wise distribution of the Students

Univ	versity				
		Frequency	Percent	Valid Percent	Cumulative Percent
Val	G C University	50	33.3	33.3	33.3
id	Faisalabad				
	University of	50	33.3	33.3	66.7
	Agriculture				
	Faisalabad				
	University of	50	33.3	33.3	100.0
	Faisalabad				
	Total	150	100.0	100.0	

Table.1.3. Shows there are equal numbers of students selected from three different universities.

 Table 1.4.
 Gender-wise distribution of the Students

Gender										
	Frequency		Percent	Valid Percent	Cumulative Percent					
Val	Male	80	53.3	53.3	53.3					
id	Fem	70	46.7	46.7	100.0					
	ale									
	Total	150	100.0	100.0						

Table.1.4. Shows the numbers of male students selected from three different universities are higher than female students.

Figure. 1 Bar-chart representation of total pretest posttraumatic Stress Disorder

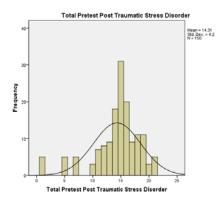


Fig.1. shows that most of the students scored 15 on "The Self-rating Inventory for Posttraumatic Stress Disorder of 22-items before using the intervention. Figure. 1.2. Bar-chart representation of total posttest posttraumatic Stress Disorder

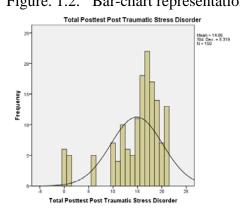
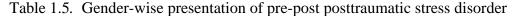
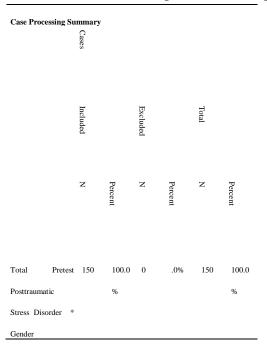


Fig.1.2. shows that most of the students scored 17 on "The Self-rating Inventory for Posttraumatic Stress Disorder of 22-items after using the intervention.





Total	Posttest	150	100.0	0	.0%	150	100.0
Posttrau	matic		%				%
Stress D	isorder *						
Gender							

## Report

		Total	Pretest	Total	Posttest	
		Posttraur	natic	Posttraumatic		
Gender		Stress Di	Stress Disorder		Stress Disorder	
Male	Mean	13.39	13.39			
	Ν	80		80		
	Std. Deviation	4.934		4.814		
Female	Mean	15.37	15.37		15.89	
	Ν	70		70		
	Std. Deviation	2.845		5.707		
Total	Mean	14.31		14.86		

Table. 1.5. Shows the mean score of Posttraumatic Stress Disorder is almost equally increased in male and female students after exposure of terrorist event, in male students it is increased 0.57 while in female students the observed increment was 0.52. But the total Posttraumatic Stress Disorder before intervention is 15.37 and after intervention is 15.89 in female students which is higher than male student in which Posttraumatic Stress Disorder before intervention is 13.39 and after intervention is 13.96, So, it was the strong evidence to accept the research hypothesis, H2.(i): Female students scores much PTSD as compared to male student after exposure of terrorist events.

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Table1.6. Universit	v-wise	presentation	of pre-post	bosttraumatic s	stress alsoraer
	J	r · · · · · · · · ·	· · · · · · ·	r · · · · · · · · · · · · · · ·	

Case Processing	Summa	ry						
	Cases							
	Incluc	led	Exclud	ded	Total			
		Perce		Perce		Perce		
	Ν	nt	Ν	nt	Ν	nt		
Total Pretes	t 150	100.0	0	.0%	150	100.0		
Posttraumatic		%				%		
Stress Disorde	r							
* University								
Total Posttes	t 150	100.0	0	.0%	150	100.0		
Posttraumatic		%				%		
Stress Disorde	r							
* University								
							Total Pretest	Total Posttest
							Posttraumatic	Posttraumatic
							Stress	Stress
				Uı	niversity		Disorder	Disorder
				0	i C	University Mean	14.16	14.86

Faisalabad	N	50	50
	Std.	4.483	5.059
	Deviation		
University of	Mean	14.10	14.38
Agriculture Faisalabad	Ν	50	50
	Std.	4.505	5.831
	Deviation		
University of Faisalabad	Mean	14.68	15.34
	Ν	50	50
	Std.	3.611	5.097
	Deviation		
Total	Mean	14.31	14.86
	Ν	150	150
	Std.	4.200	5.319
	Deviation		

Table 1.6. shows that Posttraumatic Stress Disorder in the students of University of Faisalabad i.e. 14.68 before the intervention and 15.34 after the intervention. Findings set the direction that students of Private University have greater Posttraumatic Stress Disorder as compared to the students of Government University.

Table 1.7. Correlation between pre and post posttraumatic stress disorder

One-Sample Statistics										
				Std.	Std. Error					
		Ν	Mean	Deviation	Mean					
Total	Pretest	150	14.31	4.200	.343					
Posttraumatic	Stress									
Disorder										

According to American Psychiatric Association criteria for PTSD (2000), on "The Selfrating Inventory for Posttraumatic Stress Disorder of 22-items" the score1-3 means few symptoms of PTSD, 4-9 means PTSD likely and score10 means people display many symptoms of PTSD. Table.1.7. shows that one-sample t-test was applied to check the level of PTSD in undergraduate university students, the findings shows that all the students have significant level on 13 score with the confidence interval of .95, before and after the exposure of terrorist event. It means the undergraduate university students of Faisalabad city have the significant severity of PTSD.

Figure. 1.3. University-wise and Gender-wise presentation of total pretest posttraumaic Stress Disorder

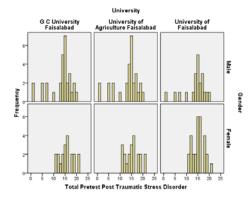


Fig.1.3. shows that most of male students from G C University and most of female students of from University of Faisalabad have severe PTSD.

Figure. 1.4. University-wise and Gender-wise presentation of total posttest posttraumatic Stress Disorder

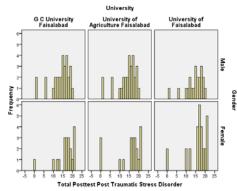


Fig.1.4. shows that the intervention cause much effect on most of the male students of G C University Faisalabad, University of Agriculture and Most of the female student of University of Faisalabad

Table 1.8. Gender-wise depression score of the students on Beck's Inventory

Group Statistics							
	Gend			Std.	Std. Error		
	er	Ν	Mean	Deviation	Mean		
Beck's Inventory	Male	80	21.05	4.525	.506		
Depression Test	Fema	70	24.44	3.962	.474		
	le						

Table.1.8. Shows that mean score of the depression among female undergraduate students is 24.44 while in male undergraduate students it is 21.05, the findings proves the sufficient evidence to accept the research hypothesis "H1.(ii): Female students scores much levels of depression as compared to levels of depression in male student after exposure of terrorist events.

Table1.9. Correlation among Beck's Inventory Depression Test Score and Pre-Post Posttraumatic Stress Disorder Score of Students.

Paired Samples Correlations							
		Ν	Correlation	Sig.			
Pair 1	Beck's Inventory Depression Test & Total	150	.141	.085			
	Pretest Post Traumatic Stress Disorder						
Pair 2	Beck's Inventory Depression Test & Total	150	.025	.762			
	Posttest Post Traumatic Stress Disorder						

				Paired Samples	Test				
				Paired Differences	3				
		95% Confidence Interval of the							
				Std. Error Difference					
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Beck's Inventory	8.247	5.678	.464	7.331	9.163	17.788	149	.000
	Depression Test - Total								
	Pretest Posttraumatic								
	Stress Disorder								
Pair 2	Beck's Inventory	7.693	6.844	.559	6.589	8.798	13.767	149	.000
	Depression Test - Total								
	Posttest Posttraumatic								
	Stress Disorder								

Table.1.9. Shows significant relationships among Pretest and Posttest Posttraumatic Stress Disorder score of the students and Beck's Inventory Depression score and table explains further that correlation between Beck's Inventory Depression score and Posttest Posttraumatic Stress Disorder score is stronger as compared to Pretest Posttraumatic Stress Disorder score. Both the tables provide sufficient evidence to accept the hypothesis, H2. (ii): There is positive relationship between the levels of PTSD and levels of depression among the undergraduate students of Faisalabad City.

#### CONCLUSION

The present study concludes that the exposure of terrorist events increases the posttraumatic stress disorder and depression level among the audience. The present study supports the previous studies that PTSD has significant relationship with depression disorder among the audience exposure to terrorist events.

The study further provided the evidence that the PTSD is much higher in the students before the exposure of terrorist events to them. The psychiatrists recommend the prescription and coping strategies if the patient score 10 on "The Self-rating Inventory for Posttraumatic Stress Disorder of 22-items" but the study discovers that on individual level the participants scored 13, that shows the alarming situation in the youth of Pakistan who are definitely the future of the country.

The study proves that there is significant relationship between the exposure of terrorist events and levels of PTSD and, between the levels of PTSD and levels of depression

among the undergraduate students of Faisalabad City. The study further provides the strong evidences that female students had much severity of PTSD as well as depression level as compared to undergraduate male students of G C University Faisalabad, University of Agriculture, and university of Faisalabad. On the basis of these results this study recommends that media should be careful enough while highlighting terrorist events on the screen, because media is not informing the public but it instills the PTSD among the youth of the country. There is also urgent need to start a program on universities' level for coping strategies against PTSD to reduce the PTSD among students.

## REFERENCES

- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders(4<sup>th</sup> ed., text revision). Washington, DC: Author.
- American Psychological Association. (2011). Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, Text Revised). Washington, DC: American Psychological Association.
- Arieh, Y., Shalev & Freedman, S. (2005). PTSD Following Terrorist Attacks: A Prospective Evaluation. American Journal of Psychiatry, 162, 1188-1191.
- Azeez, A. L. (2009). The Role of the Media in Reporting Terrorism: A Personal. Journal of Communication and Media Research, (1)1.
- Ball-Rokeach, S. J. (1974). The information perspective. Paper presented at the annual meetings of the American Sociological Association, August, Montreal.
- Ball-Rokeach, S. J. (1985). The origins of individual media system dependency: A sociological framework. *Communication Research*, 12, 485–510.
- Ball-Rokeach, S. J. (1998). A theory of media power and a theory of media use: Different stories, questions, and ways of thinking. *Mass Communication and Society*, 1, 5–40.
- Ball-Rokeach, S. J., & DeFleur, M. L. (1976). A dependency model of mass media effects. *Communication Research*, 3, 3–21.
- Ball-Rokeach, S. J., Rokeach, M., & Grube, J. W. (1984). The great American values test: Influencing behavior and belief through television. New York: Free Press.
- Beck, A. T., Steer, R.A., & Garbin, M.G. (1988) Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8(1), 77-100.
- Beck, A.T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Blanchard, E. B., and Hicking, E. J. (1997). After the Crash. Washington, DC: American Psychological Association.
- Blanchard, E.B., Kuhn, E., Rowell, D.L., Hickling, E.J., Wittrock, D., Rogers, R.L., et al. (2004). Studies of the vicarious traumatization of college students by the September 11thattacks: effects of proximity, exposure and connectedness. *Behaviour Research Therapy*, 42: 191-205.
- Bleich, A., Gelkopf, M., & Solomon, Z. (2003). Exposure to terrorism, stress-related mental health symptoms, and coping behaviors among a nationally representative sample in Israel. JAMA, 290, 612-620. doi: 10.1001/jama.290.5.612.

- Breslau, N., Davis, G. C., Andreski, P., & Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Archives of General Psychiatry*, 48, 216-222.
- Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Boston: Houghton Mifflin.
- Cochran, W. G., & Cox, G. M. (1957). Experimental designs, 2nd edn. New York: Wiley.
- Comer, J. S., Furr, J. M., Beidas, R. S., Weiner, C. L., & Kendall, P. C. (2008). Children and Terrorism-Related News: Training Parents in Coping and Media Literacy. *Journal of Consulting and Clinical Psychology*, 76(4), 568 -578. doi: 10.1037/0022-006X.76.4.568.
- Crelinsten, R.D. (1989). Terrorism and the media: Problems, solutions, and the counter problems. *Political Communication*, 6(4), 311-339. Retrieved July 23, 2013 from

http://www.tandfonline.com/doi/abs/10.1080/10584609.1989.9962881#.UulkM GyA3IV

- DiMaggi,C., & Galea, S. (2006). The behavioral consequences of terrorism: a metaanalysis. Academic Emergency Medicine, 13, 559 – 566.
- Dunkel, C. S. (2009). Terror Management Theory and Identity: The Effect of the 9 / 11 Terrorist Attacks on Anxiety and Identity Change. *Identity*, 2,281-301. doi:10.1207/S1532706XID0204
- Endler, N. S., & Parker, J. D. A. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 58, 844–854.
- Galea, S., Abein, J., Resnick, H., Kilpatrick, D., Bucuvalas, M., Gold, J., & Vlahov, D. (2002). Psychological sequelae of the September 11 terrorist attacks in New York City. *New England Journal of Medicine*, 346, 982-7.
- Galtung, J., & Ruge, M. H. (1965). The Structure of Foreign News. Journal of International Peace Research, 2(1), 64-90. Retrieved on July, 23, 2013 from http://jpr.sagepub.com/content/2/1/64.abstract
- Garcí a Vera, M. P., & Sanz, J. (2008). El papel de las guí as de auto ayuda y las pautas de intervenci ó n psicol ó gica para los afectados por los atentados del 11 M [The role of self -help guides and psychological intervention guidelines for people affected by the March 11th terrorist attacks]. In M. P. Garcí a Vera, F. J. Labrador, & C. Larroy (Eds.), Ayuda psicol ó gica a las ví ctimas de atentados y cat á strofes [Psychological help for victims of terrorist attacks and disasters, pp. 1 34] Madrid : Editorial Complutense.
- Gerbner, G. (1973). Cultural indicators: The third voice. In G. Gerbner, L. Gross, & W.
  H. Melody (eds.), Communications technology and social policy. New York: John Wiley, pp. 555 573.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980). The "mainstreaming" of America: Violence profile No. 11. *Journal of Communication*, 30, 10–29.
- Green, B. L., Krupnick, J. L., Chung, J., Siddique, J., Krause, E. D., Revicki, D., et al. (2006). Impact of PTSD comorbidity on one-year outcomes in a depression trial. *Journal of Clinical Psychology*, 62, 815-835.
- Groth-Marnat, G. (1990). *The handbook of psychological assessment* (2nd ed.). New York: John Wiley & Sons.

- Harumi, I., & Lee, D. (2005). Comparing the impact of the September 11th terrorist attacks on international airline demand. *International Journal of the Economics of Business*, 12, 225–249. doi: 10.1080/13571510500127931
- Hill, A. B. (1965). The environment and disease: Association or causation? Proceedings of the Royal Society of Medicine, 58, 295–300.
- Hoven, C. W., Duarte, C. S., Lucas, C. P., Wu, P., Mandell, D. J., Goodwin, R. D., Cohen, M., Balaban, V., Woodruff, B. A., Bin, F., Musa, G. J., Mei, L., Cantor, P. A., Aber, J. L, Cohen, P., Susser, E. (2005). Psychopathology among New York City public school children 6 months after September 11. Archives of General Psychiatry, 62,545–552. Retrieved on July, 23, 2013 from http://www.impact-kenniscentrum.nl/doc/kennisbank/1000011388-1.pdf.
- Jenkins, B. (1975) International Terrorism. Los Angeles: Crescent Publication.
- Katz, E., & Blumler, H. (1974). The uses of mass communications: Current perspectives on gratifications research. Beverly Hills, CA: Sage.
- Kim, Y.-C., & Ball-Rokeach, S. J. (2006). Civic engagement from a communication infrastructure perspective. *Communication Theory*, 16, 173–197.
- Kirk, R. E. (1995). Experimental design: Procedures for the behavioral sciences, 3rd edn. Pacific Grove, CA: Brooks/Cole.
- Laqueur, W. (1977). Terrorism. London: Weidenfield and Nicolson.
- Leary, M.R. (1991) Introduction to Behavioral Research Methods. California: Wadsworth Publishing Company.
- Lee, J. E C, & Lemyre, L. (2009). A social-cognitive perspective of terrorism risk perception and individual response in Canada. Risk analysis official publication of the Society for Risk Analysis, 29(9), 1265-80. doi:10.1111/j.1539-6924.2009.01264.x
- Lee, J.E.C., Lemyre, L., & Krewski, D. (2010). A Multi-Method, Multi-Hazard Approach to Explore the Uniqueness of Terrorism Risk Perceptions and Worry. *Journal of Applied Social Psychology*, 40(1), 241-272. doi:10.1111/j.1559-1816.2009.00572.x
- Lilienfeld, S. O., Waldman, I. D., & Israel, A.C. (1994). A critical examination of the use of the term and concept of comorbidity in psychopathology research. *Clinical Psychology*: Science and Practice, 1, 71-83.
- Matud, P. M. (2004). Sex differences in stress and coping styles. Personality and Individual Differences, 37, 1401–1415.
- Meshkin, D. (1999). Media dependency theory: Origins and directions. In D. Demers & K. Viswanath (eds.), Mass media, social control, and social change. Ames: Iowa State University Press, pp. 77–98.
- Miller, A, H. (1982). *Terrorism, the Media and the Law*. New York: Transnational Publishers.
- Momartin, S., Silove, D., Manicavasagar, V., & Steel, Z. (2004). Comorbidity of PTSD and depression: Associations with trauma exposure, symptom severity and functional impairment in Bosnian refugees resettled in Australia. *Journal of Affective Disorders*, 80, 231-238.
- Murphy, E.F., Jr., Woodhull, M.D., Post, Bert, Murphy-Post, Carolyn, Teeple, William, & Anderson, Kent. (2006). 9/11 Impact on Teenage Values. *Journal of Business Ethics*, 69, 399–421.
- National Counterterrorism Center. (2006). NCTC Report on incidents of terrorism 2005. Retrieved June 19, 2009 from National Counterterrorism Center's Worldwide

Incidents Tracking System web site: http://wits.nctc.gov/reports/crot2005nctcannexfinal.pdf

- National Counterterrorism Center. (2007). NCTC Report on terrorist incidents 2006. Retrieved June 19, 2009 from National Counterterrorism Center's Worldwide Incidents Tracking System web site: http://wits.nctc.gov/reports/crot2006nctcannexfinal.pdf
- National Counterterrorism Center. (2009). NCTC 2008 Report on terrorism . Retrieved June 19, 2009 from National Counterterrorism Center's Worldwide Incidents Tracking System web site: <u>http://wits.nctc.gov/Reports.do?f=crt2008nctcannexfinal.pdf</u>
- Nellis, a. M. (2009). Gender Differences in Fear of Terrorism. *Journal of Contemporary Criminal Justice*, 25(3), 322-340. doi:10.1177/1043986209335012
- Nixon, R. D. V., Resick, P. A., & Nishith, P. (2004). An exploration of comorbid depression among female victims of intimate partner violence with posttraumatic stress disorder. *Journal of Affective Disorders*, 82, 315-320.
- Norris, F.H., Friedman, M.J., Watson, P.J., Byrne, C.M., Diaz, E., Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981 – 2001. *Psychiatry*, 65, 207 – 239
- North, C.S., Pfefferbaum, B. (2002). Research on the mental effects of terrorism. *JAMA*, 288 (5), 633-636. Retrieved July, 23, 2013, from http://jama.jamanetwork.com/article.aspx?articleid=195157
- Oquendo, M., Brent, D. A., Birmaher, B., Greenhill, L., Kolko, D., Stanley, B., et al. (2005). Posttraumatic stress disorder comorbid with major depression: Factors mediating the association with suicidal behavior. *American Journal of Psychiatry*, 162, 560-566.
- Pfefferbaum, B., Seale, T. W., McDonald, N. B., Brandt, E. N., Rainwater, S. M., Maynard, B. T., et al. (2000). Posttraumatic stress two years after the Oklahoma City bombing in youths geographically distant from the explosion. *Psychiatry: Interpersonal & Biological Processes*, 63, 358–370.
- Richman, J. a, Cloninger, L., & Rospenda, K. M. (2008). Macrolevel stressors, terrorism, and mental health outcomes: broadening the stress paradigm. *American journal of public health*, 98(2), 323-9. doi:10.2105/AJPH.2007.113118
- Richman, J. a, Rospenda, K. M., & Cloninger, L. (2009). Terrorism, distress, and drinking: vulnerability and protective factors. *The Journal of nervous and mental disease*, 197(12), 909-17. doi:10.1097/NMD.0b013e3181c29a39
- Robson, C. (2002) Real World Research: A Resource for Social Scientists and Practitioner -Researchers. 2<sup>nd</sup> edn. Oxford, United Kingdom: Blackwell Publishers Inc.
- Roy, M. J. (2006). (Eds.). Novel Approaches to the Diagnosis and Treatment of Posttraumatic Stress Disorder. Proceedings of the NATO Advanced Research Workshop on Novel Approaches to the Diagnosis and Treatment of Posttraumatic Stress Disorder: IOS Press
- Schlenger, W. E., Caddell, J. M., Ebert, L., Jordan, B. K., Rourke, K. M., Wilson, D., et al. (2002). Psychological reactions to terrorist attacks: Findings from the National Study of Americans' Reactions to September 11. *Journal of the American Medical Association*, 288, 581–588.

- Schlesinger, P, et al. (1983). *Televising Terrorism: Political Violence in Popular Culture*. London: Comedia Publishing Company.
- Schuster, M. A., Stein B. D., Jaycox L., Collins R. L., Marshall G. N., Elliott M. N., et al. (2001). A national survey of stress reactions after the Sep-tember 11, 2001, terrorist attacks. New England Journal of Medicine, 345, 1507–1512.
- Shoshani, A., & Slone, M. (2008). The Drama of Media Coverage of Terrorism: Emotional and Attitudinal Impact on the Audience. Studies in Conflict & Terrorism, 31(7), 627-640. doi:10.1080/10576100802144064
- Silver, R. C., Holman, E. A., McIntosh, D. N., Poulin, M., & Gil-Rivas, V. (2002). Nationwide Longitudinal study of psychological responses to September 11. *Journal of the American Medical Association*, 288, 1235–1244.
- Slone, M. (2000). Responses to Media Coverage of Terrorism. *The Journal of Conflict Resolution*. [Abstract]. doi: 10.1177/0022002700044004005 August 2000 vol. 44 no. 4 508-522. Retrieved May, 16, 2011, from <a href="http://jcr.sagepub.com/content/44/4/508.short">http://jcr.sagepub.com/content/44/4/508.short</a>
- Slone, M., & Shoshani, A. (2006). Evaluation of preparatory measures for coping with anxiety raised by media coverage of terrorism. *Journal of Counseling Psychology*, 53(4), 535-542. doi:10.1037/0022-0167.53.4.535
- Slovic, P. (2002). Terrorism as a hazard: A new species of trouble. *Risk Analysis*, 22, 425–426. doi: 10.1111/0272-4332.00053. Cavtat, Croatia
- Smith, D. A., & Uchida, C. D. (1988). The social organization of self-help: A study of defensive weapon ownership. *American Sociological Review*, 53, 94-102. Retrieved July, 23, 2013 from <u>http://www.jstor.org/stable/2095735</u>.
- Smoller, B, & Sokol, J. (2001). Post traumatic stress disorder in the age of terror. Med
- South Asia Terrorism Portal. (2013). Suicide attacks in Pakistan: 2002-2014. Retrieved3August,2013,from
- http://www.satp.org/satporgtp/countries/pakistan/database/Fidayeenattack.htm Sprang, G. (1999). Post-Disaster Stress Following the Oklahoma City Bombing. An

Examination of Three Community Groups. J Interpersonal Violence, 14: 169-83. The Gallup Organization. (2005). Gallup Brain Search: "Terrorism" [Database of survey

- items]. Retrieved July 23, 2013 from <u>http://brain.gallup.com</u>
- Todd, A., Wilson, J. C., & Casey, S. (2005). Comparing British and Australian Fear of Terrorism Pre and Post the Iraqi War. Psychiatry, Psychology and Law, 12(1), 184-193. doi:10.1375/pplt.2005.12.1.184
- Weaver, A. J. (1992). Working with potentially dangerous persons: What clergy need to know. Pastoral Psychology, 40(5),313-323.
- Weaver, A. J., Flannelly, L.T., & Preston, J.D. (2003). A Handbook for Pastors and Other Helping Professionals: Counseling Survivors of Traumatic Events. New York. Abingdon Press.
- Weiss, D. S., Marmar, C. R., Schlenger, W.E., Fairbank, J. A., Jordan, B. K., Hough, R. L., and Kulka, R. A. (1992). The prevalence of lifetime and partial posttraumatic stress disorder in the Vietnam theater veterans. Journal of Traumatic Stress, 5(3),365-376.
- Wilcox, P., Ozer, M. M., Gunbeyi, M., & Gundogdu, T. (2009). Gender and Fear of Terrorism in Turkey. Journal of Contemporary Criminal Justice, 25(3), 341-357. doi:10.1177/1043986209335011
- Winer, B. J. (1971). Statistical principles in experimental design, 2nd edn. New York: McGraw-Hill.