

"UNRAVELING THE THREADS OF HOPE: RELIGIOSITY, RESILIENCE, AND LOCUS OF CONTROL IN THE AFTERMATH OF TERRORISM"

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Abstract

The current study is based on an MPhil research conducted between 2015 and 2018 by Khattak (2018). Its main objective was to examine the behavior of individuals who were affected by the Army Public School incident and explore the protective factors that played a role in preventing the development of psychopathology. The study focused on four key factors: religiosity, resilience, locus of control, and psychopathology. To assess these factors in the affected individuals (n=105), the researchers utilized the State-Trait Resilience Inventory (Hiew, 2000), a Religiosity scale, the Psychopathology scale of the Multidimensional Personality Inventory (Zeb, 2013), and the locus of control scale (Levenson, 1973). A total of 206 participants took part in the study, with 103 of them being Army Public School affected individuals, and the other 103 being from the general population. The average age of the participants was 21 years. The results of the study indicated that among the Army Public School affected individuals, those with higher levels of religiosity scored lower on the psychopathology scale compared to those with lower levels of religiosity. Similarly, individuals who scored higher on the resilience scale showed lower levels of psychopathology in comparison to those with lower resilience scores. Additionally, significant differences were found between the Army Public School victims and the general public in terms of their external locus of control scores. However, the mediation analysis did not establish resilience as a mediator between religiosity and psychopathology in this context.

INTRODUCTION

As asserted by Khan, Sarhadi, Hussain, Iqbal, and Taj (2012), terrorism's primary objective is to instill fear in society. The impact of terrorism has been evident in various countries, employing diverse means and methods, with its prevalence showing an upward trend since 2008. Notably, Pakistan stands as a nation significantly affected by terrorism, as highlighted by Ali (2010). The annual death toll in Pakistan due to terrorism witnessed a disturbing escalation, soaring from 164 in 2003 to a staggering 3,318 in 2009. Providing further weight to the severity of the situation, Hamid (2011) reported that between September 11, 2001, and May 2011, an alarming figure of approximately 35,000 Pakistanis lost their lives due to terrorist activities.

Khyber Pakhtunkhwa in Pakistan has emerged as one of the regions significantly targeted by terrorist attacks (as cited in <https://en.wikipedia.org/wiki/Khyber-Pakhtunkhwa>). The central city of KPK, Peshawar, has particularly suffered from the scourge of terrorist activities, with the tragic incident at Army Public School on December 16, 2014, being one of the most devastating (as cited in researchpedia.info/terrorist-attack-on-army-public-school-peshawar). During this heinous attack, terrorists brazenly stormed the school premises, targeting the auditorium and classrooms, leading to the tragic loss of around 120 lives, including faculty, staff, and students, and leaving more than 100 others injured. The events that unfolded on December 16, 2014, undoubtedly inflicted distress upon everyone, particularly the survivors and families of the victims. Terrorism's impact extends beyond physical harm, encompassing profound psychological repercussions (Tanielian & Stein, 2014). Victims of terrorism may endure physical injuries or experience the devastating loss of loved ones, triggering potential psychopathological effects. Psychopathology, as defined by Kleinknecht (2008), refers to clinically significant distress, dysfunction, or impairment in various aspects of



functioning, stemming from an individual's emotional state, behavior, and deviations from social or cultural norms. Remarkably, not all survivors and their families exhibited signs of psychopathology in the aftermath of the tragedy. Some students exhibited resilience and returned to the same school after its reopening, while victims and their parents engaged in media interviews with a sense of calm and peace, expressing acceptance of the incident as God's will. Such observations suggest that individuals affected by this tragic incident might have employed specific coping mechanisms to combat the onset of psychopathological symptoms. Through a careful analysis of their media interviews, three psychological characteristics emerged: religiosity, resilience, and locus of control. These traits may have been utilized by the affected individuals as protective factors to mitigate the development of psychopathology, including symptoms of depression and anxiety.

According to Wulff (2010), religiosity encompasses belief in a supreme Deity and active participation in ritual communities. James, as cited in Harrison (2006), defines religion as faith in an eternal God. Extensive research in the aftermath of terrorist attacks and traumatic events has yielded valuable insights into the psychological impact and coping strategies of those affected. For example, studies suggest that religiosity can act as a protective factor against depression (Gearing, Lizardi, & Brackett, 2015) and exhibit positive correlations with psychological well-being and spirituality (Li, Stampfer, Williams, & VanderWeele, 2016). Abu-Raiya and Pargament (2015) arrived at a similar conclusion, emphasizing religiosity's potential influence on hopelessness and suicidal intent in individuals dealing with depression and advocating for the integration of religious aspects in depression treatment plans for potential benefits. Moreover, Krause (2015) and Dai, Chen & Lu (2016) argue that religious beliefs can foster acceptance, tolerance, self-image, and resilience. Similarly, Kim and Smith (2015) emphasize the potential protective role of religiosity/spirituality against substance use and depression. Collectively, these studies contribute to the growing body of research emphasizing the significance of religion in shaping an individual's well-being and overall mental health, taking into account various cultural contexts.

Moreover, resilience is recognized as another influential factor in mitigating the onset of psychopathology amid exceptionally challenging and adverse circumstances. Santos (2012) operationally defines resilience as the ability to swiftly recover from illness, changes, or adversity. Researchers widely perceive resilience as a defensive mechanism against the risk of developing psychopathology in response to stressors (Herrman, Stewart, Diaz-Granados, Berger, Jackson, & Yuen, 2011). In this study, we also explored the role of resilience in shielding individuals from psychopathology. Resilient personalities exhibit temporary and minor disturbances in functioning, displaying relatively healthy adjustment over time (Bonanno as cited in Wald et al., 2020). Similarly, Robins, John, Caspi, Moffitt, and Stouthamer-Loeber (1996) characterized resilient individuals as steadfast, vocally expressive, active, easygoing, flexible, clever, and self-confident. These attributes assist individuals in combating the onset of mental issues when confronted with challenging events. Numerous studies have indicated that resilience plays a remarkable mediating role in various mental disorders (Mortazavi & Yarollahi, 2015). Dienstiebers (1989) theory of toughness posits that experiencing and overcoming challenging situations can strengthen individuals. Karstoft et al. (2015) demonstrated the protective effects of resilience against psychopathological symptoms in diverse populations, including survivors of mass violence. Similarly, Cuhadar et al. (2014) assessed psychiatric symptoms and resilience levels in hematopoietic stem cell transplant patients and their relatives, revealing that higher levels of resilience were associated with fewer psychiatric symptoms in both patients and their relatives. Additionally, in a study by Mansour et al. (2014) focusing on university students, the results showed an inverse correlation between depression and resilience.

The third crucial variable in this study focused on locus of control, originally developed by Rotter (1954) and considered a fundamental aspect of personality. Locus of control refers to an individual's beliefs regarding the events or situations that surround them (Khan, Saleem, & Shahid, 2012). Rotter introduced two types of locus of control: internal and external. Individuals with an "internal locus of control" believe that they have control over their own lives (Rotter, 2011). This perception arises when people believe that their behavior can influence the likelihood of receiving



reinforcements. While Rotter initially conceptualized locus of control as a general construct, several studies suggest that it may vary across different domains, such as academic and health-related contexts (Kutanic, Mesci, & Övdür, 2011).

Zimbardo (1985) defined an internal locus of control as the belief that the outcomes experienced are a result of one's own actions. In contrast, individuals with an external locus of control perceive that the outcomes of their actions are beyond their control (Zaidi & Mohsin, 2013). People with an external locus of control tend to attribute their life's events to luck, chance, or other powerful individuals, both in terms of achievements and failures (Zaidi & Mohsin, 2013).

One of the fundamental beliefs in Islam is the concept of destiny, where Muslims firmly hold that the entire universe is under the command of Allah, encompassing everything from the smallest occurrences to the most awe-inspiring phenomena. Quranic verses such as "Everything they did is in the Books" (Al Quran, 54: 52) and "Everything is recorded, big or small" (Al-Quran, 54: 53) emphasize the notion of divine predestination. This belief instills individuals with a profound sense of inner certainty, tranquility, and composure, especially when faced with adversities. The conviction that everything, including life and death, is predetermined and occurs at a destined time can elevate the level of external locus of control, potentially playing a protective role against psychopathology in individuals. However, while this assumption seems logical, empirical research has produced mixed findings. Several studies have explored the relationship between locus of control, religiosity, and psychopathology, yielding diverse results in different cultural and religious contexts. However, previous research has not consistently supported this assumption. For instance, studies conducted by Zahra, Qureshi, & Khan (2019) indicated positive correlations between external locus of control and depression. On the other hand, Faizan, Riaz, and Ali (2019) investigated the moderating role of locus of control in relation to anger and depression, revealing a negative correlation between internal locus of control and depression. Similarly, Yildirim, Dereli, and Buyukbayram (2016) explored the impact of locus of control and religious orientation on academic anxiety among adolescents. The study found that participants with an internal locus of control exhibited lower levels of academic anxiety. It is important to note that these studies were conducted in different cultural and social settings, where the concept of religiosity and external locus of control may differ significantly from our own.

The present study focuses on the positive aspects of external locus of control in dealing with unexpected and extraordinary circumstances. As the attribution of events can significantly impact individuals' social and work life, this study aims to explore which kind of locus of control individuals employ when faced with extraordinary situations. Some people believe they can control events, while others think that luck and fate govern their life events, leading to different behavioral patterns. Therefore, this paper focuses on understanding the use of locus of control to cope with unexpected events.

Rationale of the study

The aftermath of a terrorist activity typically triggers fear and avoidance behaviors within the affected community. However, the response of the APS incident survivors and their families displayed a remarkable contrast, providing a compelling incentive for the current study. Contrary to the expected behavior, the children demonstrated increased enthusiasm in returning to the same school where the horrific massacre occurred. The parents exhibited remarkable composure during media interactions, while some mothers turned to religious observance, embracing hijab after the incident. These observable behaviors suggest that the APS affectees may be employing religiosity as a coping mechanism to navigate through the tragedy, demonstrating resilience in the face of adversity. Additionally, their submission to the will of the Almighty reflects the utilization of an external locus of control among those affected. Given the potential impact of these variables on psychopathology, it is imperative to investigate their role in helping the sufferers accept reality and safeguarding them from psychological distress. The significance of this research lies in the potential application of these identified variables in future treatment plans for individuals impacted by terrorist activities



Objectives

1. To bifurcate APS affectees on the bases of religiosity, and resilience scores and to see its effect on psychopathology.
2. To differentiate between APS victims and general population on locus of control scale.
3. To find out the mediating role of resilience between religiosity and psychopathology.

Hypotheses

1. Affectees of Army public school in high religiosity group will score low on psychopathology scale as compared to low religiosity group.
2. Army public school affectees will score high on external locus of control scale as compared to general population.
3. Army public school affectees in high resilience group will score low on psychopathology scale as compared to low resilience group.
4. Resilience will mediate between religiosity and psychopathology

Method

Sample

The sample comprised of 206 respondents, collected through purposive sampling technique. Out of the 206 subjects, 103 respondents were Army public school affectees and 103 respondents were from general population. The sample further included students, teachers and parents from Army Public School and general population. In both the samples 70 (34 %) students, 25(12%) teachers and 25 (12 %) parents were included. The age range was between 15-60 years ($M= 21.77$; $SD= 9.61$). After collecting the sample from Army Public School, general population sample was extracted by matching their key characteristics with Army Public School sample like age, gender, class etc. At the beginning of the study it was assumed that a total of 250 respondents will be included in the study but due to security issues with great difficulty the school authorities gave permission to talk to the students and teachers. As it was very difficult to get the responses of 125 APS affectees a sample of 103 respondents were contacted from both the groups of APS and general population.

Inclusion Criteria: Inclusion criteria for Army Public School affectees was whether they had experienced a loss of their loved ones, injury to themselves or their loved ones or witnessed the incident.

Instruments

State-Trait Resilience Inventory

The State-Trait Resilience Inventory, initially developed by Hiew in 2000, was utilized in the present study to assess resilience. For measurement purposes, the translated version by Sarwer (2005) was employed, comprising two subscales: State Resilience with 15 items and Trait Resilience with 18 items. The inventory adopts a Likert-type response format with a 5-point scale, ranging from "strongly agree" (weighted as 5) to "strongly disagree" (weighted as 1). Higher scores on both subscales indicate greater levels of resilience. The alpha reliability coefficients for state resilience and trait resilience were calculated as .84 and .93, respectively.

Religiosity Scale of Multidimensional Personality Inventory

The measurement of religiosity in this study was conducted using the Religiosity scale of the Multidimensional Personality Inventory (Zeb, 2013), which comprises 62 items. The scale adopts a Likert format, where respondents indicate their level of agreement on a range from "strongly agree" to "strongly disagree." For scoring, "strongly agree" is weighted as 3, "agree" as 2, "mildly agree" as 1, and "disagree" as 0. Additionally, the scoring is reversed for negative items. The validity of this scale was established by comparing it to the Index of Religiosity scale (Aziz & Rehman, 1996). The Religiosity scale demonstrated a high level of internal consistency, with an alpha coefficient of 0.89, indicating strong reliability. Moreover, the split-half reliability coefficient was calculated as 0.81, further supporting the scale's consistency and accuracy in measuring religiosity.

Psychopathology Scale of Multidimensional Personality Inventory

In this study, the measurement of psychopathology was conducted using the Psychopathology scale of the Multidimensional Personality Inventory (Zeb, 2013). This scale comprises 66 items and adopts a Likert-type response format, where participants indicate their level of agreement on a range



from "strongly agree" to "strongly disagree." The scoring system assigns a weight of 3 to "strongly agree," 2 to "agree," 1 to "mildly agree," and 0 to "disagree." For negative items, the scoring is reversed. To establish the validity of the Psychopathology scale, it was validated against the Urdu version of the Depression, Anxiety, and Stress Scale (Farooqi & Habib, 2010). The scale demonstrated high internal consistency, as indicated by an alpha coefficient of 0.95, reflecting strong reliability. Additionally, the split-half reliability coefficient was calculated as 0.91, further attesting to the scale's consistency and accuracy in measuring psychopathology.

Levenson Multidimensional Locus of Control Scale

In this study, the Multidimensional Locus of Control Inventory was utilized in its translated version. Originally developed by Levenson (1973), the inventory was adapted into Urdu language by Younas in 2003. The questionnaire follows a Likert-type response format with a 6-point scale. It consists of 24 items, with 8 items measuring internal locus of control, 8 items assessing external locus of control, and the remaining 8 items gauging the dimension of powerful others. Responses on the scale range from "strongly disagree" (weighted as 1) to "very strongly agree" (weighted as 6). For the Internal Locus of Control Scale, the Kuder-Richardson reliability coefficient was calculated as 0.64, while for Powerful Others Scale, it was 0.77, and for External Locus of Control Scale, it was 0.78. The split-half reliabilities were determined to be 0.62 for Internal Locus of Control, 0.66 for Powerful Others Scale, and 0.64 for External Locus of Control Scale. As per Nunnally's criteria, all the reliability values mentioned above are considered acceptable and sufficient (as cited in Field, 2013, p. 880).

Procedure

The current paper is derived from an MPhil research completed in 2018 (Khattak, 2018). Upon receiving approval for the research topic, data collection commenced in November 2015 and spanned approximately three months. To access the Army Public School (APS) affectees, necessary permissions were obtained from the school authorities and the relatives of the APS victims. The study's purpose was conveyed, and participants were assured of the confidentiality of their information. Subsequently, questionnaires and consent letters were provided to them. Data from students and teachers were collected in group settings. Participants were gathered in classrooms, and the scales were administered individually to each of them. Students were also encouraged to seek parental consent to participate in the study, and contact information was provided for this purpose. The general public's data were obtained with their consent to participate in the study. After collecting data from APS affectees, the general population sample was matched to the APS sample based on age, gender, and class to control for the influence of other variables that could impact their responses. Data from the general public were collected in individual settings, with some respondents completing the questionnaires on the spot, while others returned them later.

Results

Table 1

Mean, standard Deviation, coefficient alpha, actual and potential range of state trait resilience, external locus of control, internal locus of control, religiosity and psychopathology scales

Scale	Item	No of		Skewness	Kurtosis	Actual Range	Potential range	Alpha Coefficient
		M	SD					
Resilience	33	118.1	23.6	-0.02	1.1	35-155	165	0.94
External locus of control	16	82.33	9.96	-0.02	0.97	22-91	96	0.69
Internal locus of control	8	58.08	5.18	-0.48	0.64	16-48	48	0.54
Psychopathology	66	51.07	34.9	0.75	-0.1	1-155	198	0.96



		148.0	20.6			80-	186	
Religiosity	62	4	4	-1.2	1.2	176		0.9

Table 1 presents the value of Arithmetic Mean, standard Deviation, skewness, kurtosis, Alpha coefficient and actual and potential Ranges. The values of skewness and kurtosis indicate that the data is normally distributed while alpha coefficient values indicate high reliability for Resilience, Psychopathology and Religiosity scales.

Table 2

Mean, SD & t-test showing difference in psychopathology between high and low religiosity groups of Army Public School affectees.

Variable	low religiosity Group (n=51)		high religiosity group (n=54)		t(48)	p	95%		Cohen's d
	M	SD	M	SD			LL	UL	
Psychopathology	81.65	40.65	28.18	24.58	5.77	0.00	34.86	42.71	1.59

Table 2 shows difference in psychopathology between high and low religiosity groups of Army Public School affectees. Individuals at or below 25th percentile (low religiosity group) scored significantly lower on psychopathology than individuals at or above 75th (high religiosity group) percentile.

Table 3

t-test comparing Army Public School affectees and general population on external locus of control scale

variable	Army Public School affectees (n=103)		General Population (n=103)		t(203)	p	95%		Cohen's d
	M	SD	M	SD			LL	UL	
external locus of control	83.54	10.55	81.12	9.25	1.74	0.04	0.3	5.15	0.24

Table 3 shows difference in the external locus of control score between Army Public School affectees and general population. Army Public School affectees have high external locus of control as compared to general population. The value of Cohen's d (0.24) indicates low effect size.

Table 4

Mean, SD & t-test showing difference in psychopathology between high and low resilience groups of Army Public School affectees.

variable	low resilience group (n=24)		high resilience group (n=30)		t(52)	p	95%		Cohen's d
	M	SD	M	SD			LL	UL	
psychopathology	63.38	42.18	40.54	31.55	2.27	0.01	2.71	42.97	0.61

Table 4 shows difference in Psychopathology between high and low resilience groups of Army Public School affectees. Individuals at or below 25th percentile (low resilience group) scored significantly lower than individuals at or above 75th (high resilience group) percentile.



Table 5 Mediating role of resilience between religiosity and psychopathology

Variables	B Model 1	Model 2		
		B	95% CI	
			LL	UL
Constant	177.09**	188.4**	156.2	220.7
Religiosity	-0.8512**	-0.7816**	-0.99	-0.56
Resilience		-0.183	-0.369	0.003
R2	0.2527	0.2663		
F	68.64**		36.7***	

B Indirect effect (-0.06,95% CI(-0.1769,0020)

The mediating effect of resilience between religiosity and psychopathology was examined by using process procedure for which Macro to SPSS was installed. This method generates results for indirect effects (mediating effects) of independent variable on dependent variable through mediator with 95% confidence intervals. If the confidence interval contains zero then one can conclude that the effect of independent variable (religiosity) on the dependent variable (psychopathology) is not mediated by mediator (resilience).

DISCUSSION

As Pakistan continues its fight against terrorism, the nation has unfortunately experienced recurrent terrorist activities across the country. Given the gravity of these circumstances, it becomes imperative to explore the factors that contribute to maintaining individual mental composure in such challenging situations. This research aims to investigate the potential protective roles of religiosity, resilience, and locus of control against psychopathology. The study collected data from individuals affected by the tragic incident at Army Public School on 16th December 2014. By examining these variables, we hope to gain insights into the coping mechanisms and psychological well-being of the affected individuals amidst the ongoing struggle against terrorism.

The first hypothesis of the research assumed that affectees of Army Public School incidence with high level of religiosity will score low on psychopathology scale as compared to low scorers on religiosity scale. The results showed significant difference between the two groups (t (48) =5.77, p<0.01). There can be number of reasons given to explain the results, for example, Spilka, Hood, and Grouch (1985) presented five ways through which religion can be linked to psychopathology, with three of them having positive implications.

First, *Religion as Psychotherapy*: One way religion can impact psychopathology is by serving as a form of psychotherapy for disturbed individuals. Religious beliefs and practices may offer a sense of comfort, hope, and purpose to those grappling with psychological distress. Engaging in religious rituals, prayer, or seeking solace in spiritual guidance can act as coping mechanisms and provide a source of emotional support, thus aiding individuals in managing their psychological challenges. Empirical studies have supported this notion, showing that religious coping strategies are associated with lower levels of psychological distress and increased well-being in individuals facing various stressors (Koenig, 2009).

Second, *Religion as Social Control*: Another positive aspect of religion's influence on psychopathology lies in its ability to control deviant behavior by providing appropriate socialization. Religious communities often emphasize moral and ethical values, which can guide individuals toward prosocial behaviors and discourage harmful actions. The sense of belonging and adherence to religious norms can create a supportive and structured environment, reducing the likelihood of engaging in behaviors that may lead to psychopathology. Research has found that religiosity is



linked to lower rates of substance abuse and criminal behavior, further supporting the notion of religion's role as a form of social control (Nonnemaker, McNeely & Blum, 2006).

Thirdly, *Religion as a Shelter*: The third positive aspect proposed by Spilka et al. (1985) is that religion can serve as a shelter, allowing individuals to hide psychological problems or vulnerabilities. This notion suggests that religion provides a safe space where individuals can find comfort and protection, shielding them from external stressors and potential triggers of psychopathology. While this aspect may not directly address psychological issues, it can create a buffer, preventing certain stressors from exacerbating existing mental health problems. While empirical evidence on this specific aspect is limited, research has shown that religiosity is associated with greater emotional well-being and higher levels of life satisfaction (Diener & Emmons, 1984).

Islamic literature also emphasizes religious principles and practices to cope with life stressors. That is, through prayers, patience and faith in God troubles can be overcome (Ara, 2016). As the Quran states worldly troubles assess the believers and develop tolerance in them for confronting the difficulties (Aflakseir, 2012). Muslims have a belief that every human being will be tested through either hunger, illness, loss of possessions or loved ones etc. A religious person may try to please God by engaging himself in psychologically healthy acts like loving and respecting others, forgiving others, thinking and acting in a positive way in any situation which keeps the person from developing psychological illnesses (Zeb, 2013). As the result indicates individuals who scored high on religiosity scale scored low on psychopathology scale (Cohen's $d = 1.5$) i.e., 94% of high religiosity group scored low on psychopathology scale which means individuals with high religiosity might use religion as a mechanism to cope with their desolate situations. The reason for such a large effect size might be the sample used, i.e., t test was computed on Army Public School affectees who have experienced either themselves or have suffered the loss or injury of their loved ones. The cutoff points for comparison between the low and high scores were 25th and 75th percentiles. Middle scorers were excluded for better comparison. The result indicates the use of religiosity as a positive coping mechanism by high scorers on religiosity scale to accept and bear their loss, which reduced the scores on psychopathology. Similarly, finding such a high effect size for the two variables (religiosity and psychopathology) is not uncommon using Islamic concept of religiosity, for example, Zeb, (2013) reported the value of Cohen's d as 1.57 showing significant difference between low and high religiosity groups on psychopathology scale. She justified the findings by quoting that believe in the Almighty God whom one can consult during the hard times, provides a sense of support. Clements & Ermakova (2012) has also suggested that surrender to God lowers down the stress level. He stated that surrender to God reduces stress through which religiosity influences health. Another reason for the significant differences on psychopathology between low and high religiosity groups is the use of positive thinking because almost every religion prevents its followers from negative emotions such as jealousy, revenge, thanklessness etc. When a person looks at the world in a positive way he may reflect positive character. Same results were obtained from the previous researches e.g. Braam, et al. (1997) and Momtaz, et al. (2012) conducted a study on religiosity. The results showed strong association of religiosity with improvement of depression. Similarly Papazisis, et al. (2014) also investigated the part of religious beliefs and spirituality in keeping people from depression. The results showed that 98 percent of the students stated strong religious and spiritual beliefs which were negatively correlated with depression.

Hypothesis number two assumed that Army Public School affectees would have high level of external locus of control as compared to general population, which is supported by the results ($t(203) = 1.7, p < 0.04$). It may be the case that the Army Public School affectees were using external locus of control more to accept the misfortune they faced due to which they scored higher on the scale as compared to general public. If things would have been in their control, they would not have let the incident take place at all, or would have reversed it after happening. This external locus of control was the coping strategy used to accept the harsh reality. As the effect size was low i.e. (0.24) which indicated that there was not a big difference between the level of external locus of control of Army Public School affectees and general population. It may be due to the fact that



the participants of this study are Muslims who believe in fate and Almighty Allah. We all believe that our lives will end at the time and place decided by God and nobody has the power to stop that. We believe that everything that happen is already written and no one has the power to change that as stated in the Holy Quran

“Every affliction that falls on the earth or yourselves, already exists in a Book before it is brought into being by us. No doubt that is easy for Allah to accomplish” (Surah al-Hadid, 57:22).

According to the third hypothesis, Army Public School affectees with high resilience were expected to score low on psychopathology scale as compared to those with low resilience. The results supported the hypothesis ($t(52) = 2.27, p < 0.01$). The result suggests that individuals who have high level of resilience may use certain strategies to overcome these painful situation which keeps them from psychopathology. The association between resilience and lower psychopathology scores aligns with the Resilience Theory, which emphasizes the ability of individuals to adapt positively to adversity. Individuals with higher resilience scores are better equipped to cope with trauma and exhibit lower levels of psychopathological symptoms (Li, Stampfer, Williams, & VanderWeele, 2016). As Kobasa, Maddi & Kahn (1982) & Maddi, and Khoshaba, (2003) explained in their theory of resilience, that a resilient person possess control, commitment and challenge which help them in dealing with catastrophic events so that is why highly resilient individuals scored low on psychopathology scale. Numerous studies investigated resilience and found similar results that resilience tend to lower down psychopathology especially depression and anxiety (Hjemdal, *et.al*, 2011; Sharple, *et.al*, 2014). The reason for the negative association between resilience and psychopathology arises due to the person’s belief that no matter how difficult the situation is, it will not stay for long and with the passage of time it will get better and better. They have the ability to bend rather than break in difficult circumstances. And if they feel like they are broken at times, there is still a part deep inside that knows that they won’t be broken forever.

According to Dienstbier’s (1989) theory of toughness, the process of experiencing stressors and the chance of recovery from these stressors can toughen individuals. This toughness produce psychological and physiological changes in individuals which in turn make individuals to look at these stressful conditions as manageable rather than overpowering and to cope efficiently with them. On the other hand, if a person is exposed to stressors or shelter from stressors continuously cannot develop toughness. It is just like physical fitness which gets improved from exercise while too much exercise will harm the body, similarly the toughness will not develop if a person has never coped with stressful situation while too much exposure to stress will disturb toughness (Seery, 2011).

According to Tedeschi and Calhoun (1996, 2004), Tedeschi et al. (1998) theory the ability to respond well to difficulty is known as posttraumatic growth. The process of posttraumatic growth is set in motion by a major life disaster that severely challenges and possibly smashes the person’s understanding of the world and his place in it. According to Tedeschi and Calhoun (1996), resilient individuals have adjusted effectively regardless of adversity. Individuals who experience posttraumatic growth are changed by their struggles with hardship.

The last research hypothesis stated resilience as a mediator between religiosity and psychopathology. To test this hypothesis the researchers employed the mediation process procedure. However, the results did not support this assumption. It was hypothesized on the basis of previous studies e.g., Kasen, Gameroff and Weissman (2012), Mosqueiro, Caldieraro, Messinger, da Costa, Peteet, & Fleck, (2021) investigated mediating role of resilience between religiosity and psychopathology and found that religiosity led to resilience and had an inverse relation with psychopathology. Although all the three measures separately played their role in protecting the person from psychopathology but being religious does not necessarily make a person resilient. The study suggests that the current measure of resilience may not fully capture the effects of religiosity. The lack of a mediating effect between religiosity, resilience, and psychopathology calls for further investigation into the reasons for these results, including considering specific aspects of religiosity and resilience, cultural differences, and other variables influencing the relationship. Understanding these complex interactions is essential for developing effective interventions and

support strategies for mental well-being. Replication studies are needed to expand our knowledge in this area.

CONCLUSION

This study contributes to the knowledge of how terrorism impacts individuals psychologically and highlights the significance of religiosity, resilience, and locus of control in aiding survivors' recovery. Understanding these factors can lead to more effective post-terrorism interventions, emphasizing the importance of religious, psychological, and community-based support to foster healing and growth in affected individuals and communities. Ultimately, this research has the potential to inform policies and therapeutic approaches, promoting a more compassionate and resilient society in the face of adversity.

Limitation and Suggestions

- The current research primarily focused on religiosity from an Islamic perspective, given that the majority of Pakistanis adhere to the Islamic faith. However, including a non-Muslim sample in the study would enhance its scope and enable generalization to non-Muslim populations.
- Obtaining cooperation from the authorities of Army Public School and gaining participation from affectees proved challenging, resulting in a low response rate.
- The data collection process solely involved the parents of affectees; it would have been beneficial to include siblings, grandparents, and other close relatives in the study to gain a more comprehensive understanding of the impact of the tragic incident.

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