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EXPLORING THE RELATIONSHIP BETWEEN POST-TRAUMATIC STRESS AND RESILIENCE AMONG UNIVERSITY STUDENTS

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ABSTRACT

This study investigated the connection between resilience and post-traumatic stress disorder in Pakistani university students. A psychological response that occurs following exposure to traumatic experiences, post-traumatic stress disorder (PTSD) frequently results in emotional suffering and cognitive impairments. It is widely believed that resilience, which is the capacity to bounce back and adjust constructively in the face of hardship, protects against the detrimental effects of trauma. An online survey was used to gather data from a convenience sample of 198 university students (73 men and 125 women) between the ages of 18 and 50 using a quantitative, correlational study methodology. Standardized tests of resilience and PTSD were completed by the participants. The suggested hypotheses were tested using statistical techniques such as one-way ANOVA, independent sample t-tests, and Pearson correlation. The results showed a statistically negligible correlation between resilience and post-traumatic stress disorder (r =.098, p >.05), indicating that individuals' levels of PTSD were not correlated with resilience. Similarly, there were no discernible variations in PTSD between male and female students (p =.071) or between age groups (p =.384). These findings suggest that, due to contextual, cultural, or situational differences, resilience may not have a direct impact on university students' levels of post-traumatic stress disorder. In order to improve students' coping mechanisms and foster psychological well-being, the study emphasizes the necessity of trauma-informed psychological interventions and resilience training programs in educational institutions.

Keywords: *Resilience, Post-Traumatic Stress Disorder, Psychological Well-Being, University Students, Gender Differences, Age Differences*

INTRODUCTION

70% people over all the worldwide experience a traumatic event in their life time. A range of other psychosocial factors has been linked to resilience. Higher coping self-efficacy, the perception that one is able to manage or recover from a stressful event, has been linked to positive adjustment and lower PTSD symptoms after trauma exposure. Post-traumatic stress disorder problem closely related to traumatic events that are related to traumatic memories, negative alternation in mood cognition, avoidance and hyperarousal (Amercian Psycological Association) prevalence of PTSD range from 1.3% to 12.2%. PTSD also led to

physical problems such as, Back and neck pain, Arthritis, Headaches, Asthma, Heart disease and stroke. The majority of individuals expose to violent or life-threatening events do not go to develop received aquatic Attention. Resilience suggests that violent and life-threatening events is quite common and their three-fourth of individual exposed to trauma are resilient.

Operation Definition of Variables:

Resilience is often understood as an individuals' ability to "bounce back" or recover quickly from the effects of a stressor, allowing resilient individuals to maintain a more stable and homeostatic psychological equilibrium over time. This desired outcome often implies providing a set of increasingly difficult and more complex challenges, structured facilitation, and "meaning making" which allows students to see their greater potential for dealing with future challenging and adverse situations. Three temporal modes of resilience: (a) an increase in functional coping during challenges or adversity, (b) quicker recovery after the exposure to the adversity, and (c) an increased adaptive capacity to deal with the adversity. (Bonanno, 2004; Liu, Reed, & Girard, 2017).

Post-Traumatic Stress Disorder

psychiatric disorder that may occur in people who have experienced or witnessed a traumatic event such as a natural disaster, a serious accident, a terrorist act, war/combat, or rape or who have been threatened with death, sexual violence or serious injury. Symptoms of PTSD fall into four categories. Specific symptoms can vary in severity. Intrusion, Avoidance, Alterations in cognition and mood, Alterations in arousal and reactivity.

Purpose of the study

The primary purpose of this study was to explore the relationship between post-traumatic stress and resilience among university students in Pakistan. The study aimed to determine whether resilience serves as a protective factor against post-traumatic stress and to examine if there are significant differences in post-traumatic stress across age and gender groups. Given the increasing exposure of young adults to academic, social, and emotional challenges, understanding how resilience interacts with stress responses is essential for promoting psychological well-being in educational settings. This research contributes to the existing body of knowledge by identifying whether resilience effectively mitigates post-traumatic symptoms among students and by providing insights for mental health practitioners to design targeted interventions that foster adaptive coping strategies.

Significance of the study.

The current study aims to investigate the connection between university students' resilience and post-traumatic stress disorder (PTSD). This study is important because college students frequently face a variety of personal, social, and academic obstacles that can occasionally become too much to handle and result in traumatic events or psychological suffering. They may become less resilient and emotionally strong as a result of these pressures, making them more susceptible to PTSD symptoms. Gaining knowledge on the relationship between resilience and PTSD in college students will help us better understand how they handle hardship and bounce back from traumatic or stressful experiences. The results of this study could help psychologists, counselors, and colleges create seminars, counseling techniques, and mental health programs that effectively build students' resilience.

Literature Review

Some previous research explains the relation between resilience and post-traumatic stress disorder there is study that are Epidemiological studies indicate that a majority of the U.S. population has been exposed to at least one traumatic event in their lives. In addition, resilience has become a variable of increasing interest in both society and the field of experiential education (EE). In this study, the relationship between psychological resilience, posttraumatic growth (PTG), and participation in EE activities is examined. There is effective at building resilience but less so for PTSG. In addition, no significant differences were noted between females and males on the PTSG. this exploratory study increases our understanding of

what psychological changes occur during a semester-long adventure-based EE curriculum with a 3-week high intensity experience embedded in the program (Ewert, A., & Tessneer, S. (2019). National Comorbidity Survey, exposure rates to traumatic events exceeded 50%, whereas the lifetime prevalence for PTSD was estimated at 7.8% The fact that the vast majority of individuals exposed to violent or life-threatening events do not go on to develop PTSD has not received adequate attention. The evidence that does exist suggests that resilience to violent and life-threatening events is quite common and that more than three fourths of individuals exposed to trauma are resilient. While previous studies have examined associations between PTSS and resilience, between PTSS and PTG, or between resilience and PTG separately, few studies have examined relationships among PTSS, resilience, and PTG concurrently. Moreover, to our knowledge, there is no study of the effect of childhood trauma on these relationships in adults. Therefore, we aimed to examine the moderated mediating effects of childhood trauma on resilience and its associations with PTSS and PTG in adult victims of traumatic accidents or crimes. We hypothesized that resilience would mediate relationships between PTSS and PTG and that its mediating effects would differ depending on childhood trauma. While the negative consequences of trauma have garnered the greatest amount of attention, researchers have recently begun to assess positive changes in a person in the aftermath of trauma and have proposed the concept of post-traumatic growth (PTG). PTG is reflected in a greater appreciation for life, improved relationships with others, a better sense of personal strength, recognition of new possibilities, and spiritual development (Tedeschi & Calhoun, 1996). Over the past decade, research on resilience has received increasing attention. The heightened interest in understanding and promoting resilience is not surprising given that in Europe alone, anxiety disorders and major depressive disorder were among the most frequent mental disorders in 2011. We conceptualize resilience as being an active and dynamic process through which a person adaptively overcomes a stressful or difficult situation or recovers swiftly from a period of ill-health. Thus, resilience is not a passive reaction to an adverse situation, nor is it merely the reverse side of post-traumatic stress disorder (PTSD), that approach which has received increasing attention over the last decade is to shift our scientific and clinical focus from risk factors for psychopathology to factors promoting resilience and mental well-being. In order to summarize and evaluate the current state of scientific affairs on the biological basis of resilience, predictors of differential susceptibility to future stress. This is highly relevant, especially in light of at-risk jobs where trauma exposure is more prevalent. (Snijders, C., Pries, L. K., Sgammeglia – 2018) posttraumatic stress disorder (PTSD) has previously been associated with increased risk for a variety of chronic medical conditions and it is often underdiagnosed in minority civilian populations. This study examined the effects of resilience on the likelihood of having a diagnosis of PTSD in an inner-city sample of primary care patients. By understanding the role of resilience in recovery from adverse experiences, improved treatment and interventional methods may be developed. Furthermore, these results suggest a role for assessing resilience in highly traumatized primary care populations as a way to better characterize risk for PTSD and direct screening/psychiatric referral efforts. (R., Bradley, B., & Ressler, K. J. 2011). Previous study examined the role of resilience in mitigating the impact of traumatic exposures in an urban, low-income, predominantly African American primary care population. To our knowledge, this is the first study to report the effect of resilience on the likelihood of PTSD given exposure to childhood sexual, physical, and/or emotional abuse and no childhood abuse trauma exposure. Other unique aspects of this study include the use of a validated self-report instrument to measure resilience in a vulnerable population. Our results suggest that resilience is an important factor for clinicians to consider when evaluating a patient's risk for PTSD given exposure to a significant trauma. Vulnerable populations do bear a disproportionate burden of PTSD risk as a group, yet individuals within this risk strata maintain the capacity to flourish in the face of trauma. Use of self-report instruments such

as the 10-item CD-RISC have the potential to aid clinicians in better understanding within-group risk for PTSD, as well as identify patients with low resilience who may benefit from interventions designed to enhance psychological resilience. (Lee, H. E., Kang,. 2012).

Hypotheses

H1: There is no significant relationship between post-traumatic stress and resilience among university students.

H2: There is a significant difference in post-traumatic stress across different age groups.

H3: There is no significant difference in post-traumatic stress between male and female university students.

Rationale of Study:

This study examines the issue of resilience in relation to trauma and posttraumatic stress disorder. Resilient coping to extreme stress and trauma is a multifaceted phenomenon characterized as a complex repertoire of behavioral tendencies. There is acute or chronic stressors lead to the development of posttraumatic stress disorder (PTSD); the majority of people are resilient to such effects. Resilience is the ability to adapt successfully in the face of stress and adversity. Has begun to identify the factors which are more influence to PTSD that are gender difference and also age criteria of people, mostly research show that these two factors didn't any effect on PTSD or resilience. Previous study showed that non-significant trend to post traumatic stress disorder, higher in female HCPs. In addition, no significant differences were noted between females and males on the PTSG. this exploratory study increases our understanding of what psychological changes occur during a semester-long adventure-based EE curriculum with a 3-week high intensity experience embedded in the program (Ewert, A., & Tessneer, S. (2019).

Methodology

Research Design:

Research Design: The current psychological investigation was carried out using the survey research method. It used a quantitative correlational strategy to investigate the connection between adult resilience and post-traumatic stress disorder (PTSD).

Sample Size: There were 198 male and female volunteers (N = 198) in the sample for this psychological investigation. There were 73 men and 125 women in the sample, and their ages ranged from 18 to 50. A Google Form was used to select participants using a convenience sampling strategy.

Variables: Resilience was the independent variable in this study, whereas post-traumatic stress disorder (PTSD) was the dependent variable. The purpose of the study was to investigate how participants' resilience affects their PTSD levels.

Instruments: The Post-Traumatic Stress Disorder Scale and the Resilience Scale, both of which were adapted from the Gulf Study's Supplemental Mental Health Scale, were the two standardized measures employed in this investigation. There were four items on the PTSD scale and twenty-seven items on the Resilience scale. In earlier studies, both tools showed strong validity and reliability.

Procedure: All participants gave their informed consent before the survey could be conducted, guaranteeing that the information gathered would only be used for research. The online survey was administered using Google Forms. Each participant received a copy of the questionnaire, which contained a demographic form, the PTSD scale, and the Resilience scale. Throughout the process, respondents received assurances of anonymity and confidentiality.

Statistical Analysis: Descriptive statistics were used to analyze the data in order to compile the variable distributions and participant demographics. An independent samples t-test was used to compare the groups. Furthermore, the relationship between resilience (an independent variable) and PTSD (a dependent variable) was evaluated using a bivariate correlation test. For all analyses, a significance level of $p < .05$ was used

Result

In current study one hundred and ninety-eight participant's data were analyzed. Three statistical methods (alpha coefficient, t- test, descriptive) are applied. The results of the analysis are given below:

Table 1

Frequencies and percentage across demographic variables (N=100).

Characteristics of variables	*f*	%
Gender		
Male	73	36.9
Female	125	63.1
Age		
18-26	112	56.6
27-35	52	26.3
36-50	34	17.2

Note: f= frequency; %= percentage.

Table 1 indicates the distribution of sample on the basis of demographics (age, gender). 63.1% of the sample comprises of female and 36.1% sample comprises of male. Falls in an age range of 56.6% in 18-25 years, 26.3% in 26-35 and 17.2% in 36-50 years.

Table 2

Correlation coefficient among PTSD and Resilience scale (N=198).

	RS
PTSD	.098

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PTSD= post-traumatic stress disorder, RS= Resilience scale

Correlation is statistically insignificant. Results of Table 5 show that PTSD and resilience have no relation (.098), which indicates that PTSD has zero correlation.

Table 3

Difference between age (18-25, 26-35 and 36-50) on PTSD using one way ANOVA.

Source	Sum of Squares	df	Mean Square	F	p
Between Groups	5.672	2	2.836	0.961	.384
Within Groups	575.282	195	2.950		
Total	580.955	197			

P<0.05

The above table showed the information about the difference between ages. The result in table 3 indicate that age of the participant has no significant difference as shown in table, F (.961) =0.384, p>0.05. It can be also said there were no difference among ages and post-traumatic stress disorder.

Table 4
Mean, standard deviation and t-value of male and female on post-traumatic stress disorder (n=198)

	Education								
	Male		Female				CI (95%)		
	(n=73)		(n=125)						
Variable	M	*SD*	M	*SD*	*t(196)*	*p*	*LL*	*UL*	*Cohen'sd*
PTSD	8.109	1.888	7.912	1.380	-.780	.071	-.6969	.3017	0.119

Note: M = Mean, SD= Standard deviation; ρ= level of significance; CI=Confidence Interval; LL=lower limit, UP=upper limit; PTSD= post-traumatic stress disorder scale.

The result mentioned in table 4 which showed the mean, standard deviation, ρ value and t-test value of PTSD of male and female. There is no significant mean difference between scores of genders and PTSD (M=8.109, SD=1.888) and (M=7.912, SD=1.380). Hence hypothesis no 4 is accepted according to ρ value .071 which is greater than .05 and Cohen's d value (.119) show small effect size.

Conclusion

The results of this study showed no discernible correlation between university students' resilience and post-traumatic stress disorder, suggesting that greater resilience is not always a sign of less trauma-related stress. Furthermore, there were no discernible variations in post-traumatic stress disorder between male and female students or between age groups. According to these findings, social support, coping mechanisms, and individual experiences may have a greater impact on students' psychological reactions to trauma than resilience. Even though resilience is commonly acknowledged as a stress-reduction strategy, its effectiveness may vary depending on contextual and cultural elements specific to the student body.

Overall, the study emphasizes how critical it is for colleges to create all-encompassing, trauma-informed support networks that take into account various facets of students' wellbeing. To help students manage stress and improve emotional stability, academic settings should incorporate peer support programs, resilience-building workshops, and counseling services. To better understand the dynamics of post-traumatic stress and resilience, future studies should take into account longitudinal designs and include extra variables like coping strategies, family support, and emotional regulation.

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