

Resilience as Moderator between Posttraumatic Stress and Suicidal Ideation among Institutionalized Orphans

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Abstract

Background. Growing without parents is a big trauma in one's life and after the death of parents children face so many problems that lead mental health problems. Orphans are the important part of our society as they are being neglected and this population is on risk, their mental health cannot be denied.

Methods. In a current study a risk of mental health issues within a neglected population was studied. The moderating role of resilience has also been investigated in posttraumatic stress and suicidal ideation among institutionalized orphans. Sample (N=200) comprised equal number of girls and boys with age range 12-18 years, present in different orphan houses of Rawalpindi and Islamabad. Sample was selected through technique of convenient sampling. For data collection Ego Resilience Scale (ERS), Posttraumatic Stress Disorder Checklist and Beck Suicidal Ideation Scale were used.

Results. Results indicated a significant positive relationship between posttraumatic stress and suicidal ideation, whereas resilience is negatively correlated with suicidal ideation and posttraumatic stress. Regression analysis showed that resilience proved to be a significant moderator between posttraumatic stress and suicidal ideation in orphans present in institutions. Further t-test analysis revealed significant gender differences on suicidal ideation while non-significant gender differences on posttraumatic stress and resilience.

Conclusion. In this study risk and protective factors are explored. Risk factors are posttraumatic stress and suicidal ideation whether the protective factor is resilience. The relationship between posttraumatic stress and suicidal ideation is significantly moderated by Resilience.

Keywords. Orphans, posttraumatic stress, resilience, suicidal ideation



Introduction

Around the world, number of orphans is increasing due to poverty, underdevelopment, disasters and war conditions (Benjet, 2010). Orphan is a kid denied by loss of one or typically the two guardians. According to a report presented by the United Nations Children's Fund, there is an extensive number that is approximately at present 148 million orphans in Asia, as Asia has a huge populace. It is evaluated that by 2015, the quantity of abandoned kids has enormously increased. These children and adolescents are more vulnerable to develop mental health issues like emotional, psychological and behavioral problems and negative characteristics such as aggressiveness, antisocial behavior and impulsivity (Yendork & Somhlaba, 2016).

Adolescence is a sensitive transitional period of quick development where an individual is being separated from parents and building up a solid feelings of independence to go into the adulthood. In this stage, adolescents run over certain challenges such as developing mental health issues like stress, depression and suicidal thoughts (Wisner et al., 2010). It is exceedingly vulnerable phase that influences psychological health/wellness. In this phase stress is the most common psychological problem among adolescent, after some traumatic event that stress leads to posttraumatic stress. Adolescent age has proved to be more influential in developing identity issues in reaction to any trauma as compared to the adulthood (Ogle et al., 2013). When a child faces a trauma in a form of death of loved one's, these is an increased probability of developing Posttraumatic Stress Disorder (PTSD) in adulthood (Fairbank & Fairbank, 2009).

The traumatic events experienced in childhood are more intense to make an individual vulnerable to develop PTSD as compared to the traumas faced later in life such as in adulthood. One reason for that might be the resilience and coping skills which develops with advancing age. Posttraumatic stress is a type of stress in which individual face numbness, sadness and intrusive

thoughts and that thought lead to suicidal thoughts (Whetten et al., 2011).

Suicidal attempts and suicide ideation are two main categories of suicidal behavior (Bhatta et al., 2014). In a suicidal attempt an individual performs a non-fatal, self-injurious behavior and he/she must has the intention to die (Suk et al., 2009). A study done in Europe reported that 10.5% of adolescents did suicide attempts (Kokkevi et al., 2012). In another study done by Gearing et al. (2015), 23.3% of German teenagers who undertook suicide received awful consequences, whereas 39.5% of them received various injuries. Suicidal ideation is thought to be at a risk of and preoccupation of suicidal thoughts. Stone and Crosby (2014) defined suicide ideation as preoccupied with the thoughts, and consistently bearing in mind and planning suicide. The rigorousness and severity of the suicide plans can vary depending on individual differences and situational differences according to Chapman and Dixon-Gordon (2007). Nanayakkara et al. (2013) studied the individuals having suicidal ideation and it has been revealed that 78.1% of adolescents had been experienced some sort trauma approximately six months prior to the exhibition of their suicidal behaviour. Protective factors proved to be helping in reducing the prospect of problematic behavior. They can be personal, social and institutional which are ultimately accompanying a positive outcome. There is a variety of factors which may seem to be a protective against posttraumatic stress and suicide ideation.

Orphan hood is considered as a phase accompanying a variety of psychological and emotional problems. Orphans may have a greater risk of developing anxiety and stress as they are unable to take decisions at their own. Moreover, they also experience lack of self-determination which in turn make them stresses (Shafiq et al., 2020).

Orphans who are resilient does not face extreme intensity of stress and suicidal ideations because they can cope with adverse situations and resilient in their nature. Resilience has been proved to be a protective factor against suicide

ideation and in turn for suicidal behavior (Asante et al., 2016). It has been seen in a study that if the individuals have high resilience, it moderates the relationship between hopelessness, stress and suicide ideation (Shenouda & Basha, 2014) whereas if the resilience is low there is an increased risk of suicidal behaviors and posttraumatic stress (Lui et al., 2014).

It is not essential that everyone who is exposed to trauma may eventually develops a post traumatic disorder (Fernando & Ferrari, 2011). According to Pietrzak and Cook (2013) there are many psychosocial resources which acts as a buffer against trauma and resilience is one of those psychosocial resources. Sometimes it can happen that after adversity individuals may show high levels of resilience. But it is not so in all the cases. Van der Merwe et al. (2020) found that in South Africa the high prevalence of traumatic experiences negatively affected the resilience in orphans.

According to Sorsdahl et al. (2011) in South African, exposure to trauma was found to be a significant trigger for suicide ideation. In different studies resilience has been explored as a moderator in depressive individuals and children who experienced traumatic experiences as this population is on high risk of developing PTSD (Salami, 2010).

Rationale of study

Pakistan's 35.4% populace contains less than 15 years of age individuals and they placed under the tender age of immaturity (World Population Prospects, 2011). Adolescents face multiple triggers that cause stress. It can be anything from physiological, psychological, social and emotional changes among adolescents. In this phase after losing parents and become an orphan is a big trauma in one's life and the consequences of this prolonged strain include adverse mental health problems like posttraumatic stress and suicidal ideation. Not everyone who exposed to trauma develops mental health problems because some individuals may have better resilience which acts as a protective factor and buffer against

these issues. Orphans who are resilient less likely to develop mental health issues and orphans who are less resilient develop posttraumatic stress and suicidal ideation (Farooqi & Intezar, 2009).

In Pakistani society comparative studies have been done on personality differences and self-esteem of orphans (Farooqi & Intezar, 2009). Another comparative study of personality differences among orphans was done in Lahore (Khan & Majeed, 2014). Other than these researches some other researches have also been done on the role of orphanages in the over all well being of orphans (Akram et al., 2015; Alam & Sajid, 2021; Lassi et al., 2011). But literature with reference to Pakistani society is very deficient with respect to the present study variables. This research might be contributive to social psychology, and also beneficial in other fields of psychology. It can also serve as a source of well-intentioned information in other fields of psychology and sociology in future perspective. The objectives of present study are the following:

1. To study the relationship between resilience, posttraumatic stress and suicidal ideation among institutionalized orphans.
2. To examine the role of resilience as a moderator between posttraumatic stress and suicidal ideation among institutionalized orphans.
3. To investigate gender differences on resilience, posttraumatic stress and suicidal ideation among institutionalized orphans.

Hypotheses

To achieve the above mentioned objectives following hypotheses are formulated.

1. There is positive relationship between posttraumatic stress and suicidal ideation among institutionalized orphans.
2. Resilience is negatively correlated with posttraumatic stress and suicidal ideation among institutionalized orphans.
3. Resilience plays as a moderator between posttraumatic stress and suicidal ideation among institutionalized orphans

4. There is a difference between male and female orphans on posttraumatic stress and suicidal ideation among institutionalized orphans.

Method

Sample

The sample ($N=200$) size was selected using WHO calculator at 7.5 % margin of error. The sample consisted of institutionalized orphans having age between 12 to 18 years and integrated equivalent number of male ($n=100$) and females ($n=100$). The convenience sampling technique was utilized to select the sample. The four orphan houses of Islamabad and Rawalpindi randomly selected were Sweet Homes Islamabad, Aghosh Rawalpindi, Bab-e-Abi Talib Islamabad and Edhi homes Rawalpindi. Consent was taken from the Principals of orphan houses of Islamabad and Rawalpindi and assigned a senior teacher to assist the orphans.

Inclusion Criteria. Male and female orphans of 12 to 18 years of age living in the orphan houses from five or more than five years were included.

Exclusion Criteria. Male and female orphans who had some serious diseases or any psychotic disorder were excluded.

Assessment Measures

Demographic Sheet. Along with utility of standardized scales a demographic sheet was developed indigenously to get information of each participant taking part in a study. Demographic sheet contained information regarding age, education, gender, and duration of stay, province, number of siblings and birth order.

Beck Suicidal Ideation Scale (BSI). BSI is a 19-item instrument developed to measure suicidal ideation, depression and feelings of hopelessness (Beck et al., 1988). In a present study Urdu translated version of BSI is used (Ayub, 2008). In these items people respond about their suicidal thoughts on a three point

likert scale from 0 means no suicidal ideation to 2 which means having more suicidal ideation. .75 alpha reliability of Urdu version indicates that it is a reasonable measure to study the suicidal thoughts in Pakistani adolescents and young adults (Ayub, 2008).

Posttraumatic Stress Checklist (PCL).

PCL checklist by Weathers et al. (1993) and translated by Khalily et al. (2012) was used. The specific symptoms of PTSD are assessed by using the PCL. It is a 17 items inventory that requires the respondents to rate how much the problem described in each statement has bothered them over the past month but time frame can be accommodated in order to achieve the assessment goals. Rating is done on a five point scale ranging from 1(not at all) to 5 (extremely). Scores of PCL range from 17-85 and the cut off score is 44. Internal consistency is found to be .94 which means that it is a good measure to find the posttraumatic symptoms.

Ego Resilience Scale. The Ego resilience scale, a 14 items measure, was devised by Block and Block (1980) and further translated by Nangiana (2002) to assess the quality of resilience by determining the way through which each individual manages the oscillation in daily life. Moreover it also evaluates what they do about their own experiences. The reliability of the scale was .93. It is in Urdu language. Items of this scale are rated on 4 point scale ranging from 1 showing less resilience to 4 means strong resilience. Score above 37 indicated more resilience and below 37 indicated low resilience.

Procedure

The study sample was comprised of orphans of Islamabad and Rawalpindi. After getting permission from the orphan houses, orphan children were approached. At first, a rapport building was done. They were assured about the secrecy and privacy. They were then briefed about aims of the study and were guaranteed that their views and ideas will be kept

confidential. They were then given all questionnaires including demographic sheet, Beck suicidal ideation scale, Ego resilience scale and Posttraumatic stress checklist and were requested to fill them all. The respondents were given instructions that they have to complete the questionnaires as honestly as possible and make sure that no item was remained unfill. Participants could complete the questionnaires at their ease without any time constraint. All their queries were addressed. Finally questionnaires were collected and they were thanked for their cooperation.

Results

In order to investigate the framed hypotheses various statistical analyses were done. Reliability analysis was carried out to establish the psychometric estimates of the scales used in a study. In order to make comparisons and predictions, t-test and regression analysis was done through using SPSS version 21 was used. Comparisons were also made on the basis of different demographic information of participants.

Table 1

Frequency and Percentages of Demographic Variables (N=200).

<i>Variables</i>	<i>Categories</i>	<i>Frequency</i>	<i>Percentage</i>
Gender	Male	100	50
	Female	100	50
Education	Primary	99	49.5
	Metric	101	50.5
Age	12-15	135	67.5
	16-18	65	32.5
Duration of stay	Below 7 years	162	81.0
	Above 7 years	38	19.0
Province	Punjab	60	30.0
	Sindh	6	3.0
	KPK	79	39.5
	Balochistan	37	18.5
	Kashmir	17	8.5

Table 1 shows frequency and percentage of institutionalized orphans with respect to gender, education, age, duration of stay and province.

Table 2

Psychometric Properties and Descriptive Statistics for Posttraumatic Stress, Resilience and Suicidal Ideation among Orphans (N= 200)

Variables	<i>k</i>	<i>M</i>	<i>SD</i>	<i>α</i>	Range		<i>Skew</i>	<i>Kurt</i>
					<i>Potential</i>	<i>Actual</i>		
Posttraumatic stress	16	34.81	13.41	.90	17-85	17-74	.77	-.09
Resilience	14	35.37	14.16	.96	14-56	3-56	-.39	-1.36
suicidal ideation	19	15.67	13.55	.97	0-38	0-37	.41	-1.48

Table 2 shows Croanbach alpha reliability for all the measures. Croanbach alpha reliability of Posttraumatic Stress is .90, for Resilience reliability is .96 and for Suicide Ideation reliability is .97. The reliability coefficients indicates a quite satisfactory internal consistency of all scales.

Table 3

Pearson Product moment Correlation between Posttraumatic Stress, Suicidal Ideation and Resilience among Institutionalized Orphans (N=200)

Variables	1	2	3
1 Posttraumatic stress	---	.79**	-.68**
2 Suicidal ideation		---	-.65**
3 Resilience			---

Note: $p < .01$ **

Results in table 3 indicates a significant positive relationship between Posttraumatic stress and suicidal ideation among institutionalized orphans, as posttraumatic stress increases suicidal ideation also increases, $r = .79$, $p < .01$. While a significant negative relationship exist between Posttraumatic stress and resilience. Furthermore a significant negative relationship is also found between suicidal ideation and resilience.

Table 4

Hierarchical Multiple Regression Analyses for Moderating Role of Resilience on the Relationship between Posttraumatic Stress and Suicidal Ideation (N=200)

	Suicidal Ideation		
	ΔR^2	<i>B</i>	95% CI
Constant	.41		[25.32,38.69]
Post Traumatic Stress		.69**	
Step 2	.64		[.54,.76]
Post Traumatic Stress		.17**	
Resilience		-.70**	
Step 3	.70		[-.756,-.55]
Post Traumatic Stress x Resilience		-.18**	

Note. ** $p < .01$

Step 1 $R^2 = .418$ Adjusted $R^2 = .415$ $F = 142.3$ $p < .001$

Step 2 $R^2 = .697$ Adjusted $R^2 = .694$ $F = 227.0$ $p < .001$

Step 3 $R^2 = .705$ Adjusted $R^2 = .701$ $F = 15626$ $p < .01$

Table 4 shows that post traumatic stress has 41% main effect on suicidal ideation. The resilience has 64% main effect on suicidal ideation. The interaction effect of post traumatic stress and resilience was found to be 70%, indicating that the interaction effect account for a significant proportion of variance in suicidal ideation at the level of $p < 0.01$.

Table 5

Mean differences between Male and Female Orphans on Posttraumatic Stress, Suicidal Ideation and Resilience (N=200)

Variables	Male	Female	<i>t</i> (198)	<i>p</i>	95%CI		Cohen's <i>d</i>
	(<i>n</i> =100)	(<i>n</i> =100)			<i>LL</i>	<i>UL</i>	
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)					
PTS	35.36(14.26)	34.24(12.54)	0.59	.556	-2.62	4.86	0.12
SI	13.72(13.07)	17.67(13.80)	2.07	.039	-.769	-.196	0.09
Res	34.86(15.28)	35.87(13.02)	.50	.610	-4.90	2.95	0.07

Note: PTS= Post Traumatic Stress; SI= Suicidal Ideation; Res=Resilience

Table 5 shows differences of gender in correspondence with posttraumatic stress, suicidal ideation and resilience. Significant gender difference was reported on suicidal ideation, as female orphans reported higher on suicidal ideation ($M=17.67$, $SD=13.80$) than male orphans ($M=13.72$, $SD=13.07$). Results further indicate non-significant difference between male and female orphans on posttraumatic stress and resilience.

Discussion

The current study was conceded out to find out the relationship of post traumatic stress and suicidal ideation among institutionalized orphans and also to investigate the moderating role of resilience. Orphans were taken from different orphan houses of Islamabad and Rawalpindi. For this purpose translated post traumatic checklist, translated Beck suicidal ideations scale and translated Ego resilience scale were used to measure post traumatic stress, suicidal ideation and resilience. The sample selected was having age between 12- 18 years (adolescents), as prescribed by some previous

researches, that in adolescent phase psychological, emotional and behavioral problems appeared to be more prevalent. It is further suggested by some different researches that during this period adolescents are more vulnerable to different psychological problems that lead to stress and suicidal ideation (Gearing et al., 2015).

An inverse relationship was found significant between posttraumatic stress and suicide ideation among orphans. In a review of possible relationship between posttraumatic stress and suicidal thoughts, results revealed that they both are strongly correlated with each other irrespective of type of trauma experienced. Another study also revealed that there is a significant positive relation between these two constructs (Thabet et al., 2015).

Resilience is negatively correlated with suicidal ideation among institutionalized orphans, as with the increase in resilience decrease in suicidal ideation in orphans was seen. This finding is consistent with the view that suicidal ideation had a significant and negative relationship with resilience. Another study support the finding, Divine (2013) investigated the effectiveness of

resilience training on Suicidal ideation among clients. Mishra and Sondhi (2019) conducted a study on the relationship of resilience, suicidal ideation and depression in adolescents. The Data for afore mentioned study was gathered from 70 participants including both genders. And it was concluded that higher levels of resilience was negatively correlated with suicidal ideation and depression.

Present study results also showed a negative relationship between posttraumatic stress and resilience among institutionalized orphans. Results are evident with the literature that higher levels of resilience reduce the intensity of posttraumatic stress. The present study was conducted with the aim to explore the relationship between posttraumatic stress and resilience and the findings suggested that having higher resilience the adolescents exhibited lower posttraumatic stress (Pietrzak & Cook, 2013).

A person after encountering with some shocking event or trauma such as loss of close one may enter into the condition known as Posttraumatic stress. The age acts as an important factor in determining the level of suffering an individual will face. People at early ages are less likely to be effected than the older ones. Once the distress is caused they are at high risk to build up suicidal thoughts in them. Early childhood upsetting events play determining role among orphans for developing posttraumatic stress as well as suicidal ideations (Draper & Hancock, 2011).

Resilience moderated the relationship of posttraumatic stress and suicidal ideation. Resilience as a moderator was found to have a significant negative relationship with the posttraumatic stress and suicidal ideation among orphans, as resilient individuals counter less symptoms of posttraumatic stress and suicidal thoughts. Higher resilience moderates the effects of suicide ideation and posttraumatic stress (Fayombo, 2010).

If a child is institutionalized at an early age, he/she may commonly shows the delays in some sort of development that could be loving and passionate, social or physical. Adolescents raised

in established units sometimes experience the hostile effects of severe conduct and they also have the attachment issues that can be an influential or reserved conduct. They have very limited information and conception of the world. They may experience mental hindrance to move forward to become a resilient adult. If the youngsters are kept and brought up in institutes, they could develop learning issues, for example, lack of decision making capability and poor reasoning, unable to establish cause and effect relationship, and develop impulsivity. On the other hand institutionalized kids who can face adverse situations and cope with the problems are resilient and have not developed psychological problems like stress, depression and suicidal thoughts.

Current study revealed that there is a difference between male and female orphans on suicidal ideation, whereas a non-significant gender differences were found on posttraumatic stress and resilience. Ibrahim et al. (2017) conducted a study on gender differences with respect to suicide ideation. The results showed that there were significant differences between resilience and suicide ideation among males and females. As females were more likely to have suicide ideation than males. As females show intense emotions when they do not have any social support, they may go through such self injurious behaviors. Females get easily distressed by insults and incidents as they don't have any other activity like males and secondly males don't easily get bothered by anything. So this makes the difference in suicidal ideation among males and females. Results are evident with the literature that there is no difference on posttraumatic stress and suicidal ideation among male and female adolescents. Gender differences were explored in Japanese culture on posttraumatic stress and data was gathered from 312 undergraduate students including male and female adolescents. Results showed that there were non-significant gender differences (Hourani et al., 2016).

Limitations and Suggestions

The study of institutionalized orphans is very important social issue form the context of

Pakistani culture; however the sample was restricted to orphan houses of Rawalpindi and Islamabad. Data was collected from small sample due to which the generalizability of the study is low. It is suggested to collect data from various locations of Pakistan to increase the generalizability of the study.

The age range of sample was 12-18. It is suggested that a broader age range of sample should be taken in order to make comparisons among different developmental stages.

It is recommended that for future researches some interviews should be conducted for this age range.

Implications

The findings of the present study can be proved beneficial to be implemented in different fields of psychology like counseling, social and clinical research. Study findings can be implied to make orphans aware of their psychological problems and also tell the caretakers of orphan houses that how to deal with their problems in future because in orphan houses individuals have been neglected. After counseling they can play an essential role in society and make useful member of society. Trainings should be given to the people who take care of orphans. The individuals who exhibited psychological problems can be helped by exploring and identifying the underlying causes of their problem. The problem can be cured by addressing the causes through counseling and therapy.

In different trainings the care takers should be told that how to deal with orphans and don't take being an institutionalization as a trauma and also give resiliency trainings to them. There is a need to inculcate in the caretakers of orphan houses to create a friendly atmosphere for them so they have not feel insecurity.

Conclusion

Being an orphan is trauma in one's life but after joining the orphan houses the children developed different psychological and emotional problems because this population is on risk and being neglected. After the death of their parents, children have to face so many problems in their

lives. Orphan adolescents who are resilient have not developed posttraumatic stress and suicidal ideation. Higher levels of resilience reduce the symptoms of psychological and emotional problems. Posttraumatic stress is positively correlated with suicidal ideation among this group because lack of love and bonding is the cause. But it has seen that the individuals who have the ability to cope with the stressors have not developed mental issues.

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Availability of data and materials. The information about dataset and analyses for the present study is available from corresponding authors.

Ethical. Formal permission was acquired from Institutional Ethical Board to conduct research.

Competing interest. The authors have no competing interests to declare.

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