# Emotional Intelligence as a Mediator between Psychological Maladjustment and Attachment Styles among Orphan Adolescents

\*Ayesha Khan

National Institute of Psychology, Quaid-i-Azam University, Pakistan Anila Kamal, PhD

National Institute of Psychology, Quaid-i-Azam University, Pakistan

In orphans, poor mental health is a key factor that leads to many psychological issues (Paul & Paul, 2017). It has been assumed that emotional and intellectual deprivation resulting from the absence of a parental figure produces a series of psychological maladjustments in adolescents. Emotional intelligence is also considered a broad personality trait in a multi-level personality hierarchy. The present study aims to explore the mediating role of emotional intelligence in the relationship between psychological maladjustment and attachment styles among orphan adolescents. The study comprised of 288 orphans (141 boys and 147 girls) with an age range from 12-22 years (M=15.83, SD=3.09) Sample was selected from different orphanages in Islamabad and Rawalpindi. Personality Assessment Questionnaire (PAQ) (Rohner & Khaleque, 2005), Brief Emotional Intelligence Scale (BEIS-10) (Davies, Devonport, Kevin, Lane, & Scott, 2010) and Inventory of Parent and Peer Attachment Revised (IPPA-R) (Gullone & Robinson, 2005) were used in the study. It was found that emotional intelligence significantly mediates the relationship between psychological maladjustment and attachment styles among orphan adolescents.

*Keywords.* Psychological maladjustment, emotional intelligence, attachment styles, orphan, adolescents

<sup>\*</sup>Correspondence concerning this article should be addressed to: Ayesha Khan National Institute of Psychology, Quaid-i-Azam University, Pakistan, email:

<sup>&</sup>lt;u>ayeshamphil18@nip.edu.pk</u> and Anila Kamal, PhD National Institute of Psychology, Quaid-i-Azam University, Pakistan

Adolescence is the transition period of growth and development between childhood and adulthood. It is a period when identity formation and psychological adjustment, including general, social and emotional functioning as well as the relationship with parents developed. Adolescents are more likely at risk for the onset of psychological problems e.g., mood disorders, attachment difficulties, and emotional problems (Kessler et al., 2007).

Orphans are usually brought up in orphanages, which are institutes for rearing and caring for children (Gwalema, et.al. 2009). Orphans adolescents are defined as individuals aged 10 or above who has lost one parent (maternal or paternal orphan) or both parents (total orphan) (Dennis, 2008). Children are brought to orphanages for two main reasons: First is the death of parents and second is the case when children are abandoned by parents (Alden, et.al. 2014). They are the most vulnerable group in society and are more at risk for developing different psychological problems. Traumatic events like parental death and the loss of a beloved one are associated with psychological and emotional problems (Thetakala et al., 2017).

Psychological maladjustment is an inability to cope successfully with the demands of one's surroundings (Rohner & Khaleque, 2005). It is maladjusted behaviour to form an unstable relationship with parents or peers and has the less coping ability to deal with stressful and difficult life situations (VandenBos, 2013).

Attachment is a special type of bond with a specific person (Cassidy, et.al. 2013). Attachment styles are usually behaviours and ways of expressing emotions, affection and feelings towards an attachment figure (Siegel, 2020). Adolescents with early deprivation experiences are more prone to develop insecure attachment styles; they have trust-related issues (O'Connor et al., 2003). MacLean (2003) found that children in foster care have an avoidant attachment, regardless of the type of early childhood maltreatment they experienced. They depend primarily on themselves, view others in a distrustful way, may fear close relationships, and rarely seek the help of others. Insecure attachment styles were also found to be associated with a higher level of anxiety (Dilmac, 2009).

There is no such research evidence on emotional intelligence and attachment style in orphans. So research in this field is necessary. Personality traits are the major factor influencing the attachment style in adolescents. Adolescents living in orphanages have reported different psychological maladjustment including the inability to form a genuine attachment, difficulty in expressing their emotions and feelings to others, expressing the feeling of insecurity, low self-esteem, and a shift from passive to verbal and physically aggressive behaviour (Batool & Najam, 2009; Gázquez Linares, et.al. 2019).

Emotional intelligence is a term coined by Salovey and Mayor (1990) and defined as the ability to recognize, understand, manage and facilitate one's as well as others' emotions. The orphan adolescents deprives of parental love, care, affection, and moral support demonstrated low emotional intelligence. High emotional intelligence helps to deal with low and negative self-esteem, depression, hostility and emotional unresponsiveness; and helps a person to upgrade his life and have a better living scenario. As orphans are deprived of parental love in most cases, researchers have found low self-esteem and emotional control in them (Chuprova, 2007). If the emotions are not handled properly, then the stress will not be handled ideally (Paul & Paul. 2017). Adolescents having difficulty in recognizing and understanding the emotions of other people and themselves, do not involve in any close relationship with other adults in sensitive periods of development. They do not form any emotional connections with others; therefore, their need for security is not satisfied, and they are suffering from many psychological problems (Shulga, et.al. 2016).

Adolescents who live with their parents have more stable personality traits and show more emotional responsiveness than those who live in orphanages (Petrides & Furnham, 2001). Research indicated that adolescents dealing with constant and prolonged grief from losing their parent are vulnerable to long-term problems like depression and anxiety (Hoeg et al., 2018), inability to establish trustful and stable relationships with others (Kozlovskaya, 2013; Chuprova, 2007; Nelson et al., 2007); determines behavioural and psychosomatic problems (Bardyshevskaya & Lebedinsky, 2003; Ivanov et. al., 2016); have a destructive influence on the development of emotional sphere and intelligence (Mikhailova, 2004; Mukhamedrakhimov, 2006). Adolescents with positive personality traits have a more secure attachment with their parents (Tsaousis & Nikolaou, 2005). Secure attachment with parents and peers can influence the emotional and social intelligence of adolescents (Hasan & Power, 2002).

Given that personality traits, attachment styles and parents play a vital role in the regulation and understanding of emotions (Mclean, 2005), so emotional intelligence is considered an important factor in this mediatory process. For this purpose, the mediatory role of emotional intelligence on the relationship between personality traits and attachment styles has been investigated using the process.

In the present study, IPARTheory is applicable. The theory explained how different types of personality traits lead to different attachment styles in children and adults. With the help of this theory, the study associates psychological maladjustment, emotional intelligence and attachment styles. Interpersonal acceptance-rejection theory explains how interpersonal acceptance and rejection influence socialization and life span development processes (Rohner, 1986, 2004). The theory also explains the consequences that occur after rejection. According to theory, an individual having negative personality traits may face rejection in their intrapersonal and interpersonal relationship. These traits include aggression, suspiciousness, hostility, emotional dysregulation, low tantrums, and psychological impairment such as negative self-esteem and inadequate self-image.

According to IPARTheory, those individuals who are rejected by others also develop a negative view of interpersonal relationships, their life and the world. They perceive other humans as untruthful, unfriendly, aggressive, freighting and emotionally unsafe. Rejection is one of the major causes of psychological disposition because such individuals are suffering from intense psychological pain. The frequency and severity of pain vary from individual to individual, those who perceive rejection from a significant figure may suffer from prolonged emotional and psychological impairments. Emotional dysfunction and dysregulation decrease their emotional intelligence which in turn leads to the development of psychological dispositions such as stress, depression, loneliness, negative self-esteem, aggression, hostility, and unstable interpersonal relationships (Extremera & Berrocal, 2006). As a result, they are emotionally cut off from others to avoid further rejection. These thoughts and feelings often extend to people's beliefs about the nature of the supernatural world (i.e., God, the gods, and other religious beliefs) (Batool & Najam, 2009). All these factors also affect their adjustment and emotions as they cannot appraise and understand one's as well as other's emotions (Veneziano, 2000), due to which they face trouble in handling close relationships and develop unstable and alienated styles of attachment (Thiele, 2007).

Low emotional intelligence results in interpersonal relational difficulties, low self-esteem, poor impulse control, loneliness, suicidal thoughts, use of drugs/illicit substances, stress, depression, anxiety, aggressive behaviours and alcohol usage (Alcaide, Berrocal, & Extremera, 2006). Positivity and optimism ("Mood," Bar-On, 2006), which strengthen self-concept by effectively managing stressful situations, have also been explored (Gázquez Linares, et.al. 2019).

In conclusion, adolescents with psychological maladjustment are generally emotionally deprived and have alienated attachment styles with parents and peers. These adolescents are striving to integrate roles to deal with the emotional demands of loss with support from parents (Batool & Najam, 2009). Loss of loved ones, particularly in childhood, leads to depressive thoughts and feelings including sadness, anger and guilt (Vijayan, 2016). Most of the studies revealed that orphans suffer a higher level of psychosocial problems than their non-orphan peers. In particular, maternal and double orphans are more likely to experience behavioural and emotional difficulties, suffer abuse, and low rate of trusting relationships (Zhao et al., 2011). Children living in conditions of maternal deprivation (in the child's home) detect several maladjustments, psychomotor retardation, poor adaptation in a peer group, and low level of intellectual curiosity (Abdullah, et.al. 2009); low emotional intelligence (Busi, et.al. 2009); social and cognitive activity, and insecure attachment styles (Baron, 2006).

#### **Rationale of the Present Study**

In the context of the above literature, the problem of orphans assumes greater significance. They are children who, at an early age, become bereft of their parents and are destined to live without parental love and affection. In Pakistan, there is a dearth of available literature on Orphans. Even though the problem of orphan children is no less in Pakistan than in other countries, research attempts in this field are meagre in Pakistan. Moreover, such studies seem to be limited in scope and purpose concerning the vast area of maladjustments which remains unprobed to a great extent. There is less literature regarding psychological maladjustment and attachment adolescents. However, few studies reported specific styles in maladjustment (aggression, anxiety, mistrust etc.) related to attachment styles. Also, there are very few studies that have assessed the role of emotional intelligence in the psychological maladjustment and attachment styles of children/ adolescents living in different living conditions (viz., orphanages and in intact families). It is in this context that the present study is conceived to gain an insight into the psychological maladjustment, emotional intelligence and attachment styles among orphans. Aside from the fact that orphans receive enough care, and need and can adapt during their stay in the orphanage, this research will also attempt to highlight the emotional intelligence and attachment styles of children living in the orphanage. The present research will also help in identifying the difficulties and challenges faced by orphans in developing attachment with others, regulating their emotions and how their personality differs. Based on this identification, a rehabilitation plan and counselling session can be planned for these orphans for making them emotionally healthy, and develop healthy attachment patterns and stable personalities.

# **Research Questions**

- 1. What is the impact of psychological maladjustment on the attachment of orphans?
- 2. How emotional intelligence influences the relationship between psychological maladjustment and attachment styles among orphans.

#### **Objectives**

The present research aims to explore the mediating role of emotional intelligence in the relationship between psychological maladjustment and attachment styles among orphans.

# Hypotheses

- Emotional intelligence will mediate the relationship between psychological maladjustment and attachment styles among orphan adolescents.
- Psychological maladjustment will more likely to be negatively related to emotional intelligence and attachment styles among orphan adolescents.

### Method

#### **Participants and Research Design**

A cross-sectional study was conducted on a group of adolescents living in an orphanage. Because of the paucity of administrative data on the distribution of adolescent orphans living in various geographical regions of Islamabad and Rawalpindi, an equal proportion method was utilized to allocate survey participants from the following region: 92 participants from Edhi Center (50 males and 42 females), 90 from Mustafa Center (65 males and 25 females), 70 from Pakistan Sweet Home (32 males and 38 females), and 36 participants were recruited from other institutes having single parent (36 females). 288 orphans (147 boys and 141 girls) have an age range between 12-22 years (M=15.83, SD=3.09). Based on education level, all of the adolescents were divided into the following group; illiterate, Hafiz-e-Quran, matric, intermediate and graduation.

**Inclusion criteria**. The participants from Orphanage were included based on the following criteria: (i) those living in an

orphanage for minimum of 2 years, (ii) paternal orphan (father dead) or double orphan (both parents died), (iii) age above 12 years but the\_maximum age limit was not specified by a researcher rather it was available at orphan homes.

**Exclusion criteria.** Those who are having regular contact with the parental family through the regular weekend or vacation visits. Those having a father alive because in most cases they lived with a stepmother so such cases were excluded. Those individuals who are suffering from any intellectual disability and severe chronic medical illness.

Table 1

General Demographic Characteristics of the Sample Orphan (N=288)

Variables		<u>Orphan</u>	
		Frequency	%
Age (in years)	12-14	122	42
	15-17	116	40
	18-22	50	17
Education	Illiterate	71	24
	Hafiz-e-Quran	55	19
	Matric	74	25
	Intermediate	57	19
	Graduation	31	11
Father	Alive	0	0
	Death	288	100
Mother	Alive	15	6
	Death	271	94
Missing values		2	
-	Both alive	0	0
	Both death	270	94
No of siblings	None	196	68
C	1-3	41	14

	4-6	51	18
Reason for parent death	Physical illness	60	20
	Murder	41	14
	Suicide	83	28
	Heart attack	15	5
	Earthquake	56	19
	Other	33	11
Age at which parents died	By birth	85	29
	1-5	54	19
	6-10	76	26
	11-15	43	15
	16-22	19	6
Missing values		11	

# Instruments

Urdu versions of all the instruments were used in the present study due to the low literacy rate (Murray, 2003).

**Demographic Sheet**. The demographic characteristics of the sample i.e., age, gender, education, number of siblings, birth order, grade, the reason for the parent's death and their age at the time of the parent's death were collected through a self-constructed tool. Some demographics are specific to orphans.

**Personality Assessment Questionnaire (PAQ).** The scale was revised by Rohner and Khaleque (2005) to assess individual adjustment or maladjustment concerning seven personality dispositions. These dispositions include (1) hostility and aggression, including physical aggression, verbal aggression, passive aggression, and problems with the management of negative hostility and aggression, (2) dependence, (3) negative self-esteem, (4) negative self-adequacy, (5) emotional unresponsiveness, (6) emotional instability, and (7) negative worldview. It contains 6 items per subscale for a total of 42 items. The format of the response was a 4-point Likert scale where 1 = Almost Always True, 2 = Sometimes True, 3 = Rarely True and 4 = Almost Never True. The possible

scoring range is 42-168 where high scores indicate psychological maladjustment. Alpha reliability for PAQ ranged from 0.73 to 0.85 with a median reliability of 0.81 (Rohner & Khaleque, 2005). PAQ was translated into Urdu by Naz and Kausar (2011) having Cronbach alpha  $\alpha$  = .94.

**Brief Emotional Intelligence Scale (BEIS-10).** It is a short version of the Emotional intelligence scale originally developed by Schutte et al. (1998) and revised by Davies, Devonport, Kevin, Lane, and Scott (2010). It was comprised of 10 items measuring the adaptive interpersonal and intrapersonal emotional functioning of an individual. The response format for the scale is 5 -point Likert-type scale (1= *strongly disagree*; 5 = *strongly agree*). Alpha reliability for BEIS-10 is reported as  $\alpha$  = .90. Due to the low literacy rate of the sample, the scale was translated into Urdu before its administration (Khan & Kamal, 2020).

**Inventory of Parent and Peer Attachment Revised (IPPA-R).** The intensity of peer attachment was assessed by using the Urdu-translated version of IPPA-R by Zafar (2009). It was originally developed by Armsden and Greenberg (1987) and revised by Gullone and Robinson (2005). The overall scale consists of three sections (Father, Mother and Peer). The peer section of IPPA-R is comprised of 25 items with three dimensions of attachment relationship: Trust, Communication and Alienation. A 5-point Likert scale was used ranging from an "*Almost Never or Never True*" score of 1 to an "*Almost Always or Always True*" score of 5. Total scores were calculated by reverse-scoring items 4, 5, 9, 10, 11, 18, 22, and 23 and then summing the response values. High scores on IPP-R reflect the positive quality of attachment in an individual. Cronbach Alpha of IPPA-R was reported as  $\alpha$ = .92 (Gullone & Robinson, 2005).

### Procedure

An official letter from the National Institute of Psychology, Quaid-e-Azam University was submitted to different orphanages and institutes in Islamabad and Rawalpindi to get permission for the study. A copyright of the letter was also kept to show any concerned body and participants. The purpose of the study was explained to the Head of the institute/Organization and participants to maintain rapport building. When officials and the institute gave full approval; the time, place of meeting, and convenient date were set based on their preferences. Participants were briefly informed about the objective of the study. Participants who were cooperative enough were consulted to ensure the quality of the data. After getting their responses, they were thanked for showing cooperation.

#### **Results**

After data was collected, the data was analyzed quantitatively using SPSS.21. Means and standard deviation were calculated to assess normal distribution. For convergent and divergent validity, inter-item correlations were calculated. The mediating role of emotional intelligence among study variables was also calculated using Andrew Hayes Process Macro.

Variables	K	α	М	SD			Skew	Kurtosis
					<u>Rang</u>	<u>e</u>		
					Poter	ntial		
					Actu	al		
PAQ <sup>a</sup>	42	.90	128.37	8.76	42-	42-	46	25
					168	155		
$HA^b$	6	.80	17.17	4.04	6-	6-	52	95
					24	24		
Dep <sup>c</sup>	6	.79	18.01	3.27	6-	6-	-2.01	1.85
-					24	24		
$NSE^{d}$	6	.80	15.87	4.57	6-	6-	-1.39	.70
					24	24		
NSA <sup>e</sup>	6	.79	16.01	4.50	6-	6-	98	.35
					24	24		
EU <sup>f</sup>	6	.78	16.83	4.42	6-	6-	75	.28
					24	19		

Descriptive Statistics of Instruments used in the study (N=288)

Table 2

EI <sup>g</sup>	6	.75	17.52	4.04	6-	6-	62	28	
					24	20			
$\mathbf{NWV}^{\mathrm{h}}$	6	.82	14.96	2.10	6-	6-	98	.52	
DEIG İ	10	0.0	10 10	4.00	24	22	00	(0)	
BEIS <sup>i</sup>	10	.90	42.40	4.98	10-	20-	98	68	
IDD A İ	<b>a</b> =	0.0	01.07	= 40	50	<b>50</b>	=0	=0	
IPPA <sup>j</sup>	25	.80	81.06	7.42	25-	<b>39-</b>	58	59	
	4.0	-		0	125	105	•••	•0	
TRUST	10	.76	37.00	7.78	10-	13-	23	28	
					50	50			
ALT <sup>k</sup>	7	.77	25.76	4.37	7-	7-	81	.98	
					35	28			
COM <sup>1</sup>	8	.70	20.52	5.01	8-	13-	.62	28	
					40	40			

Note: <sup>a</sup> Personality Assessment Questionnaire, <sup>b</sup> Hostility and Aggression, <sup>c</sup> Dependence, <sup>d</sup> Negative Self-esteem, <sup>e</sup> Negative Self-adequacy, <sup>f</sup> Emotional unresponsiveness, <sup>g</sup> Emotional Instability, <sup>h</sup> Negative World View, <sup>i</sup> Brief Emotional Intelligent Scale, <sup>j</sup> Inventory of Parent and Peer Attachment, <sup>k</sup> Alienation, <sup>1</sup>Communication.

Table 2 demonstrates the psychometric properties of the research instruments along with respective subscales. The findings provide evidence for the significant reliabilities of all the research instruments and their respective subscales. This shows that the instruments possess internal consistency and are reliable for further analysis.

Variables	Ι	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
I. PAQ <sup>a</sup>	-												
II. HA <sup>b</sup>	.86**	-											
III. Dep <sup>c</sup>	.37**	.22*	-										
IV NSE <sup>d</sup>	.84**	.75**	.06	-									
V. NSA <sup>e</sup>	.59**	.42**	.07	.42**	-								
VI. EU <sup>f</sup>	.23*	.96**	.25**	.77**	.44**	-							
VII. EI <sup>g</sup>	.64**	.56**	.19*	.40**	.31**	.54**	-						
VIII. NWV <sup>h</sup>	.84**	.12	.05	.02	.25**	.23*	.51**						
IX. BEIS <sup>i</sup>	51**	50**	13*	53**	36**	49**	.15*	31**	-				
X. IPPA <sup>J</sup>	37**	06	36**	19*	26**	32**	08	10	.43**				
XI. TRUST	22*	19*	.02	28**	13*	11	19*	19*	.52**	.50**	-		
XII. ALT <sup>k</sup>	.19*	.06	.16*	.11	.26**	.39**	.06	.01	20*	48**	74**	-	
XIII. COM <sup>1</sup>	10	.03	.21*	.22*	17*	02	03	31**	.48**	.68**	.23*	.63**	-

*Inter-Scale Correlation of study variables for the orphan (N=288)* 

Note: <sup>a</sup> Personality Assessment Questionnaire, <sup>b</sup> Hostility and Aggression, <sup>c</sup> Dependence, <sup>d</sup> Negative Self-esteem, <sup>e</sup> Negative Self-adequacy, <sup>f</sup> Emotional unresponsiveness, <sup>g</sup> Emotional Instability, <sup>h</sup> Negative World View, <sup>i</sup> Brief Emotional Intelligent Scale, <sup>j</sup> Inventory of Parent and Peer Attachment, <sup>k</sup> Alienation, <sup>1</sup>Communication

\**p*<.05, \*\**p*<.01.

Table 3 indicates the correlation between the study variables with each other for orphan adolescents. The table shows that overall scores on Psychological maladjustment have a significantly negative relationship with emotionally intelligent and attachment styles among orphan adolescents. These findings support hypothesis 1 stating *"Psychological maladjustment will be more likely to be negatively related to emotional intelligence and attachment styles among orphan adolescents"*. Whereas emotional intelligence has a positive relationship with attachment styles among orphans. The table also demonstrates that psychological maladjustment is positively related to hostility and aggression, depression, negative self-esteem, negative self-adequacy, emotional unresponsiveness, and emotional instability. Emotional intelligence is significantly negatively related to the alienation style of attachment and positively related to the trust and communication dimension of attachment styles in orphans. Overall scores on the attachment scale are negatively related to psychological maladjustment and its dimension in orphan adolescents.

Predictors	$\mathbb{R}^2$	$\Delta R^2$	β	F	95%	5 Cl
					LL	UL
Model 1	.28	.28		36.06***		
HA <sup>a</sup>			06		-1.68	.04
DEP <sup>b</sup>			40**		-2.68	-1.(
NSE <sup>c</sup>			39**		37	-1.1
NSA <sup>d</sup>			26*		3.54	36
EU <sup>e</sup>			32**		-2.21	32
$EI^{f}$			07		35	1.1
NWV <sup>g</sup>			01		-1.96	.19
PAO <sup>h</sup>			-1.28**		-1.91	79

Hostility and Aggression, <sup>b</sup> Dependence, <sup>c</sup> Negative Self-esteem, <sup>d</sup> Negative Selfadequacy, <sup>e</sup>Emotional unresponsiveness, <sup>f</sup>Emotional Instability, <sup>g</sup> Negative World View, <sup>h</sup> Personality Assessment Questionnaire <sup>i</sup> Brief Emotional Intelligent Scale, <sup>j</sup> CI = Confidence Interval, LL = Lower limit, UL = Upper Limit,  $\Delta R^2$  = change in  $R^2$ ,  $\beta$  = standardized regression coefficient.

\*p<.05, \*\*p<.01, \*\*\* p<.000

Table 4

a

Table 4 shows the impact of the predictor variable (psychological maladjustment) on the outcome variable (attachment styles) with 28 % variance, revealing that dependence, negative self-esteem, negative self-adequacy, emotional unresponsive and total psychological maladjustment were found to be significantly negatively related with attachment styles among orphans. In model 2, emotional intelligence added 3 % of the variance, indicating that emotional intelligence was found to be significantly positively related to attachment styles in orphans. The model shows a 31 % variance in total.

#### Mediation Analysis for the Study Variables

The mediation analysis was conducted, which help in identifying the mechanism of how and why a relationship exists between an independent and dependent variable (Hayes, 2013). The mediation was conducted by using Model 4 of Process. The results are given below:

#### Table 5

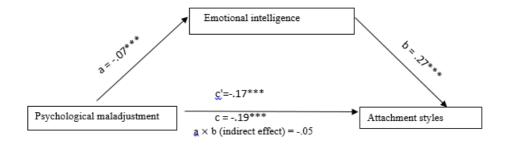
Simple Mediation of the effect of Emotional Intelligence between Psychological Maladjustment and Attachment styles among Orphans (N=288)

Predictors	Model 1	Model 2	95%	CL
	В	В	LL	UL
Constant	101.43***	91.96***	92.11	
			110.75	
Psychological	19***	17***	24	-
maladjustment			.10	
Emotional intelligence		.27***	.08	.45
Indirect effect-PM →EI-	→	05	09	-
AS			.00	
$\mathbb{R}^2$	.11	.18		
$\Delta R^2$		.05		
F	34.79***	21.78***		
$\Delta F$		13.01		

Note. B= unstandardized coefficients; LL = Lower limits; UL = Upper Limit; PT = PM = Psychological Maladjustment; EI = Emotional Intelligence; AS = Attachment styles \*p<.05, \*\*p<.01, \*\*\*p<.000

The results from Table 5 shows that emotional intelligence mediates the relationship between psychological maladjustment and attachment styles among orphan. The indirect effect appeared to be significant but in the negative direction and explained the 5% variance in attachment styles

*Figure 1:* Mediating role of emotional intelligence on psychological maladjustment and attachment styles among orphans (N=288).



## Table 6

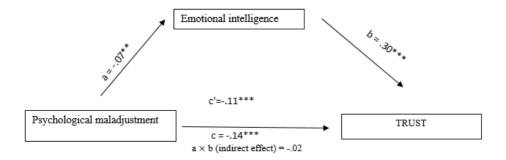
Mediating effect of Emotional Intelligence between Psychological Maladjustment and trust among Orphan (N=288)

Predictors	Model 1	Model 2	95%	D CL
	В	В	LL	UL
Constant	43.85***	33.02***	26.37	
			39.68	
Psychological maladjustment	14***	11***	15	-
			.07	
Emotional intelligence		.30***	.19	.42
Indirect effect-PM EI-		02	04	-
→ TRUST			.00	
$\mathbb{R}^2$	.15	.22		
$\Delta R^2$		.07		
F	49.42***	42.31***		
ΔF		7.11		

Note. B= unstandardized coefficients; LL = Lower limits; UL = Upper Limit; PM = Psychological Maladjustment; EI = Emotional Intelligence \*p < .05, \*\*p < .01, \*\*\*p < .000

Table 6 shows that the direct effect of psychological maladjustment is significantly negatively related to trust in orphans. The significance of the indirect effect (B = -.2, 95% Cl = -.04, -.00) indicated that emotional intelligence mediates the relationship between psychological maladjustment and trust but in a negative direction.

*Figure 2:* Mediating role of emotional intelligence on psychological maladjustment and trust among orphans (N=288).



# Table 7

*Mediating effect of Emotional Intelligence between Psychological Maladjustment and Communication among Orphan (N=288)* 

Predictors	Model 1	Model 2	95% CL
	В	В	LL
			UL
Constant	36.04***	32.33***	26.38
			38.27
Psychological	11***	09**	14 -
maladjustment			.07
Emotional intelligence		.17***	.01
			.20
Indirect effect-PM→ E►		02	03 -
COMM			.00
$\mathbb{R}^2$	.12	.14	
$\Delta R^2$		.02	
F	44.28***	24.63***	
$\Delta F$		19.65	

Note. B= unstandardized coefficients; LL = Lower limits; UL = Upper Limit PM = Psychological Maladjustment; EI = Emotional Intelligence; COMM = communication \*p<.05, \*\*p<.01, \*\*\*p<.000

Table 7 shows that the direct effect of psychological maladjustment is significantly negatively related to communication in orphans. The significance of the indirect effect (B = -.02, 95% Cl = -.03, -.00) indicated that emotional intelligence mediates the relationship between psychological maladjustment and communication but in a negative direction.

*Figure 3:* Mediating role of emotional intelligence on psychological maladjustment and communication among orphans (N=288).

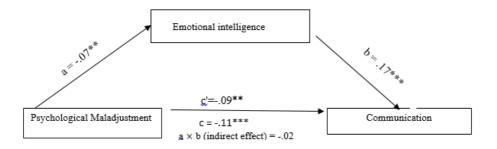


Table 8.

Mediating effect of Emotional Intelligence Between Psychological Maladjustment and Alienation among Orphan (N=288)

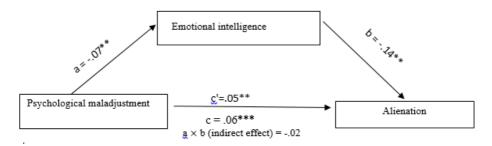
Predictors	Model 1	Model 2	95%	CL
	В	В	LL	UL
Constant	21.53***	26.61***	21.57	
			31.66	
Psychological	.06***	.05**	.02	
maladjustment			.07	
Emotional intelligence		14**	22	-
			.06	

Indirect effect-PM→	E₽	.01	.00
ATN			.02
$\mathbb{R}^2$	.05	.09	
$\Delta R^2$		.04	
F	17.11***	14.64**	
$\Delta F$		2.47	

Note. B= unstandardized coefficients; LL = Lower limits; UL = Upper Limit PM = Psychological Maladjustment; EI = Emotional Intelligence; ATN = Alienation \*p < .05, \*\*p < .01, \*\*p < .000

Table 8 shows that the direct effect of psychological maladjustment is significantly negatively related to alienation in orphans. The significance of the indirect effect (B = -.01, 95% Cl = .00, .02) indicated that emotional intelligence mediates the relationship between psychological maladjustment and alienation.

*Figure 4:* Mediating role of emotional intelligence on psychological maladjustment and alienation among orphans (N=288).



#### Discussion

Adolescents who live with their parents and those who are brought up in orphanages mostly suffer from psychological maladjustment (Khan, et.al. 2014); as those who are brought up in institutes or orphanages have low emotional intelligence (Hussain, 2017) and unstable emotions and feelings, they cannot easily trust their partners due to which they face a lot of troubles in handling their relationship and have insecure patterns of attachment (Petrides, et.al. 2009). The findings (Table 2) show the psychometric properties of the research instruments along with respective subscales.

The relationship between the study variables was determined by finding correlation estimates (Table 3). The finding indicates that psychological maladjustment is found to be significantly negatively related to emotional intelligence and attachment styles, whereas emotional intelligence is positively related to attachment styles among orphans. Sable (2007) also states that people with secure attachment styles have higher levels of psychological and physical well-being than people with insecure attachment styles. The reason might be that individuals with a secure attachment were more emotionally intelligent in comparison with avoidant and anxious individuals.

Predicting Attachment styles from psychological maladjustment and emotional intelligence in orphans was determined by the use of Hierarchical multiple regression (Table 4) indicating that both psychological maladjustment and emotional intelligence significantly predicted attachment styles in orphans by adding 31 % variance in the model. The results are consistent with previous literature (Alcaide, et.al. 2006; Batool & Khalid, 2009; Chuprova, 2007; Petrides, et.al. 2009). Orphans who were reared in foster care institutions demonstrated measurable delays in social, emotional, and language development (Zhao et al., 2010). Therefore, lack of parental involvement and guidance, school pressure, problem in choosing best friends, warmth or affection, and lack of close supervision, orphan suffers from stress (Draper & Hancock, 2011). The reason might be that orphans are more vulnerable to psychological problems as they are deprived of their parents' love and support. These problems also affect their physical and emotional health which leads

The results (Table 6-8) demonstrates that emotional intelligence mediates the relationship between psychological maladjustment and attachment styles and their dimensions in orphan. The results are consistent with previous research (Hoeg et al., 2018; Shulga, et.al. 2016; Tsaousis & Nikolaou, 2005; Vijayan, 2016). The reason might be that individuals with high emotional intelligence are tough-minded, always active in their organization, very sociable among their colleagues, outward-oriented,

emotionally stable, and can manage their stress, anxiety and their mood. These positive personality traits lead to more stable attachment styles in individuals. Kafetsios and Nezlek (2002) and Fullam (2002) discovered that individuals with a secure attachment were more emotionally intelligent in comparison with avoidant and anxious individuals. These findings are consistent with the result of the current study. The results indicated that individuals having high recognition of emotions and feelings have a more secure style of attachment. Past researchers also support our hypothesis in this regard that higher levels of emotional intelligence are associated with increased happiness, life satisfaction, positive interaction with friends and family, and owning objects that are reminders of their beloved ones; such traits are more common in individuals having parents (Ara, et.al. 2015; Swift, 2002). Low emotional stability noticeably complicates a child's communication with the outer world, which can lead to isolation and all sorts of geeky and inappropriate behaviour (Khan, et.al. 2014).

# Conclusion

Summarizing the results, it may be concluded that orphan samples differ significantly in the personality characteristics, emotional intelligence and attachment styles considered in the study. Orphan adolescents scored higher on psychological maladjustment and lower on attachment styles. Whereas emotional intelligence is a mediator in the relationship between psychological maladjustment and attachment styles.

# **Limitations and Suggestions**

The first limitation is the self-report method of data collection. Self-report data is more vulnerable to inaccurate reporting. Negative personalities are measured in the study. The role of positive personality traits like openness, optimism, kindness, humour and honesty etc. are also suggested to be studied concerning attachment styles in orphans. Addition of variables such as perceived stigma as orphans, degree of societal connection, the role of the surviving parent in the case of single-parent orphans and the relationship with the caretaker could help in drawing more clear conclusions.

#### Implications

The results obtained also fills up the literature gap prevailing in research concerning the relationship between emotional intelligence and attachment styles among orphans. The findings obtained from the research could be used to develop an intervention plan for those orphans who have more negative personality traits. The research is beneficial for social welfare workers in making policies that will help the orphan adolescent to enhance their coping skills and emotional intelligence to adjust psychologically to their environment and also help in strengthening their attachment bonds with others.

#### References

- Abdullah, M. C., Elias, H., Mahyuddin, R., & Uli, J. (2009). The relationship between emotional intelligence and adjustment amongst first year students in a Malaysian public university. *The International Journal of Interdisciplinary Social Sciences*, 4(9), 95-106. http://merr.utm.my/id/eprint/4697.
- Ara. S., Ahad. R., & Shah. A. S. (2015). Emotional intelligence and aggression among adolescents of Kashmir. *Research expo International Multidisciplinary Research Journal*, 5(12), 73-81.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454. https://doi.org/10.1007/BF02202939
- Batool, S., & Najam, H. (2009). *Relationship between perceived* parenting style, perceived parental acceptance-rejection and perception of God among young adults (Unpublished master's thesis). Quaid-e-azam University, Islamabad, Pakistan.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, *18*(5), 13-25. https://reunido.uniovi.es/index.php/PST/article/view/8415

- Bardyshevskaya, M. K., & Lebedinsky, V. V. (2003). Diagnosis of emotional disorders in children. Moscow, UMK Psikhologiya, p. 320.
- Berrocal, P. F., Alcaide, R., Extremera, N., & Pizarro, D. (2006). The role of emotional intelligence in anxiety and depression among adolescents. *Individual Differences Research*, 4, 16-27. https://emotional.intelligence.uma.es/documentos/PDF60amo ng\_adolescents.pdf.
- Cassidy, J., Jones, J. D., & Shaver, P. R. (2013). Contributions of attachment theory and research: A framework for future research, translation, and policy. *Development and Psychopathology*, 25(2), 1415-1434. Doi; 10.107/S0954579413000092
- Chuprova, M. A. (2007). Violations of interpersonal relationships and emotional development of children-orphans with no experience of life in the family. Moscow: *Moscow City Psychological Pedagogical University*, *15*(2), 194-201.
- Davies, K. A., Lane, A. M., Devonport, T. J., & Scott, J. A. (2010). Validity and reliability of a brief emotional intelligence scale (BEIS-10). *Journal of Individual Differences*, 31(4), 198-208. https://doi.org/10.1027/1614-0001/a000028
- Dennis, M. (Ed.). (2008). Children on the brink 2002: A joint report on orphan estimates and program strategies. DIANE Publishing. CID: 20.500.12592/2z6pb3.
- Dilmac, B. (2009). Psychological needs as a predictor of cyber bullying: A preliminary report on college students. *Educational Sciences: Theory and Practice*, 9(3), 1307-1325.
- Draper, A., & Hancock, M. (2011). Childhood parental bereavement: The risk of vulnerability to delinquency and factors that compromise resilience. *Mortality*, *16*(4), 285-306. https://doi.org/10.1080/13576275.2011.613266
- Fullam, A. (2002). Adult attachment, emotional intelligence, health, and immunological responsiveness to stress. *Abstract International*: 63(2-B). 1079.

- Gullone, E., & Robinson, K. (2005). The inventory of parent and peer attachment—Revised (IPA-R) for children: a psychometric investigation. *Clinical Psychology & Psychotherapy: An International Journal of Theory & Practice*, 12(1), 67-79. https://doi.org/10.1002/cpp.433
- Gwalema, R., Samzungi, A., & Busi, B. (2009). Social protection and economic empowerment of orphans living in the orphanage centers (Unpublished M.Phil. dissertation). Open University of Tanzania, Dar es Salaam.
- Hasan, N., & Power, T. G. (2002). Optimism and pessimism in children: A study of parenting correlates. *International Journal of Behavioral Development*, 26, 185–191. https://doi.org/10.1080%2F01650250114300003
- Hayes, A. F. (2013). An index and simple test of moderated mediation. *Manuscript submitted for publication*.
- Høeg, B. L., Johansen, C., Christensen, J., Frederiksen, K., Dalton, S. O., Dyregrov, A., & Bidstrup, P. E. (2018). Early parental loss and intimate relationships in adulthood: A nationwide study. *Developmental Psychology*, 54(5), 963-972.
- Hussain, S. (2017). Emotional intelligence, social intelligence and personality traits among orphan and non-orphan children. *Indian Journal of Research*, 6(12), 427-429.
- Ivanov, M.V., Kozlovsky, G.V., Margolin, I.A., & Platonov, N.V. (2016). Mental dizontogeneza in children undergoing mental deprivation. *Psychiatry*, 1(2), 12-18.
- Kafetsios, K., & Nezlek, J. B. (2002). Attachment styles in everyday social interaction. *European Journal of Social Psychology*, 32(5), 719-735. https://doi.org/10.1002/ejsp.130
- Kazdin, A. E. (2000). Perceived barriers to treatment participation and treatment acceptability among antisocial children and their families. *Journal of Child and Family Studies*, 9(2), 157-174.
- Kozlovskaya, G.E. (2013). Mental deprivation and its role in psychogenic disorders of mental development and personality formation of children in the age aspect. Retrieved April, 18, 2016, from

http;//psyjournals.ru/files/63975/sbornik\_psikhicheskaya\_dep rivatsia\_detey.pdf,7-14.

Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee,
S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry*, 20(4), 359-364.
https://doi.org/10.1097%2FYCO.0b013e32816ebc8c

Lowdermilk, D. L., Perry, S. E., Cashion, M. C., & Alden, K. R. (2014). *Maternity and Women's Health Care-E-Book*. Elsevier Health Sciences.

- MacLean, K. (2003). The impact of institutionalization on child development. *Development and Psychopathology*, 15(4), 853-884. doi;10.1017/S09545794030000415
- Majeed, R., Khan, M. A., & Khan, M. N. S. (2014). A comparative study of personality differences between orphans and nonorphans of Lahore. *Journal of Pakistan Psychiatric Society*, 11(2), 19-22.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? *Educational Implications*, *3*(2), 31-45. https://doi.org/10.2190%2FDUGG-P24E-52WK-6CDG
- McLean, K. C. (2005). Late adolescent identity development: narrative meaning making and memory telling. *Developmental psychology*, *41*(4), 683-691. https://psycnet.apa.org/doi/10.1037/0012-1649.41.4.683
- Mikhailova, Yu. (2004). Development of emotional regulation in pupils of children's home from birth to 4 years. Thesis. *Moscow: Moscow Lomonosov State University Lomonosov*, p. 225.
- Mukhamedrakhimov, R.J. (2006). Effect of the experience of living in an institution on the subsequent development of the child. *Defectology*, 1, 21-24.
- Murray, J. E. (2003). Fates of orphans: Poor children in antebellum charleston. *Journal of Interdisciplinary History*, *33*(4), 519-545. https://doi.org/10.1162/00221950360536503

- Naz, F., & Kausar, R. S. (2011). Urdu translation and adaptation of Child and Adult Personality Assessment Questionnaires. (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-e-Azam University, Islamabad, Pakistan.
- Nelson, Ch., Zeanah, Ch., Fox, N., Marshall, P., Smyke, A., & Guthrie, D. (2007). Cognitive recovery in socially deprived young children. Retrieved April,18,2016,fromhttp://www.bucharestearlyinterventionpro ject.org/Nelson\_et\_al\_\_combined\_\_2007\_.pdf. https://doi.org/10.1126/science.1143921
- O'Connor, T. G., Marvin, R. S., Rutter, M., Olrick, J. T., Britner, P. A., & English and Romanian Adoptees Study Team. (2003).
  Child–parent attachment following early institutional deprivation. *Development and Psychopathology*, 15(1), 19-38.doi:10.1017/S0954579403000026
- Paul, N., & Paul, T., (2017). Understanding the role of emotional intelligence among adolescent orphans in socialization and scholastic behavior. *Educere-the BCM Journal of Social Work*, 13(2), 152-171.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15(6), 425-448. https://doi.org/10.1002/per.416
- Pérez-Fuentes, M. D. C., Jurado, M. D. M. M., & Gázquez-Linares, J. J. (2019). Explanatory value of general self-efficacy, empathy and emotional intelligence in overall self-esteem of healthcare professionals. *Social Work in Public Health*, 34(4), 318-329. https://doi.org/10.1080/19371918.2019.1606752
- Rohner, R. P. (2016). Introduction to interpersonal acceptancerejection theory (IPARTheory) and evidence. *Online Readings in Psychology and Culture*, 6(1), 4-40.
- Rohner, R. P., & Khaleque, A. (2005). Parental acceptance-rejection questionnaire (PARQ): Test manual. In R. P. Rohner (4<sup>th</sup> Ed.), *Handbook for the study of parental acceptance and rejection*, (p. 187-227). USA: Rohner Research Publications.

- Rohner, R. P., & Khaleque, A. (2005). *Handbook for the study of* parental acceptance and rejection. Rohner Research, Storrs, CT, USA.
- Sable, P. (2007). Accentuating the positive in adult attachments. *Attachment & Human Development*, 9(4), 361-374. https://doi.org/10.1080/14616730701711573
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25(2), 167-177. https://doi.org/10.1016/S0191-8869(98)00001-4
- Shulga, T. I., Savchenko, D. D., & Filinkova, E. B. (2016). Psychological characteristics of adolescents' orphans with different experience of living in a family. *International Journal of Environmental and Science Education*, 11(17), 10493-10504. https://eric.ed.gov/?id=EJ1120236.
- Siegel, D. J. (2020). *The developing mind: How relationships and the brain interact to shape who we are*. Guilford Press.
- Swift, D. G. (2002). *The relationship of emotional intelligence, hostility, and anger to heterosexual male intimate partner violence* (Unpublished doctoral dissertation). New York University, School of Education.
- Thetakala, R. K., Sunitha, S., Chandrashekar, B. R., Sharma, P., Krupa, N. C., & Srilatha, Y. (2017). Periodontal and dentition status among orphans and children with parents in Mysore City, India: a comparative study. *Journal of clinical and diagnostic research: JCDR*, *11*(4), ZC115-ZC118. https://doi.org/10.7860/2FJCDR/2F2017/25655.9748
- Thiele, S. H. (2007). Developing a healing God image: *Young adults'* reflections on paternal relational patterns as predictors of God image development during adolescence (Unpublished doctoral dissertation). New Orleans Baptist Theological Seminary, Louisiana.
- Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health

functioning. *Stress and Health*, 21(2), 77-86. https://doi.org/10.1002/smi.1042

- VandenBos, G. R. (2013). APA dictionary of clinical psychology. American Psychological Association. https://doi.org/10.1037/13945-000
- Veneziano, R. A. (2000). Perceived paternal and maternal acceptance and rural African American and European American youths' psychological adjustment. *Journal of Marriage and Family*, 62(1), 123-132. https://doi.org/10.1111/j.1741-3737.20
- Veselka, L., Schermer, J. A., Petrides, K. V., & Vernon, P. A. (2009). Evidence for a heritable general factor of personality in two studies. *Twin Research and Human Genetics*, 12(3), 254-260.doi:10.1375/twin.12.2.54
- Vijayan, J. G. (2016). Measuring the difference between emotional intelligence, personality traits and occupational aspiration of institutionalized adolescent orphans using analysis of variance (ANOVA). *International Educational and Research Journal,* 3(3), 42-44.

https://www.academia.edu/download/56924534/14-Jyothy\_Vijayan.pdf

- Vijayan, J. G., & Rajan, S. S. (2016). An investigation of influence of emotional intelligence, and personality traits on the occupational aspiration of institutionalized adolescent orphans in Kerala. *Rethinking Skill Development and Women Empowerment*, 301-353.
- Zafar, H. (2009). Emotional autonomy, self-efficacy and peer attachment among adolescents. (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-e-Azam University, Islamabad, Pakistan.
- Zhao, J., Li, X., Barnett, D., Lin, X., Fang, X., Zhao, G., ... & Stanton,
  B. (2011). Parental loss, trusting relationship with current caregivers, and psychosocial adjustment among children affected by AIDS in China. *Psychology, Health & Medicine*, 16(4), 437-449. https://doi.org/10.1080/13548506.2011.554569

Zhao, G., Zhao, Q., Li, X., Fang, X., Zhao, J., & Zhang, L. (2010).
Family-based care and psychological problems of AIDS orphans: Does it matter who was the care-giver? *Psychology, Health* & *Medicine*, *15*(3), 326-335.
https://doi.org/10.1080/13548501003623989

Received June 10, 2021 Revisions Received August 07, 2022