# Psychological Maladjustment, Emotional Intelligence, and Attachment Styles of Orphan and Non-Orphan Adolescents



#### **Submitted to**

Dr. Anila Kamal

**Submitted by** 

Ayesha Khan

Dr. Muhammad Ajmal
National Institute of Psychology

Center of Excellence

Quaid-i-Azam University Islamabad-Pakistan 2020

# Psychological Maladjustment, Emotional Intelligence, and Attachment Styles of Orphan and Non-Orphan Adolescents

By

# Ayesha Khan

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Dr. Muhammad Ajmal

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Center of Excellence

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# **Certificate**

This is to certify that MPhil research report on "Psychological Maladjustment, Emotional Intelligence, and Attachment Styles of Orphan and Non-Orphan Adolescents" prepared by Ayesha khan has been approved for submission to Quaid-i-Azam University, Islamabad.

Dr. Anila Kamal Supervisor

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#### LIST OF ABBREVIATIONS

**ALT:** Alienation

ANOVA: Analysis of Variance

**AS:** Attachment styles

**BEIS:** Brief Emotional Intelligence Scale

**CFA:** Confirmatory Factor Analysis

CI: Confidence Interval COMM: Communication

**DEP:** Dependence

**EFA:** Exploratory Factor Analysis

**EI:** Emotional Instability **EI:** Emotional intelligence

**EII:** Emotional Intelligence Inventory

**EU:** Emotional Unresponsiveness

**HA:** Hostility and Aggression

**IPAR-Theory:** Interpersonal Acceptance-Rejection Theory

**IPPA:** Inventory of Parent and Peer Attachment

IPPA-R: Inventory of Parent and Peer Attachment-Revised

LL: Lower Level

MSCEIT: Mayer, Salovey, and Caruso Emotional Intelligence Test

**NWV:** Negative Worldview

PAQ: Personality Assessment Questionnaire

**PCA:** Principal Component Analysis **PM:** = Psychological Maladjustment

SA: Self-Adequacy

**SE:** Self-Esteem

**TSO:** Time Spend in Orphanage

**UL:** Upper Level

UNICEF: United Nations Children's Fund

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#### **ABSTRACT**

According to UNICEF (2017), Of the nearly 143 to 210 million children classified as orphans, 15.1 million have lost both parents. It is established that number of orphan increases day by day. In orphans, poor mental health is a key factor that led to many psychological issues (Paul & Paul, 2017). It has been assumed that emotional and intellectual deprivation resulting from the absence of parental figure produces a series of psychological maladjustments in adolescents. Emotional intelligence considered as a broad personality trait integrated into the higher levels of a multi-level personality hierarchy. There is still need to investigate the relationship of psychological maladjustment and emotional intelligence in both orphan and normal adolescents. When it comes to care, wellbeing, and psychological adjustment of orphan children, attachment is considered important. The aim of present study is to explore the lived experience in terms of difference in psychological maladjustment, emotional intelligence, and attachment styles among orphan and non-orphan adolescents. In study I, Interviews were conducted to investigate the opinions and experiences regarding psychological maladjustment, emotional intelligence and attachment styles of both orphans and non-orphans. Study II (phase I) consists of translation and validation of the brief emotional intelligence scale (BEIS-10) Which was originally developed by Davies, Devonport, Kevin, Lane, and Scott, (2010). In phase II, pilot study was conducted for validation of BEIS-10 and establishing psychometric properties of Revised version of Personality Assessment Questionnaire (PAQ) (α= .81), Brief Emotional Intelligence scale (BEIS-10) ( $\alpha$ = .80), and Inventory of Parent and Peer Attachment-Revised (IPPA-R) (α= .72). Sample of main study (Study III) comprised of 595 participants. The data were collected from different orphanages and colleges of Islamabad and Rawalpindi 288 non-orphans (141 boys and 147 girls) with age range from 12-22 years (M=15.83, SD=3.09). 307 orphans (155 boys and 152 girls) having age range between 12-22 years (M=15.92, SD=3.25). Results indicated that (a) there is a significant difference in the psychological maladjustment, emotional intelligence, and attachment styles of orphans and non-orphans. (b) the correlation, regression, and mediation analysis provide evidence that psychological maladjustment are the negative predictors of attachment styles, whereas emotional intelligence mediates the relationship in

orphan. (c) The effect of demographic variables among the study variables for the orphan and non-orphan groups are also discussed. The study becomes beneficial to social workers as they are working with orphaned children. They can help them by enhancing their positive personality traits and emotional intelligence to facilitate their effective adjustment and understand their emotions to improve their attachment styles.

#### INTRODUCTION

Children are the most precious resource for the future. According to UNICEF Report (2017), it is estimated there are between 143 million to 210 million orphans. Every 2.2 seconds a child loses a parent somewhere in the world. 2,015,400 million orphaned children worldwide (Lone, 2016). According to a UNICEF report (2017), Pakistan is home to 4.2 million orphaned children. In contemporary ages, children and youth are striving and facing many difficulties due to anxiety, depression, tension, frustration, emotional imbalance, and even mental health in day to day life. First, there is a lack of adequate information on the nature and magnitude of the problem; secondly, there is a cultural belief that children do not have emotional problems and therefore there is a lack of attention from adolescents. Thirdly, since psychological problems are not always obvious, many adolescents in charge of orphans are not able to identify them (Paul & Paul, 2017).

However, even where the problem may have been identified, there is a lack of knowledge of how to handle it appropriately. In many cases children are punished for showing their negative emotions, thereby adding to their pain. In orphanages and schools, there is an obvious lack of appropriate training of teachers in identifying psychological and social problems that affect their psychological adjustment and attachment pattern as well as, and therefore offering individual or group attention. It is found that the orphans are going through different challenges in the current scenario (Paul & Paul, 2017).

It is a widely accepted fact that personality characteristics and behavioral patterns of an adolescent are shaped and molded by the events occurring during the early years of life. A brief review of the related literature shows that studies on the influence of family background on various aspects of personality have been conducted in plenty in recent years (Emery, 1982). The results of some of these studies show that the quality of love received in childhood may affect the quality of one's production, either in getting along with people, becoming adjusted in the society in which one lives, or in performing at the level of one's innate potentiality (Sathyavati & Anthony, 1984). Keeping in view the importance of early life

experiences such as separation from parents or death of beloved have a deep influence on children's personality leading towards maladjustment. The present study will focus on the psychological maladjustment between orphans and non-orphans.

Emotional intelligence helps to determine how effectively one can understand and express themselves, trust and understand the attitude of others towards him and also, he can acquaint in how others are related with them according to the situations. Emotional intelligence is also helping the individual to cope with daily demand and pressures of life (Bar-On, 2006). Emotional intelligence plays a significant role in maintain the psychological health as well as social health of orphan adolescents. Emotional intelligence is that part of the human spirit which motivates them to perform in daily activities which gives us energy to demonstrate behaviors such as creativity, intuition, persistence, self-controlling, social deftness, intentionality, compassion and integrity. The individuals who had lack of psychological support fail to achieve these factors. But these factors give much more importance in the day today life of each and every individual (Kapp, 2002).

The way parents impart values and beliefs to the child, is resulting in child's self-awareness and self-confidence while developing relations with others. So, attachment plays a significant role in the development of positive personality traits as well as psychological adjustment in the child. The early experience of attachment in childhood influences the development and behavior in adolescences (Akhtar, 2012). Benchmarks for a person with good mental health are positive attitude towards life, feeling of security, autonomy, self-confidence, self-evaluation, emotional stability, self-control and interpretation of one's personality. Attainment of all these mentioned attributes can only be positive when one is well adjusted to the ambience, he or she is living in. If a child fails in achieving such attributes, he or she will more likely to demonstrate anxious or avoidant attachment in later life (Dwyer et al., 2010: Rubin et al., 2004; Zeanah et al., 2005).

The present study focuses on lived experiences of adolescent's orphans and non-orphans. It has been observed that certain various incidents in life of a person like abuse, violence, calamity, bereavement and death of near ones serves to be like an insurmountable trauma hampering and degrading the mental health of a person. Such

happenings in life leave a very destructive imprint on the long-term memory of the person suffering through it. Orphan-hood is one of those adversities of life which leave an individual in a state of complete helplessness. If, it occurs during early stage of life then this adversity becomes much more intense leading a person into a miserable condition. An orphan is one who's either or both of the parents are dead or have left due to some or other cause. In such circumstances either they are left alone or are treated as burden on their relatives. In most of the cases such children are sending to orphanages and other such institutions as they had no one to take care of them. Lack of love, attachment, disapproval and neglect by society for such group leave them to be a prey of wide range of problematic behaviors and disorders which directly or indirectly result in their stunted mental condition.

#### **Orphans**

An orphan is defined as a child who has lost one or both parents (World Bank, 2004). The official definition of an orphan is a child aged zero to 17 years whose mother, father, or both have died (Dennis, 2008). There are, however, other children who are referred to as social orphans even though one or both their parents may still be alive but who have been unable to perform parental duties because of illness or acute poverty among other reasons. Pardasani, Chazin, and Fortinsky (2010) defined orphan is a boy or girl child under the age of 18 years who lost one parent (maternal or paternal orphan) or both parents (total orphan). Children are brought to the orphanage home for one of two reasons: First, the parents have abandoned them and child who has parents died (Alden, Cashion, Lowdermilk, & Perry, 2014). Adolescent orphans represent as a vulnerable group and they are at great mental health risks. Stressors due to the loss of a loved one are highly context specific and often difficult to avoid. Parental deaths and illnesses are childhood traumatic situations that are associated with several negative physical and psychosocial health problems (Thetakala et al., 2017).

#### **Orphanage**

Orphanage was an institution dedicated to caring orphans (Gwalema, Samzungi, & Busi, 2009). Orphanage is a place that keeps children who have lost their parents and it is responsible for child care and rearing. There are many factors

that negatively affect the development of children living in the orphanages like, complete maternal deprivation (the phenomenon in which the child does not find a person on whom s/he can trust and may feel secure), poor physical conditions, poor child-caregiver ratio, people's opinion about orphanages, deficient of family support for children, neglectful and authoritative parenting styles of caregivers, early caregiver-child social-emotional relationship (Yidirim, 2005).

All the factors in orphanages may contribute to delay in the development in different domains of children. According to Bowlby and Ainsworth (2013) the most important is the relationship between child and care-giver that is usually apparent and for short period of time with little continuous warmth and affection. In such relationship child is unable to develop the sense of trust and may feel insecure, and therefore they are less involved in risk taking activities, less creative, dependent and many other poor characteristics have developed in them that lead to poor performance and make them unable to explore the new areas of world. The development of such characteristics will ultimately lead to the development of negative self-concept in them whereas, those children who are loved by their parents, they are psychologically adjusted in their life and show warmth and affections towards others (Kalaba, 2010).

#### Time in the Orphanage

Children adopted before 6 months rarely showed deficits or higher-thanexpected rates of problem behaviors. But time in the orphanage sometimes relates to the frequency and severity of longer-term delays in physical growth, mental and academic performance, internalizing and externalizing behavior problems, social and peer relations, and inattention/hyperactivity. The form of the relation between time in the orphanage and outcomes is not clear and may not be linear (Merz & McCall, 2010).

Once a child is exposed to a substandard orphanage for more than the first 6–12 months of life, higher rates of lower levels of mental performance, attachment problems, stereotyped behaviors, and indiscriminate friendliness will be found, and longer exposure increases these rates. Such results may also suggest that the specific ages of approximately 6–18 months may be especially sensitive to deficiencies in orphanage environments. These results occur within studies (Chisholm, Gunnar,

Morison, & Schuder, 2001; MacLean, 2003; Merz & McCall, 2010; Rutter et al., 2007) but not always between studies (Juffer & Van IJzendoorn, 2005).

#### **Psychological Maladjustment**

The current study is based on Rohner's personality theory of parental acceptance and rejection. In this theory psychological maladjustment is measured in term of personality dispositions. That is defined as an individual's more or less stable set of predispositions to respond (i.e., affective, cognitive, perceptual, and motivational dispositions) and actual modes of responding (i.e., observable behaviors) in various life situations or contexts. This definition recognizes that maladjustment is a behavior, influenced by external (i.e., environmental) as well as internal (e.g., emotional, biological, and learning) factors, inability to react successfully and satisfactorily to the demand of one's environment (Rohner & Khaleque, 2005).

Thomas (1991) conducted research on differences in the personality of orphans and non-orphans in terms of alienation, locus of control, hostility, and self-derogation. The results obtained indicate that: (a) there is significant difference between orphans and non-orphans in alienation, hostility, and self-derogation; (b) hostility correlates positively with alienation, locus of control, and number of years of stay in the orphanage in the case of orphans; (c) in the case of non-orphans, (i) self-derogation correlates negatively with home atmosphere and positively with alienation and hostility; (ii) alienation correlates positively with hostility and negatively with home atmosphere (Thomas, 1991).

Scientific studies of the orphan hood began in the eighteen century and continue to the present day. It was found that children, who have undergone family deprivation, have a variety of negative features. According to studies, these children and adolescents develop a number of negative characteristics: slow rate of mental development (Mukhamedrakhimov, 2006); low IQ (Bardyshevskaya & Lebedinsky, 2003); emotional and regulatory disorders (Koltinova, 2013); instable and inadequate self-esteem (Shvets, 2011; Karnaukh, 2006); anxiety and hostility to adults and low sociometric status in the group of peers (Karnaukh, 2006); poor skills of self-control (Mikhailova, 2004; Chuprova, 2007; Shvets, 2011) and of socially unacceptable

behavior (Mukhamedrakhimov et al., 2008); distorted identity (Savkova, 2013), and family image (Shubina, 2013; Shulga & Tatarenko, 2013).

Mental and psychophysiological status of children in institutions for orphans and children left without parental care is characterized by a variety of pathologies (Kozlovskaya, 2013; Proselkova, 2013), poor "self-concept" (Shvets, 2011), passive life position and distorted life perspective (Zhiltsova, 2014). Lack of experience of family life at an early age has a destructive influence on the development of emotional sphere (Mikhailova, 2004; Mukhamedrakhimov, 2006; Prikhozhan & Tolstykh, 2005; Shulga, 2013); intellect (Tottenham et al., 2011) and speech (Proselkova, 2013); ability to establish trustful relationships with others (Kozlovskaya, 2013; Chuprova, 2007; Nelson et al., 2007); determines behavioral and psychosomatic problems (Bardyshevskaya & Lebedinsky, 2003; Ivanov et. al., 2016).

Ahmad et al., (2005) followed-up of Orphans' competence, socio emotional problems and post-traumatic stress symptoms in traditional foster care and orphanages in Iraqi Kurdistan. They found that orphans were more likely to be anxious, depressed and to display anger and showed significantly higher feelings of hopelessness and suicidal ideation. In Pakistan, Farooqi and Intezar (2009) found that the children in orphanages reported lower degree of self-esteem than children living with their parents (Farooqi & Intezar, 2009).

Adolescents of single parent family may have lesser chance to be involved in recreational activities, because many of them are carrying heavy responsibilities. In the absence of mother, they have to help their fathers to look after their siblings and house. In the absence of father, they carry responsibilities outside the home. They try to help their mothers by doing part time jobs and might dropout from college. They may have lesser time for themselves and cannot pursue their hobbies. Unfulfilled wishes and helplessness cause depression in adolescents and depressed adolescents display little interest and derives minimal pleasure from their daily routine (Kazdin, 2000).

Children living in substandard orphanages have been reported different psychological maladjustments, including stereotyped self-stimulation, a shift from early passivity to later aggressive behavior, over-activity and distractibility, inability to form deep or genuine attachments, indiscriminate friendliness, and difficulty establishing appropriate peer relationships (Ames, 1997; Sloutsky, 1997; Spitz, 1946; Tizard & Hodges, 1978; Tizard & Rees, 1974).

Certain problems may increase over the years following adoption, including internalizing and externalizing psychological problems, social and peer relations (including problems regulating emotion, anger, and aggressiveness), inattention/hyperactivity, indiscriminate friendliness, and attachment problems. Attachment and behavior problems, indiscriminate friendliness, and lower IQ seem to go together in the same children (Julian & McCall, 2008).

According to Rohner and Khaleque (2005), seven personality disposition known to be panculturally associated with psychological maladjustment are (a) hostility/aggression, passive aggression, or problems with the management of hostility and aggression; (b) dependence or defensive independence depending on form, frequency, severity, timing, and longevity of perceived rejection; (c) feelings of positive or impaired self-esteem; (d) feelings of positive or impaired self-adequacy; (e) emotional (un)responsiveness; (f) emotional (in) stability; and (g) positive or negative worldview

Self-esteem. Self-esteem has also been defined in a number of other ways. The common theme refers to an individual's perception of himself in a number of physical, intellectual and social activities and depends on the evaluation conveyed to the individual by significant others, by the standard of his reference groups and by his perceived effectiveness in achieving goals (Asif, 2017). According to Rohner and Khaleque (2005), self-esteem refers to the global emotional judgment individuals make about themselves in terms of worth or value. Feelings of positive self-esteem imply that one likes oneself; that one approves of, accepts, and is comfortable with oneself; that one is rarely disappointed in oneself; and that one perceives oneself to be a person of worth and worthy of respect. Negative self-esteem, on the other hand, implies that one dislikes or disapproves of oneself; that one devalues oneself and sometimes feels inferior to others; that one perceives oneself to be a worthless person or worthy of condemnation.

Children who lose their parents tend to be anxious; hostile; aggressive; emotionally unstable and have low self-esteem. Non-orphan children reported higher level of self-esteem than the orphan children (Khan, Khan, & Majeed, 2017).

Asif (2017) examined the level of depression and negative self-esteem among orphan and non-orphan children. Participants of this study were 50 orphan children and 50 non-orphan children selected randomly. The results revealed that there is positive relationship between depression and negative self-esteem in non-orphans and non-orphan children. Orphan children obtained higher score on depression scale than non- orphan children. On the other hand, non-orphan children obtained high score on self-esteem than orphaned children.

Hostility and Aggression. It refers to violent attitudes or actions that are associated with anger and a desire to dominate a situation or others. Its displays itself in verbal, non-verbal and physical ways and holds the intention of causing harm (Rohner & Khaleque, 2005). According to Rohner and Khaleque (2005), hostility is an internal or emotional feeling of enmity, anger, or resentment. Hostility is a principal motivator of aggression.

To explore the stress and aggression of orphans as a function of gender and residence, Dey, Hussain, Islam, and Rahman (2013) conducted a research on a sample of 120 participants. Among them 60 orphans were male (30 were urban and 30 were rural) and 60 orphans were female (30 were urban and 30 were rural). The findings of the present study showed that female orphans had significantly more stress than male orphaned and urban orphan had significantly more stress than rural orphans. On the other hand, male orphans had significantly more aggression than female's orphans and urban orphans had significantly more aggression than rural orphans. Results also showed that stress was positively correlated with aggression.

An experimental study was conducted by Hermenau et al. (2011) to assess the childhood adversity, mental ill-health and aggressive behavior in an orphan in Africa. The results indicate that the experience of violence in an orphan also plays a crucial role in aggressive behavior of the orphans which itself become the part of their personality.

**Dependence.** The internal, psychologically felt wish or yearning for emotional (vs. instrumental or task oriented) support, care, comfort, attention, nurturance, and similar responses from significant others. Dependence by Rohner and Khaleque (2005), also refers to the actual behavioral bids, an individual's make for such responsiveness. For young children these bids may include clinging to parents, whining or crying when parents unexpectedly depart, and seeking physical proximity with them when they return. Older children and adults may express their need for positive response more symbolically especially in times of distress by seeking reassurance, approval, or support, as well as comfort, affection, or solace from people who are important to them particularly from parents for youths, and from non-parental significant others for adults.

Shulgaa, Savchenkoa, and Filinkovaa (2016) found that orphans who have never lived in a family have high level of dependent relationship to other people, low dominance level, unclear attitude to sexual sphere, to family as a whole and its members (mother, father, parent couple, siblings, grandparents), negative view of parent-child relationship and child functions, strong negative attitude to social adults (teachers and other employees of organizations for orphans and children left without parental care), the lowest level of complexity of the system of interpersonal relations. They have low levels of sociability tend to easily come into conflicts and show passive-type response to conflict social situations.

**Self-adequacy.** Rohner and Khaleque (2005), refers it to judgments, an individual makes about their own competence or ability to meet the instrumental/task-oriented demands of day-to-day living. Feelings of positive self-adequacy imply that one views oneself as capable of dealing satisfactorily with problems; as a success or capable of success in the things one sets out to do; as self-assured, self-confident, and socially adequate. Feelings of negative self-adequacy, on the other hand, are feelings of incompetence, the perceived inability to meet day-to-day demands successfully. According to Rohner and Khaleque (2005), individuals' who are deprived of family love or rejected ones have negative self-adequacy.

**Emotional responsiveness.** It is a persons' ability to express freely and openly their emotions. Emotional responsiveness is revealed by the spontaneity and ease with which a person is able to respond emotionally to another person, the extent to which the individual adult or child feels comfortable forming warm, intimate, involved, lasting, and non-defensive attachments with other people, attachments that are not troubled by emotional wariness, constriction, or lack of trust. The interpersonal relationships of emotionally responsive people tend to be close and personal, and such people have little trouble responding to the friendship advances of others such characteristics are more common in children who are rejected by their parents or those who have lost their beloved ones. In contrast, emotionally unresponsive people are emotionally insulated from others. They have restricted and often only defensive emotional involvement with others. They may, however, be sociable and friendly, but friendliness is not to be confused with the ability to enter into intimate relationships. Some people who are friendly are incapable of having intimate, involved, non-defensive relationships; their relationships tend to be nonpersonal and somewhat distant emotionally (Rohner & Khaleque 2005).

**Emotional stability.** It refers to an individuals' steadiness of mood, their ability to withstand minor setbacks, failures, difficulties, and other stresses without becoming upset emotionally. Emotionally stable persons tolerate minor stresses and strains of day to day living without becoming emotionally upset, anxious, nervous, tense, or angry. They are able to maintain composure under minor emotional stress. They are fairly constant in their basic mood, and they generally revert quickly to that state following those occasions when they have experienced great stress or have been exceptionally provoked. The emotionally unstable person, on the other hand, is subject to fairly wide, frequent, and often unpredictable mood shifts that may swing from pole to pole (Rohner & Khaleque 2005). Children who are rejected by their parents tend to be anxious; hostile; aggressive; emotionally unstable and have low self-esteem (Khan, Khan, & Majeed, 2014).

**Worldview.** According to Rohner and Khaleque (2005), it is a person's (often non-verbalized) overall evaluation of life, the universe, or the very essence of existence as being essentially positive or negative. A person with a positive

worldview sees life as basically good, secure, friendly, happy, or unthreatening, or having some other positive valence. For a person with a negative world view, on the other hand, life is seen as essentially bad, insecure, threatening, unpleasant, hostile, uncertain, and/or full of many dangers. Worldview, then, is a judgment individual make about the quality of existence. It is not to be confused with one's empirical knowledge of social, economic, political, or other events. Stanibula (2018) found that orphans and children left without parental care perceive the world around them as threatening, filled with despair, longing, and fear.

# Role of Family in Development of Psychological Adjustment/Maladjustment, Emotional Intelligence and Attachment in Adolescents

Family is the most important primary group in society and immediate social environment to which a child is developed and exposed (Rehman & Singh, 2015). Adolescent psychological adjustment refers to the mental health of the young person, and includes low conduct and school problems, strong and stable peer relationships and general social and emotional functioning. Different family types can also influence parent–adolescent relationships and psychological adjustment.

Adolescents who are brought up in institutions but have the experience of living in a family are more confident than family adolescents. High level of adjustment, psychological well-being, self-confidence, self-esteem and self-adequacy among adolescents having family experience may be a defense mechanism (Mikhailova, 2004). Their self-esteem and level of aspiration are overestimated. The myth of limitlessness of its capabilities is very common among adolescents in institutions (Shulga, Savchenko, & Filinkova, 2016).

Accordingly, the nature of self-confidence among adolescents growing up in a family since their birth, and those who have undergone family deprivation, can be different. Adolescents-orphans who had no experience of life in the family have a strong need to be protected more than others (Chuprova, 2007). This feature may impact negatively on the formation of their personal autonomy. Low desire for independence of these subjects leads to difficulties with their distinction of

themselves from the society, with personal maturation and sense of maturity (Shulga, Savchenko, & Filinkova, 2016).

Adolescents who have never lived in a family are more aggressive than others. Adolescents who live in institutions since their birth are less able to cooperate with others, have increased level of hostility which makes them to attribute negative qualities to other objects and phenomena. This is a result of their frustrated social needs and of deficient basic trust in the world (Filinkova, Savchenko, & Shulga, 2016).

Family is the first place where the children feel, monitor, and learn how to recognize and understand the emotions of other people. It was found that family deprivation violates psychological development of adolescents. The violation manifests itself in the specificity of their emotional intelligence and regulatory functions, reduction of social intelligence and level of sociability, as well as in specific self-image (negative self-attitude, uncertainty, distrust of the world, particular attitude to the future and the prospects of life, etc.) and perception of the other (distorted attitude towards the family and its members, negative view of parent-child relationship and child functions, etc.) Shulga, Savchenko, & Filinkova, 2016).

Morris, Myers, Robinson, Silk, and Steinberg (2007) reported different family factors that affect the emotional intelligence that include: 1) reaction of parents towards the child emotional reactions in any difficult situation that contribute to the secure attachment between child and parents. If parents show warmth to children and provide coaching for how to react and deal with such situation, then emotionally healthy child will be developed, 2) Modeling in which child imitate how his/her parents react in difficult situations, how they interact with other people, and what strategies they use for coping with stress, and 3) child temperament or neurophysiology.

There is a difference between aloofness of adolescents who are brought up in a family, and of those who have undergone total family deprivation. Adolescents from institutions, having no experience of living in a family, are deprived of the opportunity to form stable and permanent relationship with an adult, which leads to the formation of basic mistrust of the world, of negative self-attitude, of alienation,

and insularity in adulthood. At the same time, "family" adolescents shut themselves off from society, become more withdrawn in result of natural development of self-awareness and reflection (Shulga, Savchenko, & Filinkova, 2016).

In conclusion, adolescents, who are deprived of family and parental care throughout life, found to have poor psychological adjustment, having difficulty in recognizing and understanding the emotions of other people and themselves, do not involve in any close relationship with others adult 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.

#### **Emotional Intelligence**

Salovey and Mayer (1990) coined the term emotional intelligence and described it as a form of social intelligence that involves "the ability to monitor one's own and others feelings and emotions, to discriminate among them, and to use this information to guide ones thinking and action". Salovey and Mayer (1997) further elaborated that emotional intelligence was "the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth". Emotional intelligence according to them involves areas such as identifying, interpreting, managing and understanding emotions.

Batool and Shehzadi (2017) conducted research on intrapersonal and interpersonal components of emotional intelligence, and psychological well-being of late adolescents: orphans living in orphanages and non-orphans living with both parents. Result of stepwise regression indicated that intrapersonal and interpersonal emotional intelligence significantly predicts psychological well-being. It was also concluded that children living with both parents and those living in orphanage significantly differ on emotional intelligence and well-being, and intrapersonal and interpersonal components of emotional intelligence are significant determinants of well-being of orphans and non-orphans.

The orphan's children who are deprived of parental love, care, affection and moral support also demonstrate low emotional intelligence. Due to the above-mentioned reasons, without the absence of a parent, children face lots of problem psychologically and socially (Paul & Paul. 2017).

Swift (2002) studied the EI of 59 individuals who were part of a court-ordered violence-prevention program, and it was found that Perceiving Emotions was negatively related to psychological aggression (which took the form of insults and emotional torment). However, surprisingly, Swift (2002) also found that rates of psychological aggression were actually associated with higher scores in Managing Emotion (Caruso, Mayer, Salovey, & Sternberg, 2000).

Living in orphanages has been reported to leave detrimental effects on physical, cognitive, social and emotional development of adolescents (Dennis & Najarian, 1957; Tizard & Rees, 1974). Literature illustrates that adolescents living in orphanage show low emotional intelligence and experience emotional difficulties and have poor psychological well-being as compared to those living with parents (Abadi, 2011; Bhat, 2014).

Ishak (2017) investigated the emotional intelligence and academic achievement of orphan and non-orphan and found that non-orphans are having higher Emotional Intelligence than orphans and also revealed that orphans are having higher Achievement Motivation than non-orphans.

The concept of emotional intelligence was firstly introduced by Salovey and Mayer (1990) as three adaptive abilities namely the ability (1) to appraise and express emotion, (2) to regulate emotions, and (3) to utilize emotions in solving problems. The first two abilities apply to one and others. Salovey and Mayer (1997) described emotional intelligence as a subset of social intelligence. It is the ability to discriminate and monitor one's own and others' feelings and emotions and to use this information to guide thoughts and actions.

According to Mayer, Salovey, and Caruso (2004) emotional intelligence consists of four interconnected branches. Salovey and Mayer (1990) stated that the mental processes related to EI are "appraising and expressing emotions in the self and

others, regulating emotion in the self and others, and utilization of emotions in adaptive ways" (p. 190).

**Perception**. It involves the perception of emotion, including being able to identify emotions in the facial and postural expressions of others. It reflects non-verbal perception and emotional expression to communicate via the face and voice (Mayer, Caruso, & Salovey, 2000).

**Facilitation**. It includes the ability to use emotions in order to aid thinking and using emotion to interpret the world around them (Mayer, Caruso, & Salovey, 2000).

**Understanding**. It represents the capacity to understand emotion, including being able to analyze emotions and awareness of the likely trends in emotion over time, as well as an appreciation of the outcomes from emotions. It also includes the capacity to label and discriminate between feelings (Mayer, Caruso, & Salovey, 2000).

**Management/Regulation.** This branch includes an individual's personality with goals, self-knowledge and social awareness shaping the way in which emotions are managed (Mayer, Caruso, & Salovey, 2000).

These branches, which are ordered from emotion perception through to management, align with the way in which the ability fits within the individual's overall personality (Mayer, Caruso, & Salovey, 2000). In other words, perception and facilitation represent the somewhat separate parts of information processing that are thought to be bound in the emotion system whereas, emotion management is integrated into his/her plans and goals.

Salovey and Mayer (1990) argued that the abilities associated with EI were the expression and perception of emotion in self and other, the regulation of emotions in self and other, and the underutilization of emotions in problem-solving. The measurement of EI corresponding with such abilities has supported the theorized construct (Schutte et al., 1998). Subsequent research by Mayer, Caruso, and Salovey (2000) found support for the four-factor model comprised of accurate perception of emotion, use of emotions to facilitate thinking problem solving and creativity, understanding emotions, and managing emotions for personal growth.

In terms of the interpersonal dimensions of (EI), Mayer, Caruso, and Salovey (2000) studied the ability of people for understanding the contents of emotions and the application of this ability to sympathize with others. The results showed that individuals with limited emotional awareness were less able to have sympathy and empathy with others. Thus, emotional wellbeing requires an ability to recognize emotions in everyday life.

Lopes, Salovey, and Straus (2003) claimed that individuals "who can regulate their emotional states are healthier in terms of their personality because they accurately perceive and appraise their emotional states, know how and when to express their feelings, and can effectively regulate their mood states" (p. 161). This set of characteristics, dealing with the perception, expression, and regulation of moods and emotions can help individual to cope with the environmental stressors effectively.

Individuals who lose their parents and live in institution cannot reveal their feeling and emotions to others. They have their mood swings. They cannot control their emotions and become aggressive over minor things. Researchers indicated that children dealing with prolonged grief from losing a parent are vulnerable to long-term emotional problems due to their failure to resolve their sense of loss. This can include being prone to symptoms of depression, being more anxious and withdrawn, showing more problems in school, and demonstrating poorer academic performance than non-bereaved children (Hoeg et al., 2018).

Children who lost a parent to suicide seemed significantly more likely to experience relationship problems later in life than children who lost a parent for other reasons. This is consistent with previous research showing that losing a parent to suicide can leave children especially vulnerable to later emotional problems due to the stigma surrounding suicide. They have unstable emotions and feelings, cannot easily trust their partners due to which they face a lot of troubles in handling their relationship and have alienated attachment styles of patterns (Veselka, Schermer, Petrides, & Vernon, 2009).

In conclusion, individuals live with their parents can easily understand and manage their emotions may have stable personality traits as compared to those live in institute (Petrides & Furnham, 2001). Individuals who have emotional awareness have high aims and goals. They can manage or redirect one's disruptive emotions and impulses and adapt to changing circumstances. For the skillful management of emotions, it is required to have an understanding of emotions and awareness of the individual differences. These individual differences are observable in the characteristics and behaviors that are possessed by an individual and that can be expressed as personality (Maccoby, 2008).

#### Psychological Maladjustment and Emotional Intelligence

There are very few studies that have assessed the role of emotional intelligence in the well-being and psychological maladjustment of children/ adolescents living in two different living conditions (viz., orphanage and in intact families). The literature shows that the children/ adolescents living in orphanage are more prone to emotional problems and poor mental health which leads to psychological maladjustment such as aggression, hostility, neuroticism and low self-esteem (Abadi, 2011; Bhat, 2014).

People who are able to perceive and express emotions, to give meaning to their emotional experiences, and to regulate their emotions will show lower psychopathologies that have roots in emotional disturbances (Brackett, Rivers, & Salovey, 2011).

Palomera, Salguero & Ruiz-Aranda (2012) found relationships between psychological adjustment and EI in adolescents, more specifically, a higher level of emotion identification was found to be a predictive factor in psychological adjustment. While children move towards adolescence, emotional perception ability is related to better academic adjustment in social relationships, less tension and stress, better parental relationships, as well as more self-confidence and perceived personal competence. Moreover, the study of emotional intelligence (EI) and its association with psychological maladjustment in adolescence was also found by Resurrección, Salguero, and Ruiz-Aranda, (2014). They reported negative association between EI and internalizing problems, depression, and anxiety among adolescents.

Emotional intelligence has been found to be positively related to psychological wellbeing (Anjali, 2014). Tsaousis and Nikolaou (2005) in a study found that

emotional intelligence was positively related stable personality characteristics. High emotional intelligence also found to be associated with physical as well as with psychological wellbeing like, self-reported somatic symptoms (Dawda & Hart, 2000; Carroll, Day & Therrien, 2005). Negative correlations have been reported between emotional intelligence, depression and anxiety, and affective psychological wellbeing (Alcaide, Berrocal, Extremera, & Pizarro, 2006; Batool & Khalid, 2009; Berrocal, Extremera, Salovey, Ramos, & Vera, 2005).

Numerous evidences exist that self-esteem is positively related to emotional functioning, including several predictors of life satisfaction (Estévez, Moreno, Murgui, & Musitu, 2009) and subjective happiness, or is even negatively related to psychological maladjustment indicators such as depression or anxiety in response to acute stressors (Lyubomirsky, Tkach, & DiMatteo, 2006) In general, believing in oneself as good and worthy provides a setting for effective personal functioning in young adults and adolescents (Çivitci & Çivitci, 2009).

#### **Attachment styles**

The roots of attachment lay in Bowlby (1969) theory of attachment. He described attachment is a special emotional relationship that involves an exchange of comfort, care and pleasure. Attachment is a natural activity. It continues since infancy. The child attached with their parents and caregivers; as they provide comfort and care. Posada et al., (2002) observed the mother gives comfort and are more sensitive to their baby's needs the infants are more securely attached to her. The way parents impart values and beliefs to the child, is resulting in child's self-awareness and self-confidence while developing relations with others. The early experience of attachment in childhood influences the development and behavior in adolescences.

Shaver and Milkulincer (2005) concluded the secure attachment in early life may help to foster a capacity for compassion and altruism that carries forward in to adulthood. The different ways behaving and responding in attachment relation are defined as attachment styles. Akhtar (2011) defines attachment styles as the typical ways of interacting in close relationships. Ainsworth et al., (1978) classified attachment styles in to main three categories: secure, anxious and avoidant. Passer

and Smith (2007) define attachment as a strong emotional bond that develops between children and their parents.

According to Bowlby and Ainsworth, the attachment bond is a specific type of bond included in a larger class of affectional bonds (as cited in Cassidy, Jones & Shaver, 2013). The specific features of attachment bonds are: persistence of the bond, involvement of specific persons who are not interchangeable, significant emotional involvement, the desire to maintain closeness and/or contact with the person, distress during involuntary separation, and the necessity of individuals to seek security and comfort in the relationship (Cassidy, Jones, & Shaver, 2013).

According to Siegel (2012) "Attachment is a system in the brain that evolves in ways that influence and organize motivational, emotional, and memory processes with respect to significant caregiving figures" (p. 67). Attachment can be formed as early as seven months. Almost all infants become attached; attachments are formed to only a few persons, and are resulting of social interactions with these persons. Attachment plays an important role in the developing mind and insecure attachment can be a serious risk factor in developing psychopathology (Siegel, 2012).

Yet, what is labeled insecure attachment per se is not a form of psychopathology and research has not established yet the specific relationship between unsecure attachment and psychopathologies that can have multiple origins (Cassidy, Jones, & Shaver, 2013). However, certain forms of attachment type have been linked to anxiety disorders and dissociative disorders (Siegel, 2015).

According to Siegel (2020) "Security conveys resilience, whereas insecurity conveys risk attachment history is correlated with a wide variety of mental processes central to the regulation of emotion and behavior" (p. 115). Therefore, measuring attachment among orphans is essential in order to eventually prevent possible psychological risk related to unsecure attachment.

Due to difficult past histories and the realities of living in an institution, orphan children are considered to be a vulnerable population. Decades of research have suggested that orphan children, due to their circumstances, are more likely to demonstrate anxious or avoidant attachment (Mikulincer, & Sherr, 2005; Dwyer et al., 2010: Rubin, 2004; Zeanah et al., 2005). These attachment patterns in turn play a

significant role in their development and in the formation of interpersonal relationships, and are traditionally thought to stay semi-constant throughout an individual's lifetime (Simpson, 1998).

Zeanah, Smyke, and Koga (2005) conducted a research on attachment styles in institutionalized and community children in Romania. Results of the study showed a statistically significant difference between the attachment scores of institutionalized and never institutionalized children. Specifically, orphans brought up in institutions were found to be emotionally withdrawn, unresponsive, alienated and socially indiscriminate, because they are socially deprived and have insecure attachment.

Meyers and Landsberger (2002) described the attachment styles as the ways in which adults think, feel and interact in the context of their relationship. Some orphanage studies have found that while the material needs of orphans were met, orphans experienced deprivation in terms of emotional need fulfillment, including interpersonal interactions with staff (Freidus, 2010; Sanou, Turgeon-O'brien, Ouedraogo, & Desrosiers, 2008).

Children with early deprivation experiences are more prone to develop insecure attachment styles; they have trust related issues (O'Connor et al., 2003). The opportunities of foster children to develop secure attachment bonds with a caregiver are often limited due to severe negligence by biological parents (Boris et al., 2004; Zeanah et al., 2004), multiple changes of residence and institutional care (Dumitrescu, Smyke, & Zeanah, 2002; Carlson, Koga, Smyke, & Zeanah, 2005).

The orphans experienced bullying and stigma in their schools which allowed them have a weak and defensive relationship to their social environment. They are characterized as having attachment difficulties, in which formation and new relationship and as having peer groups had been very hard for them. They fail to achieve the scholastic behavior and difficulty in adjust with social environment. Most of the children find it impossible to make the friends in to one on one and more personal connection with them (Oburu, 2005).

Children who are deprived of love or are suffering from parental loss have insufficient level of trust, facing emotional problems, mostly live in isolation because they cannot easily communicate with others. Most of the children in foster care claimed that they were stigmatized and, to a great extent, ignored and excluded from their community (Dalen, Nakitende & Musisi, 2009).

A study by Katyal (2015) on peer attachment and well-being found that orphan scored high on trust and alienation than non-orphan. As far as wellbeing was also concerned, non-orphans as compared to orphans had higher mean score in positive outlook dimension of wellbeing whereas orphan children exhibited higher overall total wellbeing as compared to their counterparts belonging to non-orphan category.

#### **Psychological Maladjustment and Attachment Styles**

There are less literature regarding psychological maladjustment and attachment styles in orphan and non-orphan adolescents. However, few studies reported specific maladjustment (aggression, anxiety, mistrust etc.) related with attachment styles.

In Chisholm's study (1998), significantly more orphanage children than Canadian-born or early adopted children displayed atypical attachment patterns, which some researchers have suggested are risk factors in the development of psychopathology (Carlson & Sroufe, 1995).

McWay (2004) found that children in foster care have 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).

Insecurely attached children are likely to develop fewer social skills and have lower levels of communication skills. An insecurely attached child may frequently become anxious, even in benign circumstances. Chronic vigilance and anxiety will then increase the probability of a future anxiety disorder (Egeland, Huston, Sroufe, & Warren, 1997). "secure," "avoidant," "ambivalent (anxious-ambivalent, resistant)," and "disorganized" adolescents tend to have primary caregivers who are "autonomous," "dismissing," "preoccupied," and "unresolved," respectively, with respect to attachment (Ma, 2006).

Verschueren and Marcoen (2005) proposed that the child experience of abandonment causes him to mistrust the permanence of the present caretaker and to

defend against further loss by distancing himself from her. Moreover, children having poor home environment were more alienated, having negative self-esteem and low self-control as compared with those living in congenial home environment. Children deprived of parental love, care and security generally face economic, psychological and social problems (Khan & Khan, 2014).

Tripathy (2019) conducted a research on Alienation and Emotional Stability among orphan and non-orphan adolescents and found that non-orphan adolescents have high emotional stability than orphan adolescents. Orphan girls have high emotional stability and boys have low emotional stability. But according to percentage table of alienation we can prove that orphan adolescents have more alienation and non-orphan adolescents have low alienation.

Chakraborty, Dasgupta, and Sanyal (2019) conducted a research to explore personality correlates of destitute, orphans and Creche-attender children with comparison to normal children. They found that orphan children have higher scores with respect to some dimensions of aggression, attachment, anxiety compared to normal controls. Higher scores were found for destitute and Creche-attender children with respect to state anger/feelings, state anger/expression, trait anger/temperament, trait anger/reaction, anger expression out and anger control compared to normal children. They were also found to score higher in attachment and in all the dimensions of anxiety except OCD than normal children. They had higher mean scores as compared to normal children in certain indices of personality.

#### **Emotional Intelligence and Attachment Styles**

There is no such research evidence on emotional intelligence and attachment style on orphans. Engels, Overbeek, Stattin, and Vermulst (2007) stated that secure attachment with parents, healthy peer relationships and a protective social environment help the person to solve and communicate their problems with confidence; it develops various self-competencies of the individual such as social and emotional intelligence, cognitive and occupational abilities etc. They found that children living in orphanage with single parent have high level of emotional intelligence than those staying in orphanage without any parents.

Kafetsios and Nezlek (2002) investigated the relation between emotional intelligence abilities, and individual attachment orientation. He used MSCEIT (Mayer et al., 2002) and concluded that all subscale of emotional intelligence test was correlated with a secure attachment. In another study Kafetsios and Nezlek (2002) found that with controlling gender, and age of participant attachment quality was a reliable predictor of an emotional intelligence.

According to Mayer, Caruso, and Salovey (2000), emotional intelligence facilitated thinking, problem-solving, creativity, understanding emotions and managing emotions for personal growth. Thinking and problem-solving are likely to be associated with task focused communication. Understanding emotions is likely to be associated with another-person focus of communication, and managing emotions for personal growth is likely to be associated with a success focused communication style.

#### **Demographic and Study Variables**

Kumar and Sing (2017) conducted a research to assess the emotional intelligence of orphan and non-orphan students studying in primary schools of Meerut district. A sample of 80 students (40 orphans and 40 non-orphans) was randomly taken from different Schools. They were administered Emotional Intelligence Inventory (EII) developed by the Kumar and Sing (2017). Orphan and non-orphan boy students differed significantly on emotional intelligence. Non- Orphan boy students had better emotional intelligence than orphan boy students. Similarly, Orphan and non-orphan girl students were found to differ significantly on emotional intelligence and non-orphan girls' students have better emotional intelligence that orphan girls' students.

Father-absent girls showed more dependence on female adults and reported more feeling of insecurity than father-present girls (Boothroyd & Perrett, 2008). Orphanage reared boys are more hostile, alienated and had strong external locus of control than orphans' girls.

Ryff (1989) defined positive relations with others as warm, trusting interpersonal relations and strong feelings of empathy and affection. Orphans girls

who do not establish a supportive relationship with their care givers are unable to create new components and risk for poor psychological adjustment (Kodero, 2000).

Adolescents who live with their parents have more self-esteem, are more emotionally intelligent, and scored higher on overall psychological well-being and its sub-components (autonomy, trust, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance). Males of both group (orphanage and non-orphanage) are more resilient and scored higher on self-esteem than females (Bansal, 2019). The study indicated that orphan (female and male) scored low on personal growth, positive relations with others and self-acceptance. Orphan males scored low on emotional intelligence as compared to non-orphan males, whereas non-significant difference was found on emotional intelligence between orphan and non-orphan females (Bansal, 2019). A study conducted by Cuddy and Fiske (2004) revealed that males have high level of emotional intelligence than that of females as emotional intelligence primarily deals with managing and expressing once emotions as well as social skills.

A study conducted on gender differences in personality of institutionalized orphans, non-institutionalized orphans and non-orphan adolescents by Majeed, Khan, and Khan (2015). Findings revealed that there was a significant gender difference in dependency of institutionalized orphans showed that females have higher dependency as compared to males. There was also a significant gender difference in emotional unresponsiveness among non-orphan group showed that females are more emotionally unresponsive than males. There was a significant gender difference in emotional instability of institutionalized orphan group showing that females were more emotionally instable as compared to males. There was also a significant gender difference in negative world view of institutionalized orphan group showed that males have more negative world view than females.

A study by Naz and Kausar (2013) on 100 female adolescents with minor medical conditions were recruited from thee different hospitals. Parental Acceptance-Rejection Questionnaire (Rohner 2005), Personality Assessment Questionnaire (Rohner, 2005) and Centre for Epidemiological Studies Depression Scale (CES-D) were used to assess parental rejection, personality maladjustment and depressive

symptoms, respectively. Results revealed that parental rejection had significant positive correlation with personality maladjustment and depressive symptoms. Significant positive relationship was found between parental rejection, personality maladjustment and depressive symptoms in female adolescents.

Berndt (2004) found that early adolescent tends to engage in both positive and negative behaviors with their peer groups. Although having friends is essential to healthy psychological and social development, the quality of relationships, and the types of activities they engage in, is also important to consider when examining the personality development, health, adjustment, and well-being of young people. Ma and Huebner (2008) have argued that there are significant changes made in the organization of attachment systems during adolescence and that the effects of peers may overshadow adolescents' needs for parental involvement during this stage of life span. Due to which they tend to be more dependent on their parents.

The study was conducted by Nazir et al., (2015) on the relationship between big five personality traits & emotional intelligence and self-esteem among the college students. It was based on cross sectional survey research design. The convenience sample was used by including 170 female Students studying at Government College, Gujrat, Pakistan, degree program of 3rd year and 4th year. The study variables were measured using Big Five Inventory Scale, Emotional Intelligence scale and Self-esteem Scale. The findings of the study supported that significant negative correlation between personality traits, emotional intelligence and self-esteem, highly significant correlation between emotional intelligence and self-esteem for students studying in Government College.

The results found by Kafetsios and Nezlek (2002) on differences in emotional intelligence abilities between age and gender groups indicated that older participants scored higher on three out of four branches of EI (facilitation, understanding and management) and males scored higher than females on emotion perception and the experiential area. Juffer and Ijzendoorna (2007) found that orphan children show lower self-esteem than their non- orphan peers. Orphan children are hypothesized to be at risk of low self-esteem. Children with high self-esteem have a much closer relationship with their parents than do children with low self-esteem.

There is evidence suggesting that promoting emotional intelligence leads to less clinical symptomatology (Aradilla-Herrero, Gómez-Benito, & Tomás-Sábado, 2014; Balluerka et al. 2013), with results maintained up to 6-months after the intervention (Ruiz-Aranda et al. 2012). Several empirical studies have also demonstrated that adolescents who perceive themselves as having greater ability to understand and regulate their emotions seem to use more adaptive coping strategies (Davis & Humphrey, 2012). Other studies found that adolescents who are more capable of clearly discriminating feelings and regulating emotional states show lower levels of anxiety and depression (Fernandez-Berrocal et al. 2006; Bakker, Mavroveli, Petrides, & Rieffe, 2007) have greater life satisfaction (Extremera, Pena, & Rey, 2011) and show a better social functioning (Bakker, Mavroveli, Petrides, & Rieffe, 2007).

In conclusion, orphans who are deprived from parent love have high score on negative personality traits such as hostility, aggression, depression, low emotional control, and low self-esteem than non-orphans. They are found to have low emotional intelligence than non-orphan (Majeed, Khan, & Khan, 2015). Due to difference in gender socialization, female is supposed to submissive, well mannered, docile and repressive minded while the boys are supposed to be aggressive, independent and having high emotional intelligence. Female livings in institute (orphanages) are more at risk of negative self-esteem. They have low ability to cope with difficult situation that is why they depend more on others.

## Theoretical Perspective about Psychological Maladjustment, Emotional Intelligence, and Attachment Styles

There are several theories explaining the relationship between different psychological maladjustment, emotional intelligence, and attachment styles such as attachment theory given by Bowlby (1960, 1988). Bowlby was the first to suggest a model of bond between mother and child, and how it functions within this model. This bond helps the child who needs care to survive. Primarily, infant and mother are thought to have developed a coordinated relationship in which the infant's signals of distress or fear are noted by mother, who in turn, offers comfort and protection, as

well as "a secure base", whereby from which the infant can explore the environment (Colins, Cooper, & Shaver, 1998). Attachment research and theory predicts that securely attached adults will have a more organized, coherent or articulated, and positive sense of self (Mikulincer, 1995). Others are seen as basically trustworthy, and the self is viewed as lovable and competent.

Armsden and Greenberg (1987) hypothesized that "the internal working model of attachment figures may be tapped by assessing 1) the positive affective/cognitive experience of trust in the accessibility and responsiveness of attachment figures, and 2) the negative affective/cognitive experiences of anger and/or hopelessness resulting from unresponsive or inconsistently responsive attachment figures" (Armsden & Greenberg, 1987, p. 431). If attachment patterns are influenced by early childhood, it is easy to see how orphans are more likely to demonstrate anxious or avoidant attachment concerning any relationship they form thereafter being abandoned or given up in early childhood or infancy (Mikulincer, 1997; Mikulincer & Shaver, 2003).

Moreover, Armsden and Greenberg (1987) provided a set of rules for classifying parental and peer attachment styles. According to Armsden and Greenberg's (1987) classification criteria, individuals were assigned to the high security group (secure attachment) and to the low security group (insecure attachment). In other words, individuals who reported their close relationships as marked by high Trust and Communication and low Alienation scores were classified as high security individuals, while those who described their parent and peer relationships as characterized by low Trust and Communication and high Alienation scores were classed as low security individuals. Although such exploratory categorization efficiently distinguished individuals with secure or insecure parent and peer attachments during adolescence (Armsden & Greenberg, 1987; Rice, Fitzgerald, Whaley, & Gibbs, 1995), it did not distinguish among different types of insecure attachment.

In conclusion, the most significant factor influencing psychological adjustment in childhood seems to be family nurturing. Parental involvement is vital. Attachment to an adult is a key to psychological adjustment in children. Following

the death of parent, a child may show mood disorder. Researchers revealed that negative emotions of worry, anger, and self-hatred are weighing up in orphans. They feel angry and depressed (Marte, 2010). Parents can help their children to express their feelings through instructing, modeling and guiding them in applying the skills of emotional management. As a parent, helping children with their feelings can both help them feel better and reduce behavior problem. Children who are able to manage their emotions often experience more positive feedback from others and are more successful in everyday life (Bowlby & Ainsworth, 2013).

Secure attachment in childhood occurs when a caregiver is responsive to the needs of the child. This allows the child to explore the environment safe, and it develops confidence in its ability to interact with autonomous world, to face challenges, and regulate their own emotions (Mikulincer & Shaver, 2005; Mikulincer, Shaver, & Pereg, 2003).

In above theory, it is not clearly explained that which type of psychological maladjustment leads to attachment style, and how it is linked with emotional intelligence of adolescence. In this study, IPAR-theory is used in order to overcome the gap. The theory explained how different types of psychological maladjustments 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 (IPAR-Theory) Personality Sub-theory. Interpersonal acceptance-rejection theory (IPAR-Theory) is an evidence-based theory of socialization and lifespan development that aims to predict and explain major consequences and other correlates of interpersonal acceptance and rejection worldwide (Rohner, 1986, 2004). Historically (beginning about 1960), the theory focused mostly on the effects of perceived parental acceptance-rejection in childhood and extending into adulthood. At that time, the theory was called "parental acceptance-rejection theory" (IPAR-Theory).

But by 2000, the theory had broadened to include intimate adult relationships and other significant interpersonal relationships throughout the lifespan. This shift in emphasis in 2014 led to the transition of the theory and its name from IPAR-Theory

to its current designation: Interpersonal acceptance-rejection theory (IPAR-Theory). Despite this change in name and emphasis, significant portions of the theory continue to feature the effects, causes, and other correlates of children's perceptions of parental acceptance/rejection and of adults' remembrances of parental acceptance-rejection in childhood.

IPART-Theory's personality sub-theory attempts to predict and explain major personality or psychological especially mental health-related consequences of perceived interpersonal acceptance and rejection. IPAR-Theory posits that perceived parental acceptance is fundamentally important for positive psychological adjustment (Rohner, 1990). However, there is cross-cultural similarity in the way children (either as adults remembering their childhood or correspond when they do not perceive or remember their parents as being accepting and warm (Rohner & Khaleque, 2005). The need for positive response includes an emotional wish, desire, or yearning (whether consciously recognized or not) for comfort, support, care, concern, nurturance, and the like. In adulthood, the need becomes more complex and differentiated to include the wish (consciously recognized or unrecognized) for positive regard from people with whom one has an affectional bond of attachment. People who can best satisfy these needs (warm, care, and, love) typically are best parents for their infants and children (Rohner et al., 2016).

In IPAR-Theory, a significant other is any person who is uniquely important to the individual, and who is interchangeable with no one else (Rohner, 2005). In this sense, parents and intimate partners, for example, are generally significant others. But these people also tend to have one additional quality not shared by most significant others. That is, individuals' sense of emotional security and comfort tends to be dependent on the quality of their relationship with their significant others. Because of that fact, these people are usually the kind of significant others called attachment figures in both IPAR-Theory (Rohner, 2005) and attachment theory (Ainsworth, Blehar, Waters, & Wall, 1989; Bowlby, 1988).

According to personality sub-theory by Rohner et al., (2016), parental rejection as well as rejection by other attachment figures also leads to other psychological maladjustments, in addition to dependence. These include hostility, aggression,

passive aggression, or psychological problems with the management of hostility and aggression; emotional unresponsiveness; immature dependence or defensive independence depending on the form, frequency, duration, and intensity of perceived rejection and parental control; impaired self-esteem; impaired self-adequacy; emotional instability; and negative worldview.

IPAR-Theory's personality sub-theory postulates that the emotional need for positive response from significant others plays important role in the development of personality or psychological adjustment, as attachment figures are powerful and culturally invariant motivator. When children do not get this need satisfied adequately by their major caregivers or adults do not get this need met by their attachment figure, they are predisposed to respond both emotionally and behaviorally in specific ways. According to the sub-theory, individuals who feel rejected by significant others are likely to be anxious and insecure. In an attempt to allay these feelings and to satisfy their needs, persons who feel rejected often increase their bids for positive responses, but only up to a point. That is, they tend to become more dependent and suffer emotionally and psychologically (Baker, 2005). Such individual also shows low trust and communication and high alienated attachment styles.

Theoretically, these dispositions are expected to emerge because of the intense psychological pain produced by perceived rejection by others. More specifically, beyond a certain point that varies from individual to individual, children and adults who experience significant rejection are likely to show different psychological maladjustments as they feel ever increasing anger, resentment, and other destructive emotions that may become intensely painful. As a result, many rejected persons close off emotionally in an effort to protect themselves from the hurt of further rejection. That is, they become less emotionally responsive. In doing so they often have problems being able or willing to express love, emotions, and knowing how to or even be capable of accepting it from others (Rohner et al., 2016).

In conclusion, according to IPAR-Theory; persons who are rejected by their beloved one or those who lost them, are likely to develop maladjustments as they depend on others, they tend to be less emotionally stable than people who feel accepted. Children and adults feel their attachment figures do not love them, they are

likely to feel that they are unlovable, perhaps even unworthy of being loved, they view that world, interpersonal relationships, and the very nature of human existence as being untrustworthy, hostile, unfriendly, emotionally unsafe, threatening, or dangerous in other ways. 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; Rohner, 1960, 1986), they start blaming themselves. All of these elements also affect their emotions as they cannot appraise and understand ones as well as other's emotion (Veneziano, 2000), due to which they face trouble in handling close relationship and form alienated attachment (Thiele, 2007).

IPART Theory and Emotional intelligence. According to IPART-Theory, children and adults who experience significant rejection are likely to feel ever increasing anger, resentment, and other destructive emotions that may become intensely painful. As a result, many rejected persons close off emotionally in an effort to protect themselves from the hurt of further rejection. That is, they become less emotionally responsive. In doing so they often have problems being able or willing to express love and knowing how to or even be capable of accepting it from others. They are unable to control their emotions, even sometime they cannot understand about their emotions (Rohner et al., 2016).

Because of this, people who feel rejected often have problems with emotion regulation. That is, they tend to be less emotionally stable than people who feel accepted. They often become emotionally upset perhaps tearful or angry when confronted with stressful situations that accepted (loved) people are able to handle with greater emotional equanimity. All these acutely painful feelings associated with perceived rejection tend to induce children and adults to develop a negative worldview. That is, according to IPARTheory, rejected persons are likely to develop a view of the world of life, interpersonal relationships, and the very nature of human existence as being untrustworthy, hostile, unfriendly, emotionally unsafe, threatening, or dangerous in other ways. 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; Rohner, 1975, 1986).

Low emotional intelligence results in the interpersonal relational difficulties, low self-esteem, poor impulse control, loneliness, suicidal thoughts, drug, stress, depression, anxiety, aggressive behaviors and alcohol usage (Alcaide, Berrocal, & Extremera, 2006). Positivity and optimism ("Mood," Bar-On, 2006), strengthen self-concept by effectively managing stressful situations, has also been explored (Gázquez Linares, Jurado, & Pérez-Fuentes, 2019).

Adequate coping strategies and conflict resolution ("Adaptability"; Bar-On, 2006) are related to good self-esteem (Yildirim et al., 2017); the ability to be aware of one's own thoughts and feelings ("Intrapersonal"; Bar-On, 2006) keeps individuals from becoming absorbed in negative or critical beliefs, thereby improving their self-esteem (Bajaj et al., 2016); likewise, emotional regulation helps counteract the negative impact of stressful situations ("Stress management"; Bar-On, 2006), promoting positive affect in emotional self-evaluation (Park & Dhandra, 2017) and they have strong trust on their partner, and have secure attachment styles ("Intrapersonal"; Bar-On, 2006).

In conclusion, individual who are rejected by their parents cannot easily understand, express and manage emotions. As orphan lost their parents, they are usually emotionally deprived, financially challenged and desperate. 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 during childhood, brings with its depressive thoughts and feelings among which are sadness, anger and guilt (Vijayan, 2016). Children living in conditions of maternal deprivation (in the child's home), detects a number of violations of their personality development (Vijayan, & Rajan. 2016); maladjustment, psychomotor retardation, poor adaptation in a peer group, low level of intellectual curiosity (Abdullah, Elias, Mahyuddin, & Uli, 2009); low emotional intelligence (Busi, Gwalem, & Samzungi, 2009); social and cognitive activity and, hyper excitability or; on the contrary, unsecure attachment styles (Bar-on, 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 do without parental love and affection. According Erwintri (2012), the orphanage is a social welfare institution established by the government intentionally or people responsible for doing service, sponsorship, and eradication of neglected children and has a function as a substitute for the role of parents in meeting the mental and social needs of foster children so that they have ample opportunity for physical growth and develop thought until he reaches a mature level of maturity and be able to carry out their role as individuals and citizens in public life.

When children lose a parent or are separated from their home or community, it is very difficult for them to adapt and adjust in their new environment and also for fulfillment of their needs. These orphans cannot be emotionally healthy until and unless they do not adjust in to a new community, and also when children are emotionally healthy, they have energy to play and learn. It is not easy for them to trust enough to form good relationships with others, without a model and guidance from their parents and thus, suffering from psychological maladjustment.

Aside from the fact that orphans receive enough care, needs and can adapt during their stay in the orphanage, this research will also attempt to highlights the emotional intelligence and attachment styles of children living in orphanage. This study will help us in evaluating the lived experiences of children in a selected orphanage and how they can cope with their problems and difficulties during their stay at the orphanage.

A great majority of such research done till date, is in western countries. 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 with regard to the vast area of maladjustments which remains unprobed to a great extent. It is in this context that the present study is conceived so as to gain an insight into the psychological maladjustment, emotional intelligence and attachment styles among orphans and non-orphans.

Present research will help in identifying the difficulties and challenges faced by the orphans in developing attachment with others, regulating their emotions and how their personality differs from normal children. On the basis of this identification, rehabilitation plan and counseling session can be planned for these orphans for making them emotionally healthy, developing healthy attachment patterns and stable personalities.

#### Chapter 2

#### RESEARCH DESIGN

The research was designed in a way that it comprised of three studies. Qualitative study was conducted in Study 1 to explore and understand variables that were psychological maladjustment, emotional intelligence and attachment styles of both orphan and non-orphan adolescents. For this purpose, interviews were conducted. After finalizing the constructs of the study, translation, validation and Psychometric properties of research instruments were done in study 2. Study 3 was comprised of main study in which factorial validity of research instruments, correlation, regression, and others analysis were done on study variables.

#### **Study 1: Interviews**

Main objective of the study was to explore lived experiences in terms of psychological maladjustment, emotional intelligence, and attachments styles of orphans and non-orphans' adolescents. This was done by eliciting the personal knowledge and experience of orphans and non-orphans' adolescents. For this purpose, eight interviews were conducted from two different groups (orphans vs non-orphans). Each group consisted of four participants. Interviews were conducted because it provides a platform for carefully planned discussion that was designed to obtain perceptions, feelings, subjective phenomenology, opinions and ideas of orphans and non-orphans regarding the concerned topic. It is also a quick, easy, practical way to have an overview about the topic with target population.

**Procedure.** An official letter from National Institute of Psychology, Quaid-e-Azam university was submitted in different orphanages and institutes in Islamabad and Rawalpindi to get permission for the study. A copy of letter was kept to show any concerned body and participants (See Appendix A). Participants who were interactive enough were consulted to ensure the quality of data. The purpose of and eligibility criteria to participate in the study were explained to the organization head and participants in order to maintain rapport building. After obtaining full approval

from the orphanage officials and institutes; to conduct the study, the children, convenient date, time and place of the meeting were set based on their preferences.

Data collection took place from 6 December to 27 December, 2019. Data were collected through unstructured phenomenological in-depth interviews in this study, because the researcher intended to allow the participants to use their own words and develop their own thoughts. Allowing participants to 'speak their minds' is a good way of discovering detail about complex issues (Denscombe, 2014).

Before staring the interview, Participants were asked permission to record the interview, and they were told that their recording will be used for the purpose of research, and one of the orphans did not allow for recording. While other interviews were recorded. The opening question, 'Can you tell me about your lived experiences of living in this institute' yielded spontaneous and rich descriptions of the phenomenon. The remainder of the interview proceeded by following up and exploring dimensions introduced in the stories told in response to the initial question posed.

Participants may have felt a greater degree of comfort sharing their lived experiences and meaning making with the knowledge that they were protected from identification through their anonymity. Data gathering continued until the data reached saturation after eight interviews, which meant that the researcher was obtaining the same information from subsequent participants; therefore, there was little point in continuing with the data collection (Jolley, 2010). Field notes provided a detailed record of all interviews, and enhanced the richness of the data gathered. At the end, participants were thanked for his/her quality time and cooperation. Each interview took almost one hour.

**Interview protocol**. The researcher prepared a semi-structured interview protocol. In the first step of the study, an interview guideline was prepared with the help of existing literature and subject expert on the topic. The interview guide had brief statements and probing questions regarding objectives of the interview. The questions in the interview were designed to elicit information regarding participants'

experiences of psychological maladjustment, emotional intelligence, and attachment styles (see Appendix B). The interview guide provides topics or subjects' areas within which the interviewer is free to explore, probe, and ask questions that will elucidate and illuminate that particular subject. Thus, the interviewer remains free to build a conversation within a particular area, to word questions spontaneously, and to establish a conversation style but with focus on a particular subject that has been predetermined. Sequence of statements was from general to specific.

Some of the questions were specific to group (Orphan). Such as

The details of interviews are as follows.

**Group 1 (Orphans).** This group aimed at collection of information related to experience of orphans in orphanages.

Sample. The group 1 included four interviewees (Boys=2, Girls=2). They were selected from different orphanages (Pakistan Sweet Home and Edhi Centre) from Islamabad and Rawalpindi. Two participants were 14 years (1 boy and 1 girl) and other two were 18 years 1 boy and 1 girl). The educational qualification for all the participants was ranged from primary to intermediate. All the participants were approached individually and shared their lived experiences after rapport building.

**Table 1**General Demographic Characteristics of Orphan (N=4)

Participants	Age	Gender	Class	Parents alive/death	Reason of T	Time spend in
	(in				parent's c	orphanage
	Years)				death	
P1	14	Boy	$7^{\text{th}}$	Both parents died	Road accident	7 years
P2	14	Girl	Illiterate	Mother died	Cancer	9 years
P3	18	Boy	9 <sup>th</sup>	Both parents died	Road accident	9 years
P4	18	Girl	5 <sup>th</sup>	Both parents died	Murder(father) 13 years	
					Heart-attack (Moth	ner) 9 years

Brief biographical details of the participants. The participants are identified as P1, P2, P3, and P4. P1 was a 14-year-old boy in Grade 7. He lost both parents. He could not remember the years when his parents died and how old he was when they died because it happened in his early childhood. P2 was not interested in study, a girl of 14 years. She lost her mother after a long illness. Her mother died in the hospital where she was admitted in 2011. She did not know about her father as her parents were separated before her birth. She has been living with her maternal grandmother since early childhood in orphanage. P3 was in Grade 9<sup>th</sup>. He was a boy of 18 years. He lost his father who was sick for a long time. Mother died at the time of delivery. P4 was in Grade 5th. She was a girl of 18 years. P4 lost her father in the same year she started Grade 1 sometime in 2007. She was the only girl at home. She did not study after grade 5. She was living with her mother, but her mother also died because of heart attack.

Starting from the introduction of the topic and general orientation of the study, questions were asked following guidelines. Questions related to psychological maladjustment, emotional intelligence and attachment styles were asked from the interviewee covering the important objectives of the study. Each session took an average of 1 hour.

**Results.** Data collected from each interviewee was reviewed and identified responses were reviewed for content analysis. Results depict the prevalence of psychological maladjustment, their emotional intelligence and attachment styles. The same responses given by all four participants show validating evidences related to presence of study variables among participants. Whereas, responses given by one or two participants show fewer validating evidences related to presence of various aspects of study variables.

Following information was gained by the first group of interviewees (orphans) and are given below;

**Dependence.** They feel helpless and afraid because they have been prepared inadequately to cope with these responsibilities and depend up on others. All participants said that they cannot make their own decisions. One of them described his feelings as follows;

'I looked all around for help but there was no one to help because all of them have more or less similar kind of suffering. They are alone like me without help and afraid. Most days after the death of my parents I just didn't know what to do.' (Interview with participant 3, December 2019)

The participants described feeling overwhelmed by their life circumstances because they became orphans and they said that they were bewildered, shocked, and completely overwhelmed by the enormity of their completely new reality as orphans. The following quotations encapsulate the feelings experienced in this regard:

"After my mother died, I was overwhelmed because every day was difficult for me. I didn't know where to get food, how to wash my clothes and how to cook" (Interview with participant 4, December 2019).

"It makes me feel uncomfortable in getting close to other. Yes, of course I want relationships in my life but for me, it is difficult to trust others completely or depend upon them. I am afraid that if I allow myself to become too close to others and share

my emotions and feelings with them, I will be hurt " (Interview with participant 1, December 2019).

**Negative Worldview.** The participants reported that the world is mortal and scary. The world is a dangerous place. One of the participants stated that:

"...the world is confused tormented and deluded forever. Everything is decaying. The world is full of suffering...." (Interview with participant 4, December 2019).

*Lack of Trust.* When questions were asked about trust, one of the participants responded in the following way:

"People are not good. People left you alone or everyone left you. People are unfair. I am living alone. It became more difficult for me to remain vulnerable and trusting others..." (Interview with participant 2, December 2019)

They also reported that they could not get opportunity to form secure attachments with their parents. Out of four, three participants said that they have low trust on people. They have friends but they do not have close friends because they cannot easily trust on others as they have seen painful events in their life, which have profound impact on their lives.

"Perhaps the kindest response to that is to point out that other people are no more trustworthy than you are, mainly because they are constantly changing and are not just one person, but rather lots of different people; some are those people you can trust while they are there, but they will soon be replaced by somebody completely untrustworthy" (Interview with participant 3, December 2019).

**Negative Self-adequacy.** Being alone and isolated had led the orphaned adolescents to feel pity for themselves. Three participants reported that they do not encourage themselves for doing something. Having low motivational level, they are not bold enough.

"I have no motivation to do anything...felt exhausted all the time, or scared to get out of bed to face the day.... Not have enough courage to face any more difficulty in my life..." (Interview with participant 1, December 2019).

**Negative Self-esteem.** Out of four, three participants reported that they had low self-confidence to succeed in their life goals. They think that they could not have desired inputs and capacities to achieve their goals confidently by comparing themselves with others. A 14 years old girl who lived for 9 years in the orphanage described her confidence as follows;

"...I do not assure myself. What makes me have no self-confidence is just because I have nothing, so I feel insecure. This affected my school performance since I usually fear to communicate with my class mates and teachers..."

One of the boys said that he feels inferior from others. He also has lack of confidence, and feel unlovable and incompetent. Whereas, two reported that they if they get opportunity, they will be successful.

**Alienation.** When the questions were asked about their friends and gathering, two reported that they spend most of their time alone and have friends but they do not want to share their personal matters with them. One said that he does not want to leave orphanage.

"I like it here. I can be closer with friends (mentions the name). I like to stay in orphanage because I have a lot of friends, and it is fun while playing and hanging out with friends.... because I feel comfortable if closed with them" (interview P2, December, 2019).

Life experience in the orphanage had taught them about the meaning of sharing and empathy. So, children who receive care, love affection, stimulation, and support in early childhood, they have a good foundation for growth and development, are more able to cope with difficulties and challenges, are better at overcoming disadvantages, and making positive contributions to the society.

**Hostility and Aggression.** Anger is a very powerful emotion. It is experienced when a person is 'extremely displeased, irritated, frustrated or enraged by injustice of some sort; it is to experience animosity towards, resentment, or to have a bad temper towards another person or object' (Roger, 2005).

When exposed to the adverse situations in life, the development of aggression is easily justified. However, all the participants experienced anger at some point after their parent's death, yet only one respondent claimed of developing higher level of aggression right after the death of his parent. When the frustration accumulates, it results into aggression. This had been a way practiced releasing negative energies. Participant I reported that:

'I became so angry when I had become an orphan, I hated it. I hated being called 'orphan'. It was like a burning feeling in me and all I wanted to do was to hit people. One day I was walking and I just kicked a stone all the way to the orphanage. It made me to feel better' (Interview with participant 1, December 2019).

**Perceiving emotions in self.** How participants recognize specific emotions when these occur is depicted here:

"I'm frustrated when I cannot reach my goal and I cannot do what I want to do. [When I am angry] my pulse goes little higher and it's getting on my mind, yeah. It's more in my mind" (Interview with participant 4, December 2019).

Managing emotions in self. One of the participants beliefs that she has a grasp over her emotions, "I'm always pretty in controls of my emotions. I feel them but I control them usually. I guess I don't want to show anger" (Interview with participant 2, December 2019).

**Emotional unresponsiveness.** When they were asked about emotions, how they express their emotion, they said that they cannot easily express their feelings. One of them reported that;

"I can understand the feelings of others, get happy for others and usually get worried for own successful life". (interview P2, December, 2019).

**Group 2 (Non-Orphans).** It aimed at collection of information related to experience of non-orphans.

Sample. The second group of interviewees was comprised of four (Boy=2, Girls=2) non-orphans. The sample of girls was collected from IMCG (PG), F-7/2 school Islamabad and both were 14 years old. Two boys were selected from Punjab group of college for boys Islamabad for interview. One was 16 and other was 18 years old. The educational qualification for all the participants was ranged from matriculation to intermediate. They were approached individually. After taking their consents they were selected. It also took thirty minutes to finish the interview. At the end of the session, they were fully thanked for their cooperation.

**Table 2**General Demographic Characteristics of Non-Orphan (N=4)

Participants	Age	Gender	Class	Parents
	(in years)			(alive/death)
P1	16	Boy	Intermediate	Alive
P2	14	Girl	Matric	Alive
P3	18	Boy	Intermediate	Alive
P4	15	Girl	Matric	Alive

**Results.** Following information was obtained from non-orphans.

*Independent.* Two participants reported that they can make their own decisions but they need assistance from their parents and whatever their parents want they will accept it. They feel protected and secure when they are with their parents. While other two reported following:

"I'm a very independent person, I have been since I was very young, and independence was reinforced. Today, I rely on my own judgement (although I'll ask advice if I have questions) and rarely take other people into consideration when making a decision that affects me "(Interview P3, December 2019)

"Sometimes, I think I'm overly independent; I hate to ask for help (but I do if I can't figure it out) and I don't want to be seen as "incompetent" if I can't do something myself" "(Interview P1, December 2019).

**Communication.** They have many friends. They are really social and friendly in nature. They have good communication skill to deal with another person.

"...enjoy having multiple friend groups from different circles so that I can spend time with different kinds of people instead of just friends with the same interests all the time "(Interview P2, December 2019).

*Trust and hope.* The participants said that they give importance to other people. They think that most people are good and trustworthy. It is easy for them to trust others but it also depends upon person and situation as well as.

"I get angry sometimes when things go wrong. I sometimes lose hope when past hardships repeat themselves repeatedly. However, I think this happens because there is yet something we are meant to learn. I also think these trials can make prosperous. This means, no matter how hard it gets, I know I can be an independent person" (Interview P1, December 2019)

**Self-esteem and self-adequacy.** Out of four participants, three reported that they appreciate their self- abilities and share their problems with friends and family. They encourage themselves for doing anything challenging. They are capable of doing anything because they are bold enough.

"Yes...I feel glad in accepting hard challenges in my life because I have confidence on them and also, I believe in myself, my skills and my abilities. I feel inspired to do my work and motivated to perform to the best of my abilities. My work makes me happy, and I feel confident in it! I work with pleasure and joy; and each day, I get more and more excited about the things I do!" (Interview P2, December 2019).

**Emotional stability.** When they were asked about their emotions, that they said that they can control their emotions easily and are expressive by nature.

"Being too emotional is good but everything has a limit, one who is too emotional and sentimental is criticized by everyone. But one who is emotional and strong who does not manage to break someone's emotion in any condition and stands on the values is praised by everyone else..." (Interview P3, December 2019).

**Attachment.** Two of them reported that they are closely attached with their parents. They find it hard to leave their close relatives or friends.

"I have a very good relationship with my dad, but not really a good one with my mom. My dad has always been really close to me. He acts like a friend, but he also is a parent figure. I confide in him and trust him. The relationship I have with him is very important and I do not know what I would do if I did not have it. My dad and our relationship are one of the best things about my life" (Interview P2, December 2019).

"I have a very good relationship with both my parents. We all spend quality time together. I enjoy spending time with my family. I think I have the best relationship with my mom. I have a very strong relationship with my dad, but I spend more time with my mom. Partly because my dad works for a lot of the day. I love both of my parents" (Interview P1, December 2019).

**Worldview.** They said that if they want to live happily in their life, they must be competitive. They reported that the world around them is full of fun and enjoyment. One of them described that in following:

"What being thankful means to me is to see everything as a gift from God. I see my very life as a gift from God, and I am so thankful to know Him. He has always provided for me with everything that I need so I never need to worry because he takes care of me. I am so thankful for my school, the teachers, and my close friends. I thank God for bringing me though all my 12 years of school. I thank God for the loving family I have" (Interview P2, December 2019).

*Hostility/aggression.* Two of them said that they do not get anxious. They are friendly. They could conceal their hostility. They said they could control their anger.

"I don't get mad easily. I just accept it for what it is and move on." (Interview P2, December 2019).

*Jealousy.* When they were asked about success of other, two of them reported that they get jealous on others success. They are not happy on others' success. They have sense of superiority. As some of them are dominating.

"I'm jealous when my best friend is having fun with other friends. That makes me angry with her and sometimes I don't talk to her because of it" (Interview P4, December 2019).

"I don't know why I get jealous of other people's success..."(Interview P3, December 2019).

**Discussion.** Eight interviews were conducted for the above-mentioned purpose with orphans and non-orphans. Most of the results revealed similar results such as low self-esteem, negative worldview, feeling of hopelessness and loneliness in orphans (Gilborn, Jagwe-Wadda, Kabumbuli, & Nyonyintono 2001; Chipunga & Bent-Goodlay, 2004). There is thus an urgent need to revise the existing resilience model of the orphanages to protect the expansion of problems among adolescents.

The finding shows that orphan adolescents orphan is more dependent on others as compared to non-orphans. They need guidance from others for making decision and cannot solve their problem by their own. These findings are consistent with the previous researches (Chuprova, 2007; Kanrnaukh, 2006; Mukhamedrakhimov, 2006; Shvets, 2011).

Being abandoned and lack of parental care have a divesting impact on orphan personality (Crenshaw & Garbarino, 2007). Due to trust related issues, they do not make strong bonds with others and limited social contact. As they are facing hard time in their lives, they are not bold enough for taking any kind of responsibility. The results are consistent with previous studies (Koltinova, 2013). The reasons behind this could be the strict orphanages rule of conduct, which limit social interaction, create

bad perception of people among the children, leading to lack of self-confidence and social skills. This signifies that healthy child development hinges greatly upon the continuity of good social relationships. Hence, programs focusing on socialization skills should target people in the community and care providers to promote the social development of orphan.

Previous researches indicated that orphan have low self-esteem and emotional intelligence (Farooqi & Intezar, 2009). Same results were revealed from interviews as orphans have high aims and goals but they felt themselves inferior from others whereas, non-orphan have confidence on their abilities. The results also show that orphan adolescents who had lost their parents or deprived of parent's love, affection and moral support has low emotional intelligence, which are consistent with research finding (Paul & Paul, 2017).

The participants from orphan group reported that they have short tempered and cannot control their aggression. The results are same with the finding of the study conducted by Savchenkho, Shugla, and Filinkova (2016), revealed that adolescents who live in institution are more apt to start destructive conflict, more hostile in nature and do not have good relationship with others. The reason could by that lack of acceptance by the parent, experience of rejection and loss of beloved one lead to the fact that the child perceives other people as opposed to him; feel anxiety when coming into contact. Such experience extends to the others and leads to frustration. Due to which child feels insecurity from others and get aggressive even on minor things.

The interviews conducted with orphans show that extreme negligence in infancy may results in lack of pre- attachment behavior (e.g., smiling, making eye contact, crying). They are often quiet in nature, cannot share their feelings with other and usually unresponsive in terms of emotions. Such behavior may place these children in risk for the development of attachment and they have passive style of interaction with others. The results are consistent with previous research findings (MacLean, 2003).

The results also show that orphans have more negative view about the world as they reported that world is mortal and scary, although they are surrounded by others in the children's home but they feel alone. They reported that leaving the orphanage is a hard transition for them in many facets of their life. They even did not have the simple preparation for life; did not know how to budget money or have a grasp of other life skills. They had no place to run because the relationships with other family members had not been developed. Whereas non-orphan views world around them is full of fun and enjoyment. The findings are consistent with previous researches (Cassidy, Jones & Shaver, 2013; Kazdin, 2000; Rohner et al., 2016)

In conclusion, Children in foster care are at a high risk of developing psychological maladjustment. Such children's experience cannot appraise and understand the emotion of others. They have more negative worldview. They depend upon others. They do not trust others easily. On the other hand, children who have parents have high self-esteem, high self-adequacy, they can understand other emotions but they view that the world is the place of competition. They are highly confident about their skills because of the parent support. Thus, orphans suffering from psychological maladjustment are enable to manage and express their emotions. Individuals with low emotional intelligence have insecure and alienated attachment with others. The findings of the interview are the basis for further exploration of the aforementioned phenomenon using standardized instruments. The findings of interviews determined that the instruments are standardized measure of psychological maladjustment, emotional intelligence and attachment styles of orphans and non-orphans.

# STUDY 2: TRANSLATION, VALIDATION AND PSYCHOMETRIC PROPERTIES OF REASERCH INSTRUMENTS

The main purpose of the present study was to translate and validate research instrument (BEIS-10) as well as to establish the psychometric properties of the research instruments. The present study involves two phases.

#### Phase 1: Translation and Validation of the Brief Emotional Intelligence Scale

The translation and validation of research instruments is of great significance for addressing cultural variability and establishing the cultural equivalence (Basssnett, 2011; Hung & Wakabayashi, 2014) the aim of phase 1 is to translate and establish construct validation of the research of the research instrument; Brief Emotional Intelligence Scale (BRIS-10) (Davies, Devonport, Kevin, Lane, & Scott, 2010).

**Objectives**. The main objectives of this study are as follows:

- 1. To translate the Brief Emotional Intelligence scale BEIS-10.
- **2.** To establish the cross-language validation of BEIS-10.

A brief description of instrument was as follows;

Brief Emotional Intelligence Scale (BEIS-10; [Kevin et al., 2010]). Emotional intelligence of the participants was measured by BEIS-10 (see Appendix). It is a multi-dimensional measure of emotional intelligence with a 5-point response scheme (1-strongly disagree; 5-strongly agree) and consists of 10 items. It covers five dimensions including Appraisal of own emotions, Appraisal of others' emotions, regulation of own emotions, regulation of others' emotions and utilization of emotions. Each subscale contains 2 items.

Brief Emotional Intelligence subscales are described as follows

- 1. Appraisal of Own Emotions. Score presents an individual's ability to recognize emotions in them self and to identify factors that lead to changes in emotions.
- **2.** *Appraisal of Others' Emotions.* It measures individual's ability to interpret emotions in others based on their verbal and visual cues.
- **3.** Regulation of Own Emotions. Represents an individual's perceptions of control over their emotions and their ability to regulate emotion through seeking out activities.
- **4.** *Regulation of Others' Emotions*. It is a representative of an individual's ability to promote positive feelings in others.
- **5.** *Utilization of Emotions.* It is relating to an individual's ability to utilize positive moods for problem solving.

Translation and validation of instrument involved three steps i.e. forward translation and back translation. The details of these steps are as under,

Step 1: forward translation. In order to attain greater confidence for creating parallel Urdu translated version of instrument, present study was sampled each sphere for forward translation. Six bilingual experts were approached for forward translation of BEIS-10. Two translators were English language experts (MPhil in English). Three bilingual experts were lecturer of psychology from IMCG (PG) F-7/2 College, and one was Ph.D. scholar in Quaid-e-Azam university (having knowledge of both source and target language). These translators fit in the criteria as described by Brislin (1980) who believed that translation should: (1) have a clear understanding language, (2) have a high probability of finding a readily available target equivalent so that he/she does not have use unfamiliar term, and (3) able to produce target language items readily understandable by the eventual set of respondents who are the part of the pilot and main study.

*Committee approach.* Next an expert panel was approached by the researcher. The goal in this step was to identify and resolve the inadequate expressions, concepts

of the translation. An expert panel of 3-5 individual is usually considered appropriate. For present study committee approach was done with 3 participants including a Ph.D. scholar, the supervisor of the study and the researcher herself, as the researcher was not the part of the translation phase. In this phase committee members critically analyzed each statement of every scale and selected the one, which conveyed the best meaning. Committee members also evaluated the translated items with reference to their context, grammar, and wording.

**Step II: back translation.** In step II the translated version mutually agreed upon by the panel, was back translated in to the source language as a check on initial translation and to identify the points of equivalence or difference between the two versions.

For this phase again 6 bilingual experts were approached who were not exposed to the original English items of the scale, were provided with Urdu translation of scale that has been obtained in step 1. They have to translate the items into English. Out of six bilinguals' three were lecturers in English, having six years teaching experience. Three were students of psychology at M.Phil. and Ph.D. level.

The back translation of the Urdu version and original scales were examined by the same committee. The committee observed that the back translation matched to a great extent with the original scales. Finally, the Urdu translated items arranged in the scale order given in the original scale.

**Step III. Cross language validation.** In this step validation process involved a comparison of Urdu translated version with original English version of the scale. So, the following procedure was carried out to assess the quality of Urdu translation and determine the empirical equivalence of the target script against the original version.

**Sample.** The sample for cross-language validation comprised of 60 adolescents from normal population (non-orphan) having proficiency on both Urdu and English languages.

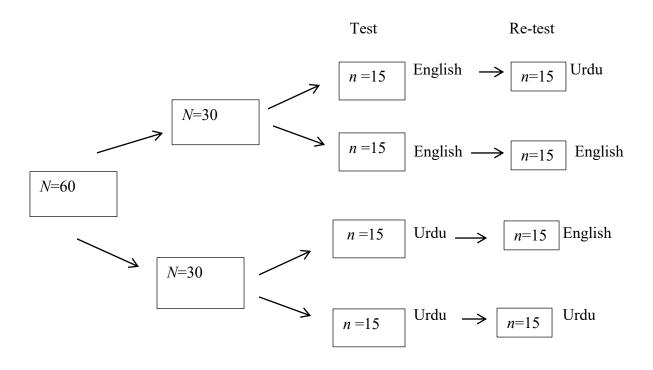


Figure 1. Representation of sample distribution for test-retest reliability (N = 60).

Figure 1 provides a representation of sample of non-orphan adolescents (N =60). The validation on non-orphans was carried out in such that majority of the participants aged 15-24 years, graduated, and have equal number of boys (n = 30) and girls (n = 30). The sample was divided into four equal groups of 15 participants each and distributed into English-Urdu, English-English, Urdu-English, and Urdu-Urdu conditions of test-retest. The equal number of participants was assigned randomly to each group.

The validation study was also carried on the sample (N = 30) of orphans having proficiency on Urdu language only. Most of the participants aged 15-20 years, had secondary level of education, and 15 were girls and 15 were boys. They were selected from different orphanages (Pakistan Sweet home, Al-Mustafa center, and Edhi home).

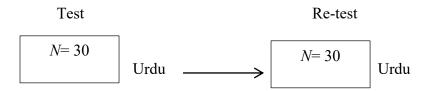


Figure 2. Representation of test-retest reliability on sample of orphans (N = 30).

The above figure provides a representation of sample (N = 30) of orphans for the Test-Retest Reliability into Urdu-Urdu test-retest condition as the proficiency of the sample was only on Urdu language.

**Procedure.** The procedure of the validation study is divided into two stages; the first on the non-orphans and the second on the orphans that forms the population of interest of current study. For the English test condition, the original version of the research instrument; Brief Emotional Intelligence scale (BEIS-10) was administered whereas for the Urdu test condition the translated version of the research instrument was administered. For orphans, only translated version Brief Emotional Intelligence scale (BEIS-10) was used because of inadequacy of English language.

The time interval between the test and re-test is of one week. In the English-Urdu test-retest condition, the original versions of instruments were administered on the participants (n = 15) and after the time interval same participants were re-tested by using the Urdu translated versions of the instruments. In the English-English test-retest condition, the original versions of instruments were administered on the participants (n = 15) and after one week a re-administration of same versions was carried out on the same participants. In the Urdu-English test-retest condition, the translated versions of instruments were administered on the participants (n = 15) and afterwards a re-test was done by administering original versions on the same participants. In the fourth condition; that is, Urdu-Urdu test-retest, the Urdu translated versions of instruments were administered on the participants (n = 15) and after the time interval of one-week same participants were re-tested.

The second stage of validation comprised of Urdu-Urdu test-retest condition with orphans (N=30). The participants were tested first by using the Urdu translated

versions of the research instruments and after the time period of one week a re-test was carried out on the same participants by using the same versions of the research instruments.

**Results.** The language validity and test-retest reliability of the research instrument was established by determining the correlation coefficients of the four groups of non-orphans (N=60) and of the group of orphans (N=30). The results obtained of them validation studies along with the test-retest scores of Brief emotional intelligence scale (BEIS; Davies, Devonport, Kevin, Lane, and Scott, 2010]) is given in the tables below:

**Table 3**Retest reliabilities of Urdu and English versions of BEIS-10 on Non-Orphans (N=60) and Orphan (N=30)

Non-C	Orphans (N=60)	)			
GP. I	GP. II	GP. III	GP. IV		
(EU)	(EE)	(UE)	(UU)		
(n=15)	(n=15)	(n=15)	(n=15)		
elligent .57*	.64**	.50**	.88**		
		Orphan			
		(N=30)			
$\overline{GP}$					
nt scale			.81**		
	GP. I (EU) (n=15)	GP. I GP. II (EU) (EE) (n=15) (n=15) elligent .57* .64**	(EU) (EE) (UE) (n=15) (n=15) (n=15) elligent .57* .64** .50**  O (N=30) GP. I		

Note: Group; EE = English-English; EU = English-Urdu; UE = Urdu-English; UU = Urdu-Urdu, \*\*p < .01.

Table 3 shows that test-retest correlations of the four groups; English-English (EE), English-Urdu (EU), Urdu-English (UE), and Urdu-Urdu (UU), are positive and significant in nature. Values demonstrated that of the four groups, the highest correlation coefficients are observed for the Urdu-Urdu (UU) group; such that correlation coefficient of total scale  $\alpha = .88$  (p < .01). This high correlation coefficient indicates that the test-retest scores for Urdu-Urdu (UU) group are highly correlated which might indicate that as compared to original English version the translated Urdu

version was found to have a better comprehension. The results overall demonstrated evidence of cross language validity for Brief Emotional Intelligent Scale.

Whereas correlation coefficients for the Urdu-Urdu test-retest condition on the sample (N=30) of orphans is  $\alpha = .81$  (p < .01). The values demonstrated the positive and significant nature of correlation between the scores. The results thus provide evidence for the language validity of translated Urdu version of for Brief Emotional Intelligent Scale (BEIS) on sample of interest of current study; that is Orphan.

**Discussion.** Orphan is a unique sample which is comprised of children having one or no parents. Instruments for data collection are of great importance in order to collect meaningful information from orphan. Despite the selection of valid and reliable instruments other important issue is the administration of these instruments especially if the instruments are developed in any foreign country. This difference often lies in the language of the instrument as it is different from the native language. Cultural difference often played a great role as it effects the contextual meanings of the statements

Orphans are reported to be either illiterate or with low educational level and facilities (Filinkova, Savchenko, & Shulga, 2016; Hussain, 2017). Due to all these issues, it was not possible to administer English version of these instruments on orphan as they are much familiar with this language. Urdu and other regional languages were mode of communication at their home or institute where they lived. So, it was decided to translate and adapt English version of the scales into Urdu version. So, in the present study, independent back translation and committee approach was done but it was important to establish the cross-language validity of the instrument. The translation was carried out by using forward-back translation approach (Brislin, 1976, 1980; Van de Vijver & Hambleton, 1996). The translations help to make up for the culture and language barrier that might exist between two cultures; one in which the measure or instrument is originally developed with the one in which it has to be administered. The translation process helps to obtain reliable data and systematic analyses of the measure across variable culture (Hung & Wakabayashi, 2014).

If the scores on an instrument in test-retest administration are strongly related to each other then it indicates the stability of the construct measured by the instrument and also strong test-retest reliability. In the present study, BEIS-10 has been translated and it was important to establish test-retest reliability before using the instrument in the main study. To see the empirical equivalence, English-Urdu, English-English, Urdu-English, and Urdu-Urdu was administered on non-orphans whereas Urdu-Urdu on orphans. While translating the scale, two issues were very common. Initially, some forward translation does retain the scenario of the situation but were unable to grasp in depth meanings or detail of the situation like "I use good moods" was initially translated back as "I am in good or positive mood" or "I arrange events others enjoy" was translated into "I organize such events from which others people can enjoy". Such issues were addressed and fixed by repeating the whole process again with new translates both in forward and backward translations.

Second issue on the other hand is much related to use of language in our daily life and expressional difference. Reason of such difference is that English is not our mother language due to which people of Pakistan usually do not use perfect or grammatically appropriate English language in daily routine life. So simple and causal expression were preferred for example word "generally" was changed into usually or often and "seek out" was changed into searching or finding out.

After translation procedure, test-retest reliabilities were found, which demonstrated that the instruments possess high consistency of scores over time such that the highest correlation was observed for Urdu-Urdu test-retest condition both for orphan and non-orphan. This might evidence that comprehension for Urdu translated versions is as good for our culture as English original versions.

Conclusion. The research instrument has been translated and validated for non-orphans as well as orphans' adolescents. age, educational level and cultural concerns were given priority in the adapting and translating procedure. Construct validity and adapted versions of scales was planned to be done in the main study through CFA (Further details are in the relevant chapter). After satisfying all the standards of translation, Urdu version of the scales were developed and finalized to be used in

pilot study. The test-retest reliabilities were also calculated and observed to be highly correlated for the Urdu-Urdu test-retest condition. This indicated that the translated Urdu version of the instruments possess a good reliability across the orphan and non-orphan adolescents. Then the instrument was ready for the pilot study.

## Phase II. Establishing Construct Validity of Translated Instrument and Psychometric Properties of the Instruments

The study was planned to achieve the following objectives;

- 1. To explore the factor structure of Brief Emotional Intelligence scale (BEIS-10).
- 2. To establish the psychometric properties of the Personality Assessment Questionnaire (PAQ) developed by Rohner and Khaleque (2005) and translated by Naz and Kausar (2011), Brief Emotional Intelligence scale (BEIS-10) developed by Davies, Devonport, Kevin, Lane, and Scott (2010), and Inventory of Parent and Peer Attachment (IPPA) developed revised by Armsden and Greenberg (2009) and translated by Zafar (2009).
- 3. To find the relationship between variables (psychological maladjustment, emotional intelligence, and attachment styles) among orphan and non-orphans adolescents.

### Exploring Factors of BEIS-10 through exploratory factor analysis (EFA).

The main purpose of this was to explore the factor structure of Brief Emotional Intelligent Scale (BEIS-10) Questionnaire –Urdu translation which are measuring emotion and feelings of individual. The EFA help verify whether the existence of the construct is same for Pakistani cultural context as in the Western one and to find any indigenous factor involve with respect to the sample of interest, which is orphan. EFA is found to be paramount importance when the scale developed in one culture to be used another culture around the globe. This would help to address the possible cultural differences and to validate the research instrument cross-culturally (Matusmoto & Van de Vijver, 2010). Another underlying importance of factor structuring is that when a scale is translated from the language of its origin to another regional language where a scale is to be used, for the purpose of making it more comprehend able, exploring the underlying factors become essential so as to identify the variation in already existing factors of the scale or either the scale can be used as

unidimensional (Haig, 2018). The third main reason which highlight the significance of EFA for the current study is that sample of the study is comprised of a special population that is, orphan adolescents, so there is possibility of existence of some indigenous factors being associated with the sample of the study (Henson & Roberts, 2006).

**Sample.** 60 orphans (30 boys, 30 girls) adolescents ranging from age 12-22 years old (M =16.03, SD= 4.21) were taken from Edhi home, Pakistan Sweet home and Al-Mustafa center. On the other hand, 60 non orphan adolescents (30 boys, 30 girls) selected from different Government institute of Islamabad and Rawalpindi. Their age ranged between 12-22 years (M =16.14, SD= 3.62)

**Table 4**Demographic Characteristics of the Sample for Exploratory Factor Analysis (N=120)

Variables	Variables		an (N=60)	Non orpha	an (N=60)
		Frequer	ncy %	Frequency	/ %
Age	12-14	10	17	10	17
	15-18	32	53	31	50
	19-22	18	30	19	31
Education	Illiterate	9	15	7	11.6
	Primary	17	28	17	28
	Secondary	19	31.6	20	33
	Intermediate	9	15	9	15
	Bachelors	6	10	7	11.6

Table 4 shows that majority of orphans and non-orphan were 15-18 years old adolescents having education secondary level.

**Procedure.** In order to carry out the present study, Participants were divided in to two groups' i.e. orphans vs non-orphans. Data from non-orphans' participants were collected from different colleges in Islamabad and Rawalpindi. Permission was

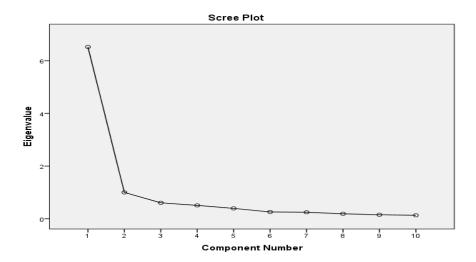
taken from the Head of selected orphanages. Participants were informed about the objectives of the study and their consent was taken before proceeding. Participants were required to give their responses honestly and accurately. They were asked to give responses to all the items of the scales. After collecting the data statistical analysis was done using SPSS 21 version.

**Results.** The factorial structure of Brief Emotional Intelligent Scale (BEIS-10) was examined with the help of exploratory factor analysis (EFA) technique. Bartlett's test of specificity was significant ( $\chi^2$  (245) =1654.25, p=.000) which demonstrates that the items possess adequate common variance and Kaiser-Meyer-Olkin Measure (KMO) of sample adequacy was .82 which is close thus suggesting that data set is adequate for the factor structuring (Field, 2013). Principal component analysis (PCA) is the extraction method for factor analysis resulting in unifactorial structure. Factor loading obtained as a result of EFA on 10 items of BEIS-Urdu are given as follows:

**Table 5**Factor Loadings for Brief Emotional Intelligent Scale-Urdu (BEIS-10) through Principal Component Analysis (N=120)

Items	Factor
	loadings
1	.71
2	.72
3	.86
4	.76
5	.74
6	.64
7	.82
8	.84
9	.56
10	.78
Eigen values	6.728
% of Variance	67.28

Table 5 indicates that all the 10 items have good factor loadings (<.56). Eigen values represent how much variance is explained in terms of average original variable; Eigen value of 1.0 means that a factor accounts for as much of the variance as the average original variable. Table 5 shows that above scale constitutes only one factor that has an Eigen value of 6.728 and contribute in explaining 67.28 % of the total variance. The scree plot was also obtained to determine the number of factors contributing in maximum variance.



The above scree plot indicates that the maximum variance is explained by one component as lying above the point of inflexion. The reliability estimates for the BEIS-10 was also made which indicate that the scale is reliable in nature ( $\alpha = .80$ ).

**Psychometric Properties of Research Instruments.** Three instruments were used in the present study.

- i. Personality Assessment Questionnaire (PAQ).
- ii. Brief Emotional Intelligence scale (BEIS-10).
- iii. Inventory of Parent and Peer Attachment (IPPA).

Personality Assessment Questionnaire (PAQ). The Personality Assessment Questionnaire is a self-report questionnaire designed in 1971 to assess individuals' perceptions of themselves with respect to the seven personality dispositions. Collectively the seven PAQ scales represent a measure of the respondents' overall psychological adjustment. This is a form of adjustment or maladjustment predicted in PART-Theory to be universally associated with the experience of parental

acceptance-rejection, and with the experience of acceptance-rejection by attachment figures in other relationships throughout life (Rohner & Khaleque, 2005).

Two versions of the PAQ are available: (i) The Adult PAQ is used by adolescents and adults, and asks them to reflect on their own personality dispositions. The Original adult version scale consists of 63 items whereas short version (Rohner & Khaleque, 2005) consists of 42 items, which assess adolescents' perceptions of themselves with respect to seven personality dispositions. (ii) The Child PAQ is designed to be used with children from about seven through twelve years of age. It asks children to reflect on their personality dispositions. The child version contains 6 items per subscale for a total of 42 items.

Both versions of the questionnaire are written in the present tense and ask respondents to reflect on their true, not ideal, feelings about themselves. In the current research we administered the revised Adult PAQ, after having translated it into Urdu. It consists of seven 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. Collectively the seven PAQ scales constitute a composite measure of respondents' positive and negative personality traits.

Each sub scale consists of six items. Adult PAQ reliability coefficients (Alpha) range from 0.73 to 0.85 with a median reliability of 0.81. Participants was required to respond to the PAQ questions on a 4-point Likert scale. Responses ranged from almost always true to almost never true. The higher the score will on the PAQ, the higher will be the level of psychological maladjustment. PAQ was translated in Urdu through back translation by Naz and Kausar (2011) having Cronbach's alpha  $\alpha$  = .94. Total scores will be calculated by reversing item no 16, 10, 24, 38, 11, 25, 39, 19, 33, 20, 41, 14, 28, and 42, and then summing all items (Appendix G).

Urdu version of scale was used by Huassain, Kamrani, and Munaf (2012). The coefficient alpha of the scale was found to be  $\alpha = .964$  For subscales, namely, Hostility and Aggression, Dependence, Negative self-esteem, Negative Self-

adequacy, Emotional Unresponsiveness, Emotional instability and Negative Worldview it was found as, .81, .85, .82, .85, .80, .84 and .88, respectively.

Brief Emotional Intelligent Scale (BEIS-10). The original Emotional Intelligent scale (EIS) is a 33-item self-report instrument purported to measure an individual's perceptions of the extent to which s/he can appraise and regulate emotions in self and others, and utilize emotions for problem solving (Schutte et al., 1998). It was revised by Davies, Devonport, Kevin, Lane, and Scott (2010). The brief version of scale consists of 10 items. It is a method of measuring general Emotional Intelligence (EI). 5-point Likert scale (1-strongly disagree; 5-strongly agree) was used to measure adaptive interpersonal and intrapersonal emotional functioning. Davies et al., (2010) reported that confirmatory factor analysis supported a five-factor solution but the factors were highly correlated further providing support for a total EI score. Davies et al., (2010) also reported adequate internal consistency reliability (r = .87 to .90) and acceptable test-retest reliability (r= .78). Total scale scores will be calculated by summing all items (Appendix H).

The BEIS-10 is representative of an individual's self-reported emotional skills and abilities; it is hypothesized that the measure should demonstrate a degree of stability over time (Furnham, Mavroveli, & Petrides, 2007). Reliability coefficients of .83 were reported by Howell and Miller-Graff (2014) and .84 by Rizzo (2013).

Inventory of Parental and Peer Attachment Revised (IPPA-R). The IPPA is a self-report scale that measures adolescents' perceptions of their attachment to their parents and peers. The first version of this instrument was developed by Greenberg and colleagues (Greenberg, Seigel, & Leich, 1984) for adolescents from 12 to 19 years old. Based on Bowlby's attachment theory, the authors developed two unidimensional scales to assess the behavioral and affective/cognitive aspects of attachment to parents and peers. However, although the IPPA scores were correlated with self-esteem and life satisfaction, the unifactorial nature of the scale renders it inappropriate to assess the attachment construct.

For this reason, a few years later Armsden and Greenberg (1987) worked on the scale in order to develop a multidimensional measure. Particularly, the authors hypothesized that "the internal working model of attachment figures may be tapped by assessing 1) the positive affective/cognitive experience of trust in the accessibility and responsiveness of attachment figures, and 2) the negative affective/cognitive experiences of anger and/or hopelessness resulting from unresponsive or inconsistently responsive attachment figures" (Armsden & Greenberg, 1987, p. 431). Starting from these considerations, using a sample of 16-to-20-year-olds, Armsden and Greenberg developed two parallel versions of the IPPA. The parent version contained 28 items and the peer version contained 25. The items measure both a global score of security attachment and three dimensions of the attachment relationship: Trust, Communication and Alienation.

Indeed, the Cronbach's alpha for the subscales was shown to range from .72 to .92 and test-retest reliability was .93 for parent attachment and .86 for peer attachment. Moreover, the dimensions presented high inter-correlations, with the r value ranging from .70 to .76 for the parent version, and .40 to .76 for the peer version (Armsden & Greenberg, 1987).

The revised version (Mother, Father, and Peer Version) by Gullone and Robinson (2005) is comprised of 25 items in each of the mother, father, and peer sections, yielding three attachment scores. 5-point Likert scale is used ranging from "Almost Never or Never True" score as 1 to "Almost Always or Always True" score as 5 (Appendix I).

The IPPA-R is scored by reverse-scoring the items 4, 5, 9, 10, 11, 18, 22, 23 and then summing the response values in each section. A high score reflects a positive quality of attachment. For the revised version, internal reliabilities (Cronbach's alpha) were: Mother attachment, .87; Father Attachment, .89; Peer attachment, .92. The scale was translated in Urdu by Zafar (2009).

Urdu translated version of IPPA-R was used by Safdar and Zahrah (2016). Internal reliability (Cronbach's alpha) for mother attachment scale was  $\alpha = .77$ ,

 $\alpha$  = .75 for father attachment and  $\alpha$  = .75 for peer attachment. Moreover, Siddiqa (2017) reported internal consistency of Urdu version for IPPA Total was  $\alpha$ =.72, Peer Trust ( $\alpha$ =.69), Peer Communication ( $\alpha$ =.68), and Peer Alienation ( $\alpha$ =.52).

Furthermore, the internal consistency reliability estimates for the IPPA scales reported by Johnson (2010) were as follows: Mother Trust ( $\alpha$ =.90), Mother Communication ( $\alpha$ =.84), Mother Alienation ( $\alpha$ =.78), Father Trust ( $\alpha$ =.92), Father Communication ( $\alpha$ =.88), and Father Alienation ( $\alpha$ =.77). For the peer scales, Peer Trust ( $\alpha$ =.90), Peer Communication ( $\alpha$ =.91), and Peer Alienation ( $\alpha$ =.71).

**Demographic sheet.** Self-constructed tool was given to the participants in order to take personal demographic age; gender, number of siblings, birth order, detail about parents, grade, reason of parent's death, their age at the time of parent's death, time spends in orphanage and who are their guardians (Appendix C).

**Descriptive of the study variables.** The mean, standard deviation, coefficient of reliability, range, Skewness, and kurtosis of study variables is also determined and stated as below:

**Table 6**Descriptive statistics (number of items, alpha reliabilities, Mean, Standard deviation, range, Skewness and kurtosis) of Study Variables used in Pilot Study (N=120)

Variables	K	α	M	SD	R	ange	Kurtos	sis Skew
					Potenti	al Actual		
PAQ <sup>a</sup>	42	.81	114.4	5.76	42-168	71-124	-1.060	19
$HA^b$	6	.72	19.98	1.43	6-24	6-20	832	-1.3
Dep <sup>c</sup>	6	.78	15.72	1.21	6-24	10-21	-1.11	16
$NSE^d$	6	.77	15.62	1.58	6-24	9-23	-1.00	13
NSA <sup>e</sup>	6	.65	15.55	1.25	6-24	10-21	-1.22	08
EU <sup>f</sup>	6	.75	16.06	1.40	6-24	6-23	-1.03	21
$\mathrm{EI}^\mathrm{g}$	6	.69	15.83	1.02	6-24	9-22	437	16
$NWV^h$	6	.68	15.80	1.32	6-24	10-20	167	19
BEIS i	10	.80	33.65	3.25	10-50	14-50	301	.27
$IPPA^{j}$	25	.72	77.44	4.25	25-125	39-106	.639	24
TRUST	10	.70	31.11	1.23	10-50	11-41	.569	09
ALT k	7	.68	25.72	1.25	7-35	11-33	.661	15
$COM^l$	8	.68	20.61	1.38	8-40	10-29	413	.12

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 6 represents the alpha reliability of the total subscale of PAQ ( $\alpha$ = .81), BEIS-10 ( $\alpha$ = .80) and IPPA ( $\alpha$ = .72). The coefficients of PAQ ranged from .78 to .65, which indicates that items of all the subscales are internally consistent. The subscales of IPPA also ranged from .68-.70 indicates that these subscales are also internally consistent. Furthermore, the table 6 also showed the mean and standard deviation of the variables. The range, Skewness and kurtosis values explain the normal distribution of data.

Item-Total Correlation of the Personality Assessment Questionnaire Urdu-Version. Item-total correlation was carried out to find out the internal consistency and construct validity of the subscales of personality assessment questionnaire Urdu version.

**Table 7**Item Total Correlation of Subscales of the Personality Assessment Questionnaire(N=120)

Hostility an	nd aggression	Depender	ncy	Negative self-esteem		
Item no	r	Item no	r	Item no	r	
1	.76**	1	.72**	1	.90**	
2	.83**	2	.75**	2	.89**	
3	.67**	3	.74**	3	.77**	
4	.83**	4	.88**	4	.79**	
5	.79**	5	.66**	5	.80**	
6	.85**	6	.74**	6	.88**	
Negative sel	lf-adequacy	Emotional unre	esponsiveness	Emotional ins	stability	
Item no	r	Item no	r	Item no	r	
1	.70**	1	.70**	1	.73**	
2	.85**	2	.49**	2	.91**	

Item no	r	Item no	r	Item no	r
1	.70**	1	.70**	1	.73**
2	.85**	2	.49**	2	.91**
3	.81**	3	.73**	3	.88**
4	.87**	4	.78**	4	.87**
5	.84**	5	.87**	5	.76**
6	.76**	6	.76**	6	.85**

Negative W	orldview			
Item no	r			
1	.73**			
2	.68**			
3	.71**			
4	.71**			
5	.86**			
6	.75**			

<sup>\*\*</sup>p<0.1

Table 7 show the item total correlation of all the subscales of personality assessment Questionnaire-Urdu version, which indicates that all the subscales have significant positive item total correlation at P< .01 and correlation coefficient for all the subscales ranged from .66 to .91. The significant correlation coefficients of item total of subscales suggest satisfactory internal consistency and construct validity.

Item-Total Correlation of the Brief Emotional Intelligent Scale (BEIS-10) Urdu version. Item-total correlation was carried out to find out the internal consistency and construct validity of the subscales of brief emotional intelligent scale (BEIS-10) Urdu version.

**Table 8** *Item Total Correlation of Brief Emotional Intelligent Scale (N=120)* 

Item no	r	
1	.71**	
2	.82**	
3	.64**	
4	.65**	
5	.72**	
6	.63**	
7	.60**	
8	.72**	
9	.66**	
10	.85**	

<sup>\*\*</sup>p<0.1

Table 8 show the item total correlation of brief emotional intelligent Questionnaire-Urdu version, which indicates that all the items have significant positive item total correlation at P< .01 and correlation coefficient for all the items ranged from .63 to .85. The significant correlation coefficients of item total of scale suggest satisfactory internal consistency and construct validity.

Item-Total Correlation of the Inventory of Parental and Peer Attachment-Revised (IPPA-R) Urdu version. Item-total correlation was carried out to find out the internal consistency and construct validity of the subscales of Inventory of Parental and Peer Attachment-Revised (IPPA-R) Urdu version.

Table 9

Item Total Correlation of Subscales of the Inventory of Parental and Peer Attachment-Revised (IPPA-R) (N=120)

Trust		Alienation		Communication	
Item no	r	Item no	R	Item no	r
1	.65**	1	.67 **	1	.70**
2	.67**	2	.81**	2	.91**
3	.53**	3	.54**	3	.78**
4	.35**	4	.33**	4	.74**
5	.41**	5	.65**	5	.85**
6	.33**	6	.39**	6	.88**
7	.78**	7	.36**	7	.85**
8	.72**			8	.89**
9	.66**				
10	.85**				

\*\*p<0.1

Table 9 show the item total correlation of all the subscales of Inventory of Parental and Peer Attachment-Revised (IPPA-R)-Urdu version, which indicates that all the subscales have significant positive item total correlation at P< .01 and correlation coefficient for all the subscales ranged from .41 to .91. The significant correlation coefficients of item total of subscales suggest satisfactory internal consistency and construct validity.

**Inter-Scale Correlations**. The inter scale correlation coefficient of all the scales with each other and with the total have also been calculated (Table 10)

**Table 10** *Inter-scale correlation of PAQ, BEIS-10 and IPPA-R (N=120)* 

Variables	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
I. PAQ <sup>a</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-
II. HA <sup>b</sup>	.50**	-	-	-	-	-	-	-	-	-	-	-	-
III. Dep <sup>c</sup>	.23*	.45**	-	-	-	-	-	-	-	-	-	-	-
IV. NSE <sup>d</sup>	.35**	.65**	.76**	-	-	-	-	-	-	-	-	-	-
V. NSA <sup>e</sup>	.51**	.48**	.61**	.63**	-	-	-	-	-	-	-	-	-
VI. EU <sup>f</sup>	.38**	.19	.46**	.37**	.36**	-	-	-	-	-	-	-	-
VII. EI <sup>g</sup>	.72**	.73**	.36**	.61**	.74**	.60**	-	-	-	-	-	-	-
VIII. NWV <sup>h</sup>	.75**	.61**	.73**	.20*	.60**	.65**	.71**	-	-	-	-	-	-
IX. BEIS <sup>i</sup>	51**	75**	28*	70**	78**	76**	15	60**	-	-	-	-	-
X. IPPA <sup>J</sup>	58**	75**	56**	62**	19	65**	58**	11	.68**	-	-	-	-
XI. TRUST	45**	63**	25*	14	13	.25	61**	18	.62**	.45**	-	-	-
XII. ALT <sup>k</sup>	.65**	.63**	.36**	.45**	.48**	.11	.56**	.58**	60*	36**	54**	-	-
XIII. COM <sup>1</sup>	51**	44**	75**	22*	45**	10	58**	60**	.13	.15	.40**	69**	-

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>l</sup> Communication, \*p<.05, \*\*p<.01.

Table 10 shows that there is significant correlation among Personality Assessment Questionnaire (PAQ), Brief Emotional Intelligent Scale (BEIS-10) and Inventory of Parental and Peer Attachment- Revised (IPPA-R). Table shows that overall scores on personality assessment questionnaire (PAQ) is significantly positively related to hostility and aggression, dependence, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability, negative world-view, and alienation. However, overall scores on personality assessment questionnaire (PAQ) is significantly negatively related to emotional intelligence, attachment style, trust and communication. It indicated that individuals having psychological maladjustment have low emotional intelligence and are more likely to demonstrate distrust, lack of communication and alienated attachment styles.

The Table 10 also indicated that emotional intelligence is significantly negatively related to hostility and aggression, dependence, negative self-esteem, negative self-adequacy, emotional unresponsiveness, negative world-view, and alienation, whereas it is significantly positively related to overall scores on Inventory of Parental and Peer Attachment- Revised (IPPA-R), and trust. The finding indicates that a person with high emotional intelligence can manage their anxiety, are emotionally stable, have high trust and strong relationship with family members, peers and friends.

It also shows that overall scores on Inventory of Parental and Peer Attachment-Revised (IPPA-R) is significantly negatively related to hostility and aggression, dependence, negative self-esteem, emotional unresponsiveness, emotional instability, and alienation. Whereas, it is significantly positively related to trust and communication. It demonstrated that in the absence of secure attachment, normative behaviors are disrupted, which may leave the individual vulnerable to the intensification of anger, anxiety, hostility, and impulsive behavior whereas individual having strong and secure attachment can easily trust and communicates with others.

**Discussion.** Study II also aimed to explore factor structure of Brief Emotional Intelligent Scale (BEIS-10), by using EFA. The objective of the study also includes were pre-testing of scales on a small group to establish the psychometric properties of the all three scale Personality Assessment Questionnaire (PAQ), Brief Emotional Intelligent

Scale (BEIS-10) and Inventory of Parental and Peer Attachment- Revised (IPPA-R). Alpha reliability coefficient, item total correlation and inter scales correlations were computes to find out the internal consistency and construct validity of three scales.

Phase II involved exploration of factor structure of BEIS-10 among our sample of study through EFA. The construct underlying other instruments were already translated in Urdu version, therefore they were not explored. The results obtained from EFA in Brief Emotional Intelligent Scale (BEIS-10) demonstrated a unifactorial structure. The finding is consistent with pervious researches (Davidson, 2013; Dergisi, 2016).

Phase II also involved the psychometric properties of the instruments. The findings of reliability coefficients of PAQ are consistent with the findings of previous research indicated reliability coefficients in range from .73 to .95 (Khaleque & Rohner, 2005). These findings show that all the items of all the measures are internally consistent and sufficiently reliable. Positive significant correlation indicates that all the items are measuring the same construct like the scale as a total.

The item-total correlation analysis of BEIS-10 Urdu version indicates that all the items have shown positive correlation with the total scores, indicates high internal consistent between items of the scale.

All the items of subscales of IPPA-Urdu have also shown significant positive correlations with the total scores (Table 9). Thus, indicating consistency of items with the total of the scale. The significant item-total correlations calculated from the data from Pakistan suggest that the instruments can be used to measure these constructs in our culture.

The internal consistency was further determined by inter scales correlation of all the scales (Table 10). There is a negative relationship between overall scores on psychological maladjustment and emotional intelligence indicating that individual having psychological maladjustment has low emotional intelligence. This finding is consistent with previous research evidences (Abadi, 2011; Alcaide, Berrocal, Extremera, & Pizarro, 2006; Bhat, 2014, Hussain, 2017). The table also shows that

psychological maladjustment is significantly negatively relate to over-all attachment styles of pattern and their dimension (trust and communication) whereas significantly positively related to alienation (coefficient of attachment style). This finding indicates that participants having psychological maladjustment may have insecure style of attachment with their peers. This finding is consistent with previous studies (Ahmad et al., 2005; Egeland, Huston, Sroufe, & Warren, 1997; Filinkova, Savchenko, & Shulga, 2016; Ma, 2006). Moreover, the results assumed that and key characteristics of securely attached individuals include having high self-esteem, trust, intimacy, affection, and are less anxious, as well as secure attachment helps the individual to form stable and functional relationships, allowing the individual to regulate emotions with the help of others.

The Table 9 shows that there is positive correlation between BEIS and IPPA-R. Results indicated that emotional intelligence in adolescents can be predicted by their attachment styles. Individuals, who hold a close attachment style, were higher in emotional intelligence in compare to others, and individuals who had insecure attachment style (such as mistrust, low communication and alienation), were lower in emotional intelligence. The results of the current study were consistent with some other investigation (Caruso, Mayer, & Salovey, 2002; Kafetsios, 2002; Kafetsios and Yeadou, 2003; Charuvastra, Cloitre, Stovall-McClough, & Zorbas, 2008; Deniz, Hamarta, & Saltali, 2009). It may suggest that people with secure attachment style are expected to understand and handle with their problems, it is difficult for people with mistrust and fearful attachment styles to do so.

Inter-scale correlations of phase-II of study showed that participants having psychological maladjustment have low emotional intelligence and insecure style of attachment with others. Zeanah, Smyke, and Koga (2005) showed children brought up in institutions were found to be emotionally withdrawn, unresponsive, alienated and socially indiscriminate, because they are socially deprived and have insecure attachment.

The findings of study provided support for the reliability and validity for all three instruments. Therefore, findings of the study supported the use of instruments in the main study and testing of the hypotheses.

# Chapter 4

## STUDY III: MAIN STUDY

Findings of interviews and pilot study paved the way for main study. It aimed to compare and find the relationship between psychological maladjustment, emotional intelligence and attachment styles among orphan and non-orphan.

# **Objectives**

The objectives of the study are as follows;

- 1. To establish the factorial validity of research instruments.
- 2. To compare the psychological maladjustment, emotional intelligence and attachment styles among orphan and non-orphan adolescents.
- 3. To find out the mediating role of emotional intelligence for the relationship between psychological maladjustment and attachment styles among orphan and non-orphan adolescents.
- 4. To study the relationship between psychological maladjustment, emotional intelligence and attachment styles among orphan and non-orphan adolescents along with the demographic variables i.e., gender, age, education, time spent in orphanage etc.

# **Hypotheses**

- 1. Psychological maladjustment will be negatively related to emotional intelligence and attachment styles among orphan and non-orphan adolescents.
- 2. Emotional intelligence will be positively related to attachment styles among orphan and non-orphan adolescents.
- 3. Emotional intelligence act as a mediator in relationship between psychological maladjustment and attachment styles among orphan and non-orphan adolescents.
- 4. Orphans will score high on hostility and aggression, dependence, emotional instability, emotional unresponsiveness, negative self-adequacy, negative worldview and negative self-esteem as compared to non-orphans.

- 5. Orphans will score low on emotional intelligence, trust and communication, and high on and alienation as compared to non-orphans.
- 6. Orphan boys will score high on hostility and aggression and emotional intelligence compared to orphan girls.
- 7. Orphan girls will score high on dependence, negative self-esteem, negative self-adequacy, negative worldview, emotional instability, emotional unresponsiveness, attachment styles, trust and communication than orphan boys.
- 8. Non-orphan boys will score high on emotional intelligence than non-orphan girls.
- 9. Higher the education, higher will be emotional intelligence, trust, and communication, lower will be hostility and aggression, dependence, emotional instability, emotional unresponsiveness, negative self-adequacy, negative worldview, negative self-esteem and alienation among orphan and non-orphan adolescents.
- 10. Longer duration spend in orphanage will also lower the relationship between psychological maladjustment and attachment styles among orphan and non-orphan adolescents.

### **Operational Definitions**

**Psychological Maladjustment.** An individual's more or less stable set of predispositions to respond (i.e., affective, cognitive, perceptual, and motivational dispositions) and actual modes of responding (i.e., observable behaviors) in various life situations or contexts (Rohner & Khaleque, 2005). High scores on PAQ will indicate psychological maladjustment whereas low scores will indicate psychological adjustment.

Hostility and Aggression. Hostility is an emotional response or feeling of anger or resentment toward another person or situation or toward the self. Hostility is expressed on a behavioral level in the form of aggression, with acts that aim to harm another person, object or the self. Active aggression may be manifested verbally in such ways as sarcasm, humiliating acts toward another person, criticism or by saying

cruel things. Passive aggression is a less direct expression of aggression in such forms as stubbornness, bitterness, vindictiveness, irritability, and temper tantrums (Rohner & Khaleque, 2005). A high score on this scale suggests that a person or a group of individuals tend(s) to experience the above-named negative emotions to an extent that is above the average.

**Dependence.** Dependence is the internal psychologically felt yearning for emotional (vs. instrumental) support, care, comfort, nurturance, attention, and similar positive responses from significant others and attachment figures. Overall, high scores on the dependence scale indicates that the individual's need to have sympathy or encouragement from significant others when they are ill or troubled. (Rohner & Khaleque, 2005).

**Negative self-esteem.** It is about the feeling of one's own self such as disappointment, unworthiness, disrespect, dislike and refusal (Rohner & Khaleque, 2005). High scores on the items of negative self-esteem indicates that person dislikes or disapproves of himself, devaluates himself, perhaps feels inferior to others, and perceives himself as being a worthless person.

**Negative self-adequacy.** It is about feeling that he one is unable to deal / cope with problems; he is a failure, incapable of success and incompetent refusal (Rohner & Khaleque, 2005). High scores on the items of negative self-adequacy indicates that the individual feels incompetent to meet the challenges of everyday life. The person perceives himself as a failure and as being unable to successfully compete for the things he aspires to.

**Emotional unresponsiveness.** It is the disability of a person to express their emotions freely freely/ openly of their emotions; non-spontaneity and inability to respond to others (Rohner & Khaleque, 2005). High scores on the items of emotional unresponsiveness indicate that individuals are tend to be more toward social isolation and are able to form only restricted and/or defensive emotional relationships.

**Emotional instability.** It is about the inconstancy or unsteadiness of mood and disability to withstand from surrounding stresses or (Rohner & Khaleque, 2005). High

scores on the items of emotional stability indicate that individuals have frequent and unpredictable mood swings from such poles as e.g. friendly to hostile.

**Negative world view**. It is the view about world/global or about overall life of a person negatively such as the world/universe is bad, hostile, insecure unpleasant (Rohner, 2005). High scores on the items of negative world-view indicate that individual perceives the universe as a bad, insecure, threatening and uncertain place, full of danger, and evil.

**Emotional Intelligence.** It is the measure of an individual's perceptions of the extent to which s/he can appraise and regulate emotions in self and others, and utilize emotions for problem solving (Davies, Devonport, Kevin Lane, & Scott, 2010). High scores indicate that individual will be able to under, manage and comprehend one's as well as others emotions.

Attachment styles. It can be conceptualized as how individuals have come to view themselves as worthy of love and affection throughout development (model of the self), as well as how comfortable the person feels establishing close and intimate relationships (model of others) in different ways (Gullone & Robinson, 2005). A high score reflects a positive quality of attachment.

In the present study, adult attachment will be assessed by inventory of peer and parent-revised (IPPA-R) developed by Gullone and Robinson (2005). There are three dimensions; trust, alienation, and communication that underlie the three attachment styles.

**Trust.** It refers to the adolescents' trust that parents and peers understand and respect their needs and desires (Gullone & Robinson, 2005). High score on items indicate high trust on parents and peers and low score indicates mistrust.

Alienation. It refers to adolescents' feelings of isolation, anger, and detachment experienced in attachment relationships with parents and peers (Gullone & Robinson, 2005). High scores indicate that individual assesses feelings of anger and interpersonal alienation.

Communication. It refers to adolescents' perceptions that parents and peers are sensitive and responsive to their emotional states and assessing the extent and quality of involvement and verbal communication with them (Gullone & Robinson, 2005). High score on items indicate greater communication skills whereas low scores indicate difficulty in communication.

### Sample

Sample of main study comprised of 595 participants. The data were collected from different orphanages and colleges of Islamabad and Rawalpindi 288 non-orphans with age range from 12-22 years (*M*=15.83, *SD*=3.09). 307 orphans (155 boys and 152 girls) having age range between 12-22 years (*M*=15.92, *SD*=3.25). Orphans participants were selected on the basis of following criteria: they lived in orphanage since the age since the age of 3-10. On the basis of education level, all of the adolescents were divided in to following group; illiterate, Hafiz-e-Quran, matric, intermediate and graduation.

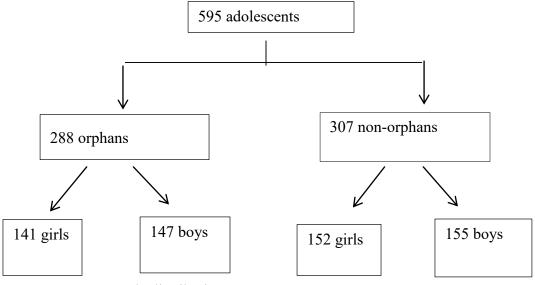


Figure 3. Sample distribution

**Demographic characteristics of the sample.** The demographic characteristics of the sample i.e., age, gender, education, number of siblings, birth order, grade, reason of parent's death and their age at the time of parent's death were collected through self-constructed tool. Some demographic is specific for orphans. Their respective frequencies and percentages are given as follows:

Table 11

General Demographic Characteristics of the Sample Orphan(n=288) and Non-Orphan (307)

Variables		<u>Orphan</u>		Non-orphan	
		Frequency	%	Frequency	%
Age (in years)	12-14	122	42	126	41
	15-17	116	40	122	39
	18-22	50	17	59	18
Education	Illiterate	71	24	65	21
	Hafiz-e-Quran	55	19	51	16
	Matric	74	25	94	30
	Intermediate	57	19	59	19
	Graduation	31	11	38	13
Father	Alive	13	6	307	100
	Death	271	94		
Missing values		4			
Mother	Alive	15	6	307	100
	Death	271	94		
Missing values		2			
	Both alive	0	0	307	100
	Both death	260	90		
No of siblings	None	186	64	114	36
	1-5	41	14	118	38
	6-10	49	17	63	20
	11-15	2	1	12	4
Reason of parent	Physical	60	20		
death	illness				
	Murder	41	14		
	Suicide	83	28		
	Heart attack	15	5		

	Earthquake	56	19	
	Other	33	11	
Age in which	By birth	85	29	
parents died				
	1-5	54	19	
	6-10	76	26	
	11-15	43	15	
	16-22	19	6	
Missing values		11		

Table 11 demonstrates the demographic variables of orphan and non-orphan adolescents. Majority of the sample of the orphan lie in the age range of 15-17 i.e., 40%, illiterate i.e., 24%, hafiz-e-Quran i.e., 19%, have education up to matric i.e., 25%, intermediate i.e., 19%, graduation i.e., 10%, and masters i.e., 1% with both parent died i.e., 90%, whereas majority of non-orphan lie in the age range of 15-17 i.e., 39%, illiterate i.e., 14%, hafiz-e-Quran i.e., 13%, have education up to matric i.e., 30%, intermediate i.e., 27%, graduation i.e., 11%, and masters i.e., 2% having both parents alive i.e., 100%.

#### **Instruments**

Following instruments have been used in the main study of this research

- 1. Personality Assessment Questionnaire (PAQ) developed by Rohner and Khaleque (2005) and Urdu-Version by Naz and Kausar (2011) (details are given in chapter 3, p-60)
- 2. Brief Emotional Intelligence scale (BEIS-10) originally developed by (Schutte et al., 1998). It is revised by Davies, Devonport, Kevin, Lane, and Scott (2010) (details are given in chapter 3, p-61).
- 3. Inventory of Parent and Peer Attachment-Revised (IPPA-R), by Gullone and Robinson (2005) and translated by Zafar (2009) (details are given in chapter 3, p-62).

#### **Procedure**

In order to carry out the present study, permission was taken from the Head of selected orphanages. All subjects were divided into two groups: orphan vs non-orphans. Participants were informed about the objectives of the study and their consent was taken before proceeding.

The research was conducted in three phases. In first phase, self-structured interviews were conducted on order to assess lived experience of adolescent orphans' vs non-orphans'. In the second phase, self-constructed tool was given to the participants in order to take personal demographic information. In the third phase, psychological tools were administered in order to measure psychological maladjustment, emotional intelligence and attachment styles.

Before administering the scales, they were assured that all the information provided by them would keep confidential and were used only for the research purpose. Participants were requested verbally about how to respond to various items in each questionnaire. They were requested to read each item carefully and respond as honestly as possible by selecting the option that is close to their personal experiences. They were requested to give response to all the items of the scales. The average time to complete the questionnaire was 25-30 minutes. After data collection, data was analyzed quantitatively using SPSS.21and Amos.

#### **Results**

The hypotheses of the study were tested by establishing the construct validity through CFA and making estimates of the psychometric properties, correlations, regression, mediation, T-test, ANOVA, mediation and, moderation analysis. All the results along with the respective interpretation is given in the following:

**Establishment of construct validity of instruments through confirmatory factor analysis.** This phase established construct validity of translated versions by determining the indices of goodness fit thus confirming the factor structure of the scale. The objective of the phase was achieved through Confirmatory Factor Analysis.

Confirmatory factor analysis of personality assessment questionnaire (PAQ). PAQ was a multi-dimensional construct and Urdu translated version of scale Naz and Kausar (2011) was used in present research. In order to confirm the structure of this scale on sample of orphan and non-orphan, CFA was performed Model fit was not achieved for PAQ because of highly correlated and negative items as future researchers are recommended to do it with independent samples.

Confirmatory factor analysis of brief emotional intelligent scale (BEIS-10). Brief emotional intelligent scale was a uni-dimensional scale and it was translated in present study. In order to confirm the structure of this scale on sample of orphan and non-orphan, CFA was performed. Path diagram of its items and the factor loadings are given below:

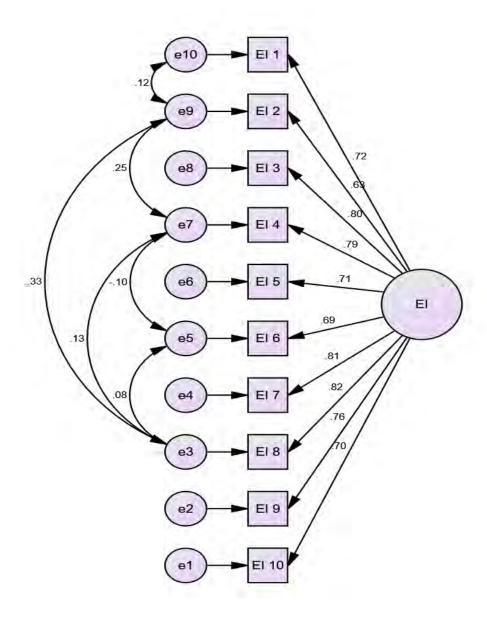


Figure 4. Confirmatory Factor Analysis of BEIS-10.

Figure 4 shows CFA model of the items of BEIS-10 and obtained factor loadings of each items.

**Table 12**Fit Indices of BEIS-10 used in the Main Study (N=595)

Scale	$\chi^2$	df	CMIN/DF	IFI	NFI	CFI	RMSEA
Model 1	102.62	35	2.93	.89	.88	.89	.08
Model 2	69.13	25	2.76	.93	.92	.93	.04

Model 1= Default model of CFA

Model 2= M1 after adding co-variances

Table 12 illustrates the model fit indices of the scale BEIS-10. Model 1 represents fit indices for Default model with  $\chi^2$  (df)= 102.62(35) is with value of CFI= .89, IFI=88, NFI= .89 and RMSEA= .08 which was not in desired limit. Model 2 shows values after adding co-variances in order to achieve goodness of model fit. The validity indices Normed Fit Index (NFI), Incremental fit index (IFI), and Comparative fit index (CFI) in model 2 are in acceptable range. The values of the indices are above .90. This shows that the scale used in the study are now valid. Moreover, the Value of Root Mean Square Error of Approximation (RMSEA) for model 2 is also in acceptable ranges, which are below .08.

**Table 13**Confirmatory Factor Analysis with Factor Loadings (Standardized Regression Weights) for One Factor of BEIS-10 (N=595)

Item no	Loading	
1	.72	
2	.63	
3	.60	
4	.79	
5	.71	
6	.69	
7	.81	
8	.82	
9	.78	
10	.70	

Table 13 shows the CFA of the Brief Emotional Intelligent Scale (BEIS-10). Loadings of the scale are ranged from .60 - .82. In addition, all the factor loadings were above the criteria (>3). The BEIS was used in main study after modifications.

Confirmatory Factor Analysis of Inventory of Parent and Peer Attachment (IPPA). Inventory of Parent and Peer Attachment (IPPA) was a multi-dimensional scale and it was translated by Zafar (2009). In order to confirm the structure of this scale on sample of orphan and non-orphan, CFA was performed. Path diagram of its items and the factor loadings are given below:

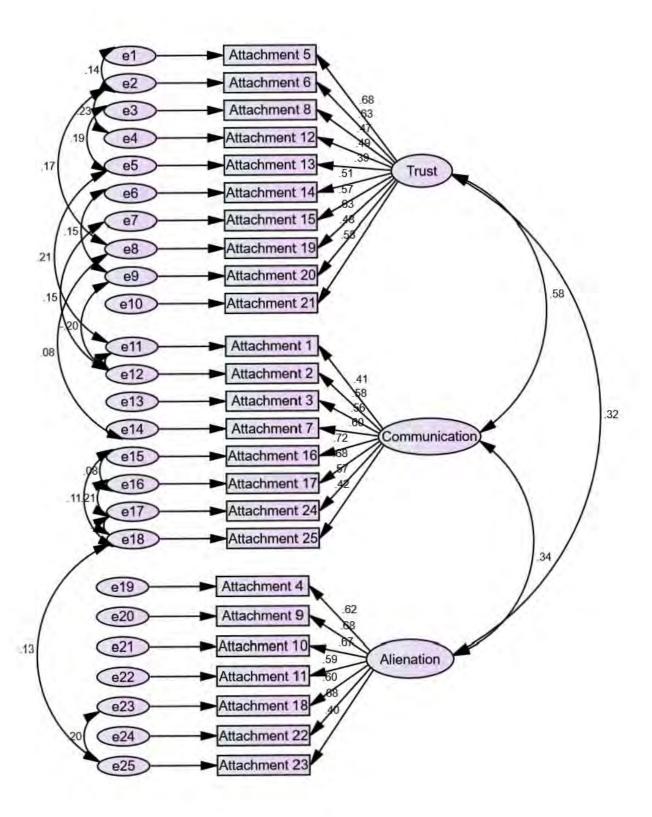


Figure 5. Confirmatory Factor Analysis of IPPA.

Figure 5 shows CFA model of the items of IPPA and its subscales as well as obtained factor loadings of each items.

**Table 14**Fit Indices of IPPA used in the Main Study (N=595)

Scale	$\chi^2$	df	CMIN/DF	IFI	NFI	CFI	RMSEA
Model 1	62.35	25	2.49	.90	.89	.91	.09
Model 2	19.56	15	1.30	.95	.93	.97	.06

Model 1= Default model of CFA

Model 2= M1 after adding co-variances

Table 14 illustrates the model fit indices of the scale IPPA. Model 1 showed poor model fit as RMSEA=.09 which was not in acceptable range. The goodness of fit after adding co-variances improve and depicted satisfactory values of modification indices in Model 2.

**Table 15**Confirmatory Factor Analysis with Factor Loadings (Standardized Regression Weights) for One Factor of IPPA (N=595)

Subscale	Items	Loadings	Subscale	Items	Loadings
Trust	5	.68	Alienation	4	.62
	6	.53		9	.68
	8	.47		10	.67
	12	.49		11	.59
	13	.39	Communication	18	.60
	14	.51		22	.68
	15	.57		23	.40
	19	.63		1	.41
	20	.48		2	.58
	21	.58		3	.56
				7	.60
				16	.72
				17	.68
				24	.57
				25	.42

Table 15 shows the CFA of the Inventory of Parent and Peer Attachment. Loadings of the scale are ranged from .39-.72. In addition, all the factor loadings were above the criteria (>3). The IPPA was used in main study after modifications.

**Descriptive Statistics of the research instruments.** The mean, standard deviation, coefficient of reliability, range, skewness, and correlation estimates of study variables is also determined and are sated as below:

**Table 16**Descriptive statistics (number of items, alpha reliabilities, Mean, Standard deviation, Range, Skewness and kurtosis) of Study Variables used in Main Study (N = 595)

Variables	K	α	M	SD	Ran	<u>ge</u>	Skewness	Kurtosis	
					Potential	Actual			
PAQa	42	.90	100.64	10.64	42-168	52-145	62	59	
$HA^b$	6	.80	15.73	3.02	6-24	7-20	.25	.01	
Dep <sup>c</sup>	6	.81	18.16	2.93	6-24	10-24	.13	53	
NSE <sup>d</sup>	6	.84	18.37	4.81	6- 24	8-19	16	69	
NSA <sup>e</sup>	6	.78	13.01	2.32	6-24	6-24	30	61	
EU <sup>f</sup>	6	.80	15.63	3.05	6-24	6-24	.05	23	
EIg	6	.76	14.83	2.17	6-24	6-24	12	42	
$NWV^h \\$	6	.82	15.52	3.55	6-24	11-19	20	51	
BEIS i	10	.89	34.45	8.42	10-50	12-47	29	.28	
$IPPA^{j}$	25	.81	30.34	5.21	25-125	25-89	51	69	
TRUST	10	.80	26.10	5.90	10-50	12-40	52	82	
ALT k	7	.76	21.73	6.30	7-35	8-32	40	23	
$COM^l$	8	.72	12.11	3.39	8-40	9-25	15	21	

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 Parental and Peer Attachment, <sup>k</sup> Alienation, <sup>1</sup> Communication.

Table 16 demonstrates the psychometric properties for the research instruments along with respective subscales. It indicates the number of items belonging in each subscale, along with the mean, standard deviation, reliability coefficient, range of scores; comprising of both actual and potential ranges, skewness and kurtosis. 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 is reliable for further analyses.

The mean scores for all the variables indicate that the score lie closer to the higher end of the curve; that is, the majority of the participants are high scorer on Psychological Maladjustment, Negative Self-Esteem and Brief Emotional Intelligent. This provides evidence for the negative skewness of the data, as also indicated by the values of skewness; that is, the distribution of the data is towards the positive end of the curve.

Psychometric properties of the research instruments among orphan (N=288) and non-orphan (N=307). The mean, standard deviation, coefficient of reliability, range, skewness, and correlation estimates of study variables is also determined and are sated as below:

 Table 17

 Descriptive statistics (number of items, alpha reliabilities, Mean, Standard deviation, range, Skewness and kurtosis) of Study Variables among Orphan

 (N=288) and Non-Orphan Adolescents (N=307) 

Orphans (N=228)									N	lon-Orphai	ns (N=3	07)			
Variables	K	α	M	SD	Ranş	Range		kurtosis	α	M	SD	Ran	ge	skew	kurtosis
					Potential	Actual						Potential	Actual		
PAQa	42	.94	142.28	9.76	42-168	77-157	56	49	.90	128.37	8.76	42-168	42-155	46	25
$HA^b$	6	.80	20.80	5.01	6-24	11-24	18	-1.14	.80	17.17	4.04	6-24	6-24	52	95
Dep <sup>c</sup>	6	.82	17.67	2.38	6-24	6-24	-1.95	1.89	.79	18.01	3.27	6-24	6-24	-2.01	1.85
$NSE^d$	6	.83	19.82	4.27	6-24	6-24	-1.02	.67	.80	15.87	4.57	6-24	6-24	-1.39	.70
NSA <sup>e</sup>	6	.80	19.58	4.16	6-24	6-24	79	.17	.79	16.01	4.50	6-24	6-24	98	.35
EU <sup>f</sup>	6	.80	19.87	4.09	6-24	6-24	81	.34	.78	16.83	4.42	6-24	6-19	75	.28
EIg	6	.78	20.98	3.03	6-24	8-24	52	16	.75	17.52	4.04	6-24	6-20	62	28
$NWV^h$	6	.83	15.02	1.14	6-24	8-24	-1.37	.86	.82	14.96	2.10	6-24	6-22	98	.52
BEIS i	10	.89	38.33	4.23	10-50	14-43	60	87	.90	42.40	4.98	10-50	20-50	98	68
<b>IPPA</b> <sup>j</sup>	25	.81	75.58	6.89	25-125	54-106	46	52	.80	81.06	7.42	25-125	39-105	58	59
<b>TRUST</b>	10	.80	30.83	7.73	10-50	11-50	43	18	.76	37.00	7.78	10-50	13-50	23	28
ALT k	7	.78	28.97	4.28	7-35	12-35	-1.10	1.62	.77	25.76	4.37	7-35	7-28	81	.98
COM <sup>1</sup>	8	.72	19.72	6.36	8-40	11-36	.54	39	.70	20.52	5.01	8-40	13-40	.62	28

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 17 demonstrates the psychometric properties for the research instruments along with respective subscales among orphan and non-orphans. It indicates the number of items belonging in each subscale, along with the mean, standard deviation, reliability coefficient, range of scores; comprising of both actual and potential ranges, skewness and kurtosis. 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 is reliable for further analyses.

The mean scores for all the variables indicate that the score lie closer to the higher end of the curve; that is, the majority of the participants are high scorer on Psychological Maladjustment, Emotional Instability, Emotional Intelligent, Attachment styles, Trust, and Alienation. This provides evidence for the negative skewness of the data, as also indicated by the values of skewness; that is, the distribution of the data is towards the positive end of the curve.

### Correlation Estimate Study Variables for orphan and non-orphan adolescents

The correlation coefficients of the study variables for orphan adolescents were estimated. The results obtained of the correlation matrix are given below:

**Table 18** *Inter-Scale Correlation of PAQ, BEIS And IPPA-R for Orphan (N=288) and Non-Orphan (N=307)* 

Variables	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
I. Age	-	.13*	.11	.02	.01	.01	.01	.08	.01	.01	.05	.23**	.19*	15	.21**
II. Education	.03	-	32**	09	10	.02	37**	.03	02	33**	.03	.31**	.34**	19*	.01
III. PAQ <sup>a</sup>	.36**	11	-		.70**	.57**	.77**	.72**	.61**	.10	47**	31**	24**	.12	23**
IV. HA b	.11	02	.86**	-	.33**	.60**	.24**	.21**	.50**	.32**	52**	.03	21**	.11	31**
V. Dep c	.27**	02	.37**	.22*	-	.09	.12	.06	.05	.12	10	25**	20**	.18*	01
VI. NSE <sup>d</sup>	.10	04	.84**	.75**	.06	-	.28**	.26**	.27**	.36**	31**	39**	19*	.14*	32**
VII. NSA <sup>e</sup>	.08	05	.59**	.42**	.07	.42**	_	.25**	.24**	.45**	06	11	08	.09	07
VIII. EU <sup>f</sup>	.33**	.03	.23*	.96**	.25**	.77**	.44**	-	.11	.05	12	02	03	.10	01
IX. EI <sup>g</sup>	.11	01	.64**	.56**	.19*	.40**	.31**	.54**	_	.06	14	16	31**	.05	02
X. NWV h	.14*	.01	.84**	.12	.05	.02	.25**	.23*	.51**	-	19*	05	12	.01	05
XI. BEIS i	.08	.19*	51**	50**	13*	53**	36**	49**	.15*	31**	-	.02	.08	19*	.11
XII. IPPA <sup>J</sup>	25**	.11	37**	06	36**	19*	26**	32**	08	10	.43**	-	.78**	32**	.35**
XIII. TRUST	26**	.09	22*	19*	.02	28**	13*	11	19*	19*	.52**	.50**	-	48**	.25**
XIV. ALT k	.11	.10	.19*	.06	.16*	.11	.26**	.39**	.06	.01	20*	48**	74**	-	44**
XV. COM <sup>1</sup>	26**	.01	10	.03	.21*	.22*	17*	02	03	31**	.48**	.68**	.23*	63**	-

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>l</sup>Communication.

<sup>\*</sup>*p*<.05, \*\**p*<.01.

Tables 18 indicates the correlation among the study variables with each other for orphan and non-orphan adolescents. Table shows that overall scores on Psychological maladjustment has a significantly negative relationship with emotional intelligent and attachment styles among orphan and non-orphan adolescents. These finding supporting hypothesis 1 stating "Psychological maladjustment will be negatively related to emotional intelligence and attachment styles among orphan and non-orphan adolescents". Whereas emotional intelligent has positive relationship attachment styles among orphan and non-orphan adolescents, supporting hypothesis 2 stated that "Emotional intelligence will be positively related to attachment styles among orphan and non-orphan adolescents".

The table also demonstrates that both in orphan and non-orphan, Psychological maladjustment is positively related with subscales. Emotional intelligence is significantly negatively related to alienation style of attachment, and positively related to trust and communication dimension of attachment styles in orphan and non-orphan. Overall scores on attachment scale is negatively related with psychological maladjustment and its dimension in both orphan and non-orphan.

Comparison of study variables among orphan and non-orphan. The t- analysis estimates were made to determine the differences existing among the study variables; psychological maladjustment and its correlated, emotional intelligence and attachment styles with its correlate among orphan vs non-orphan.

**Table 19**Study Variables and its Differences among Orphan (N=288) and Non-Orphan (N=307)

Variables	<u>Or</u>	<u>phan</u>	Non-or	phan	t	p	95 9	% CL	Cohen's
	M	SD	M	SD			LL	UL	d
PAQa	142.28	9.76	128.37	8.76	4.31	.000	3.14	14.14	1.04
$HA^b$	20.80	5.01	17.17	4.04	4.87	.000	3.22	9.79	.79
Dep <sup>c</sup>	17.67	2.38	18.01	3.27	-1.04	.091	-6.01	.36	.13
$NSE^{d}$	19.82	4.27	15.87	4.57	4.01	.000	1.19	5.54	.89
NSA <sup>e</sup>	19.58	4.16	16.01	4.50	3.20	.036	1.18	5.09	.82
EU f	19.87	4.09	16.83	4.42	4.56	.000	2.59	5.56	.71
EIg	20.98	3.03	17.52	4.04	4.07	.000	1.66	5.01	.96
$NWV^h \\$	15.02	1.14	14.96	2.10	1.13	.926	43	5.23	.03
BEIS i	38.33	4.23	42.40	4.98	-7.65	.000	-9.07	-3.07	.88
<b>IPPA</b> <sup>j</sup>	75.58	6.89	81.06	7.42	-3.02	.036	-5.98	-1.63	.76
TRUST	30.83	7.73	37.00	7.78	-3.85	.041	-7.86	30	.79
ALT k	28.97	4.28	25.76	4.37	4.47	.020	1.21	5.74	.74
$COM^l$	19.72	6.36	20.52	5.01	52	.053	-2.06	.77	.13

Note: <sup>a</sup> Personality Assessment Questionnaire, <sup>b</sup> Hostility and Aggression, <sup>c</sup> Dependence, <sup>d</sup> Negative Selfesteem, <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>l</sup> Communication. CI = Confidence Interval, *LL* = Lower limit, *UL* = Upper Limit

Table 19 illustrates mean differences of orphan and non-orphan on psychological maladjustment, emotional intelligence, attachment styles and their correlates. Results indicated that non-orphan scored higher on emotional intelligence, peer attachment, and trust whereas orphan scored higher on psychological maladjustment, hostility and aggression, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability, and alienation. These differences indicate that adolescents living in orphanage have low emotional intelligence and experience emotional difficulties and have poor psychological well-being as compared to those living with parents.

**Table 20**Study variables and Gender differences among Non-Orphan (N=307)

Variables	Ma	<u>ale</u>	Fen	<u>nale</u>	t	p	95 %	<u>CL</u>	Cohen's
	M	SD	M	SD			LL	UL	d
PAQa	90.01	5.35	99.06	6.52	-9.31	.000	-10.83	-2.98	1.51
$HA^b$	28.80	5.27	27.10	4.06	1.34	.133	-2.48	2.68	.36
Dep <sup>c</sup>	18.68	3.25	21.58	3.54	-3.16	.029	-4.98	06	.85
$NSE^{d}$	28.66	2.92	29.32	2.16	42	.612	-1.02	1.20	.25
NSA <sup>e</sup>	37.40	3.81	40.49	3.78	-3.60	.015	-4.28	671	.81
EU <sup>f</sup>	28.06	3.86	29.54	3.18	-2.16	.123	-3.80	1.39	.40
$EI^g$	24.21	1.65	24.63	1.68	18	.600	-1.56	1.36	.25
$NWV^h$	20.23	2.65	18.02	1.99	3.48	.021	1.38	4.06	.94
BEIS i	43.88	3.66	40.86	<b>5.67</b>	5.01	.000	2.16	7.22	.63
<b>IPPA</b> <sup>j</sup>	75.18	9.32	86.82	9.95	-5.37	.000	-13.99	-6.72	1.20
TRUST	41.50	5.71	37.42	5.80	6.44	.354	1.61	7.06	.71
ALT k	21.26	4.78	21.44	4.79	32	.093	-1.47	.95	.03
$COM^{l}$	18.05	5.30	18.28	5.63	36	.142	57	1.23	.04

Note: <sup>a</sup> Personality Assessment Questionnaire, <sup>b</sup> Hostility and Aggression, <sup>c</sup> Dependence, <sup>d</sup> Negative Selfesteem, <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>l</sup> Communication. CI = Confidence Interval, *LL* = Lower limit, *UL* = Upper Limit.

Table 20 illustrates gender difference and study variables among non-orphan adolescents. Results indicated that non-orphan male scores significantly high on negative world-view, emotional intelligence and trust than non-orphan females. Whereas female non-orphans score high on psychological maladjustment, dependence and negative self-adequacy and attachment styles. The results also showed that due to difference in gender socialization, female is supposed to submissive, well mannered, docile and repressive minded while the boys are supposed to be aggressive, independent. For this reason, girls do not express their emotion and it leads to the emotional problem including stress, depression and anxiety.

**Table 21**Gender differences on Study variables among Orphan (N=288)

Variables	Ma	<u>ale</u>	Fem	ale	t	p	95 %	<u>CL</u>	Cohen's
	M	SD	M	SD			LL	UL	d
PAQa	138.18	9.51	146.56	10.51	-3.48	.001	-9.24	-2.54	.83
HA <sup>b</sup>	26.07	5.29	21.38	6.98	4.53	.000	1.89	5.18	.75
Dep <sup>c</sup>	28.94	2.57	31.38	3.06	-4.88	.000	-5.43	68	.86
NSE <sup>d</sup>	27.38	2.71	29.42	2.08	-3.58	.023	-4.06	41	.84
NSA <sup>e</sup>	25.63	2.25	26.37	1.74	65	.332	-1.87	1.10	.36
EU <sup>f</sup>	25.81	3.95	25.44	5.12	.97	.327	47	1.59	.08
$\mathrm{EI}^\mathrm{g}$	15.95	1.95	15.91	1.91	. 18	.179	31	1.68	.02
$NWV^h \\$	16.52	2.14	15.96	2.10	1.13	.205	-1.48	2.19	.26
BEIS i	27.40	4.14	24.26	4.01	3.01	.000	1.52	4.28	.77
$IPPA^{j}$	74.03	6.37	73.13	7.68	.96	.233	-2.05	1.63	.12
TRUST	22.11	3.91	25.09	3.71	-4.22	.000	-5.86	-1.62	.78
ALT k	19.11	4.38	19.08	4.39	.11	.160	-2.21	.74	.00
$COM^l$	24.73	6.54	20.73	5.87	3.08	.012	1.30	4.27	.64

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>l</sup> Communication. CI = Confidence Interval, *LL* = Lower limit, *UL* = Upper Limit

Table 21 illustrates gender difference and study variables among orphan adolescents. Results indicated that orphan female sored high on psychological maladjustment, dependence, negative self-esteem, and trust than orphan male. Whereas orphan male scores significantly high on hostility and aggression, emotional intelligence and communication than orphan females. The results also showed that female living in institute (orphanages) are more at risk of negative self-esteem. They have low ability to cope with difficult situation, that is why they are more depend on others.

Table 22

Study Variables and Differences among Hafiz-e-Quran (106) and Non-Hafiz-Quran (489)

Variables	Hafiz-e	-Quran	Non-Haf	iz-e-Quran	t	p	95 %	CL	Cohen's
	M	SD	M	SD			LL	UL	d
PAQ <sup>a</sup>	105.09	19.71	116.48	116.53	-4.97	.00	-12.76	-6.81	.79
$HA^b$	19.10	5.23	19.99	5.23	-1.51	.12	-2.02	.259	.17
Dep <sup>c</sup>	14.04	6.67	16.08	5.72	-3.23	.00	-4.28	804	.32
NSE <sup>d</sup>	14.20	6.68	15.99	5.50	-3.92	.00	-5.01	591	.29
NSA <sup>e</sup>	14.10	6.47	15.87	5.82	-3.77	.01	-4.22	513	.28
EU <sup>f</sup>	14.07	6.81	14.29	5.78	0.85	.06	-2.57	.071	.03
$EI^g$	14.02	6.74	14.35	5.82	0.25	.09	-2.59	.951	.05
$NWV^h$	13.86	5.47	16.22	4.88	-4.42	.00	-5.36	-1.31	.46
BEIS <sup>i</sup>	32.76	9.29	33.85	9.08	92	.35	-3.38	1.22	.11
<b>IPPA</b> <sup>j</sup>	75.22	4.14	77.92	5.23	-3.00	.04	-4.37	850	.57
TRUST	30.06	7.42	31.34	7.88	-1.21	.22	-3.25	1.21	.16
ALT k	24.23	5.42	26.05	5.55	-3.99	.04	-2.88	572	.33
$COM^{l}$	20.93	4.23	20.53	4.89	0.41	.67	48	2.28	.08

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>l</sup> Communication. CI = Confidence Interval, *LL* = Lower limit, *UL* = Upper Limit.

Table 22 illustrates difference between hafiz- e-Quran and non-hafiz-e-Quran among study variables. Results indicated that non-hafiz Quran sored high on psychological maladjustment, dependence, negative self-esteem, negative self-adequacy, negative world view, attachment styles, and alienation than hafiz-e-Quran.

Differences across age in relation to all variables of the study among orphan and non-orphan. In order to explore the differences across categories of age in relation to psychological maladjustment, emotional intelligent, attachment styles and their correlates, one-way ANOVA was performed separately for each variable. Results have been summarized below.

Table 23

One-Way ANOVA to Check Age Differences at various levels in relations to Study Variables Among Orphan (288)

		Catego	ories of A	ge (in ye	ears)				
	12-1	14	15-	17	18-	22			
	(n=1)	22)	(n=1)	16)	(n=	50)			
Variable	M	SD	M	SD	M	SD	F	p	$\eta^2$
PAQa	133.38	22.98	147.36	16.71	152.24	20.76	23.68	.00	.14
$HA^b$	12.53	2.85	11.96	3.14	22.18	3.53	2.74	.06	.01
<b>DEP</b> <sup>c</sup>	21.16	2.85	22.27	2.49	22.98	1.91	15.05	.00	.09
$NSE^d$	17.90	3.94	16.95	4.34	12.07	4.43	2.73	.06	.01
$NSA^{e}$	10.90	4.15	10.40	4.07	10.65	4.60	.72	.48	.00
$\mathbf{E}\mathbf{U^f}$	18.25	4.89	20.83	3.13	21.60	2.96	19.31	.00	.12
$EI^g$	19.43	6.61	40.22	7.07	14.36	5.91	.92	.39	.00
$NWV^h$	20.43	2.90	20.84	3.10	21.43	2.98	2.44	.06	.00
$BEIS^{i}$	89.21	16.31	88.36	15.20	23.40	6.58	2.01	.98	.00
<b>IPPA</b> <sup>j</sup>	77.43	13.61	71.39	9.01	69.630	9.37	12.51	.00	.08
<b>TRUST</b>	27.79	8.46	25.54	6.33	22.90	6.45	17.28	.02	.10
$ALT^k$	35.52	6.63	35.01	6.63	12.63	8.74	.17	.11	.00
COM <sup>1</sup>	22.08	7.56	18.26	4.89	17.76	4.88	14.70	.00	.11

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>l</sup> Communication. *df*=degrees of freedom,  $\eta^2$ =eta squared.

Table 23 shows that statistically significant differences exist across different age groups, in relation to psychological maladjustment, dependence, emotional unresponsive, attachment, trust and communication among orphan adolescents. F values are significant for these variables, therefore, post-hoc analyses are required for pairwise comparisons. As sample sizes with respect to categories of age are unequal, the suggested post-hoc method is this case is Games-Howell test (Field, 2000). Pairwise comparisons across gender difference categories in relation above variables have been presented in Table 24.

**Table 24**Pairwise Comparisons across Age with respect to PAQ, Dependence, Emotional unresponsive, IPPA, Trust and Communication among Orphan (288)

						95%	CI
Variable	(I) AGE	(J) AGE	(I-J)	β	p	LL	UL
PAQ <sup>a</sup>	12-14	15-17	-13.98	2.596	.000	-20.11	-7.86
		18-20	-18.86	2.900	.000	-25.73	-11.99
	15-17	12-14	13.98	2.596	.000	7.86	20.11
		18-20	-4.87	2.548	.139	-10.93	1.18
	18-20	12-14	18.86	2.900	.000	11.99	25.73
		15-17	4.87	2.548	.139	-1.18	10.93
$\mathrm{DEP^b}$	12-14	15-17	-1.61	.347	.000	-2.43	79
		18-20	-1.82	.374	.000	-2.71	94
	15-17	12-14	1.61	.347	.000	.79	2.43
		18-20	21	.356	.822	-1.06	.63
	18-20	12-14	1.82	.374	.000	.94	2.71
		15-17	.21	.356	.822	63	1.06
$EU^c$	12-14	15-17	-2.57	.516	.000	-3.79	-1.36
		18-20	-3.34	.598	.000	-4.76	-1.93
	15-17	12-14	2.57	.516	.000	1.36	3.79
		18-20	77	.511	.289	-1.99	.44
	18-20	12-14	3.34	.598	.000	1.93	4.76
		15-17	.77	.511	.289	44	1.99
$IPPA^{d}$	12-14	15-17	6.03	1.521	.000	2.45	9.63
		18-20	8.12	1.810	.000	3.84	12.42
	15-17	12-14	-6.03	1.521	.000	-9.63	-2.45
		18-20	2.08	1.597	.395	-1.71	5.89
	18-20	12-14	-8.12	1.810	.000	-12.42	-3.84
		15-17	-2.08	1.597	.395	-5.89	1.71
TRUST	12-14	15-17	5.24	.966	.000	2.96	7.52
		18-20	4.88	1.192	.000	2.06	7.72
	15-17	12-14	-5.24	.966	.000	-7.52	-2.96
		18-20	35	1.086	.942	-2.94	2.23
	18-20	12-14	-4.88	1.192	.000	-7.72	-2.06
		15-17	.35	1.086	.942	-2.23	2.94
COMM <sup>e</sup>	12-14	15-17	3.82	.822	.000	1.88	5.76
		18-20	4.32	.973	.000	2.02	6.63
	15-17	12-14	-3.82	.822	.000	-5.76	-1.88
		18-20	.49	.827	.819	-1.47	2.47
	18-20	12-14	-4.32	.973	.000	-6.63	-2.02
		15-17	49	.827	.819	-2.47	1.47

Note: <sup>a</sup> Personality Assessment Questionnaire, <sup>b</sup> Dependence, <sup>c</sup> Emotional unresponsiveness<sup>d</sup> Inventory of Parent and Peer Attachment, <sup>c</sup> Communication. CI=Confidence Interval, *LL*=Lower Limit, *UL*=Upper limit

Table 24 shows that orphans aged between 15-22 scored high on psychological maladjustment, dependence and emotional unresponsive than those orphans aged between 12-14. On the other hand, orphan aged between 12 to 14 years scored higher on IPPA, Trust and Communication than those aged between 15 to 22 years. The results indicate adolescents' emotional need for positive responses from the people most important to them (i.e., parents) are not meet and this will lead to the psychological maladjustment, mistrust and less interpersonal relationships.

**Table 25**One-Way ANOVA to Check Age Differences at various levels in relations to Study Variables among Non-Orphan (N=307)

-		Са	tegories of	Age (in ye	ears)				
	12-	-14	15-	17	18-2	22			
	(n=1)	126)	(n=1)	22)	(n=5)	59)			
Variable	M	SD	M	SD	M	SD	F	p	$\eta^2$
PAQ <sup>a</sup>	97.84	11.48	98.45	11.23	44.21	4.23	2.37	.07	.00
$HA^b$	24.65	4.12	24.27	5.21	22.23	1.23	.33	.21	.02
$DEP^{c}$	26.64	2.71	26.18	3.51	25.65	2.36	1.24	.14	.00
$NSE^d$	20.63	5.62	20.19	6.32	27.89	3.25	.30	.23	.00
$NSA^e$	20.92	4.72	27.82	5.24	22.25	2.62	.73	.23	.01
$EU^f$	27.92	5.23	25.12	6.21	28.52	2.69	.63	.26	.00
$EI^g$	25.62	1.32	23.62	5.63	25.23	2.98	.98	.48	.00
$NWV^h$	20.39	3.25	29.32	4.52	21.32	2.47	1.00	.52	.02
$BEIS^{i}$	100.8	12.35	102.32	13.52	21.23	7.45	2.58	.30	.00
<b>IPPA</b> <sup>j</sup>	75.37	13.26	83.04	10.32	88.36	8.78	948	.00	.05
<b>TRUST</b>	32.55	7.27	39.74	6.71	40.86	6.18	5.25	.00	.03
$ALT^k$	22.35	6.30	27.10	7.25	22.98	7.45	2.56	.83	.00
$COM^{l}$	28.77	6.54	32.57	5.62	34.02	4.53	6.25	.00	.03

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. df=degrees of freedom,  $\eta$ <sup>2</sup>=eta squared

Table 25 shows that statistically significant differences exist across different age groups, in relation IPPA, trust and communication among non-orphan adolescents. F values are significant for these variables, therefore, post-hoc analyses are required for pairwise comparisons. As sample sizes with respect to categories of age are unequal,

the suggested post-hoc method is this case is Games-Howell test (Field, 2000). Pairwise comparisons across different age categories in relation to IPPA, Trust and Communication have been presented in Table 26.

**Table 26**Pairwise Comparisons across Age with respect to IPPA, Trust and Communication among Non-Orphan (N=307)

	(I)	(J)				95%	6 CI
Variable	AGE	AGE	(I-J)	β	p	LL	UL
IPPA	12-14	15-17	-8.03	1.507	.000	-11.59	-4.48
		18-20	-12.99	1.644	.000	-16.88	-9.10
	15-17	12-14	8.03	1.507	.000	4.48	11.59
		18-20	-4.95	1.477	.003	-8.45	-1.45
	18-20	12-14	12.99	1.644	.000	9.10	16.88
		15-17	4.95	1.477	.003	1.45	8.45
TRUST	12-14	15-17	-7.19	.887	.000	-9.28	-5.10
		18-20	-8.31	1.032	.000	-10.76	-5.87
	15-17	12-14	7.19	.887	.000	5.10	9.28
		18-20	-1.12	1.009	.506	-3.52	1.27
	18-20	12-14	8.31	1.032	.000	5.87	10.76
		15-17	1.12	1.009	.506	-1.27	3.52
COMM	12-14	15-17	-3.804	.774	.000	-5.63	-1.98
		18-20	-5.247	.829	.000	-7.21	-3.29
	15-17	12-14	3.804	.774	.000	1.98	5.63
		18-20	-1.44	.779	.157	-3.29	.40
	18-20	12-14	5.247*	.829	.000	3.29	7.21
		15-17	1.443	.779	.157	40	3.29

Note. IPPA=Inventory of Parent and Peer Attachment, COMM = Communication, CI=Confidence Interval, LL=Lower Limit, UL=Upper limit

Table 26 shows that non-orphan adolescents ranged between 15-22 scored high on attachment, trust and communication than those whose age ranged 12-14. The results indicate that adolescents in their middle and late phases have more secure attachment with their peers and friends. They have positive views of themselves, peers and their relationship. Adolescents having secure attachment exhibits high level of trust and communication with their peers and friends.

**Table 27**One-way ANOVA to check Education related differences at various levels in relations to Study Variables among Orphan (N=288)

	Illiter	rate	Hafiz-e-		Mat	ric	Interm	ediate	Gradu	ation			
	(n=7)	1)	Quran		(n='	74)	(n=	57)	(n=	31)			
			(n=55)										
Variable	M	SD	M	SD	M	SD	M	SD	M	SD	F	p	$\eta^2$
PAQ <sup>a</sup>	107.97	8.64	107.81	7.93	88.52	4.23	87.23	4.21	92.52	5.23	2.60	.09	.01
$HA^b$	49.52	4.23	42.58	3.35	35.62	3.20	35.23	2.21	23.62	1.23	1.23	.25	.00
DEPc	45.23	4.62	46.25	3.61	33.52	3.25	34.62	2.69	24.52	2.32	.96	.23	.01
$NSE^{d}$	45.98	3.58	36.22	3.68	31.58	2.21	35.89	2.13	26.32	1.16	.56	.09	.00
NSA <sup>e</sup>	44.23	4.62	38.56	3.01	30.25	3.15	30.12	1.19	25.21	1.65	.29	.21	.00
$EU^{\mathrm{f}}$	42.35	4.95	48.25	3.68	33.45	3.62	35.62	2.35	22.50	1.23	1.23	.10	.00
$\mathrm{EI}^\mathrm{g}$	44.96	4.93	49.52	3.64	33.52	3.48	31.26	2.64	21.36	2.36	.98	.19	.02
$NWV^{h} \\$	48.62	3.69	48.31	3.21	30.10	2.05	30.65	2.85	22.96	1.23	1.02	.65	.00
BEIS	78.00	5.89	73.63	5.62	81.96	6.05	83.51	6.41	91.26	7.41	4.87	.00	.06
$IPPA^{j}$	103.85	8.52	117.25	9.52	85.23	7.40	88.56	4.23	95.36	3.36	2.52	.09	.00
TRUST	59.52	3.69	47.85	4.52	34.52	2.12	35.62	2.63	23.62	1.23	1.36	.28	.00
$ALT^k$	59.56	3.98	46.32	4.23	31.25	2.58	34.58	2.68	22.63	2.32	1.35	.36	.01
$COM^l$	52.63	3.96	46.98	4.98	37.02	2.15	33.52	2.65	29.36	1.02	1.96	.21	.03

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>l</sup> Communication. *df*=degrees of freedom,  $\eta^2$ =eta squared.

Table 27 shows that statistically significant differences exist across difference in education in relation to BEIS among orphan adolescents. F values are significant for these variables, therefore, post-hoc analyses are required for pairwise comparisons. As sample sizes with respect to categories of education are unequal, the suggested post-hoc method is this case is Games-Howell test (Field, 2000). Pairwise comparisons across different educational categories in BEIS have been presented in Table 28.

**Table 28**Pairwise Comparisons across Education with respect to BEIS among Orphan (N=288)

_						95%	CI
Variable	e (I) Class	(J) Class	(I-J)	β	p	LL	UL
BEIS	Illiterate	Hafiz-e-Quran	4.37	2.42	.468	-2.68	11.42
		Matric	-3.95	1.93	.321	-9.54	1.62
		Intermediate	-5.50	2.01	.076	-11.35	.33
		Graduation	-13.25*	1.65	.000	-18.07	-8.44
	Hafiz-e-Qura	n Illiterate	-4.37	2.42	.468	-11.42	2.68
		Matric	-8.33*	2.31	.007	-15.08	-1.58
		Intermediate	-9.88*	2.38	.001	-16.83	-2.93
		Graduation	-17.63*	2.09	.000	-23.78	-11.48
	Matric	Illiterate	3.95	1.93	.321	-1.62	9.54
		Hafiz-e-Quran	$8.33^{*}$	2.31	.007	1.58	15.08
		Intermediate	-1.55	1.88	.963	-7.01	3.90
		Graduation	-9.30 <sup>*</sup>	1.49	.000	-13.63	-4.97
	Intermediate	Illiterate	5.50	2.01	.076	33	11.35
		Hafiz-e-Quran	$9.88^*$	2.38	.001	2.93	16.83
		Matric	1.55	1.88	.963	-3.90	7.01
		Graduation	-7.74*	1.60	.000	-12.42	-3.08
	Graduation	Illiterate	$13.25^*$	1.65	.000	8.44	18.07
		Hafiz-e-Quran	17.63*	2.09	.000	11.48	23.78
		Matric	$9.30^{*}$	1.49	.000	4.97	13.63
		Intermediate	$7.74^{*}$	1.60	.000	3.08	12.42

Note: BEIS = Brief Emotional Intelligence Scale, CI=Confidence Interval, LL=Lower Limit, UL=Upper limit, \*p<.05, \*\*p<.01

Table 28 shows that adolescent orphan who are graduated scored higher on emotional intelligence than illiterate, and those who have education level from matric up-to intermediate.

**Table 29**One-Way ANOVA to Check Education related Differences at various levels in relations to Study Variables among Non-Orphan (N=307)

-	Illite	rate	Hafiz-	e-	Mat	ric	Interm	ediate	Gradu	ation			
	(n=0)	65)	Quran		(n=0)	94)	(n=	59)	(n=)	38)			
			(n=51)										
Variable	M	SD	M	SD	M	SD	M	SD	M	SD	F	p	$\eta^2$
PAQa	98.49	8.99	80.76	5.64	75.82	5.12	72.36	4.12	73.43	4.96	10.01	.00	.06
$HA^b$	9.23	3.36	6.25	3.58	8.32	3.52	8.25	3.25	10.23	2.85	1.58	.10	.00
$DEP^{c}$	9.52	3.58	6.58	3.24	8.89	3.66	8.35	3.68	11.62	2.56	1.68	.45	.00
$NSE^d$	10.01	3.8	5.25	2.99	8.41	3.52	8.62	3.58	11.65	2.68	1.98	.06	.00
<b>NSA</b> <sup>e</sup>	20.23	4.41	19.24	4.81	15.83	3.79	11.85	3.39	14.54	3.19	9.38	.00	.04
$EU^{f}$	9.52	3.58	5.62	3.74	8.21	3.54	9.69	3.57	16.62	2.68	1.38	.06	.00
$EI^g$	8.62	3.56	5.62	2.89	8.23	3.58	8.25	3.54	9.32	2.58	1.29	.28	.00
$NWV^h$	17.42	3.64	10.75	4.55	9.14	3.89	9.75	2.66	9.60	1.17	9.75	.00	.03
$BEIS^{i}$	8.35	4.52	9.23	5.23	9.52	4.56	9.91	5.56	10.21	5.68	2.43	.08	.01
<b>IPPA</b> <sup>j</sup>	73.00	7.73	74.63	7.85	80.96	9.65	81.26	8.99	82.14	8.29	11.30	.00	.06
TRUST	33.92	6.73	31.90	8.01	38.90	7.45	38.24	6.99	43.43	2.61	7.85	.00	.03
$ALT^k$	13.74	2.75	14.39	4.19	12.69	2.84	12.18	3.30	12.15	1.50	7.25	.00	.03
$COM^{l}$	5.62	2.68	8.25	2.36	6.21	2.28	8.62	1.87	8.36	1.63	2.48	.98	.00

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>l</sup> Communication. df=degrees of freedom,  $\eta^2$ =eta squared.

Table 29 shows that statistically significant differences exist across difference in education in relation to PAQ, negative self-adequacy, negative worldview, IPPA, trust and alienation among non-orphan adolescents. F values are significant for these variables, therefore, post-hoc analyses are required for pairwise comparisons. As sample sizes with respect to categories of education are unequal, the suggested post-hoc method is this case is Games-Howell test (Field, 2000). Pairwise comparisons across different educational categories in psychological maladjustment, negative self-adequacy, negative worldview, IPPA, trust and alienation have been presented in Table 30.

**Table 30**Pairwise Comparisons across Education with respect to PAQ, Negative Self adequacy, Negative world-view, IPPA, Trust and Alienation among Non-Orphan (N=307)

						95 %	6 CL
Variable	(I) CLASS	(J) CLASS	(I-J)	β	•	LL	UL
PAQ <sup>a</sup>	Illiterate	Matric	22.67**	3.92	.00	10.00	24.66
		Intermediate	26.13**	4.20	.00	15.70	28.04
		Graduation	25.06**	3.45	.00	14.88	27.99
	Hafiz-e-Quran	Matric	4.94*	1.84	.00	2.94	5.17
		Intermediate	8.4*	3.07	.05	3.82	10.37
		Graduation	7.33*	2.47	.01	4.52	8.81
$NES^b$	Illiterate	Matric	4.40*	1.67	.02	.65	5.55
	Illiterate	Graduation	5.69*	.76	.00	2.07	6.55
	Hafiz-e-Quran	Matric	3.41*	.78	.00	1.32	5.87
	-	Intermediate	7.39*	.85	.03	1.12	9.12
		Graduation	4.70*	.86	.00	2.79	7.83
	Matric	Graduation	1.29*	.75	.00	.48	4.90
$NWV^{c}$	Illiterate	Matric	8.28*	.58	.04	1.02	9.42
		Intermediate	7.67*	.56	.00	1.71	8.95
		Graduation	7.82*	.52	.00	1.66	8.71
	Hafiz-e-Quran	Matric	1.61*	.75	.02	.20	4.59
		Intermediate	1.00*	.73	.00	.86	3.14
		Graduation	1.15*	.70	.00	.79	3.92
$IPPA^d$	Illiterate	Graduation	-9.14*	1.65	.00	-11.08	-1.58
	Hafiz-e-Quran	Matric	-6.33*	2.31	.00	-9.83	-2.93
		Intermediate	-6.63*	2.38	.00	-9.78	-2.48
		Graduation	-7.51*	2.09	.00	-10.63	-1.97
	Matric	Graduation	-1.18*	.49	.00	-2.42	08
	Intermediate	Graduation	88*	.30	.00	-1.26	97
Trust	Illiterate	Matric	-4.98*	1.13	.00	-7.96	-2.66
		Intermediate	-4.98*	1.25	.01	-12.66	-3.16
		Graduation	-9.53*	.94	.00	-10.95	-3.05
	Hafiz-e-Quran	Matric	-7.00*	1.35	.00	-10.59	-2.08
		Intermediate	-6.33*	1.46	.00	-15.46	-8.39
		Graduation	-11.53*	1.20	.00	-17.49	-9.36
	Matric	Graduation	-4.53*	.88	.00	-8.64	-2.55
	Intermediate	Graduation	-5.19*	1.04	.00	-7.08	-1.58
AlTe	Illiterate	Matric	1.05*	.45	.00	1.29	3.89
		Intermediate	1.56*	.53	.04	.01	3.10
	Hafiz-e-Quran	Matric	1.70*	.65	.00	1.32	5.16
		Intermediate	2.21*	.71	.03	.13	4.30
	Matric	Graduation	.54*	.44	.01	.03	2.24

Note: <sup>a</sup> Personality Assessment Questionnaire, <sup>b</sup> Negative Self-esteem, <sup>c</sup> Negative World View, <sup>d</sup> Inventory of Parent and Peer Attachment, <sup>c</sup> Alienation, CI=Confidence Interval, LL=Lower Limit, UL=Upper limit, \*p<.05, \*\*p<.01.

Table 30 shows that non-orphan who are illiterate and hafiz-e-Quran scores high on psychological maladjustment, negative self-adequacy, negative worldview and alienation than those having education up to graduation. The tables also show that non-orphan adolescents who have education up to graduation also scores high on IPPA, and trust than those who are illiterate and hafiz-e-Quran.

Additional analysis. Further analysis has been done in order to examine the difference of demographic on study variables among orphan adolescents. for this purpose, one-way ANOVA was done to check the difference in reason of parent's death in relations to study variables among orphan.

**Table 31**One-way ANOVA to check the difference in reason of Parent's Death in relations to Study Variables among Orphan (N=288

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Physical	Murder	Suicide	Earth	Other			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$									
Variable         M (SD)         M (SD)         M (SD)         M (SD)         M (SD)         M (SD)         F p η²           PAQa 135.13 146.66 (18.29)         146.66 141.75 148.30 144.24 1.11 .00 .09 (18.29)         148.29 (20.63) (19.76) (19.96) (19.81)         148.42 4.11 .00 .09 (19.81)           HAb 2016 21.20 20.55 21.55 21.06 (2.72)         22.94) (3.18) (3.16) (2.81)         21.76 .75 .55 .00 (2.72)         .75 .55 .00 (2.94)         .75 .55 .00 (2.81)           DEPc 21.79 22.49 20.25 22.32 21.76 .75 .55 .00 (3.06) (2.52) (2.35) (1.01) (2.22)         NSEd 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)         NSEd 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)           NSAc 18.15 20.39 19.70 20.50 20.00 3.51 .00 .05 (3.45) (4.34) (3.86) (4.00) (3.57)         EUf 18.56 20.71 19.64 21.07 20.36 3.88 .00 .05 (3.45) (4.06) (4.05) (4.20) (3.81) (3.40)           EIF 20.21 21.61 20.54 21.93 21.39 3.72 .00 .02 (2.84) (2.71) (3.40) (2.75) (2.79)           NWVh 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)           BEISi 24.44 23.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.02) (4.36) (3.20) (5.65)           IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)           TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65) (5.86)           TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65) (3.63)           COM¹ 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (			,	( )	~	()			
PAQ <sup>a</sup> 135.13 146.66 141.75 148.30 144.24 4.11 .00 .09 (18.29) (20.63) (19.76) (19.96) (19.81)  HA <sup>b</sup> 2016 21.20 20.55 21.55 21.06 2.13 .15 .00 (2.72) (2.94) (3.18) (3.16) (2.81)  DEP <sup>c</sup> 21.79 22.49 20.25 22.32 21.76 .75 .55 .00 (3.06) (2.52) (2.35) (1.01) (2.22)  NSE <sup>d</sup> 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)  NSA <sup>c</sup> 18.15 20.39 19.70 20.50 20.00 3.51 .00 .05 (3.45) (4.34) (3.86) (4.00) (3.57)  EU <sup>f</sup> 18.56 20.71 19.64 21.07 20.36 3.88 .00 .05 (3.16) (4.05) (4.20) (3.81) (3.40)  EI <sup>g</sup> 20.21 21.61 20.54 21.93 21.39 3.72 .00 .02 (2.84) (2.71) (3.40) (2.75) (2.79)  NWV <sup>h</sup> 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)  BEIS <sup>i</sup> 24.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.23) (4.20) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63) (2.00) (2.75) (2.19)	X7 ' 1 1		M	M		M	-		2
PAQ <sup>a</sup> 135.13 146.66 141.75 148.30 144.24 4.11 .00 .09 (18.29) (20.63) (19.76) (19.96) (19.81)  HA <sup>b</sup> 2016 21.20 20.55 21.55 21.06 2.13 .15 .00 (2.72) (2.94) (3.18) (3.16) (2.81)  DEP <sup>c</sup> 21.79 22.49 20.25 22.32 21.76 .75 .55 .00 (3.06) (2.52) (2.35) (1.01) (2.22)  NSE <sup>d</sup> 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)  NSA <sup>c</sup> 18.15 20.39 19.70 20.50 20.00 3.51 .00 .05 (3.45) (4.34) (3.86) (4.00) (3.57)  EU <sup>f</sup> 18.56 20.71 19.64 21.07 20.36 3.88 .00 .05 (3.16) (4.05) (4.20) (3.81) (3.40)  EI <sup>g</sup> 20.21 21.61 20.54 21.93 21.39 3.72 .00 .02 (2.84) (2.71) (3.40) (2.75) (2.79)  NWV <sup>h</sup> 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)  BEIS <sup>i</sup> 24.44 23.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.23) (4.02) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63)  COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	Variable	(SD)	(SD)	(SD)	(SD)	(SD)	F	p	$\eta^z$
HA <sup>b</sup> 2016 21.20 20.55 21.55 21.06 2.13 .15 .00 (2.72) (2.94) (3.18) (3.16) (2.81)  DEP <sup>c</sup> 21.79 22.49 20.25 22.32 21.76 .75 .55 .00 (3.06) (2.52) (2.35) (1.01) (2.22)  NSE <sup>d</sup> 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)  NSA <sup>e</sup> 18.15 20.39 19.70 20.50 20.00 3.51 .00 .05 (3.45) (4.34) (3.86) (4.00) (3.57)  EUf 18.56 20.71 19.64 21.07 20.36 3.88 .00 .05 (3.16) (4.05) (4.20) (3.81) (3.40)  EI <sup>g</sup> 20.21 21.61 20.54 21.93 21.39 3.72 .00 .02 (2.84) (2.71) (3.40) (2.75) (2.79)  NWV <sup>h</sup> 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)  BEIS <sup>i</sup> 24.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.02) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63) (2.75) (2.19) (2.90)	PAQa	135.13	146.66		148.30	144.24	4.11	.00	.09
(2.72)         (2.94)         (3.18)         (3.16)         (2.81)           DEP <sup>c</sup> 21.79         22.49         20.25         22.32         21.76         .75         .55         .00           (3.06)         (2.52)         (2.35)         (1.01)         (2.22)         .00		(18.29)	(20.63)	(19.76)	(19.96)	(19.81)			
DEP <sup>c</sup> 21.79 22.49 20.25 22.32 21.76 .75 .55 .00 (3.06) (2.52) (2.35) (1.01) (2.22)  NSE <sup>d</sup> 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)  NSA <sup>e</sup> 18.15 20.39 19.70 20.50 20.00 3.51 .00 .05 (3.45) (4.34) (3.86) (4.00) (3.57)  EUf 18.56 20.71 19.64 21.07 20.36 3.88 .00 .05 (3.16) (4.05) (4.20) (3.81) (3.40)  EI <sup>g</sup> 20.21 21.61 20.54 21.93 21.39 3.72 .00 .02 (2.84) (2.71) (3.40) (2.75) (2.79)  NWV <sup>h</sup> 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)  BEIS <sup>i</sup> 24.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.02) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63)  COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	$HA^b$	2016	21.20	20.55	21.55	21.06	2.13	.15	.00
$\begin{array}{c} (3.06)  (2.52)  (2.35)  (1.01)  (2.22) \\ NSE^d  18.41  20.56  19.89  20.91  20.09  3.59  .01  .07 \\ (3.55)  (4.12)  (4.03)  (4.19)  (4.23) \\ NSA^e  18.15  20.39  19.70  20.50  20.00  3.51  .00  .05 \\ (3.45)  (4.34)  (3.86)  (4.00)  (3.57) \\ EU^f  18.56  20.71  19.64  21.07  20.36  3.88  .00  .05 \\ (3.16)  (4.05)  (4.20)  (3.81)  (3.40) \\ EI^g  20.21  21.61  20.54  21.93  21.39  3.72  .00  .02 \\ (2.84)  (2.71)  (3.40)  (2.75)  (2.79) \\ NWV^h  17.85  19.71  19.17  20.02  19.58  3.04  .01  .06 \\ (2.50)  (3.43)  (3.87)  (3.43)  (3.92) \\ BEIS^i  24.44  23.44  23.93  24.11  26.58  1.03  .39  .00 \\ (4.23)  (4.02)  (4.36)  (3.20)  (5.65) \\ IPPA^j  76.65  74.22  70.89  72.57  74.30  3.01  .04  .08 \\ (9.70)  (8.36)  (6.47)  (5.16)  (5.86) \\ TRUST  26.41  25.22  23.42  24.79  24.33  1.54  .19  .00 \\ (2.51)  (1.98)  (1.54)  (1.88)  (1.65) \\ ALT^k  28.89  28.76  29.53  28.46  28.82  .58  .67  .00 \\ (3.30)  (4.39)  (4.40)  (4.92)  (3.63) \\ COM^1  21.35  20.24  1.91  19.32  21.15  3.39  .01  .03 \\ (3.85)  (3.06)  (2.75)  (2.19)  (2.90) \\ \end{array}$		(2.72)	(2.94)	(3.18)	(3.16)	(2.81)			
NSE <sup>d</sup> 18.41 20.56 19.89 20.91 20.09 3.59 .01 .07 (3.55) (4.12) (4.03) (4.19) (4.23)  NSA <sup>e</sup> 18.15 20.39 19.70 20.50 20.00 3.51 .00 .05 (3.45) (4.34) (3.86) (4.00) (3.57)  EU <sup>f</sup> 18.56 20.71 19.64 21.07 20.36 3.88 .00 .05 (3.16) (4.05) (4.20) (3.81) (3.40)  EI <sup>g</sup> 20.21 21.61 20.54 21.93 21.39 3.72 .00 .02 (2.84) (2.71) (3.40) (2.75) (2.79)  NWV <sup>h</sup> 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)  BEIS <sup>i</sup> 24.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.02) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63)  COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	$DEP^{c}$	21.79	22.49	20.25	22.32	21.76	.75	.55	.00
NSA   18.15   20.39   19.70   20.50   20.00   3.51   .00   .05   (3.45)   (4.34)   (3.86)   (4.00)   (3.57)		(3.06)	(2.52)	(2.35)	(1.01)	(2.22)			
NSAe 18.15	$NSE^d$	18.41	20.56	19.89	20.91	20.09	3.59	.01	.07
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(3.55)	(4.12)	(4.03)	(4.19)	(4.23)			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$NSA^{e}$	18.15	20.39	19.70	20.50	20.00	3.51	.00	.05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(3.45)	(4.34)	(3.86)	(4.00)	(3.57)			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$EU^{f}$	18.56	20.71	19.64	21.07	20.36	3.88	.00	.05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(3.16)	(4.05)	(4.20)	(3.81)	(3.40)			
NWV <sup>h</sup> 17.85 19.71 19.17 20.02 19.58 3.04 .01 .06 (2.50) (3.43) (3.87) (3.43) (3.92)  BEIS <sup>i</sup> 24.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.02) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63)  COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	$\mathrm{EI}^\mathrm{g}$	20.21	21.61	20.54	21.93	21.39	3.72	.00	.02
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(2.84)	(2.71)	(3.40)	(2.75)	(2.79)			
BEIS <sup>i</sup> 24.44 23.44 23.93 24.11 26.58 1.03 .39 .00 (4.23) (4.02) (4.36) (3.20) (5.65)  IPPA <sup>j</sup> 76.65 74.22 70.89 72.57 74.30 3.01 .04 .08 (9.70) (8.36) (6.47) (5.16) (5.86)  TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63)  COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	$NWV^h$	17.85	19.71	19.17	20.02	19.58	3.04	.01	.06
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(2.50)	(3.43)	(3.87)	(3.43)	(3.92)			
IPPA <sup>j</sup> 76.65       74.22       70.89       72.57       74.30       3.01       .04       .08         (9.70)       (8.36)       (6.47)       (5.16)       (5.86)         TRUST       26.41       25.22       23.42       24.79       24.33       1.54       .19       .00         (2.51)       (1.98)       (1.54)       (1.88)       (1.65)         ALT <sup>k</sup> 28.89       28.76       29.53       28.46       28.82       .58       .67       .00         (3.30)       (4.39)       (4.40)       (4.92)       (3.63)         COM <sup>l</sup> 21.35       20.24       1.91       19.32       21.15       3.39       .01       .03         (3.85)       (3.06)       (2.75)       (2.19)       (2.90)	$BEIS^{i}$	24.44	23.44	23.93	24.11	26.58	1.03	.39	.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(4.23)	(4.02)	(4.36)	(3.20)	(5.65)			
TRUST 26.41 25.22 23.42 24.79 24.33 1.54 .19 .00 (2.51) (1.98) (1.54) (1.88) (1.65)  ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63)  COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	IPPA <sup>j</sup>	76.65	74.22	70.89	72.57	74.30	3.01	.04	.08
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(9.70)	(8.36)	(6.47)	(5.16)	(5.86)			
ALT <sup>k</sup> 28.89 28.76 29.53 28.46 28.82 .58 .67 .00 (3.30) (4.39) (4.40) (4.92) (3.63) COM <sup>l</sup> 21.35 20.24 1.91 19.32 21.15 3.39 .01 .03 (3.85) (3.06) (2.75) (2.19) (2.90)	TRUST	26.41	25.22	23.42	24.79	24.33	1.54	.19	.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(2.51)	(1.98)	(1.54)	(1.88)	(1.65)			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ALT^k$	28.89	28.76	29.53	28.46	28.82	.58	.67	.00
$(3.85) \qquad (3.06) \qquad (2.75) \qquad (2.19) \qquad (2.90)$		(3.30)	(4.39)	(4.40)	(4.92)	(3.63)			
	$COM^{l}$	21.35	20.24	1.91	19.32	21.15	3.39	.01	.03
		(3.85)	(3.06)	(2.75)	(2.19)	(2.90)			

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>l</sup> Communication. *df*=degrees of freedom,  $\eta^2$ =eta squared,

Table 31 shows the difference in reason of parent's death in relations to study variables among orphan through one-way ANOVA. The table shows orphan having different reasons of parental death scores high on psychological maladjustment, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional

instability, negative world view, IPPA and Communication. F values are significant for these variables, therefore, post-hoc analyses are required for pairwise comparisons. As sample sizes with respect to categories of reason of parent's death are unequal, the suggested post-hoc method is this case is Games-Howell test (Field, 2000). Pairwise comparisons across different categories of parental death with respect to above significant variables have been presented in Table 32.

**Table 32**Pairwise Comparisons across reason of Parent's Death with respect to Study Variables among Orphan (N=288)

-							
			Mean			<u>959</u>	<u>% CI</u>
			Difference				
Variable	(I)	(J)	(I-J)	β	p	LL	UL
PAQ <sup>a</sup>	physical illness	murder	-11.53*	4.05	.043	-22.83	22
		earth quake	-13.17*	3.55	.003	-23.00	-3.34
	murder	physical illness	11.53*	4.05	.043	.22	22.83
	earth quake	physical illness	$13.17^{*}$	3.55	.003	3.34	23.00
$NSE^b$	physical illness	earth quake	$-2.50^*$	.75	.011	-4.60	40
	earth quake	physical illness	$2.50^{*}$	.75	.011	.40	4.60
$NSA^{c}$	physical illness	earth quake	-2.35*	.74	.016	-4.41	30
	earth quake	physical illness	$2.35^{*}$	.74	.016	.30	4.41
$EU^d$	physical illness	earth quake	-2.51*	.70	.004	-4.45	57
	earth quake	physical illness	$2.51^{*}$	.70	.004	.57	4.45
$EI^e$	physical illness	earth quake	-1.72*	.49	.006	-3.08	35
	earth quake	physical illness	$1.72^{*}$	.49	.006	.35	3.08
$NWV^f$	physical illness	earth quake	-2.17*	.69	.018	-4.08	25
	earth quake	physical illness	$2.17^{*}$	.69	.018	.25	4.08
$IPPA^g$	physical illness	suicide	$5.76^{*}$	2.00	.037	.22	11.30
	suicide	physical illness	-5.76 <sup>*</sup>	2.00	.037	-11.30	22
$COMM^h$	physical illness	suicide	3.41*	1.08	.017	.41	6.40
	suicide	physical illness	-3.41*	1.08	.017	-6.40	41

Note: The above table only shows significant results, Personality Assessment Questionnaire,  $^{\rm b}$  Negative Self-esteem,  $^{\rm c}$  Negative Self-adequacy,  $^{\rm d}$  Emotional unresponsiveness,  $^{\rm c}$  Emotional Instability,  $^{\rm f}$  Negative World View,  $^{\rm g}$  Inventory of Parent and Peer Attachment,  $^{\rm h}$  Communication. CI=Confidence Interval, LL=Lower Limit, UL=Upper limit, \*p<.05, \*\*p<.01, \*\*\*p<.000.

Table 32 shows reason of parent's death and score of orphans on study variables. The table illustrates that orphans whose parents died because of any physical illness scored less on psychological maladjustment, negative self-esteem, negative self-

adequacy, emotional unresponsiveness, emotional instability and negative world-view than those died from murder, suicide, earthquake, and other reason. The table also shows that those orphans who parents died because of any physical illness scored high on inventory of parent and peer attachment indicated that these orphan adolescents can trust and communicate with other than those whose parents died from suicide. The results indicate that adolescents often feel guilty when a parent dies by suicide, or worry that they did something to cause the suicide. They may become anxious and clingy. With the passage of time, these adolescents may adhere negativity in their personality, suffer from maladjustment and cannot make stable or long-term relationship with others. They may have trust related issues and mostly live in alienation.

Differences across gender in relation to all variables of the study among orphan and non-orphan. In order to explore the differences across categories of gender in relation psychological maladjustment, emotional intelligent, and attachment styles, two-way ANOVA was performed separately for each variable. Results have been summarized below.

**Table 33**F values of male and female adolescents scores on Psychological Maladjustment among Orphan (288) and Non-Orphan (307)

Variable	SS (df)	MS	Е	р	η2
			F		
Orp_Non	434899.65(1)	434899.65	898.80	000	.193
Gender	40803.17(3)	13601.05	42.16	.000	.105
Orp_Non *Gender	33338.71(3)	11112.90	68.90	.000	.124
-2					
$\mathbb{R}^2$	.623				
$\Delta R^2$	.621				

Note: SS= Sum of Square, df= Degree of Freedom, MS= Mean Square, Orp\_Non = orphan vs non-orphan,  $\eta 2 = Eta\ square$ ,

Table 33 shows that main effect of orphan vs non-orphan, gender, and the interaction between orphan vs non-orphan and gender though two-way ANOVA. The table also shows that all three effect are significant as p < .000. It indicates that there is a significant difference between orphan and non-orphan in categories of gender over

psychological maladjustment. Pairwise comparisons across gender with respect to psychological maladjustment have been presented in Table 34.

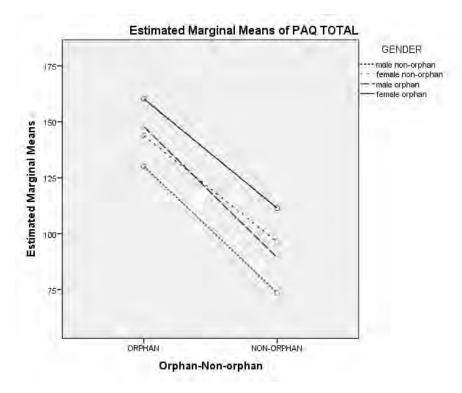


Figure 6: Estimated Marginal means on the measure of Psychological Maladjustment in gender among orphan vs non-orphan.

Figure 6 is illustrating that overall orphans have higher score on psychological maladjustment than non-orphans. The graph shows that female orphan scores high on psychological maladjustment than orphan, male non-orphan, and female non-orphan.

**Table 34**Pairwise Comparisons across gender with respect to Psychological Maladjustment among Non-Orphan (307) and Orphan (N=288)

					95%	CI
(I) GENDER	(J) GENDER	(I-J)	β	p	LL	UL
male non-orphan	female non-orphan	-9.58	2.51	.000	-11.52	-7.65
	male orphan	-48.17	2.54	.000	-50.71	-45.71
	female orphan	-56.55	2.57	.000	-59.14	-51.04
female non-orphan	male non-orphan	9.58	2.51	.000	7.65	11.52
	male orphan	-39.13	2.53	.000	-44.10	-34.15
	female orphan	-47.50	2.56	.000	-52.53	-42.47
male orphan	Male non orphan	48.17	2.54	.000	45.71	50.71
	female non-orphan	39.13	2.53	.000	34.15	44.10
	female orphan	-8.38	2.59	.001	-13.47	-3.28
Female orphan	Male non-orphan	56.55	2.57	.000	51.04	59.14
	Female non- orphan	47.50	2.56	.000	42.47	52.53
	male orphan	8.38	2.59	.001	3.28	13.47

*Note:* CI = Confidence Interval, *LL*=Lower Limit, *UL*=Upper limit,

Table 34 shows scores of different categories of gender on psychological maladjustment. The table shows that female orphan scores high on psychological maladjustment as compared to male orphan, male non-orphan and female non-orphan.

**Table 35**F values of male and female adolescents scores on Emotional Intelligence among Orphan (288) and Non-Orphan (307)

Variable	SS (df)	MS	F	p	η2
Orp_Non	48441.79 (1)	48441.79	1304.57	.000	.12
Gender	366.59(3)	122.19	4.41	.006	.06
Orp_Non *Gender	301.59(3)	100.53	4.17	.036	.04
$\mathbb{R}^2$	.692				
$\Delta R^2$	.690				

Note: SS= Sum of Square, df= Degree of Freedom, MS= Mean Square, Orp\_Non = orphan vs non-orphan,

Table 35 shows that main effect of orphan vs non-orphan, gender, and the interaction between orphan vs non-orphan and gender though two-way ANOVA. The table also shows that all three effect are significant as p < .000. It indicates that there is a significant difference between orphan and non-orphan in categories of gender over emotional intelligence. Pairwise comparisons across gender with respect to emotional intelligence have been presented in Table 36.

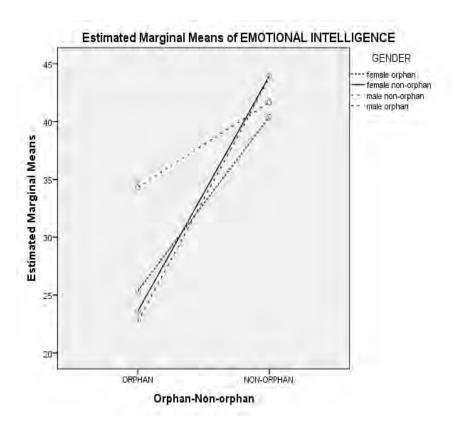


Figure 7: Estimated Marginal means on the measure of Emotional Intelligence in gender among orphan vs non-orphan.

Figure 7 is illustrating that overall non-orphans have higher score on emotional intelligence than orphan. The graph shows that male non-orphan scores high on emotional intelligence than female non-orphan, male orphan, and female orphan.

**Table 36**Pairwise Comparisons across gender with respect to Emotional Intelligence among Non-Orphan (307) and Orphan (N=288)

					95%	6 CI
(I) GENDER	(J) GENDER	(I-J)	β	p	LL	UL
male non-orphan	female non-orphan	3.00	.696	.000	1.63	4.36
	male orphan	16.48	.702	.000	18.10	20.86
	female orphan	19.63	.709	.000	18.24	21.02
female non-orphan	male non-orphan	-3.00	.696	.000	-4.36	-1.63
	male orphan	13.46	.705	.000	15.10	17.87
	female orphan	16.63	.712	.000	15.23	18.03
male orphan	male non-orphan	-16.48	.702	.000	-20.86	-18.10
	female non-orphan	-13.46	.705	.000	-17.87	-15.10
	female orphan	3.14	.718	.000	1.26	4.56
female orphan	male non-orphan	-19.63	.709	.000	-21.02	-18.24
	female non-orphan	-16.63	.712	.000	-18.03	-15.23
	male orphan	-3.15	.718	.000	-4.56	-1.26

*Note:* CI = Confidence Interval, *LL*=Lower Limit, *UL*=Upper limit,

Table 36 shows that male and female non-orphan scored high on emotional intelligence than male and female orphan. The high on EI among could be their self-awareness of emotions as well as others and hence are able to regulate their emotions and others effectively.

Table 37

F values of male and female adolescents scores on Attachment Styles among Orphan (288) and Non-Orphan (307)

Variable	SS (df)	MS	F	p	η2
Orp_Non	8188.91(1)	8188.91	62.52	.000	.116
Gender	5835.10(3)	1945.03	15.55	.000	.070
Orp_Non	4291.12(3)	1430.37	12.77	.000	.053
*Gender					
$\mathbb{R}^2$	.195				
$\Delta R^2$	.191				

Note: SS= Sum of Square, df= Degree of Freedom, MS= Mean Square, Orp\_Non = orphan vs non-orphan,

Table 37 shows that main effect of orphan vs non-orphan, gender, and the interaction between orphan vs non-orphan and gender though two-way ANOVA. The table also shows that all three effect are significant as p < .000. It indicates that there is a significant difference between orphan and non-orphan in categories of gender over attachment styles. Pairwise comparisons across gender with respect to attachment styles have been presented in Table 38.

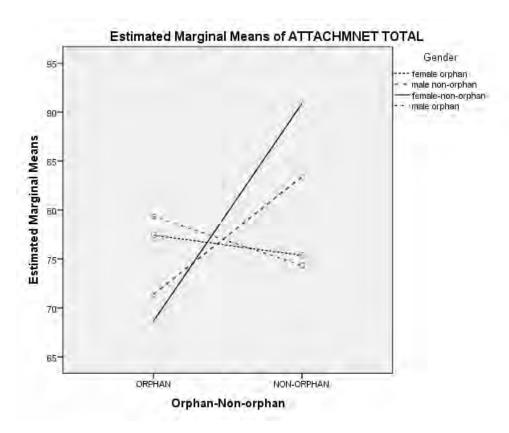


Figure 8: Estimated Marginal means on the measure of Attachment Styles in gender among orphan vs non-orphan.

Figure 8 is illustrating that overall non-orphans have higher score on attachment styles than orphan. The graph shows that female non-orphan scores high on attachment styles than male orphan, male non-orphan, and female non-orphan.

Table 38

Pairwise Comparisons to check gender differences at various levels in relations to Attachment styles among Orphan (288) and Non-Orphan (307)

					95%	<u>CI</u>
(I) GENDER	(J) GENDER	(I-J)	β	p	LL	UL
male non-orphan	female non-orphan	-11.64*	1.306	.000	-15.01	-8.28
	male orphan	1.15	1.324	.818	-2.25	4.57
	female orphan	2.05	1.338	.419	-1.40	5.50
female non-orphan	male non-orphan	11.64*	1.306	.000	8.28	15.01
	male orphan	$12.80^{*}$	1.318	.000	9.40	16.19
	female orphan	13.69*	1.332	.000	10.26	17.12
male orphan	male non-orphan	-1.15	1.324	.818	-4.57	2.25
	female non-orphan	-12.80 <sup>*</sup>	1.318	.000	-16.19	-9.40
	female orphan	.90	1.349	.911	-2.58	4.37
female orphan	male non-orphan	-2.05	1.338	.419	-5.50	1.40
	female non-orphan	-13.69*	1.332	.000	-17.12	-10.26
	male orphan	90	1.349	.911	-4.37	2.58

Note: CI=Confidence Interval, LL=Lower Limit, UL=Upper limit,

The table 38 shows pairwise comparison of categories of gender on attachment styles. The table shows that female non-orphan scored high on attachment styles than male orphan, female orphan and male non-orphan. The result indicates that female livings with their parents are likely to score higher on measure of attachment (both in personal and professional settings) than male (Naz & Kausar, 2013).

Predicting attachment styles from psychological maladjustment and emotional intelligence. After calculating correlations and difference across age and gender in relation to variables, Hierarchical multiple regressions analysis was performed in order to explore the impact of different psychological maladjustment, emotional intelligence on attachment styles. According to filed (2013), hierarchical regression method is used when are entered based on past work. Known variables are entered first, followed by new variables.

Preliminary analyses for regression include confirmation of normality, linearity and homoscedasticity of data. The correlations between the predictor variables (psychological maladjustment and emotional intelligence) were found weak and moderate among non-orphan where as strong among orphan adolescents (Table 18).

**Table 39**Hierarchical Multiple Regression Analysis predicting Attachment Styles from Psychological Maladjustment and Emotional Intelligence (N=595)

Predictors	$R^2$	$\Delta R^2$	β	F	95%	6 Cl
					LL	UL
Model 1	.33	.33		41.30***		
$HA^b$			41**		-2.36	-1.30
DEP <sup>c</sup>			13		41	1.11
$NSE^d$			48**		-1.32	15
NSA <sup>e</sup>			43**		-1.19	81
$EU^f$			15		87	1.53
$\mathrm{EI}^\mathrm{g}$			10		-1.27	.37
$NWV^h$			-16		58	.84
$PAQ^a$			-1.873*		-1.45	.02
Model 2	.42	.09		39.17***		
$BEIS^{i}$			.41***		.40	.62

Note: a Personality Assessment Questionnaire, b Hostility and Aggression, c Dependence, d Negative Self-esteem, c Negative Self-adequacy, f Emotional unresponsiveness, g Emotional Instability, h Negative World View, Brief Emotional Intelligent Scale, CI = Confidence Interval, LL = Lower limit, UL = Upper Limit,  $\Delta$  R<sup>2</sup>= change in R<sup>2</sup>,  $\beta$  = standardized regression coefficient. p<.05, \*\*p<.01, \*\*\* p<.000

Table 39 shows impact of psychological maladjustment (hostility and aggression, Dependence, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability and negative world-view) and emotional intelligence on attachment styles both in orphan and non-orphan adolescents. The analysis was completed in two steps. Model 1 explains 33 % variance in attachment styles. Beta values indicate that hostility and aggression, negative self-esteem, negative

self-adequacy and total of psychological maladjustment significantly negatively predict attachment styles in adolescents, which partially support out hypothesis 1 ("Psychological maladjustment will be negatively related to emotional intelligence and attachment styles among orphan and non-orphan adolescents").

In model 2, emotional intelligence also has a significant positive association with attachment styles, and adds 9% variance in the model. Thus hypothesis 2 ("Emotional intelligence will be positively related to attachment styles both in orphan and non-orphan adolescents"). Overall, the model explains 42% variance in attachment styles.

Predicting attachment styles from psychological maladjustment and emotional intelligence in orphan and non-orphan. In order to explore the impact of psychological maladjustment and emotional intelligence on attachment styles on orphans and non-orphans, hierarchical multiple regression was carried out separately on both samples. Results have been presented in table 40.

**Table 40**Hierarchical Multiple Regression Analysis predicting Attachment Styles from Psychological Maladjustment and Emotional Intelligence among Orphan (N=288) And Non-Orphan (N=307)

Predictors	R <sup>2</sup>	$\Delta R^2$	β	F	95%	<u>6 Cl</u>	R <sup>2</sup>	$\Delta R^2$	β	F	95%	<u>C1</u>
					LL	UL					LL	UL
Model 1	.28	.28		36.06***			.15	.15		12.82**		
$HA^a$			06		-1.68	.04			03		10	1.21
$DEP^b$			40**		-2.68	-1.04			22*		-2.56	28
$NSE^{c}$			39**		37	-1.14			32**		-1.05	33
$NSA^d$			26*		3.54	36			13		-1.04	1.62
EUe			32**		-2.21	32			25		95	2.02
$\mathrm{EI^f}$			07		35	1.14			.16		09	1.23
$NWV^g$			01		-1.96	.19			.21		80	1.76
$PAQ^h$			-1.28**		-1.91	79			-1.04*		-1.27	52
Model 2	.31	.03		25.92**			.16	.01		7.39		
BEIS			.58**		.36	.91			.03		12	.23

<sup>&</sup>lt;sup>a</sup>Hostility and Aggression, <sup>b</sup>Dependence, <sup>c</sup>Negative Self-esteem, <sup>d</sup>Negative Self-adequacy, <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, UL = Change in UL = Change in UL = Change in UL = Change in UL = Upper Limit, UL = Upper Limit, UL = Change in UL = Change

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\* p<.000

Table 40 is divided into two parts. First part shows impact of psychological maladjustment and emotional intelligence on attachment styles on orphans and second shows the impact of study variables on attachment styles on non-orphans.

Part 1 shows the impact of psychological maladjustment on attachment styles with 28 % variance, revealing that dependence, negative self-esteem, negative self-adequacy, emotional unresponsive and total of psychological maladjustment found to be significantly negatively related with attachment styles among orphans. In model 2, emotional intelligence added 3 % of variance, indicating that emotional intelligence has found to be significantly positively related with attachment styles in orphans. The model shows 31 % of variance in total.

Part 2 shows that impact of psychological maladjustment on attachment styles with 15% variance, revealing that dependence and negative self-esteem found to be significantly negatively related with attachment styles among non-orphans. On other hand, model 2 add only 1% of variance in total indicating that emotional intelligence is a weak predictor of attachment styles in non-orphans. overall, the model explains just 16% of variance in attachment styles.

## **Mediation Analysis for the Study Variables**

The mediation analysis was conducted, which help in identify the mechanism how and why a relation 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 41**Simple Mediation of the effect of Emotional Intelligence between Psychological Maladjustment and Attachment styles (N=595)

Predictors	Model 1	Model 2	Model 2 95% CL	
	В	В	LL	UL
Constant	107.60***	79.69***	104.40	110.80
Psychological maladjustment	21***	11***	24	18
Emotional intelligence		.49***	.38	.59
Indirect effect-PM→ EI→ AS		09	12	07
$\mathbb{R}^2$	.30	.39		
$\Delta R^2$		.09		
F	254.77***	191.63***		
$\Delta F$		63.14		

Note. B= unstandardized coefficients; LL = Lower limits; UL = Upper Limit; PM = Psychological Maladjustment; EI = Emotional Intelligence; AS = Attachment styles

The results from table 41 shows that emotional intelligence mediate the relationship between psychological maladjustment and attachment styles. Indirect effect appeared to be significant but in negative direction and explained 9% variance in attachment styles.

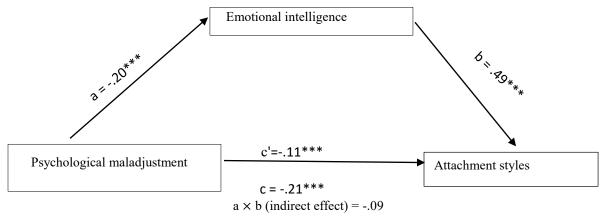


Figure 9: Mediating role of emotional intelligence on psychological maladjustment and attachment styles (N=595).

Table 42

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

Predictors	Model 1	Model 2 <u>95% CL</u>		CL
	В	В	LL	UL
Constant	101.43***	91.96***	92.11	110.75
Psychological maladjustment	19***	17***	24	10
Emotional intelligence		.27***	.08	.45
Indirect effect-PM →EI→ AS		05	09	00
$R^2$	.11	.18		
$\Delta R^2$		.05		
F	34.79***	21.78***		
$\Delta \mathrm{F}$		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 42 shows that emotional intelligence mediate the relationship between psychological maladjustment and attachment styles among orphan. Indirect effect appeared to be significant but in negative direction and explained 2% variance in attachment styles

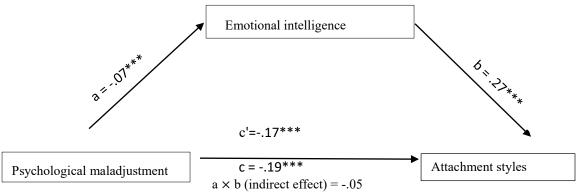


Figure 10: Mediating role of emotional intelligence on psychological maladjustment and attachment styles among orphan (N=288).

Table 43

Simple Mediation of the effect of Emotional Intelligence between Psychological Maladjustment and Attachment styles among Non-Orphan (N=307)

Predictors	Model 1	Model 2	95% CL	
	В	В	LL	UL
Constant	88.52***	52.47***	79.11	93.05
Psychological maladjustment	05*	07	03	09
Emotional intelligence		.03	01	.05
Indirect effect-PM→ EI→ AS		01	02	.00
$\mathbb{R}^2$	.03	.05		
$\Delta R^2$		.02		
F	1.89	.98		
$\Delta \mathrm{F}$		0.9		

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

The results 43 shows that direct effect of psychological maladjustment is to be significant on attachment styles among non-orphans but indirect effect of psychological maladjustment on attachment styles through emotional intelligence is non-significant (B = -.01, 95% Cl = -.02, .00) indicating that emotional intelligence does not mediate the relationship between psychological maladjustment and attachment styles in non-orphans.

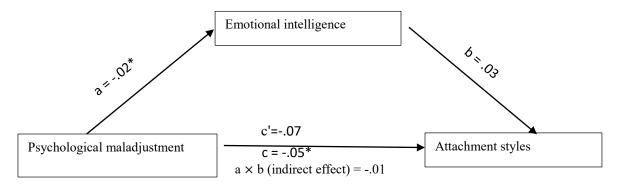


Figure 11: Mediating role of emotional intelligence on psychological maladjustment and attachment styles among non- orphan (N=307).

**Table 44**Mediating of the effect of Emotional Intelligence between Psychological Maladjustment and trust among Orphan (N=288)

Model 1	Model 2	95%	CL
В	В	LL	UL
43.85***	33.02***	26.37	39.68
14***	11***	15	07
	.30***	.19	.42
	02	04	00
.15	.22		
	.07		
49.42***	42.31***		
	7.11		
	B 43.85***14***	B B 43.85*** 33.02***14***11*** .30***02 .15 .22 .07 49.42*** 42.31***	B B LL  43.85*** 33.02*** 26.37 14***11***15  .30*** .19 0204  .15 .22  .07  49.42*** 42.31***

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

The table 44 shows that direct effect of psychological maladjustment is significantly negatively related to trust in orphans. The significance of indirect effect (B = -.2, 95% Cl = -.04, -.00) indicated that emotional intelligence mediates the relationship between psychological maladjustment and trust but in negative direction.

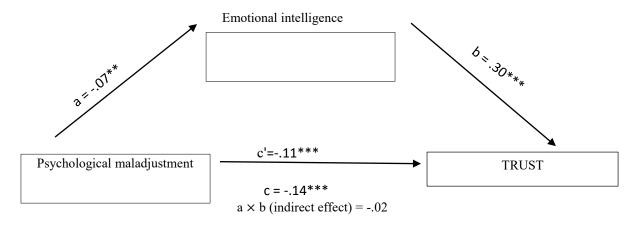


Figure 12: Mediating role of emotional intelligence on psychological maladjustment and trust among orphan (N=288).

**Table 45**Mediating of the 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 maladjustment	11***	09**	14	07
Emotional intelligence		.17***	.01	.20
Indirect effect-PM →EI→ COMM		02	03	00
$\mathbb{R}^2$	.12	.14		
$\Delta R^2$		.02		
F	44.28***	24.63***		
$\Delta \mathrm{F}$		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

The table 45 shows that direct effect of psychological maladjustment is significantly negatively related to communication in orphans. The significance of indirect effect (B = -.02, 95% Cl = -.03, -.00) indicated that emotional intelligence mediates the relationship between psychological maladjustment and communication but in negative direction.

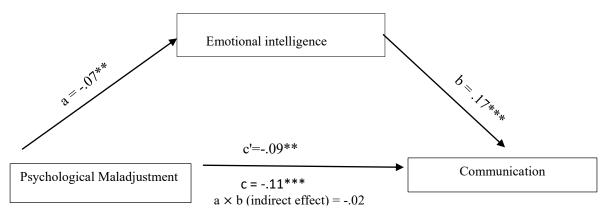


Figure 13: Mediating role of emotional intelligence on psychological maladjustment and communication among orphan (N=288).

**Table 46**Mediating of the effect of Emotional Intelligence Between Psychological Maladjustment and Alienation among Orphan (N=288)

Predictors	Model 1	Model 2	Model 2 <u>95% CL</u>	
	В	В	LL	UL
Constant	21.53***	26.61***	21.57	31.66
Psychological maladjustment	.06***	.05**	.02	.07
Emotional intelligence		14**	22	06
Indirect effect-PM→EI→ ATN		.01	.00	.02
$R^2$	.05	.09		
$\Delta R^2$		.04		
F	17.11***	14.64**		
$\Delta \mathrm{F}$		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

The table 46 shows that direct effect of psychological maladjustment is significantly negatively related to alienation in orphans. The significance of indirect effect (B = -.01, 95% Cl = .00, .02) indicated that emotional intelligence mediates the relationship between psychological maladjustment and alienation.

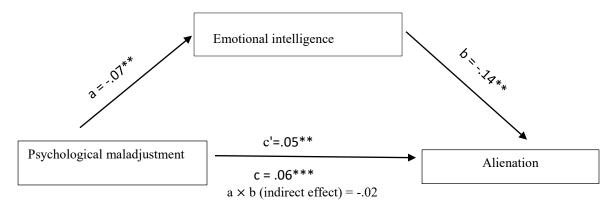


Figure 14: Mediating role of emotional intelligence on psychological maladjustment and alienation among orphan (N=288).

## Moderation analysis with demographic variables

The moderation analysis with respect to different demographic variables were also conducted, which help identify the conditions of when and for whom the relation exist between dependent and independent variables (Hayes, 2013). The current study only reported significant moderation findings with respect to study variables.

Moderating effect of Education for psychological maladjustment in predicting attachment styles among non-orphans. The moderating effect of Education was also determined for psychological maladjustment in predicting attachment styles. The results obtained of the analysis are mentioned as follows:

**Table 47** *Moderating effect of Education for Psychological Maladjustment in Predicting Attachment Styles among Non-Orphans (N=307)* 

10 70***			
18.78***	15.91	21.04	.00
1.19**	.36	1.56	.01
27**	-2.10	96	.01
.02**	.00	.05	.01
_	27**	27** -2.10	27** -2.1096

<sup>\*</sup>p<.05, \*\* p<.01, \*\*\* p<.001

Table 47 demonstrates that the main effect of psychological maladjustment on attachment styles is significantly negative in nature (p<.05). The education is found to be positive predictor of attachment style. The findings also show the significance (p<.05) of interaction effect of moderator and predictor (i.e., education and psychological maladjustment on outcome variable that is, attachment among non-orphans. the interaction effect found to explains 2 % variance in attachment styles.

The model graph reveal for these results was also obtained which is given as follows:

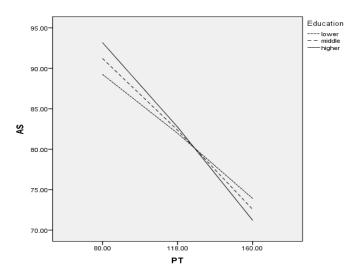


Figure 15: Moderation effect of education on psychological maladjustment in predicting attachment styles among non-orphans; PT= Psychological Maladjustment; AS= Attachment styles.

The mod graph above indicates that at the given point of psychological maladjustment, attachment styles is increasing for all level of education The computation of slopes indicates that t = -4.3 (p < .05) for low level of education, t = -3.8 (p < .05) for medium level of education and t = -1.89 (p < .001) for high level of education. The values show that moderation is significant for all level of education, indicating that a significant increase in attachment styles decreases the psychological maladjustment among non-orphan having higher level of education.

Moderating effect of institute for psychological maladjustment in predicting attachment styles among non-orphans. The moderating effect of institute (private and government institute) was also determined for psychological maladjustment in predicting attachment styles. The results obtained of the analysis are mentioned as follows:

**Table 48**Moderating Effect of Institute for Psychological Maladjustment in Predicting Attachment Styles among Non-Orphans (N=307)

0.07**	3.32	17.40	.00
.13**	20	- 05	0.4
		05	.01
07***	.02	.10	.00

<sup>\*</sup>p<.05, \*\*p<.01, \*\*\* p<.001

Table 48 demonstrates that the main effect of psychological maladjustment on attachment styles is significantly negative in nature (p < .05). The institute is found to be positive predictor of attachment style. The findings also show the significance (p < .001) of interaction effect of moderator and predictor (i.e., institute and psychological maladjustment on outcome variable that is, attachment among non-orphans. the interaction effect found to explains 3 % variance in attachment styles. The model graph reveal for these results was also obtained which is given as follows:

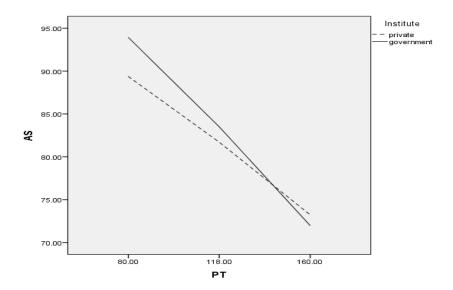


Figure 16: Moderation effect of institute on psychological maladjustment in predicting attachment styles among non-orphans; PT = psychological maladjustment; AS= Attachment styles.

The mod graph above indicates that at the given value of psychological maladjustment, the attachment styles is increasing for both private institute and government institute. The computation of slopes indicates that t = -5.78 (p <.05) for private institute, t = -1.18 (p <.001) for government institute. The values show that moderation effect show a significant increase in attachment style with respect in decrease in psychological maladjustment among non-orphan who are studying in government institute.

Moderating effect of age for dependence in predicting attachment styles among orphans. The moderating effect of age was also determined for dependence in predicting attachment styles. The results obtained of the analysis are mentioned as follows:

**Table 49**Moderating Effect of Age for Dependence in Predicting Attachment Styles among Orphans (N=288)

		В	LL	UL	p
Constant		138.00***	115.87	160.14	.00
Age (Moderator)		-28.54***	-44.01	-20.08	.00
Dependence		42***	-1.26	57	.00
Age × Dependence		.17***	.08	.20	.00
$\mathbb{R}^2$	.46***				
$\Delta R^2$	.04				
F	19.34***				
$\Delta F$	4.86				

<sup>\*</sup>p<.05, \*\* p<.01, \*\*\* p<.001

Table 49 demonstrates that the main effect of dependence on attachment styles is significantly negative in nature (p<.001). The age is found to be negative predictor of attachment style. The findings also show the significance (p<.001) of interaction effect of moderator and predictor (i.e., age and dependence on outcome variable that is, attachment among orphans. the interaction effect found to explains 4 % variance in attachment styles. The model graph reveal for these results was also obtained which is given as follows:

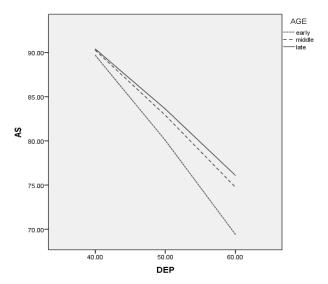


Figure 17: Moderation effect of age on dependence in predicting attachment styles among orphans; DEP = dependence; AS= Attachment styles.

The computation of slopes indicates that t = -10.71 (p < .001) for early age, t = -13.36 (p < .001) for middle age and t = -10.51(p< .001). The values show that moderation is significant for all level of the age among orphan. The moderation effect is such that a significant decrease is observed in attachment styles with respect to increase in dependence among orphan at all levels of age.

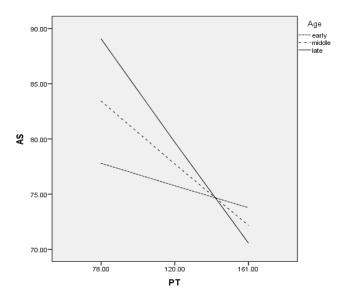
Moderating effect of age for psychological maladjustment in predicting attachment styles among orphans. The moderating effect of age was also determined for psychological maladjustment in predicting attachment styles. The results obtained of the analysis are mentioned as follows:

**Table 50**Moderating Effect of Age for Psychological Maladjustment in Predicting Attachment
Styles among Orphans (N=288)

		В	LL	UL	p
Constant		69.13***	61.71	76.56	.00
Age (Moderator)		-12.43***	-16.64	-8.22	.00
Psychological Maladjustme	nt	11***	15	09	.00
$Age \times PT$		.08***	.01	4.93	.00
$\mathbb{R}^2$	.12***				
$\Delta R^2$	.04				
F	28.92***				
$\Delta { m F}$	4.61				

Note; PT= Psychological Maladjustment; AS = Attachment styles. \*p<.05, \*\*p<.01, \*\*\* p<.001

Table 50 demonstrates that the main effect of psychological maladjustment on attachment styles is significantly negative in nature (p<.001). The age is found to be negative predictor of attachment style. The findings also show the significance (p<.001) of interaction effect of moderator and predictor (i.e., age and psychological maladjustment) on outcome variable that is, attachment among orphans, the interaction effect found to explains 4 % variance in attachment styles. The model graph reveal for these results was also obtained which is given as follows:



*Figure 18:* Moderation effect of age on psychological maladjustment in predicting attachment styles among orphans; PT = Psychological Maladjustment; AS= Attachment styles.

The computation of slopes indicates that t = -3.64 (p <.001) for early age, t = -2.96 (p <.001) for middle age and t = -2.10 (p< .001). The values show that moderation is significant for all level of the age among orphan. The moderation effect is such that a significant decrease is observed in attachment styles with respect to increase in psychological maladjustment among orphan at all levels of age.

Moderating effect of time spent in orphanage for psychological maladjustment in predicting trust among orphans. The moderating effect of time spent in orphanage was also determined for psychological maladjustment in predicting trust. The results obtained of the analysis are mentioned as follows:

**Table 51**Moderating effect of Time spent in Orphanage for Psychological Maladjustment in Predicting Trust among Orphans (N=288)

14.56*	2.36	26.57	
		26.57	.02
-3.09**	-5.32	-3.88	.01
20*	38	29	.02
.03*	.01	.05	.02
	20*	20*38	20*3829

Note; TMO NOTE; TMO= time spent in orphanage; PT= Psychological Maladjustment, p<.05, p<.01, p<.01

Table 51 demonstrates that the main effect of psychological maladjustment on attachment styles is significantly negative in nature (p< .05). The time spend in orphanage is found also to be negative predictor of trust (p<.05). The findings also show the significance (p< .05) of interaction effect of moderator and predictor (i.e., time spent in orphanage and psychological maladjustment on outcome variable that is, trust in orphans. the interaction effect found to explains 2 % variance in trust. The model graph reveal for these results was also obtained which is given as follows:

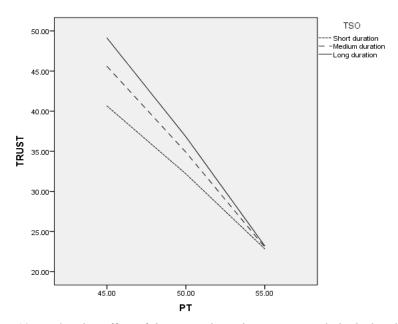


Figure 19: Moderation effect of time spent in orphanage on psychological maladjustment in predicting trust among orphans; TSO = Time Spend in Orphanage; PT = Psychological Maladjustment.

The computation of slopes indicates that t = -5.77 (p > .05) for short duration, t = -5.23(p > .05) for medium duration and t = -4.70 (p < .05) for long duration. These values show that moderation is significant for shorter duration among orphans. the moderation effect is such that a significant decrease in trust with respect to increase in psychological maladjustment among orphan who spent longer time in orphanage.

## Chapter 5

## **DISCUSSION**

Adolescents who live with their parents and those who are brought up in orphanage mostly suffer from psychological maladjustment (Khan, Khan, & Majeed, 2014); as those who are brought up in institute or orphanage having 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, Schermer, Veselka, & Vernon, 2009). The present study aimed to explore the relationship between psychological maladjustment, emotional intelligence and attachment styles among orphan and non-orphan adolescents. The purpose of the research was accomplished by following a proper procedure underlying interviews to finalize the constructs of the study in Study I, translation and validation of the BEIS, and establishing construct validity of translated of PAQ and IPPA in Study II, and administration of those translated and other research instruments on orphan and non-orphan adolescents in order to determine the relationship between psychological maladjustment, emotional intelligence and attachment styles in Study III.

The main objectives of study III include (a) to compare the psychological maladjustment, emotional intelligence and attachment styles among orphan and non-orphan adolescents (b) determine the mediating role of emotional intelligence for the relationship between psychological maladjustment and attachment styles, (c) examine the role of demographic variables (i.e., gender, age, education, institute, time spend in orphanage, reason of parent's death, number of siblings) related difference on the variables among orphan and non-orphan adolescents.

The descriptive account of qualitative information obtained from the participants based on their experiences was also made. Interviews were conducted to investigate the opinions and experiences regarding psychological maladjustment, emotional intelligence and attachment styles of both orphans and non-orphans. The results obtained from the interviews showed that orphans are more dependent, having

low-self-esteem with less acceptance, not bold to take responsibility, have low levels of sociability, more behavioral and emotional problems, trust related issues, poor peer attachment and more problems in peer relationships than non-orphans. Other than that, interviews were also conducted in order to finalize constructs of the study. The results were consistent with previous study (Bakermans-Kranenburg, IJzendoorn, & Juffer, 2007; Chakraborty, Dasgupta & Sanyal, 2019; Khan, Khan, & Majeed, 2014; Katyal, 2015).

#### **Confirmatory Factor Analysis on Study Variables**

In order to establish construct validity of translated versions of instruments used in main study and to confirm the factor structure of the instruments, Confirmatory Factor Analysis (CFA) was performed. After doing CFA on PAQ scale, model fit was not achieved for PAQ as future researchers are recommended to do it with independent samples. CFA of the Brief Emotional Intelligent Scale (BEIS-10) showed that after adding co-variances, goodness of model fit was achieved. Loadings of the scale are ranged from .60 - .82 (Table 12). In addition, all the factor loadings were above the criteria (>3). On the other hand, goodness of fit for IPPA was improved after adding co-variances depicted satisfactory values of modification indices (Table 14). Loadings of the scale are ranged from .39-.72.

# Relationship between the Psychological Maladjustment, Emotional Intelligence and Attachment Styles and Their Correlates

The relationship between the study variables was determined by finding correlation estimates (Table 18). The finding indicate that psychological maladjustment is found to be significantly negatively related with emotional intelligence and attachment styles in orphan (Table-18). Whereas, psychological maladjustment is significantly negatively related to attachment styles in orphans but not significantly related to emotional intelligence in non-orphan. This finding supported hypothesis 1:" Psychological maladjustment will be negatively related to emotional intelligence and attachment styles among orphan and non-orphan adolescents " of the research and is also supported by the literature (Filinkova, Savchenko, & Shulga, 2016; Hussain, 2017; Kozlovskaya, 2013; Mukhamedrakhimov, 2006; Vijayan, & Rajan, 2016). Consistent with the present research findings, 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. Reason might be that persons with low self-esteem often feel alienated as they are more dependent on external reinforcements and are being characterized by feelings of insecurity, inferiority, and hostility (and to be aggressive and full of anxieties, and conflicts). Such individuals are not being able to comprehend the emotions in order to evaluating thoughts, manners and behavior and they have unstable attachment with parents, peers and friends.

The correlation estimates for emotional intelligence indicated that emotional intelligence is positively related to attachment styles among orphan and non-orphan adolescents (Table17-18). This finding supported hypothesis 2: "Emotional intelligence will be positively related to attachment styles among orphan and non-orphan adolescents". 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 result of the current study. The results indicated that individual having high recognition of emotions and feelings have more secure style of attachment.

The difference between psychological maladjustment and its associates, emotional intelligence and attachment style was determined by independent t-test analysis. The results (Table 19) indicated that non-orphan scored higher on emotional intelligence supporting hypothesis 5: "Orphans will score low on emotional intelligence, trust and communication, and high on alienation as compared to non-orphans". Past researchers also support our hypothesis in this regard that higher level of emotional intelligence are associated with an increase likelihood of attending to health and appearance, positive interaction with friends and family, and owning objects that are the reminders of their beloved one, such traits are more common in individuals having parents (Ara, Ahad. & Shah, 2015; Swift, 2002), non-orphans are having higher Emotional Intelligence than orphans (Ishak, 2017). The plausible reason for non-orphan score high on emotional intelligence might be that non-orphan

children can understand and regulate their impulsive feeling and distress emotion well (Abadi, 2011). They display traits like honesty and integrity. They meet commitments and keep promises. They are also flexible in handling change and challenges and are also open to novel ideas, approaches and new information (Bhat, 2014). The healthy and supportive parenting style helps the non-orphan children to regulate and manage their emotions efficiently.

Orphans also scores significantly high on alienation than non-orphans (Table 19). The findings are consistent with research result of Katyal (2017) revealed that there existed significant difference in mean scores of trusts in peers and total peer attachment of orphan and non-orphan children, with non-orphans having more trust and attachment with peers as compared to those of orphan children. The possible reason for the present finding could be that personality characteristics of orphan who survived parental lose reflect their understanding of the outer world, their place and status in it. The results also indicate that the view about world is often perceived by such children as completely indifferent or even hostile. In this case mistrust towards others, negative and even contemptuous attitude towards them is formed. A child feels like an outcast, feels his/her own "inferiority" in comparison with most peers, or vice versa, a child, especially a teenager, feels his "superiority" over others, as he/she has already acquired some negative social experience and "knows life" better than other, ordinary people (Filinkova, Savchenko, & Shulga, 2016). As a result, negativity and destructive, "substitute" activities are formed, the system of interpersonal relations is changed. 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 behavior (Khan, Khan, & Majeed, 2014).

Orphan significantly scored higher on negative psychological maladjustment, hostility and aggression, negative self-esteem, negative self-adequacy, emotional unresponsiveness, and emotional instability than non-orphans (Table 19). The finding partially supported hypothesis 4; "Orphans will score high on hostility and aggression, dependence, emotional instability, emotional unresponsiveness, negative self-adequacy, negative worldview and negative self-esteem as compared to non-

orphans". The above findings are consistent with past researches which showed that there is a positive relationship between depression and negative self-esteem in orphaned children (Asif, 2017); more hostility, negative self-adequacy in orphan, and emotional responsiveness, emotional stability in non-orphan (Khan, Khan, & Majeed, 2014). 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, lack of close supervision, orphan suffers from stress (Draper & Hancock, 2011). The way in which they cope with this stress can have significant short and long-term consequences on their physical and emotional health such as chronic fear and anxiety, poor interpersonal relations, aggression and other social disorders.

Effect of demographics on study variables. The effect of demographics on study variables were determined by t-test and one-way and two-way ANOVA. Gender difference among non-orphan (Table 20 and 35) suggested that non-orphan boys scored high on negative world-view and emotional intelligence. The result supported hypothesis 8 "Non-orphan boys will score high on emotional intelligence than non-orphan girls". The results are consistent with previous researches in that, men do better than women when it comes to understanding and managing emotions. (Bansal, 2019; Chu, 2002; Kumar & Sing, 2017).

Non-orphan girls scored high on psychological maladjustment, dependence, negative self-adequacy and attachment style (Table 20 and 38). Past researches supported our hypothesis (Jane, Klonsky, Oltmanns, & Turkheimer, 2002). The reason might be that girls having low self-esteem and dependency feel poorly about themselves and judge themselves to be inferior to others especially from boys. They feel incompetent due to which they cannot achieve their true potential in life and depends upon other especially parents or partners.

Gender difference among orphan boys and girls were determined (Table 21). The results show that that female orphan sored high on dependence, negative self-esteem, emotional intelligence, and trust than male orphans. The results partially

supported hypothesis 7 "Orphan girls will score high on dependence, negative self-esteem, negative self-adequacy, negative worldview, emotional instability, emotional unresponsiveness, attachment styles, trust and communication than orphan boys". This result is consistent with previous research by Naz and Kausar (2013), Rohner, Khaleque and Cournoyer (2007), Mandell and Pherwani (2003) who found that female living in institute are likely to score higher on measure of negative self-esteem, dependence, communication, attachment (both in personal and professional settings) than male. The reason might be that female livings in institute (orphanages) are more at risk of negative self-esteem. They have low ability to cope with difficult situation that is why they are more depending on others.

On the other hand, orphan boys score significantly high on hostility and aggression and emotional intelligence and communication than orphan girls (Table 21). The result supported hypothesis 6 "Orphan boys will score high on hostility and aggression and emotional intelligence compared to orphan girls". The high scores on hostility obtained by orphan boys may also be explained by that; in the life of orphan boys there is a greater chance of the presence of antecedents of anger, such as frustration, annoyance, attacks etc. Since hostility is a conditioned anger response, its development depends upon the individual's being angered (Shulga, Savchenko, & Filinkova, 2016). The high scored on EI among could be their self-awareness of emotions as well as others and hence are able to regulate their emotions and others effectively.

In conclusion, the above results might suggest that orphans are deprived of love, affection from their parent or family. In most of the orphanage homes, they are reared through neglecting or depriving situation. The major characteristics of orphanage home are poor care giving, absence of a constant caregiver. The poor orphan who are not able to solve their own problems; the peer pressure, conflict with peers, opposition authority figures, often show insecure, avoidant, or ambivalent attachment to their primary adult caregivers (Chisholm, Gunnar, Morison, & Schuder, 2001). Female orphans cannot adjust on most of the issues like male orphans. Because, male orphans express and shares their problems to friends or other nearest

person that female cannot do it. Due to difference in gender socialization, female is supposed to submissive, well mannered, docile and repressive minded while the boys are supposed to be aggressive, independent. For this reason, girls do not express their emotion and it leads to the emotional problem including stress, depression and anxiety which is similar to Roberts et al. (2005). He stated that repressed emotion lead to stress, and depression and it was more among girls than boys.

Predicting Attachment styles from psychological maladjustment and emotional intelligence in orphan and non-orphan was determined by the use of Hierarchical multiple regression (Table 40) indicated that both psychological maladjustment and emotional intelligence significantly predicted attachment styles in orphan by adding 31 % variance in the model. Whereas psychological maladjustment and emotional intelligence predict the attachment styles in non-orphan with adding only 16 % of variance in total. The results are consistent with previous literature (Alcaide, Berrocal, Extremera, & Pizarro, 2006; Batool & Khalid, 2009; Berrocal, Extremera, Salovey, Ramos, & Vera, 2005; Chuprova, 2007; Petrides & Furnham, 2001; Rohner et al., 2016; Thomas, 1991; Petrides, Schermer, Veselka, & Vernon, 2009).

The difference in psychological maladjustment, emotional intelligence and attachment styles among hafiz-e-Quran and non-hafiz-e-Quran were also calculated (Table 22). The results show that non-hafiz Quran sored high on psychological maladjustment, dependence, negative self-esteem, negative self-adequacy, negative world view peer attachment, and alienation than hafiz-e-Quran. According to Francis and Kaldor (2002), spirituality and/or religiosity are known to have beneficial effects on personality of individuals. The reason might be due to the fact that the authoritarian and restricted environment of Madrassahs heavily emphasizes obedience and discipline. Higher levels of religious faith and spirituality are associated with a more optimistic life orientation, greater perceived social support, trust, higher resilience to stress, lower levels of anxiety, hostility and aggression (Pardini, 2003).

Age difference across study variables among orphan and non-orphan were also analyzed (Table 23-26). Orphans aged ranged 15-22 scored high on psychological maladjustment, Dependence and Emotional Unresponsive than those orphans aged

ranged 12-14. On the other hand, orphan aged ranged 12 to 14 years scored higher on IPPA, Trust and Communication than those aged ranged15 to 22 years. The reason might be that early adolescents' perception of a warm and accepting quality in the relationship with their friends is remarkably important to maintaining their healthy psychological adjustment because their security and emotional and psychosocial states are dependent on it. With the passage of time, these adolescents in their late ages perceive other as low in warmth, as adolescents' emotional need for positive responses from the people most important to them (i.e., parents) are not meet and this will lead to the development of more negative personality traits, mistrust and less interpersonal relationships.

On the other hand, non-orphan adolescents ranged between 15-22 scored high on attachment, trust and communication (Table 25, 26). The results get the support of the findings of Berndt (2004) and, Ma and Huebner (2008). Plausible explanation for such result might be that adolescents are that phase of development in which an individual's range of attachment figures is thought to expand dramatically to include friends and partners. The belief that people are trustworthy and fair which make them to attached more closely to their friends than parents. As Berndt (2004) said that the wider and more diverse social experiences of older adolescents should mean that they are, on average, less naïve and positive than early adolescents in their judgments about people.

Education level difference across study variables among orphan and non-orphan (Table 27, 28) indicated adolescent orphan who are educated up-to master scored higher on emotional intelligence than illiterate, and those who have education level from matric up-to intermediate. Thus, partially supporting hypothesis 9 "Higher the education, higher will be emotional intelligence, trust, and communication, lower will be hostility and aggression, dependence, emotional instability, emotional unresponsiveness, negative self-adequacy, negative worldview, negative self-esteem and alienation among orphan and non-orphan adolescents. The reason might by that the development of emotional intelligence plays a role in the long-term academic success of students. By acquiring the skills related to academic intelligence, such as

stress management, students are more likely to persist and finish high school and college in order to increase both IQ and EQ (Collin, Parker, Saklofske, & Wood, 2009). Education can play a crucial role in improving the prospects of orphans and securing their future.

Whereas non-orphan who are illiterate and hafiz-e-Quran scored high on psychological maladjustment, negative self-adequacy, negative worldview and alienation than those having education up to masters (Table 29,30). It was also showed that non-orphan adolescents who are educated scores high IPPA, and trust than those who are illiterate and Hafiz-e-Quran. Personality also influences how an individual behaves in an educational context. Those having higher education found to have more adjusted in their environment than those having education up to primary and they have secure pattern of attachment with their elder and peer group (Chamorro-Premuzic, & Furnham, 2008).

Reason of parent's death and score of orphans on study variables were also determined (Table 30,32). The results indicated that orphans whose parents died because of any physical illness scored less on psychological maladjustment, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability and negative world-view than those died from murder, suicide, earthquake, and other reason. The result also showed that those orphans who parents died because of any physical illness scored high on inventory of parent and peer attachment indicated that these orphan adolescents can trust and communicate with other than those whose parents died from suicide. The reason might be that those adolescents often feel guilty when a parent dies by suicide, or worry that they did something to cause the suicide. They may become anxious and clingy. With the passage of time, these adolescents may adhere negativity in their personality, and cannot make stable or long-term relationship with others. They may have trust related issues and mostly live in alienation (MacLean, 2003; Merz & McCall, 2010).

The estimates from two-way ANOVA also shows that orphan female scored high on psychological maladjustment (Table 34), whereas male non-orphan scored high on emotional intelligence (Table 36) and non-orphan female scored high on

attachment styles (Table 38). This might be due to female living in orphanages are unable to cope with difficulty and internalize their problem to themselves, that is why they are more dependent, have low self-esteem, self-confident, shy and have more negative world-view about the world. On the other hand, non-orphan boys are more independent and have high EI. Whereas, non-orphan females are strongly attached with their parents especially mother. This secure attachment enables them to be self-confident, trusting, hopeful, and comfortable in the face of conflict.

Effect of Demographic variables on the relationship between study variables. The effect of demographic on the relationship between study variables were determined by the use of moderation analysis and the findings obtained were discussed in this section in light of results obtained from preliminary analysis; that is one-way ANOVA. Moderation analysis helped to identify that under what condition of the moderator the relationship between study variables is affected significantly (Table 47 - 51). The effect of education level on relationship between psychological maladjustment and attachment styles among non-orphan was determined. The finding suggested that moderating role is significant for all level of education strengthen the negative relationship between psychological maladjustment and attachment styles. Literature also suggest that education level play an important role in the development of psychological adjustment and strengthen the positive attachment styles in individual (Chamorro-Premuzic, & Furnham, 2008). The estimates from one-way ANOVA also suggested that psychological maladjustment and attachment styles differ with respect to education level for non-orphan such that, non-orphan having high education level scored low on psychological maladjustment and high on attachment than those who are illiterate or education level up-to matric or intermediate (Table 26-29).

The moderating role of institute (private and government) for psychological maladjustment in predicting attachment styles suggest that moderation is significant for government institute such that decrease in psychological maladjustment increases the attachment styles among adolescent studying in government institute (Table 48). The previous literature also supports our findings in that institute is a place where

students grow together and shows their involvement in important relationship with peers and teachers, students get benefits from these relationships and have a positive self- respect, have healthy psychological well-being (Schurer, Kassen-boehmer, & Leung, 2015), as children in local institute exhibit psychological adjustment (Nazir et al., 2015).

The moderating effect of age was also determined for dependence in predicting attachment styles among orphan (Table 49). The findings demonstrate that moderation is significant for all age level among orphan, such that with increase in age, the negative relationship between dependence and attachment styles are strengthen. The reason might be old age is usually accompanied by many difficulties and losses (Cuddy & Fiske, 2004). The intensified vulnerability of older adults to chronic and incapacitating diseases increases their dependency on caregiving behaviors (Fingerman, 1996; 2001).

The moderating effect of age was also determined for psychological maladjustment in predicting attachment styles among Orphans (Table 50). The results revealed that significant decrease is observed in attachment styles with respect to increase in psychological maladjustment among orphan at all levels of age. The finding is consistent with previous literature reported that older adults exhibited a more positive personality profile than they exhibited in their everyday lives (Noftle & Fleeson, 2010) and older adults experience attachment less frequently than younger adults (Segal, Needham, & Coolidge, 2009). With the passage of time, adolescents in their late ages perceive other as low in warmth, as adolescents' emotional need for positive responses from the people most important to them (i.e., parents) are not meet and this will lead to the development of psychological maladjustment, mistrust and less interpersonal relationships.

The moderating effect of time spend in orphanage was also determined for orphan for psychological maladjustment and trust (Table 51). The findings revealed that negative relationship between negative psychological maladjustment and trust is strengthen among those orphans who spent long time in orphanage (Table 50). The findings are consistent with reported that orphans scored low on trust (Dontsov,

Perelygina, & Veraksa, 2016) and high on measures of anxious; hostility; aggressive; emotionally instability and have low self-esteem (Khan, Khan, & Majeed, 2014). Orphanage is a place that keeps children who have lost their parents and it is responsible for child care and rearing. The type of care received after becoming an orphan has significant impact on the development of the orphan. The death of their parents has made a negative psychological impact on their psychosocial wellbeing with the passage of time because most of time they do not get family support in orphanages, resulting in the development of more negative self-esteem, depression, hostility, aggression, low trust and alienated style of attachment.

Mediating role of study emotional intelligence on relationship between psychological maladjustment and attachment styles. The mediating role of emotional intelligence between psychological maladjustment and attachment styles was also study among orphan and non-orphan adolescents. The results (Table 41-46) demonstrates that emotional intelligence mediates the relationship between psychological maladjustment and attachment styles and its dimensions in orphan (Table 42) but does not mediate it in non-orphan (Table 43). The findings partially supporting hypothesis 3 "Emotional intelligence act as a mediator in relationship between psychological maladjustment and attachment styles among orphan and nonorphan adolescent". The past researches also demonstrate that emotional intelligence is associated with psychological maladjustment (Ghiabi & Besharat, 2011; Rohner et al., 2016; Shulga, Savchenko, & Filinkova, 2016; Stanibula, 2018; Tsaousis & Nikolaou, 2005; Vijayan, 2017) and attachment styles (Kafetsios & Nezlek, 2002; Engels, Overbeek, Stattin, & Vermulst, 2007) among orphans. The reason might be that individuals high emotional intelligent are tough minded, always active in their organization, very sociable among their colleagues, outward oriented, emotionally stable, can manage their stress, anxiety and their mood. These positive personality traits lead to more stable attachment styles in individual.

## Conclusion

The present research providing the support for the relationship between psychological maladjustment, emotional intelligence and attachment styles among orphan and non-orphan adolescents. Summarizing the results, it may be concluded that orphan and non-orphan samples differ significantly in the personality characteristics considered in the study. The pattern of inter-correlations among these characteristics in also different in two groups. A more detailed study with greater scope and more representative sample may help understand further the dynamics of these differences.

#### Limitations and suggestions

The current research also possesses a set of limitation with it. These are given as follows:

- 1. The sample for interview was limited to eight individuals (four orphan and four non-orphans). Adding more numbers to the identified sample could help generalize the findings to a larger public.
- 2. The second limitation is the self-report method of data collection. Self-report methods provide a view of the participant from his/her own perspective, which is both a strength and a weakness of the design. The limitation in this regard is that we do not have an "outside" or "independent" perspective on the participants. Self-report data also is vulnerable to inaccurate reporting: Participants might attempt to manage the impression of self that is presented for a variety of conscious and unconscious reasons.
- 3. The role of positive personality traits like openness, optimism, kindness, humor and honesty etc. are also suggested to be studies tin relation of attachment styles in orphans.
- 4. Addition of variables such as perceived stigma as orphans, degree of societal connection, role of the surviving parent in case of single parent orphan and the relationship with caretaker could help in drawing more clear conclusions.

## Implications of study

1. The current research adds to the theoretical understanding of the attachment styles from the psychological perspective based on Rohner IPARTheory of personality traits.

- 2. The results obtained also fills up the literature gap prevailing in Pakistani research with respect to the relationship between emotional intelligence and attachment styles among orphan and non-orphan.
- 3. The findings obtained of the research could be used to develop an intervention plan for those orphans who have more negative personality traits.
- 4. This study is very much useful for the students who are unable to adjust in the environment and leads a stressful life, by enhancing their emotional intelligence they can come out of such problems. Similarly, this study is very much useful for the teachers who deal with orphans to enhance the emotional intelligence of his orphan students for their effective adjustment and understand their emotions for taking them a right decision in their life.
- 5. The present study has implications for social welfare workers and policy makers. On the basis of results of the study, it can be recommended that conducive environment in orphanages should be created in order to compensate for effect of parental deprivation on well-being of children.

## REFERENCES

- Abadi, Q. H. (2011). Comparing the emotional intelligence of orphanage children with ordinary children. *Quarterly Educational Psychology*, 7(21), 73-89.
- 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.
- Ahmad, A., Qahar, J., Siddiq, A., Majeed, A., Rasheed, J., & Jabar, F. (2005). A 2-year follow-up of Orphans' competence, socio emotional problems and post-traumatic stress symptoms in traditional foster care and orphanages in Iraqi Kurdistan. *Child Care Health Development*. 31(2), 203-215.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum
- Akhtar, Z. (2011). The Effect of Parenting Styles of Parents on Attachment Styles of Undergraduate Students. Conference paper presented in International Conference of Education, Research and Innovation, Madrid: Spain.
- Akhtar, Z. (2012). Attachment styles of adolescents: Characteristics and contributing factors. *Academic Research International*, 2(2), 613-620.
- Ames, E. W. (1997). The development of Romanian orphanage children adopted into Canada. Final report to human resources development, Canada. Burnaby, Canada: Simon Fraser University, p. 21.
- Anjali, A. (2014). Role of emotional intelligence in psychological well-being of faculty member. *Tenth International Journal of Multidisciplinary Research*, 4(10), 1-7.

- 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.
- Aradilla-Herrero, A., Tomás-Sábado, J., & Gómez-Benito, J. (2014). Associations between emotional intelligence, depression and suicide risk in nursing students. *Nurse Education Today, 34*(4), 520–525.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological wellbeing in adolescence. *Journal of Youth and Adolescence*, 16(5), 427-454.
- Armsden, G. C., & Greenberg, M. T. (1989). *Inventory of parent and peer attachment (IPPkA)*. Seattle, WA: University of Washington.
- Asif, A. (2017). Self-esteem and depression among orphan and non-orphan children. *Dubai UAE: MedCrave Group LLC*, p. 25.
- Atwine, B., Cantor-Graae, E., Bajunirwe, F. (2005) Psychological distress among AIDS orphans in rural Uganda. *Social Science and Medicine*, 61(3), 555-564.
- Baker, A. J. (2005). The long-term effects of parental alienation on adult children: A qualitative research study. *The American Journal of Family Therapy*, 33(4), 289-302.
- Bakermans-Kranenburg, M. J., Steele, H., Zeanah, C. H., Muhamedrahimov, R. J., Vorria, P., Dobrova-Krol, N. A., & Gunnar, M. R. (2011). III. Attachment and emotional development in institutional care: characteristics and catch up. *Monographs of the Society for Research in Child Development*, 76(4), 62-91.
- Balluerka, N., Aritzeta, A., Gorostiaga, A., Gartzia, L., & Soroa, G. (2013). Emotional intelligence and depressed mood in adolescence: A multilevel aproach. *International Journal of Clinical and Health Psychology*, 13(2), 110–117.

- Bansal, R. (2019). A comparative study of orphan and non-orphan adolescences in relation to subjective well-being, self-esteem, emotional intelligence, resilience, and hope (Doctoral dissertation). Thapar University of Engineering and Technology, India.
- Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQ-i): Rationale, description and summary of psychometric properties. In G. Geher (Ed.), *Measuring emotional intelligence: common ground and controversy* (p. 115-145). New York: Nova Science Publishers, Inc.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18(5), 13-25.
- Bar-On, R., Handley, R., & Fund, S. (2006). *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups* (2<sup>nd</sup> Ed.). Vanessa Urch Druskat, Gerald Mount: Psychology Press.
- Bardyshevskaya, M. K., & Lebedinsky, V. V. (2003). *Diagnosis of emotional disorders in children*. Moscow, UMK Psikhologiya, p. 320.
- Bassnett, S. (2011). The translator as cross-cultural mediator. *The Oxford Handbook of Translation Studies*, 77, 85.
- Batool, S. S., & Khalid, R. (2009). Low emotional intelligence: A risk factor for depression. *Journal of Pakistan Psychiatric Society*, 6(1), 65-72.
- 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.
- Batool, S. S., & Shehzadi, A. (2017). Intrapersonal and interpersonal determinants of well-being of orphans and non-orphans. *Bahria Journal of Professional Psychology*, *16*(1), 17-26.

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-501.
- Bazeley, P. (2013). Qualitative data analysis: Practical strategies. Sage.
- Beckett, C., Maughan, B., Rutter, M., Castle, J., Colvert, E., Groothues, C., & Sonuga-Barke, E. J. (2006). Do the effects of early severe deprivation on cognition persist into early adolescence? Findings from the English and Romanian adoptees study. *Child Development*, 77(3), 696-711.
- Berndt, T. J. (2004). Children's friendships: Shifts over a half-century in perspectives on their development and their effects. Merrill-Palmer Quarterly (1982), pp. 206-223.
- 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.
- Berrocal, P. F., Salovey, P., Vera, A., Extremera, N., & Ramos, N. (2005). Cultural influences on the relation between perceived emotional intelligence and depression. *International Review of Social Psychology*, 18(4), 91-107.
- Bhat, N. M. (2014). The study of emotional stability and depression in orphan secondary school students. *International Journal of Education and Psychological Research*, 3(2), 95-100.
- Bjorklund, D. F., & Pellegrini, A. D. (2002). *The origins of human nature:* Evolutionary developmental psychology. American Psychological Association.
- Boothroyd, L. G., & Perrett, D. I. (2008). Father absence, parent-daughter relationships and partner preferences. *Journal of Evolutionary Psychology*, 6(3), 187-205.
- Bowlby, J. (1951). *Maternal care and mental health* (Vol. 2). Geneva: World Health Organization.

- Bowlby, J. (1960). Separation anxiety. *International Journal of Psycho- Analysis*, 41(5), 89-113.
- Bowlby, J. (1969). Attachment and Loss: Volume 1 Attachment. New York: Basic Books
- Bowlby, J. (1988). A secure base parent-child attachment and healthy human development. New York: Basic Books.
- Bowlby, J., & Ainsworth, M. (2013). The origins of attachment theory. In S. Goldberg, R. Muir, & J. Keer (2<sup>nd</sup> Eds.), *Attachment Theory: Social, Developmental, and Clinical Perspectives* (p. 45-82). Hillsdale: The Analytical Press.
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, *5*(1), 88-103.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, *1*(3), 185-216.
- Brislin, R. W. (1976). Comparative research methodology: Cross-cultural studies. *International Journal of Psychology*, 11(3), 215-229.
- Brislin, R. W. (1980). Translation and content analysis of oral and written material. In Triandis, H. C., Berry, J. W. (Eds.), *Handbook of cross-cultural psychology* (pp. 389–444). Boston, MA: Allyn & Bacon.
- Carlson, E. A., & Sroufe, L. A. (1995). Contribution of attachment theory to developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), Wiley series on personality processes. Developmental psychopathology, Vol. 1. Theory and methods (pp. 581–617). John Wiley & Sons.
- Case, A., Parson, C., & Ableidinger, J. (2003). *Orphans in Africa*. Princeton, NJ: Princeton University.

- 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.
- Chakraborty, R., Dasgupta, M., & Sanyal, N. (2019). A comparative psychosocial study of aggression, attachment style and other personality correlates among orphan, destitute, creche-attender and normal children. SIS Journal of Projective Psychology & Mental Health, 26(1), 15-20.
- Chamorro-Premuzic, T., & Furnham, A. (2008). Personality, intelligence and approaches to learning as predictors of academic performance. *Personality and Individual Differences*, 44(7), 1596-1603.
- Chipungu, S. S., & Bent-Goodley, T. B. (2004). Meeting the challenges of contemporary foster care. *The Future of Children*, *14*(1), 75-93.
- Chisholm, K. (1998). A three-year follow-up of attachment and indiscriminate friendliness in children adopted from Romanian orphanages. *Child Development*, 69(4), 1092-1106.
- 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.
- Çivitci, N., & Çivitci, A. (2009). Self-esteem as mediator and moderator of the relationship between loneliness and life satisfaction in adolescents. *Personality and Individual Differences*, 47(8), 954-958.
- Cloitre, M., Stovall-McClough, C., Zorbas, P., & Charuvastra, A. (2008). Attachment organization, emotion regulation, and expectations of support in a clinical sample of women with childhood abuse histories. *Journal of Traumatic Stress:*Official Publication of the International Society for Traumatic Stress Studies, 21(3), 282-289.

- Cooper, M. L., Shaver, P. R., & Colins V. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology*, 74(5), 1380-1397.
- Crenshaw, D. A., & Garbarino, J. (2007). The hidden dimensions: Profound sorrow and buried potential in violent youth. *Journal of Humanistic Psychology*, 47(2), 160-174.
- Cuddy, A. J., & Fiske, S. T. (2004). Doddering but dear: Process, content, and function in stereotyping of older persons. *Ageism: Stereotyping and Prejudice Against Older Persons*, 3(1), 1351-1361.
- Dalen, N., Nakitende, A. J., & Musisi, S. (2009). "They don't care what happens to us." The situation of double orphans heading households in Rakai District, Uganda. *BMC Public Health*, 9(1), 321.
- Davis, S. K., & Humphrey, N. (2012). The influence of emotional intelligence (EI) on coping and mental health in adolescence: Divergent roles for trait and ability EI. *Journal of Adolescence*, *35*, 1369–1379.
- 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.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences*, 28(4), 797-812.
- Day, A. L., Therrien, D. L., & Carroll, S. A. (2005). Predicting psychological health:

  Assessing the incremental validity of emotional intelligence beyond personality, Type A behavior, and daily hassles. European Journal of Personality: Published for the European Association of Personality Psychology, 19(6), 519-536.

- Dennis, M. (Ed.). (2008). Children on the brink 2002: A joint report on orphan estimates and program strategies. DIANE Publishing.
- Dennis, W., & Najarian, P. (1957). Infant development under environmental handicap. *Psychological Monographs*, 71(15), 436-450.
- Denscombe, M. (2014). The good research guide: for small-scale social research projects. McGraw-Hill Education (UK).
- Dey, B. K., Hossain, M. A., Bairagi, A., Rahman, A., & Islam, T. (2013). Orphan's stress and aggression. *Journal of Biological Science*, 8 (2), 51-62.
- 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.
- Dontsov, A. I., Perelygina, E. B., & Veraksa, A. N. (2016). Manifestation of Trust Aspects with Orphans and Non-Orphans. *Procedia-Social and Behavioral Sciences*, 233(1), 18-21.
- Draper, A., & Hancock, M. (2011). Childhood parental bereavement: The risk of vulnerability to delinquency and factors that compromise resilience. *Mortality*, 16(4), 285-306.
- Dwyer, K. M., Fredstrom, B. K., Rubin, K. H., Booth-Laforce, C., Rose-Krasnor, L., & Burgess, K. B. (2010). Attachment, social information processing, and friendship quality of early adolescent girls and boys. *Journal of Social and Personal Relationships*, 27(2), 91-116.
- Emery, R. E. (1982). Interparental conflict and the children of discord and divorce. *Psychological Bulletin*, 92(2), 310-321.
- Erwintri, F. (2012). *Pengertian Panti Sosial Asuhan Anak*. Retrieved January, 15 2013, Fromhttp://ewintribengkulu.blogspot.com/2012/10/pengertian-panti-sosial-asuhan-anak.html.

- Extremera, N., & Berrocal, P. F. (2006). Emotional intelligence as predictor of mental, social, and physical health in university students. *The Spanish Journal of Psychology*, 9(3), 45-51.
- Farooqi, Y. N., & Intezar, M. (2009). Differences in self-esteem of orphan children and children living with their parents. *Journal of the Research Society of Pakistan*, 46(2), 115-130.
- Fayombo, G. A. (2012). Emotional Intelligence and Gender as Predictors of Academic Achievement among Some University Students in Barbados. *International Journal of Higher Education*, *I*(1), 102-111.
- Fernandez-Berrocal, P., Alcaide, R., Extremera, N., & Pizarro, D. (2006). The role of emotional intelligence in anxiety and depression among adolescents. *Individual Differences Research*, 4(1), 16–27.
- Field, A. (2013). Discovering statistics using IBM SPSS statistics. Sage.
- Fingerman, K. L. (1996). Sources of tension in the aging mother and adult daughter relationship. *Psychology and Aging*, 11(1), 591–606.
- Fingerman, K. L. (2001). Aging mothers and their adult daughters: A study in mixed emotions. New York: Springer.
- Francis, L. J., & Kaldor, P. (2002). The relationship between psychological wellbeing and Christian faith and practice in an Australian population sample. *Journal for the Scientific Study of Religion*, 41(1), 179–84.
- Freidus, A. (2010). Raising Malawi's children: Unanticipated outcomes associated with institutionalized care. *Children & Society*, 24(4), 293-303.
- Fullam, A. (2002). Adult attachment, emotional intelligence, health, and immunological responsiveness to stress. *Abstract International*: 63(2-B). 1079.
- Gee, D., Gabard-Durnam, L., Flannery, J., Goff, B., Humphreys, K., Telzer, E., Hare, T., Bookheimer, S., & Tottenham, N. (2013). Early developmental emergence of human amygdala-prefrontal connectivity after maternal deprivation.

- Retrieved April, 18, 2016, from <a href="http://www.kathrynhumphreys.com/uploads/4/3/0/6/43065295/gee">http://www.kathrynhumphreys.com/uploads/4/3/0/6/43065295/gee</a> 2013 pna s.pdf
- Ghiabi, B., & Besharat, M. A. (2011). Emotional intelligence, alexithymia, and interpersonal problems. *Procedia-Social and Behavioral Sciences*, 30(1), 98-102.
- Gilborn, L. Z., Nyonyintono, R., Kabumbuli, R., & Jagwe-Wadda, G. (2001). *Making a difference for children affected by AIDS: Baseline findings from operations research in Uganda*. New York: Population Council.
- Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology*, 28(2), 235-260.
- Glasser, W. (2000). *Reality therapy in action*. Harper Collins Publishers.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books
- 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.
- Gunnar, M.R., (2000). Early adversity and the development of stress reactivity and regulation. *The Minnesota Symposia on Child Psychology*, 31(2), 163–200.
- Gunnar, M. R., Morison, S. J., Chisholm, K. I. M., & Schuder, M. (2001). Salivary cortisol levels in children adopted from Romanian orphanages. *Development and Psychopathology*, 13(3), 611-628.
- 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.

- Haig, B. D. (2018). Exploratory Factor Analysis, Theory Generation, and Scientific Method. In *Method Matters in Psychology* (pp. 65-88). Springer, Cham.
- Hamarta, E., Deniz, M., & Saltali, N. (2009). Attachment Styles as a Predictor of Emotional Intelligence. *Educational Sciences: Theory and Practice*, 9(1), 213-229.
- Hatami, F., Ghahremani, L., Kaveh, M. H., & Keshavarzi, S. (2016). The effect of self-awareness training and painting on self-efficacy of adolescents. *Journal of Practice in Clinical Psychology*, 4(2), 89-96. http://dx.doi.org/10.15412/J.JPCP.06040203
- Hayes, A. F. (2013). An index and simple test of moderated mediation. *Manuscript* submitted for publication.
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. *Educational and Psychological measurement*, 66(3), 393-416.
- Hermenau, K., Hecker, T., Ruf, M., Schauer, E., Elbert. T., & Schauer, M. (2011). Childhood adversity, mental ill health and aggressive behavior. *Child Adolescent Psychiatry Mental Health*, 25(5), 5-29.
- 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.
- Howell, K. H., & Miller-Graff, L. E. (2014). Protective factors associated with resilient functioning in young adulthood after childhood exposure to violence. *Child Abuse & Neglect*, 38(12), 1985-1994.
- Hubscher-Davidson, S. (2013). Emotional intelligence and translation studies: A new bridge. *Meta: Journal Des Traducteurs/Meta: Translators' Journal*, 58(2), 324-346.
- Hung, E. T. H., & Wakabayashi, J. (2014). Asian translation traditions. Routledge.

- Hussain, S. (2017). Emotional intelligence, social intelligence and personality traits among orphan and non-orphan children. *Indian Journal of Research*, 6(12), 427-429.
- Ishak, H. (2017). Emotional intelligence and achievement motivation among orphans and non-orphans. *International Journal of Science and Research*, 7(10), 378-380.
- 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.
- Juffer, F., & Van Ijzendoorn, M. H. (2005). Behavior problems and mental health referrals of international adoptees: A meta-analysis. *Jama*, 293(20), 2501-2515.
- Juffer, F., & Van IJzendoorn, M. H. (2007). Adoptees do not lack self-esteem: A metaanalysis of studies on self-esteem of transracial, international, and domestic adoptees. *Psychological bulletin*, 133(6), 1067-1101.
- Julian, M. M., & McCall, R. B. (2011). The development of children. *International Journal of Child & Family Welfare*, 3(4), 119-147.
- Kafetsios, K. (2002). Emotional intelligence abilities across the life-span: Attachment, age, and gender effects. In 12th Conference of the International Society for Research on Emotions, Cuenca, Spain. Inc.
- Kafetsios, K., & Yeadou, J. (2003). *Emotional intelligence and adult* attachment. Moscow: Moscow State Regional University.
- Karnaukh, I. S. (2006). *Psychological characteristics of children's home of adolescent students: PhD Abstract*. Moscow: Moscow State Regional University, p. 28.
- Kafetsios, K., & Nezlek, J. B. (2002). Attachment styles in everyday social interaction. *European Journal of Social Psychology*, 32(5), 719-735.

- Kalaba, R. (2010). Factors Affecting Orphans and Vulnerable Children (OVC) Droping Out from School: Case Study of Mulenga Compound, Kitwe Zambia. *Kitwe Zambia (March 30, 2010)*.
- Kap. (2002). Parents' role in their children's upbringing. Retrieved from www.saching.com.
- Katyal, S., (2015). Peer attachment and wellbeing: A study in orphan and non-orphan children. *International Journal of Multidisciplinary Research and Development*, 2(9), 603-607.
- 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.
- Klonsky, E. D., Jane, J. S., Turkheimer, E., & Oltmanns, T. F. (2002). Gender role and personality disorders. *Journal of Personality Disorders*, *16*(5), 464-476.
- Koltinova, V.V. (2013). Mental deprivation of children in an institution for orphans and children left without parental care. Retrieved April, 18, 2016, fromhttp://psyjournals.ru/files/63975/sbornik\_psikhicheskaya\_deprivatsia\_det ey.pdf, 158-163.
- 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\_deprivatsia\_detey.p df,7-14.
- Kumar, R., & Singh, K. P. (2017). Emotional Intelligence of Orphan and Non-Orphan Students Studying in Primary Schools. *Contemporary Social Sciences*, *12*(5) 163-169.
- Lone, M. A. (2016). Health and nutritional status of orphan children's living in. *The International Journal of Indian Psychology*, 3 (1), 1-7.

- Lopes, P. N., Salovey, P., & Straus, R. (2003). Emotional intelligence, personality, and the perceived quality of social relationships. *Personality and Individual Differences*, 35(3), 641-658.
- Liotti, G. (2011). Attachment disorganization and the controlling strategies: An illustration of the contributions of attachment theory to developmental psychopathology and to psychotherapy integration. *Journal of Psychotherapy Integration*, 21(3), 232-252.
- Lowdermilk, D. L., Perry, S. E., Cashion, M. C., & Alden, K. R. (2014). *Maternity and Women's Health Care-E-Book*. Elsevier Health Sciences.
- Lyubomirsky, S., Tkach, C., & DiMatteo, M. R. (2006). What are the differences between hapiness and self-esteem? *Social Indicators Research*, 78(3), 363-404.
- Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools*, 45(2), 177-190.
- Ma, K. (2006). Attachment theory in adult psychiatry. Part 1: Conceptualizations, measurement and clinical research findings. Advances in Psychiatric Treatment, 12(6), 440-449.
- Maccoby, M. (2008). To win the respect of followers, leaders need personality intelligence. *Ivey Business Journal Online*, 72(3), 1-5.
- MacLean, K. (2003). The impact of institutionalization on child development. Development and Psychopathology, 15(4), 853-884.
- Majeed, R., Khan, M. A., & Khan, M. N. S. (2014). A comparative study of personality differences between orphans and non-orphans of Lahore. *Journal of Pakistan Psychiatric Society*, 11(2), 19-22.
- Mandell, B., & Pherwani, S. (2003). Relationship between emotional intelligence and transformational leadership style: A gender comparison. *Journal of Business and Psychology*, 17(3), 387-404.

- Munaf, S., Huassain, S., & Kamrani, F. (2012). Urdu translation, reliability and validity of personality assessment questionnaire-adult version. *International Journal of Business and Social Science*, *3*(7), 121-132.
- Marte, L. (2010). Orphans and vulnerable children in Ghana, a contextual analysis: ECCD stakehold ers adapting the safety net. (Master's Thesis) New York: Columbia University (Retrieved from <a href="http://www.tc.edu/faculty/bajaj/IP\_Lisa\_Deters.pdf">http://www.tc.edu/faculty/bajaj/IP\_Lisa\_Deters.pdf</a>).
- Matsumoto, D., & Van de Vijver, F. J. (Eds.). (2010). *Cross-cultural research methods in psychology*. Cambridge University Press.
- Mavroveli, S., Petrides, K. V., Rieffe, C., & Bakker, F. (2007). Trait emotional intelligence, psychological well-being, and peer-rated social competence in adolescence. *British Journal of Developmental Psychology*, 25, 263–275.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2000). Selecting a measure of emotional intelligence: The case for ability scales. In R. Bar-On & J. D. A. Parker (Eds.), The handbook of emotional intelligence: Theory, development, assessment, and aplication at home, school, and in the workplace (p. 320–342). Jossey-Bass.
- Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment*, 54(3-4), 772-781.
- Mayer, J. D., & Salovey, P. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? *Educational Implications*, 3(2), 31-45.
- McWay, L. M. (2004). Predictors of attachment styles of children in foster care: An attachment theory model for working with families. *Journal of Marital and Family Therapy*, 30(5), 439–452.

- Merz, E. C., & McCall, R. B. (2010). Behavior problems in children adopted from psychosocially depriving institutions. *Journal of Abnormal Child Psychology*, 38(4), 459-470.
- Meyers, S. A., & Landsberger, S. A. (2002). Direct and indirect pathways between adult attachment style and marital satisfaction. *Personal Relationships*, 9(2), 159-172.
- 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.
- Mikulincer, M., & Shaver, P. R. (2005). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships*, *12*(2), 149-168.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27(2), 77-102.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 1(2), 361-388.
- Muhamedrahimov, R.J., Nikiforova, N.V., Palmov, O.I., Groark, C.J., & McCall, R.B. (2008). The effects of early social-emotional and relationship experience on the development of young orphanage children. Boston, Massachusetts: Wiley-Blackwell.
- 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.

- Muhamedrahimov, R. J., Vorria, P., Dobrova-Krol, N. A., Steele, M., van IJzendoorn,
  M. H., Juffer, F., & Gunnar, M. R. (2011). Attachment and emotional development in institutional care: Characteristics and catch-up. *Monographs of the Society for Research in Child Development*, 76(4), 62-91.
- 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.
- Naz, F., & Kausar, R. (2013). Parental rejection, personality maladjustment and depressive symptoms in female adolescents in Pakistan. *Journal of Humanities and Social Science*, *14*(1), 56-65.
- Nazir, F., Azam, A., Rafiq, M., Nazir, S., Nazir, S., & Tasleem, S. (2015). Relationship between big five personality traits, emotional intelligence and self-esteem among college students. *International Journal of Business, Economics and Management Works*, 2 (3), 13-17.
- 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.bucharestearlyinterventionproject.org/Nelson\_
  et\_al\_combined\_2007\_.pdf
- Noftle, E. E., & Fleeson, W. (2010). Age differences in big five behavior averages and variabilities across the adult life span: Moving beyond retrospective, global summary accounts of personality. *Psychology and Aging*, 25(1), 95-101.
- Oburu, P. O. (2005). Caregiving stress and adjustment problems of Kenyan orphans raised by grandmothers. *Infant and Child Development: An International Journal of Research and Practice*, 14(2), 199-210.
- 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.
- Overbeek, G., Stattin, H., Vermulst, A., Ha, T., & Engels, R. C. (2007). Parent-child relationships, partner relationships, and emotional adjustment: A birth-to-maturity prospective study. *Developmental Psychology*, 43(2), 429-432.
- Palomera, R., Salguero, J. M., & Ruiz-Aranda, D. (2012). La percepción emocional como predictor estable del ajuste psicosocial en la adolescencia. *Behavioral Psychology/Psicología Conductual*, 20(1), 43-58.
- Pardasani, M., Chazin, R., & Fortinsky, L. (2010). The orphan's international tanzania (OIT) family care model: Strengthening kinship networks and empowering families. *Journal of HIV/AIDS & Social Services*, 9(3), 305-321.
- Pardini, D. (2003). Religious faith and spirituality in substance abuse recovery. Determining the mental health benefits. *Journal of Substance Treatment*, 19(5), 347-354.
- Park, H. J., & Dhandra, T. K. (2017). The effect of trait emotional intelligence on the relationship between dispositional mindfulness and self-esteem. Mindfulness, (Advance online publication).
- Parker, J. D., Saklofske, D. H., Wood, L. M., & Collin, T. (2009). The role of emotional intelligence in education. In assessing emotional intelligence (p. 239-255). Springer, Boston, MA.
- Passer & Smith. (2007). Psychology the science of mind and behavior. New York: McGraw-Hill Companies
- 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.
- 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.
- 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.
- Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait emotional intelligence: Moving forward in the field of EI. *Emotional Intelligence: Knowns and Unknowns*, 4(2), 151-166.
- Posada, G., Jacobs, A., Richmond, M. K., Carbonell, O. A., Alzate, G., Bustamante, M. R., & Quiceno, J. (2002). Maternal caregiving and infant security in two cultures. *Developmental Psychology*, 38(1), 67-78.
- Prikhozhan, A. M., & Tolstykh, N. N. (2005). Psychology of orphan-hood. *Piter: Saint Petersburg*, p. 3.
- Proselkova, M.O. (2013). Clinical manifestations of deprivation "abandonment syndrome" in infants. Retrieved April, 18, 2016, from http://psyjournals.ru/files/63975/sbornik\_psikhicheskaya\_deprivatsia\_detey.p df., 73-79.
- Rehman, R., & Singh, H. (2015). Family type and adjustment level of adolescents: A Study. *International Journal of Dental and Medical Research*, *1*(6), 22-25.
- Resurrección, D. M., Salguero, J. M., & Ruiz-Aranda, D. (2014). Emotional intelligence and psychological maladjustment in adolescence: A systematic review. *Journal of Adolescence*, *37*(4), 461-472.
- Rey, L., Extremera, N., & Pena, M. (2011). Perceived emotional intelligence, self-esteem and life satisfaction in adolescents. *Psychosocial Intervention*, 20(1), 227–234.
- Rice, K. G., FitzGerald, D. P., Whaley, T. J., & Gibbs, C. L. (1995). Cross-sectional and longitudinal examination of attachment, separation-individuation, and

- college student adjustment. *Journal of Counseling & Development*, 73(4), 463-474.
- Rohner, R. P. (1960). *Child acceptance-rejection and modal personality in three Pacific societies.* (Unpublished master's thesis). Stanford University.
- Rohner, R. P. (1986). *The warmth dimension: Foundations of parental acceptance-rejection theory*. Newbury Park, CA: Sage Publications, Inc. [Reprinted by Rohner Research Publishers]
- Rohner, R. P. (1990). *Handbook for the study of parental acceptance and rejection*. Storrs, CT: Rohner Research.
- Rohner, R. P. (2004). The parental" acceptance-rejection syndrome": universal correlates of perceived rejection. *American psychologist*, 59(8), 830-840.
- 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.
- Rohner, R. P. (2016). Introduction to interpersonal acceptance-rejection theory (IPARTheory) and evidence. *Online Readings in Psychology and Culture*, *6*(1), 4-40.
- Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2012). Introduction to parental acceptance-rejection theory, methods, evidence, and implications. *Journal of Family Theory & Review*, 2(1), 73-87.
- Rubin, K. H. (2004). Attachment, friendship, and psychosocial functioning in early adolescence. *The Journal of Early Adolescence*, 24(4), 326-56.

- Rubin, K. H., Dwyer, K. M., Booth-LaForce, C., Kim, A. H., Burgess, K. B., & Rose-Krasnor, L. (2004). Attachment, friendship, and psychosocial functioning in early adolescence. *The Journal of Early Adolescence*, *24*(4), 326-356.
- Ruiz-Aranda, D., Castillo, R., Salguero, J. M., Cabello, R., Fernández-Berrocal, P., & Balluerka, N. (2012). Short-and midterm effects of emotional intelligence training on adolescent mental health. *Journal of Adolescent Health*, 51(5), 462-467.
- Rutter, M., Colvert, E., Krepner, J., Beckett, C., Castle, J., Groothues, C., & Sonuga-Barke, E. J. (2007). Early adolescent outcomes for institutionally-deprived and non-deprived adoptees. I: Disinhibited attachment. *Journal of Child Psychology and Psychiatry*, 48(1), 17-30.
- Ryff, C. D. (1989). Beyond Ponce de Leon and life satisfaction: New directions in quest of successful ageing. *International Journal of Behavioral Development*, 12(1), 35-55.
- Sable, P. (2007). Accentuating the positive in adult attachments. *Attachment & Human Development*, 9(4), 361-374.
- Safdar, S., & Zahrah, S. M. (2016). Impact of parenting styles on the intensity of parental and peer attachment: Exploring the gender differences in adolescents. *American Journal of Applied Psychology*, 4(2), 23-30.
- Salguero, JM, Fernández-Berrocal, P., Ruiz-Aranda, D., Castillo, R., & Palomera, R. (2011). Emotional intelligence and psychosocial adjustment in adolescence: The role of emotional perception. *European Journal of Education and Psychology*, 4 (2), 143-152.
- Salovey, P., Mayer, J. D., Caruso, D., & Yoo, S. H. (2009). The positive psychology of emotional intelligence. In S. J. Lopez & C. R. Snyder (Eds.), *Oxford library of psychology*. *Oxford handbook of positive psychology* (pp. 237–248). Oxford University Press.

- Sanou, D., Turgeon-O'Brien, H., Ouedraogo, S., & Desrosiers, T. (2008). Caring for orphans and vulnerable children in a context of poverty and cultural Transition:
  A case study of a group foster homes program in Burkina Faso. *Journal of Children and Poverty*, 14(2), 139-155.
- Sathyavati, K., & Anthony, T. (1984). An attributional aproach to locus of control, self-esteem and alienation: A clinical study. *Psychological Studies*, *29*(1), 60-63.
- Schurer, Stefanie and de New, Sonja C. and Leung, Felix, Do Universities Shape Their Students' Personality?. IZA Discussion Paper No. 8873, Available at SSRN: <a href="https://ssrn.com/abstract=2575053">https://ssrn.com/abstract=2575053</a>.
- 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.
- Segal, D. L., Needham, T. N., & Coolidge, F. L. (2009). Age differences in attachment orientations among younger and older adults: evidence from two self-report measures of attachment. *The International Journal of Aging and Human Development*, 69(2), 119-132.
- Senese, V. P., Bacchini, D., Miranda, M. C., Aurino, C., Somma, F., Amato, G., & Rohner, R. P. (2016). The adult parental acceptance–rejection questionnaire: a cross-cultural comparison of Italian and American short forms. *Parenting*, 16(4), 219-236.
- Shvets, S.A. (2011). *The development of subjectivity orphanage adolescent inmates*. Moscow: Moscow Open Social Academy, p. 181.
- Shubina, A. (2013). The image of the family in children's picture of the world deprived of parental care. Volgograd: Volgograd State Pedagogical University, p. 303.
- Shulga, T. (2013). Social and psychological problems of orphanage graduates and children left without parental care. *Series Psychology*, *3*(1), 68-75.

- Shulga, T. I., & Tatarenko, D. D. (2013). Psychological characteristics of adolescent orphans with no experience of socialization in the family. *Psychological-Educational Studies*, 5(2), 203-213.
- 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.
- Siegel, D. J. (1999). The developing mind: Toward a neurobiology of interpersonal experience. Guilford Press.
- Siegel, D. J. (2020). *The developing mind: How relationships and the brain interact to shape who we are.* Guilford Press.
- Siddiqa, U. (2017). Explaining behavioral problems by peer relations, coping strategies and bullying among school going orphans and non-orphans. (Unpublished M.Phil. dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Simpson, J. (1998). *Attachment theory and close relationships*. New York: Guilford Press.
- Sloutsky, V. M. (1997). Institutional care and developmental outcomes of 6-and 7-year-old children: A contextualist perspective. *International Journal of Behavioral Development*, 20(1), 131-151.
- Smyke, A. T., Dumitrescu, A., & Zeanah, C. H. (2002). Attachment disturbances in young children. I: The continuum of caretaking casualty. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(8), 972-982.
- Stanibula, S. (2018). Psychological portrait of an orphan child during professional studies research aspect in the republic of Belarus. *International Journal of New Economics and Social Sciences IJONESS*, 8(2), 425-430.

- Spitz, R. A., & Wolf, K. M. (1946). Anaclitic depression: An inquiry into the genesis of psychiatric conditions in early childhood, II. *The psychoanalytic Study of the Child*, 2(1), 313-342.
- 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.
- 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.
- Thomas, I. (1991). Personality differences between orphans and non-orphans. *The Creative Psychologist*, *3*(1) 31-38.
- Tizard, B., & Hodges, J. (1978). The effect of early institutional rearing on the development of eight-year-old children. *Journal of Child Psychology and Psychiatry*, 19(2), 99-118.
- Tizard, B., & Rees, J. (1974). A comparison of the effects of adoption, restoration to the natural mother, and continued institutionalization on the cognitive development of four-year-old children. *Child Development*, 19(2), 92-99.
- Tottenham, N, Hare, T.A., Millner, A., Gilhooly, T., Zevin, J.D. & Casey, B.J. (2011). Elevated amygdala response to faces following early deprivation. *Developmental Science*, *14*(2), 190-204.

- Tripathy, M. (2019). A study of alienation and emotional stability among orphan and non-orphan adolescents. *Irish Interdisciplinary Journal of Science & Research*, 3(3) 51-60.
- Tsaousis, I., & Nikolaou, I. (2005). Exploring the relationship of emotional intelligence with physical and psychological health functioning. *Stress and Health*, 21(2), 77-86.
- UNICEF. (2017). *Orphans*. Retrieved October 20, 2017 from <a href="http://www.unicef.org/media/media/44928.html">http://www.unicef.org/media/media/44928.html</a>.
- Van de Vijver, F., & Hambleton, R. K. (1996). Translating tests. *European Psychologist*, *1*(2), 89-99.
- Van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., & Juffer, F. (2007). Plasticity of growth in height, weight, and head circumference: meta-analytic evidence of massive catch-up after international adoption. *Journal of Developmental & Behavioral Pediatrics*, 28(4), 334-343.
- 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.
- 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.
- Verschueren, K., & Marcoen, A. (2005). Perceived security of attachment to mother and father. *Attachment in Middle Childhood*, *12*(1), 71-88.
- 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.

- 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.
- Warren, S. L., Huston, L., Egeland, B., & Sroufe, L. A. (1997). Child and adolescent anxiety disorders and early attachment. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(5), 637-644.
- World Bank. (2004). Operational guidelines for supporting early child development (ECD) in multi-sectoral HIV/AIDS programs in Africa, 2004.http://www.worldbank.org/children/ECDAIDSRevised.htm. Accessed March 17, 2004.
- Yıdırım, A. (2005). Investigation of the Relationship between Continuous Anger and Depression Levels in Children between ages 13-18 who are Under Institution Care and Those Who Live with Their Family. Firat University, Institute of Health Sciences, Department of Public Health.
- Yıldırım, N., Karaca, A., Cangur, S., Acıkgoz, F., & Akkus, D. (2017). The relationship between educational stress, stress coping, self-esteem, social support, and health status among nursing students in Turkey: A structural equation modeling approach. *Nurse education today*, 48(1), 33-39.
- 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.
- Zeanah, C. H., Scheeringa, M., Boris, N. W., Heller, S. S., Smyke, A. T., & Trapani, J. (2004). Reactive attachment disorder in maltreated toddlers. *Child Abuse & Neglect*, 28(8), 877-888.
- Zeanah, C., Smyke, A., & Koga, S. (2005). Attachment in institutionalized and community children in Romania. *Child Development*, 76(5), 1015-1028.

- Zeanah, C. H., Smyke, A. T., Koga, S. F., Carlson, E., & Bucharest Early Intervention Project Core Group. (2005). Attachment in institutionalized and community children in Romania. *Child Development*, 76(5), 1015-1028.
- 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 caregiver? *Psychology, Health & Medicine*, *15*(3), 326-335.

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F. No. D-107-2(02)M.Phil/2018-Admin

## TO WHOM IT MAY CONERN

It is certified that *Ms. Ayesha Khan* is a M.Phil student of National Institute of Psychology, Quaid-i-Azam University Islamabad. She has undertaken a research project on "Personality Difference Emotional Intelligence, Attachment Styles and Lived Experiences of Adolescent Orphans and Non-orphans" for partial fulfillment of her degree. For this purpose, kindly allow her to visit your Institute/Organization to collect information regarding the research purpose. The collected data from the through survey will be used only for research purpose. It is assured that data will be kept confidential and will only be used for research purpose.

Your cooperation in this regard will be highly appreciated.

(Prof. Dr. Anila Kamal) Director Student Copy

## PERMISSION FORM (For Research Only)

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Applicant's Name Ayesha Khan Supervisor's Na	
Applicant's Email anishakhan 946 egmai	Lion
Institution/ Department National mistitul	
Topic of Research Personality difference, e	motional margine attentment
M.Sc. / M.Phil / M.S / Ph.D / Diploma 11	
Test Required: (scale title, year, author) IPPA ( und	u ujasan)
Undertaking	M. C.
<ul> <li>This is hereby specified that the above mentioned and</li> </ul>	fination is correct.
<ul> <li>I applied for the above mentioned scale after consupervisor.</li> </ul>	nsultation with my
I also understand that I have to follow the popy rights National Institute of Psychology	requirements of the
<ul> <li>This test / scale is the intellectual property of the Psychology. No part of this test iscale may be reproduced or disseminate or to republish without written per National Institute of Psychology.</li> </ul>	uced or photocopied ermission from the
<ul> <li>I am also under optigation to share my data and resear TRC of National Histitute of Psychology.</li> </ul>	ch findings with the
A Dr	Ages knam
Research Supervisor	Student
Permission granted for the above mentioned	research only.
You are not allowed to share this scale /test	Incharge TRC (Signature)  Test Resource Centre
National Institute of Psy	chology, Quaid-i-Azam University

## Informed Consent

قو می ادارہ نفیات، قائداعظم بو نیورٹی اسلام آباد کا تحقیقاتی ادارہ ہے۔ جہاں مختلف موضوعات پر تحقیق کی جاتی ہے۔ میں قائداعظم بو نیورٹی کی ادارہ نفیات کی طالبہ ہوں۔ میں بچوں کی شخصیت پر تحقیق کررہی ہوں۔ اس سلسلے میں مجھے بچوں سے کچھ بوالات کے جوابات در کارہوں گئے۔ اس تحقیق میں آپ کے بچوں کی شمولیت رضا کارانہ ہے۔ ان کو بیق حاصل ہے کہ وہ کسی بھی وقت اس تحقیق میں شمولیت سے دستبردار ہو بھتے ہیں۔ اس تحقیق میں ویئے ہوئے جوابات کوسیندراز میں رکھا جائے گا۔ اور صرف محقق کو تحقیق میں رسائی حاصل ہوگی۔ ان کے جوابات کوریکارڈ کیا جائے گا۔ اس تحقیق میں ان کی شمولیت کی شکرگز اربوں۔

وستخط

عاكشهفان

Ayeshamphil18@nip.edu.

# Appendix-C

ذاتی کوائف نامه
چنن. لاکا / لاکی
بنماعت:
اسكول:
غرب. غرب ا
والدين كي وفات كيونت عمر: سال
والدين کی وفات کی وجید:
يتيم خانے ميں کتنے عرصے متیم ہیں: ۔ ۔ ۔ سال
يبان آنے سے پہلے کتنے اواروں میں رہ چکے ہیں:
ليمن جما ئيول كي تغداد:
بين بھائيول بين آپ کا تمبر:
آپ کا گارؤ يشن کون ہے:

#### Appendix-B

#### Semi-Structured Interview Protocol

ا- آپايناريس بتائين؟ 2- آب يبال س طرح آئيں؟ 3- يبال كس طرح وقت كزارد بي بين؟ 4- آب کے کتنے دوست میں؟ 5- آپ كيام فغ بين؟ 6- آپ کازندگی کا کیامقصدے؟ 7- اس مقصد کی کیاوجو مات ہیں؟ 8- آب بين كم فتم كي صلاحين بن؟ 9- آپکویبال کس طرح کے مسائل در پیش ہیں؟ 10- آپ اپ مسائل کوکس طرح طل کرتے ہیں؟ 11- کیاان سائل کوس کرنے میں آپ کودوسروں کی مددور کار ہوتی ہے؟ 12 - كياآب دوسرول كي سنگت مين خوشي محسوس كرتے بين؟ 13- كى تىم كى نىگت آپ كويىندے؟ 14- كياآ ب كوجلدى غصه آتا ہے؟ 15- این فصے رکس طرح قابویاتے ہیں؟ 16- خود اين ليه فصل كريحة بين؟ 17- فیصلہ کرتے وقت وسرول کی رائے درگار ہوتی ہے؟ 18- كياآب دوسرول كوعزت دية إلى؟ 19- كياآب دوسرول بريقين كركت بين؟ 20- كياآپ خوداعتادين؟ 21- كياآب كلص انسان بين؟ 22- كياآت دومروں كے ساتھ مضبو ماتعلق قائم كر كتے ہيں؟ 23- دوسروں كے ساتھ تعلق قائم كرنے كے بعدان كوچھوڑ دينا آسان ہے؟ 24- آپ س طرح کے جذبات رکھتے ہیں؟ 25- كياآب دوسرول كے جذبات كو بجھتے ہيں؟ 26- آبائے جذبات رکس طرح قابوکرتے ہیں؟ 27- دُنياكولے كرآب كاكيا تظريب، 28- دوسرول كولي كرآب كاكيانظريد ي 29- كياآب دوسرول كى كامياني يرخوش ہوتے ہيں؟ 30- کیا آپ چھوٹی چھوٹی ہاتوں پرجلدی ہریشان ہوجاتے ہیں؟ 31- آپ کے اپنے بارے میں کیا خیال ہیں؟ 32- کیا آپ خودا متماد ہیں؟ 33- کیا آپ اپنی ذرمد داریوں کو تجر پور طرح سے پورہ کرتے ہیں؟ 34- آپ کو کستم کی تفاظت کی ضرورت ہے؟ یا بھی تفاظت کی ضرورت چیش آئی؟ 35- کمبھی فیملی کی ضرورت محسوس ہوئی؟ 36- کن موقعوں پر فیملی کی ضرورت محسوس ہوئی؟ اسکے علاوہ آگرآپ کچھ کہنا جا ہیں؟

عكريا

- للإ كد المنظلة في أليه لذا للذراي وال

## Adult PAQ: Personality Assesment Questionaire (short form)

# سالاالعالافولوكسي

- بالمراه - المراه و المره و الم

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نبرشار	بيائات	1	بعض اوقات سيحج	بهت كم	تقريبا تجهي نبيس
1	جب ميں پريشان ہوتا/ ہوتي ہول توا پي احشڪات خود حل كريا جا ہتا/ جا ہتى ہول_				
ľ	جب بھی میں کئی اجنبی ہے ملتا ہوں میرا پہلا تاثر ہوتا ہے کہ وہ بھی ہے بہتر ہے۔				
	میں جن چیز ول کو حاصل کرتا جا ہتا/ جا ہتی ہوں ان کے لیے جدو جبد کر کے کامیا بی حاصل کر سکتا/ عتی ہوں۔				
112	يُحِيا وَتَحْدومت بنائے اور دوی قائم رکھنے میں مشکل ویش آتی ہے۔				
2	جب جھے سے کام خراب ہوجائے تو میں پریشان ہوجاتا/ جاتی ہوں۔				
2	میں ء چتا/ سوچتی ہوں کہ دُنیاایک آچی اورخوشگوارجگہ ہے۔		,		
2.	مجھے لوگوں کی اور کا در کات پر بنسی آتی ہے۔				
2	میں چاہتا/ جائتی جول کرمیر ےوالدین مجھے پوری توجد یں۔				
2	میرا خیال ہے کہ میں ایک چھاشخص ہوں اور میں جا ہتا/ جا بتی ہوں کہ ووسرے بھی میرے متعلق بھی خیال رکھیں۔				
2.	میں سوچتا/سوچتی ہوں کہ میں ایک ناکا شخص ہوں۔				
2	سیمیرے کیے آسان ہے کہ میں اپنے گھر والوں کو بتا سکول کہ میں ان سے محبت کرتا /کرتی جول۔				
2	یس ایک منٹ میں حُوش ہوتا/ ہوتی ہول اور ووسرے ہی منٹ آداس اور پریشان ہو جاتا / جاتی ہول۔				
2	ۇنيامىرے ليےائيٽ ناخۇڭلوارچگە				
2	شدید غصے میں میری حالت جذباتی ہوجاتی ہے۔		b		
3	یں چاہتا/ جاہتی ہوں کہ جب میں کسی معالم میں پریشان ہوں تو میری حوصلدافزائی کی جائے۔				
3	میں اپنے متعلق اچھامحسوں کرتا/کرتی ہوں۔				
3/	میں محسو <i>ن کرنا اکر</i> تی ہوں کہ میں بہت ساری چیزیں تبین کر سکتا اسکتی جو میں کرنا عابتا/ جائتی ہوں۔				
3.	مجھ کی ے بیا کہنے میں دشواری بیش آتی ہے کہ میں اے پیند کرتا /کرتی ہوں۔				
3-	میں بہت کم خصر کر تا کر تی بیانا راض ہوتی / ہوتا ہوں _				
3	يل دُنيا كوايك خطرناك جگه تصور كرتا /كرتي جون_		1		
3	تجھےا بنے مزان م <sub>و</sub> کنٹرول نہیں رہتا۔				
3	جب میں پریشان یا بیمار ہوتا /کرتی ہوں تو میں چاہتا/ چاہتی ہوں کہ ہے والدین میرے لیے ریشان ہوا				

T		<i>e</i>	<i>*</i>	-	1 K -
	بيانات	نقر يبالجيشة	بعض اوقات سيحيح	بهندم	تقريبا بمعينين
	يل اپنے آپ سے ناخوش ہوجا تا/ جاتی ہوں۔		14 -1		
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	یے میرے لیے آسان ہے کہ میں اپنے دوستوں کو بتا سکوں گا کہ میں حقیقت میں ان کو پیند کرتا /کرتی ہوں۔				
	جب مجھ مشکل کام کا سامنا کر ما پڑتا ہے قومیں جلد ہی پریشان ہوجاتا/ جاتی ہوں۔		. = .		
Ī	زندگی میرے لیے ایک انچی چیز ہے۔				

ہمایات: مندرجہ ذیل انتخابات میں سے ہرایک انتخاب آگی جذبات سے متعلق رقبمل کے بارے میں ہیں۔اگر دیا گیا بیان عام طور پر آپ کے ساتھ مطابقت رکھتا ہے۔ قو میں میں سے گرممکنہ میں دیں۔ میں میں عدر سے معرف کے بات سے متعلق رقبمل کے بارے میں ہیں۔اگر دیا گیا بیان عام طور

ببرشار	يانات	ممل غير متفق	پگوهدتگ غیر متفق	ناشفق نه غیرشفق	می تکشفق	تكمل متفق
1	ہیں جانتی ہوں کہ میرے جذبات کیوں ہدلتے ہیں۔				= 11	
2	میں آسانی سے اپنے جذبات پہلیان لیتا ہوں جب بھی ان جذبات میں سے گزرتا ہوں۔					
3	میں لوگوں کے لب و کیج ہوٹن کر بتا مکتی ہوں کہ وہ کیا محسوں کررہے ہیں۔					
4	میں لوگوں کے چبرے کے تاثرات کو دیکھ کران جذیات کو پیچان جاتی ہوں جن ہے وہ گزر رہے ہوتے ہیں۔					
5	ين اليك مصرو فيات وُسوعُد تل مول جو جَصِحة خُرْش رَحْتَى بين _		4	144		
6	<u> بحجه اپ برقابو</u> ہے۔					
7	میں الیے مواقع/تقال ببتر تیب دین جول جن عدوس الطف اندوز ہوتے ہیں۔					
8	میں دوسر الوگوں کو پہنر محموں کرائے میں مدوکرتی جوں جب وہ آداس دوتے ہیں۔					
9	جب مِن خوشگوار مودّ میں ہوتی ہول تونت نے آئیڈیاز بنائمتی ہول۔		+	1		
10	میں مزاج میں خوشگواریت کی مدد ہے راہ میں آگی رکا دٹوں کا سامنا کرتی رہتی ہوں۔					

## A-xibnəqqA

مهايمنو	শ্ৰহ	ار الهز الهز	مين مين	الهزاكهز	174 174	17.75 17.75
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91	シリンニューシーションといるからおりおりゃし-		-			-
41	ふしるいがいるいろうしんかんしんかんし					
81	مَّ الْهِ وَمَوْلَ عَنْ إِوْ الْمُؤْمِّلُ لَا مِنْ الْمُؤْمِّ الْمُؤْمِّلُ لَا مِنْ الْمُؤْمِّلُ لَ					
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نبرغار	بيانات	مبهرهی درست نهیس	ا کثر درست نبیں	مجمعي بمعي	آگثر درست	جمیشه درست
22	مجھ اپنے دوست پر جروسے ہے۔					
23	میرے دوست نیس تھے کہ میں آج کل کن حالات سے گزرد ہا/دی ہول۔					
24	جب مجھا ہے دل کا بوجھ اتارنا ہوتویں اپنے دوست پراعتبار کرسکتا اعتی ہوں۔					
25	اگر میرے دوست کو پند ہو کہ کوئی بات مجھے پریشان کر رہی ہے تو جھے ہے اس بارے میں پوچھ لینتے ہیں۔					



#### Ronald and Nancy Rohner Center for the Study of Interpersonal Acceptance and Rejection

Human Development & Family Studies, Box U-1058, University of Connecticut, Storrs, CT 06269-1058 USA

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August 31, 2020

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Ronald P. Rohner, Ph.D.

Rohner Research Publications www.rohnerresearchpublications.com

#### APPENDIX E

#### Respected madam,

Hope this email finds you well. I am a student of Psychology (Mphil-III) at National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan. I am currently carrying out my research on the topic of psychological maladjustment, Emotional Intelligence, Attachment Style and Lived Experiences of Adolescent Orphans and non-orphans, in which as it is mentioned i am taking the variable of emotional Intelligence. Hence, in order to measure this variable, i need your permission to use your scale. Kindly grant me your consent to use this scale so that i can pursue with my study. Thanking you in anticipation.

Kind Regards,

Ayesha Khan



Tracey J. Devonportto you

\$ 20, 2010

The brief EIS was developed from the EIS of Schutte and it is an open access free to use measure. So I am pleased to say our consent is not required, best wishes for your research,

Tracey

## Appendix F

#### Permission for Scale



ayesha khan <arishakhan946@gmail.com>

Wed, Sep 25, 2019, 11:35 PM

to franca.tani

Respected madam,

Hope this email finds you well. I am a student of Psychology (Mphil-III) at National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan. I am currently carrying out my research on the topic of Personality Difference, Emotional Intelligence, Attachment Style and Lived Experiences of Adolescent Orphans and non-orphans, in which as it is mentioned i am taking the variable of attachment. Hence, in order to measure this variable, i need your permission to use your scale, Kindly grant me your consent to use this scale so that i can pursue with my study. Thanking you in anticipation.

Kind Regards,

Ayesha Khan

Virus-free. www.avast.com

Franca Tani <franca.tani@psico.unifi.it>

Thu, Sep 26, 2019, 12;38 PM

to me

Dear Ayesha

no problem. I would be pleased to know the results of your research and, eventually, compare our attachment data, that are collected in so very different contexts.

Please, let me know.

Best regards,

Franca Tani

#### PERMISSION FOR SCALE



#### ayesha khan <arishakhan946@gmail.com>

Oct 13, 2019, 9:14 PM

to g.armsden, mxg47

Respected sir,

Hope this email finds you well. I am a student of Psychology (MPhil-III) at National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan. I am currently carrying out my research on the topic of Personality Difference, Emotional Intelligence, Attachment Style and Lived Experiences of Adolescent Orphans and non-orphans, in which as it is mentioned i am taking the variable of attachment. Hence, in order to measure this variable, i need your permission to use your scale (the inventory of parent and peer attachment). Kindly grant me your consent to use this scale so that i can pursue with my study, kindly send your full scale. Thanking you in anticipation.

Kind Regards,

Ayesha Khan

Greenberg, Mark T mxg47@psu.edu via pennstateoffice365.onmi@eb\$&ft.com

9:21 PM

to me, g.armsden@gmail.com

Dear Ayesha

This email grants you permission for use of the IPPA in your research. A manual is attached.

#### Mark T. Greenberg

Emeritus Professor, Human Development and Family Studies Founding Director, Edna Bennett Plerce Prevention Research Center Penn State Univ. www.prevention.psu.edu

Chairperson of the Board, CREATE www.createforeducation.org

Appendix K: Analysis of Lived Experiences of Orphans

Category	Themes	Sr.no	Sub-themes	1	2	3	4	Percentage %
Personality	1.Negative personality traits	1.1	Low Self-esteem	*	*		*	75
	The same of the same	1.2	Hostility & aggression	*		*	*	75
		1.3	Dependence	*	*	ak	*	100
		1.4	Low self-adequacy	*	*		*	75
		1.5	Less emotional responsiveness			*	*	50
		1.6	Low Emotional stability	*	*			50
		1.7	Negative worldview	*	*	afe	af¢.	100
Emotions	2. Emotional intelligence	2.1	Appraisal of one's emotion		*			25
		2.2	Appraisal of others emotion		*			25
		2.3	Regulation of one's emotion		*			25
		2.4	Regulation of others emotion		*			25
		2.5	Understanding emotions		*			25
Attachment	3.Attachment styles	3.1	Low trust	*	*	**	*	100
		3.2	Alienation	*		3 1	*	75
		3.3	Low communication	*		*	*	75

Appendix L: Analysis of Lived Experiences of Non-Orphans

Category	Themes	Sr.no	Sub-themes	1	2	3	4	Percentage %
Personality	1. personality traits	1.1	High Self-esteem	*	*		*	75
		1.2	Hostility & aggression	*			<b>3</b> fc	50
		1.3	Dependence	*		*		50
		1.4	High self-adequacy	*	*		*	75
		1.5	Emotional responsiveness	*		*	*	75
		1.6	Emotional stability	*	*	*		75
		1.7	Positive worldview	#	*	*	*	100
Emotions	2. Emotional intelligence	2.1	Appraisal of one's emotion	*	*	*	*	100
		2.2	Appraisal of others emotion	*		*	*	75
		2.3	Regulation of one's emotion	*	*	*	*	100
		2.4	Regulation of others emotion		*	*		50
		2.5	Understanding emotions	*	*	*	*	100
Attachment	3.Attachment styles	3.1	Trust	*	*	*	*	100
		3.2	Alienation	*				25
		3.3	Communication	*	*	ak.	*	100