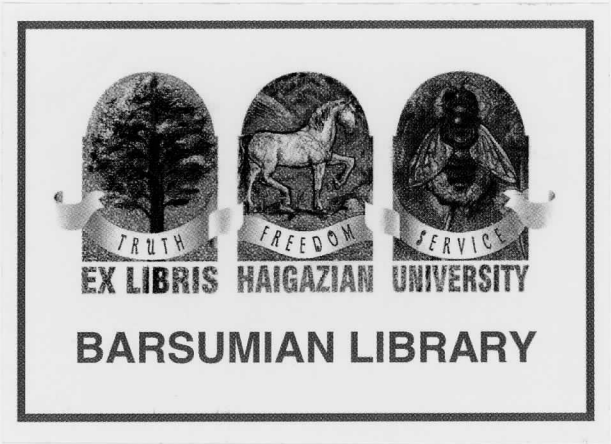

HAIGAZIAN UNIVERSITY

Depression, Anxiety and Self-Esteem of Institutionalized and Non-institutionalized Lebanese Adolescents

A THESIS SUBMITTED IN PARTIAL FULLFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARTS TO THE DEPARTMENT OF SOCIAL AND BEHAVIORAL SCIENCES AT HAIGAZIAN UNIVERISTY

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BEIRUT - LEBANON

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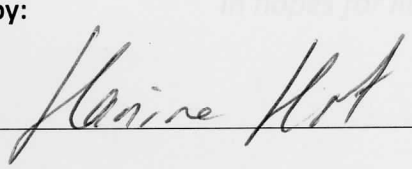

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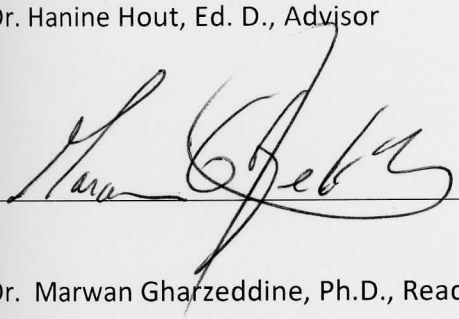

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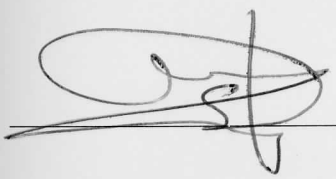

Dr. Daoud Tawil, Ph.D., Reader

DEDICATION

To my wonderful parents

For their unconditional love, support, and care

To all the orphaned children and adolescents around the world

To all the children and adolescents in oppressed countries

Particularly the Palestinian Children

In hopes for liberty and justice soon

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ABSTRACT

It was previously predicted that adolescents living in institutional homes and orphanages, away from the typical nurturing environment in a family, would have more psychological symptoms than those living with their parents. A sample of Lebanese adolescents living in orphanages and institutional homes (*AOI, n= 75)* were compared to those living with their parents and families (*APF, n = 75)* on depression, anxiety and self-esteem. Both samples were given the Centre for Epidemiological Depression Scale for Children (CED-SC), Spence Children Anxiety Scale (SCAS), Rosenberg Self-Esteem Scale (RSE-S), and a demographic questionnaire. Lebanese adolescents in orphanages and institutional homes were found with higher symptoms of depression and anxiety. No difference in self-esteem was found between both samples. Additionally, when males and females were compared separately, no difference was found in the self-esteem of both samples. Having a deceased parent was not found to lead to higher symptoms of depression in Lebanese adolescents living in institutional homes and orphanages. These results were compared to previous findings, and suggestions were made for further studies.

CHAPTER 1

Depression, Anxiety and Self-Esteem Differences of Institutionalized and Non-Institutionalized Lebanese Adolescents

Introduction

The importance of children living with their parents, growing up with their siblings, and experiencing attachment bonds with their parents is important for normal development (Adler, 1940). Since the 1940s, research about family psychotherapy showed that children are greatly influenced by their surroundings (Adler, 1940). As a leading founder in psychology, Adler (1940) considered the family life of a child as a major contributor to either the well-being or the break-down of the child. On the other hand, many contemporary researchers have explored the behaviors of children living in orphanages and institutional homes. The noticeable negative impact of living in institutional orphanages and institutional homes on children has been investigated in the field of psychology, social psychology, and psychiatry (Rutter, Colvert, Kreppner, Beckett, Castle, Groothues, Hawkins, Connor, Stevens, & Songua-Barke; MacLean , 2003).

Back ground of the study

Research has concluded that general deprivation in orphanages but mainly the deprivation of parental nurturing has been affecting the children living there rather negatively. Generally, deprivations in orphanages include the lack of family life, the lack of maternal and paternal relationships, and the exposure to supervisors who may not offer

the nurturing needs required by the children. However, some children may have been previously exposed to more difficult circumstances in their lives, and moving into an orphanage was, in fact, beneficial for them. In these cases, moving into the orphanage may have possibly resulted in the improvement of the mental and psychological development of children. Children were found to improve psychologically because they were offered a safer and more secure environment than their previous one. Given this mixed evidence, our study considered that investigating the topic was essential to understand whether living in institutional homes and orphanages contributes to a positive or a negative effect. More specifically, we wanted to investigate whether there would also be a difference in Lebanese adolescents than previous studies on other cultures.

Moreover, evidence in some studies, that compared adolescents living in institutional homes and adolescents living with their parents in various countries of the world, showed the negative effects of deprivation (Zohra, Lassi, Mahmud & Jangua, 2010; Zukauskeiene, 1995). For instance, Zohra, Lassi, Mahmud & Jangua (2010) collected ratings of Pakistani teachers for the behavior, cognition, and emotion of adolescents living in institutional homes and orphanages. It was found that adolescents in orphanages had more symptoms of negative behavior, cognition and emotions (conclusion, *p*. 26, Zohra et al., 2010). In another study, Zukauskiene (1995) investigated 331 Lithuanian adolescents living in long term institutional homes who had higher symptoms of anxiety and depression, withdrawal and social problems than adolescents living with their parents. Given the background of studies comparing adolescents living in institutional homes and orphanages in various countries in the world, it was also necessary to compare a sample of adolescents living in institutional home and orphanages

to a sample of adolescents living with their parents in Lebanon. Investigating the differences in a sample selected from a Lebanese population was crucial in this study. Moreover, most studies were conducted on a younger sample of children as opposed to adolescents, and for this particular reason too, it was more beneficial to choose a sample of adolescents in this study.

Additionally, researchers have previously compared a sample of adolescents living in institutional homes and orphanages with a sample of adolescents living with their parents on depression (Zukausksiene , 2004; Mutiso, 2008; Sogendo & Nambi, 1997), anxiety (Zidron, 2008; Zukauskiene, 2004), and self-esteem (Youngleson, 1973; Farooqi & Intezar, 2009. Zidron (2008) found that adolescents from institutional homes have higher symptoms of anxiety than adolescents living with their parents. Youngleson (1973) found that adolescents living in orphanages and institutional homes have lower self-esteem than adolescents living with their parents. Specifically, Zukauksiene (2004) found that losing a parent and living in an institutional home was positively correlated with children's depression. He also found that adolescents living in institutional homes showed more anxiety symptoms than the group living with their parents.

Moreover, Mutiso (2008) found that orphaned adolescents (2.9 %) had more depression than non orphaned adolescents (2.6 %) (Mutiso, 2008). Sogendo et al. found that orphans were more depressed (19%) than non-orphans (12%) in a sample of 193 Ugandan adolescents (Sogendo & Nambi, 1997). In our study, it was important to investigate whether there would be differences in the symptoms of depression, anxiety and self-esteem between a sample of adolescents living in institutional homes and

orphanages and a sample of Lebanese adolescents living with their parents. Higher symptoms on anxiety and depression would indicate a necessity for psychological counselling for adolescents in institutional homes and orphanages. Lower self-esteem would indicate a requirement for counselling to help children living in intuitional homes and orphanages feel more confident and worthy of themselves. Since Lebanese adolescents live in isolated orphanages and institutional homes, and do not live in society, this may help protect them against society's criticism and judgments. Perhaps, this may be a protective factor against having significantly lower self-esteem given that they are not exposed to society's judgements on daily basis. For this reason, it was important to investigate whether Lebanese adolescents living in institutional homes and orphanages would have any difference in self-esteem at all than those living with their parents given that they live in isolated orphanages and institutional homes.

Farooqi & Intezar (2009) found that orphaned boys had lower self-esteem as compared to boys living with their parents (*M* of orphaned boys = 19.1, *M* of boys living with their parents = 17.4), but there was no difference in the female samples. Given these differences in means, it was important to also investigate whether Lebanese boys living in orphanages and institutional homes would have lower self-esteem than those living with their parents, and there would also be no difference in the Lebanese female sample.

Moreover, more contemporary studies showed evidence that children who lost their mothers when they were younger than fifteen years were shorter in about 2-3 cm, attended school a year less than the sample of non-orphans, and were poorer in 8.5% in

their lifetime course (Dercon, 2010). Dercon (2010) also found that if the mother is alive, there is a general improvement in the child's well being. However, he found that the living status of the father did not lead to any significant improvements. Similarly, Sogendo & Nambi found that when orphans (6-20 years) were compared to children from normal families without any deceased parent, orphaned children were found to be more depressed. Given this evidence, it was necessary to find out whether Lebanese adolescents living in orphanages and institutional homes with deceased parent are likely to have higher depression symptoms than those with a living parent. It was crucial to find out if having a deceased parent leads to higher depression and anxiety symptoms in the adolescent.

Finally, Marcovitch (1997) investigated a sample of children who were previously living in Romanian institutions, and found that children were deprived of basic physical, emotional, and nutritional needs. Given these reported deprivations in the literature review, I predicted it is likely that adolescents living in orphanages were more likely to have higher symptoms of depression and anxiety, and lower self-esteem than adolescents living with their parents. Our study compared a sample of Lebanese adolescents living in orphanages and institutional homes *(AOI)* to a sample of Lebanese adolescents living with their parents within a typical family orientation *(APF)*.

Problem Statement

The effect of living in institutional orphanages and institutional homes on the internalization and externalization of behavior, the emotional well-being, the mental development and the social interaction of children has been evident in the literature

review. The lack of family life, the lack of paternal and maternal relationships, and the physical and emotional distance from one's family may lead the child to develop symptoms of psychological disorders (Zeahen, Egger, Smyke, Neslon, Fox, Marshalla, & Guthrie, 2009). Many previous studies were conducted on a sample of younger children, but there was not a lot of evidence on adolescents living in institutional homes and orphanages. Thus, it was necessary to conduct further studies on adolescents living in orphanages, and to compare this sample to adolescents living with their parents in our study.

This study was a replication of a combination of studies on depression, anxiety and self-esteem. However, we predicted that our study will implicate different results due to cultural reasons. Possibly, the close family life typically found in a Lebanese society would lead to even higher depression and anxiety symptoms in Lebanese adolescents living away from their parents than found in previous studies. More specifically, this study investigated whether Lebanese adolescents living in orphanages and institutional homes had higher symptoms of depression and anxiety, and lower symptoms of self- esteem than Lebanese adolescents living with their families. The following hypotheses were made:

1) Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have higher symptoms of depression than Lebanese adolescents living with parents and families *(APF)*

2) Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have higher symptoms of anxiety than Lebanese adolescents living with parents and families (*APF)*

3) Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have less self-esteem than Lebanese adolescents living with parents and families *(APF)*

4) Lebanese male adolescent living in orphanages and institutional homes (*AOI)* are likely to have less self-esteem than Lebanese male adolescents living with their parents (*APF*)

5) Lebanese female adolescents living in orphanages and institutional homes *(AOI)* are likely to have less self-esteem than those living with their parents (*APF)*

6) Lebanese adolescents living in orphanages and institutional homes who have a deceased parent are likely to have higher symptoms of depression than those without a deceased parents

The professional significance of the study

Statistically, there are about between 143 to 210 million children and adolescents living in institutional homes and orphanages, and about 5,200 children who become orphans every day (*UNICEF, 2010*). Considering these significant numbers of children and adolescents living in institutional homes and orphanages worldwide, one can only begin to imagine the implication of living outside a traditional family setting on the psychological development of these children. This study emphasized the importance of finding out whether children in institutional homes and orphanages have higher symptoms of depression, anxiety and self-esteem. It was necessary to highlight how important it is to improve the overall condition of orphanages and institutional homes. A nurturing environment is crucial for the well-being of the children and adolescents living there. An environment devoid of nurturance may lead to the mental,

psychological and physical development of the children and adolescents. The experience of living in orphanages and institutional homes can be difficult on children specifically when their care-givers do not offer a family experience necessary for normal development. Detecting problematic symptoms in adolescents living in orphanages and institutional homes is important; administrative staff, social workers, psychologists and psychotherapists are expected to work together to ensure the well-being of children and adolescents living in orphanages and institutional homes. If adolescents, in general, experience a lot of growing pains as they go through this critical developmental phase of their lives, what are we to expect of orphaned adolescents who, in addition to the normal developmental challenges, are suffering from symptoms of depression and anxiety as well as low self-esteem? Such adolescents would then require professional counseling and psychological assistance.

Overview of methodology

Lebanese adolescents living in orphanages and institutional homes were predicted to have higher symptoms depression and anxiety and lower self-esteem than adolescents living with their parents. Visits were made to various orphanages in Beirut to obtain a sample of Lebanese adolescents living in orphanages. Visits were also made to various schools in Lebanon to obtain a sample of Lebanese adolescents living with their parents. Both samples were convenient samples. The first sample consisted of 75 adolescents living in orphanages (control group *AOI*) between the age of 13 and 18 years ($n = 70$, $m = 37, f = 38$). The second sample consisted of 75 children between the age of 13 and 18 years ($n = 100$, $m = 23, f = 52$) living with their families (comparison group *APF)*. Both samples were given three inventories: the Child Epidemiological Studies Depression

Scale for Children *(CES-DC),* the Spence Anxiety Scale for Children (*SAS-C),* and the Rosenberg Self-Esteem Scale (*RES,), which were all* administered to both groups. Furthermore, both samples were also given a demographic questionnaire which consisted of several questions including their age, and gender.

Delimitations

The study had several limitations:

-The control sample was obtained from two orphanages in Lebanon, and the comparison sample was obtained from two schools in Lebanon; thus, the sample may or may not represent the entire Lebanese population of adolescents living in orphanages and institutional homes, or the entire Lebanese population of adolescents living with their parents.

- Three variables were investigated in the Lebanese adolescents: depression, anxiety, and self-esteem. Self-reports were used to discuss the results of adolescents living in orphanages with adolescents living with their parents. Reports from orphanages may or may not be correct if orphanages rated themselves according to how they perceived themselves, and not according to their condition. The method in our study depended specifically on the self-ratings of the adolescents, and there were no other sources of ratings. Other studies have gone further to collect data using the ratings of teachers and parents, which was neglected in our study (Zohra, Lassi, Mahmud & Jangua, 2010).

Definition of Terms

Depression- Based on the Diagnostic and Manual Disorder (*DSM IV),* specific

symptoms for depression include a combination of the following: *non specific complaints like headaches, muscle aches, stomach aches, and tiredness to absences in school, outbursts of shouting, complaining, increased irritability and reckless behavior, increased conduct problem, increased sensitivity to criticism , and frequent crying* (National Institute of Mental Health, 2010).

Anxiety- The second variable anxiety was also based on the American Psychiatric Association's (*APA*) definition as "a *compound of symptoms including constant fear, continuous worry, a rigid lack of confidence in succeeding, and/or generalized anxiety across all settings".* Spence (1988) defined anxiety using both the generalized and specific factors that contribute to it: *separation, anxiety, social phobia, obsessive compulsive disorder, generalized anxiety, fears of physical injury, and panicagrophobia* (Spence Manual, 1988).

Self-esteem- Our definition of self-esteem in the study corresponded with that of Rosenberg (1965), who defined self-esteem as a stable sense of personal worth or worthiness.

CHAPTER 2

Review of Literature

Children are sent to institutional homes or orphanages when they have a deceased parent, and are usually those whose families cannot take care of them anymore. Not all children in institutional homes or/and orphanages have both of their parents deceased. Some of these children are orphaned by one parent and their living parent cannot take care of them. Others have both parents alive but their parents cannot take care of them due to poverty or other socio-economic reasons. Other children do not even know their parents because they were given up to the institutional homes when they were infants. In all cases, children living in orphanages and institutional homes on a long-term basis are those who cannot go back home everyday after school, and who do not have someone at home to take care of them.

It is believed that living in orphanages on a long-term basis, devoid of a family experience may psychologically, mentally and even physically affect the normal development of these children. Statistically, it has been reported that there are about 240 million orphans in the world, and about *143,000,000* children living between orphanage centers and institutional homes (*Unicef,* 2010). These high statistical counts indicate how important it is to explore the impact of living in orphanages and institutional homes on the mental and psychological well-being of children.

Theoretically, the consequences of family deprivations on the development of children have been discussed by prominent names in the field of psychology. Adler

(1940) explained that early life experiences leave an impact on the children's entire lives; it was suggested that even early institutionalization may affect the child in the long run (Adler, 1940). Moreover, growing up in institutional homes and orphanages was believed to affect the child's development and functioning. Spitz (1955) explained why the impact of early infant institutionalization was negative. Early bed-sheets covering the face of institutionalized children obstruct the views for the infants from care-givers, which then leads to deterioration in their mental development (Spitz, 1955). Similarly, Bowbly (1988) suggested that children deprived of the necessary attachment bonds tend to be avoidant and anxious. Children living in orphanages were found to be more anxious and avoidant than children living with their parents (Bowbly, 1950). Recent empirical evidence also reflected on the differences in development levels of orphans and non-orphans. It was believed that children living in orphanages and institutional homes may possibly differ in their behavioral and cognitive patterns from children growing up within a typical family orientation (Maclean, 2003).

Various researchers investigated the effects of institutions on children's psychological and mental development (Rutter, Colvert, Kreppner, Beckett, Castle, Groothues, Hawkins, Connor, Stevens, & Songua-Barke, 2010; Maclean, 2003). Some longitudinal studies investigated the effects of early infant institutions and orphanages on children years after they were adopted (Rutter, 2007). Other researchers predicted that orphans are more likely to have high reports of depression, psychosomatic symptoms, conduct problems, and emotional deficiencies (Balat & Guven, 2006). In one study, the ability of orphans living in orphanage centers to define basic concepts in comparison to

non-orphans was investigated, and orphans reported lower levels of basic conceptualization (Balat & Guven, 2006).

Similarly, Fisher, Ames, Chilsom & Savoie (1997) found that children living in Romanian orphanages and institutional homes were either overwhelmed by peer attention or addicted to peer contact, which are both extreme behaviors. In another study by Zohra, Lassi, Mahmud & Jangua (2010), it was found that children living in conventional Pakistani orphanages had higher scores on behavioral problems than those living in within orphanages based on more familial settings. These results indicated there may be discrepancies between the behaviour, cognition and emotions of children in orphanages and children in regular homes (Zohra et al., 2010). According to National Institute of Mental Health (2010), children and adolescents may have a difficult time expressing their internal and mood states when they have depression. Moreover, their actions and reactions may become aggressive towards their colleagues, friends, and teachers due to their inability to discuss their feelings. The compound of hypotheses previously tested on children in institutional homes and orphanages was interesting, and directed me towards investigating this topic.

Theoretical framework

Earlier theoretical research on this topic was essential to review the effects of institutional homes and orphanages on children's development.

Several theorists have discussed the importance of early childhood events that lead to problematic behavior that may affect the child's entire life (Adler, 1940). Adler

(1940) studied the impact of early childhood experiences on the life of the child. It was believed that several factors as organ inferiorities and child hood diseases, pampering, and neglect contribute to a faulty lifestyle in the child. Adler explained that neglect is expected to occur in orphanages and hypothesized that that children possibly develop a faulty lifestyle after experiencing *painful* deprivations in many orphanages (Adler, 1945).

Furthermore, Adler concluded that children go into the outer world and act upon how they are raised in their own families; children have pathways in their own families and their birth order affects how they act with their own parents, but this structure also shapes the way they deal with the outer world. Children who are taken to institutional homes and orphanages may suffer great consequences when ripped away from the pathways they are used to within their own families. It was believed that "only" child in the family may have a difficult time suddenly moving into an orphanage where all the love and attention previously given is suddenly nonexistent (Adler, 1945). In such a situation, a child may all of a sudden feel abandoned and neglected, and may develop dangerous and severe feelings of inferiority and avoidance as a coping mechanism. Thus, moving into an orphanage or institutional home is likely to affect children in long run extending to the phases of adolescence and adulthood (Adler, 1940).

Adler suggested that expression of behavior in children is linked to the earlier experiences internalized by the child. He specified *"behaviors as overt aggression and stealing in children may be linked to having superiority complex and stuttering may be linked to severe anxiety*" (Adler, 1940, *p.* 18). Adler's associations indicated the

importance of monitoring whether children in orphanages without a typical family orientation would have higher stuttering, stealing, and overt aggression than children living with their parents. Other researchers have showed interest in the early experiences of deprivation in infants; the consequences of developmental diminishment due to infants' deprivation were of major focus (Spitz 1945; Golfarb, 1945- 1955; Bowbly, 1950).

Spitz & Bowbly (1950) discussed how institutionalisation of children was over-all negative for infants in the early 1940s and 1950s, but evidence was more positive in the 1970s (Tizzard, 1970). Spitz (1945) found that early institutionalisation can leave lasting negative effects on the lives of children, and the effects may not be reversed. It was found that children who lacked such stimulation in their early infants had developed a decrease in their developmental levels (Spitz, 1950). Spitz (1950) found that living in orphanages, and institutional homes, and being taken from the parents even in the first year of life was led to a drop in 100 on the development quotients of children to 45.

Other researchers also proposed that a disruption in child-mother attachment, like in institutional homes, may affect the child in the long run (Bowbly, 1950). Bowbly (1950) explained how a lack of attachment in early relationships may lead to delinquency in the future life of the child. Thus, it was believed that orphans who possibly suffer the lack of attachments become delinquent in their future lives (Bowbly ,1950). Such evidence suggested a possibility that children living in orphanages may have some anomalies from children living with their families. Bowbly (1950) found that the improvement of children occurs only when the child experiences integration of the

lost childhood experiences in the future. Children and adolescents who grow up without typical family bonds are expected to show anomalies in their pathways, and must experience an integration of the lost childhood bonds to reorganize the anomlaies (Bowbly, 1950). Finally, Bowbly (1950) suggested that an infant and a young child need to experience a warm, intimate and continuous relationship with their mother or a permanent substitute.

However, the 1970s carried more positive reports about the developmental problems of children living in orphanages, and children living in institutional homes; it was proposed that improving the way caregivers treat the children within the orphanages may help lessen the decline in their developmental levels (Broussard & DeCarie, 1971; Tizzard 1970). Additionally, there was major evidence for positive results in orphans when corrections were implemented in the orphanages in the 1970s (Tizard, 1977). Tizard & Tizard (1974) found that children actually developed attachment bonds with their adopted and foster parents at the age of sixteen. Such recent evidence contradicted previous conclusions, which previously believed that children living in orphanages could not develop future bonds in their lives. Yet, there was still evidence for lower reports of intelligence (IQ), language, and social development of children in institutional homes and orphanages, than children who lived with their parents (Tizard, 1974). Conclusively, theoretical research showed that theorists warned families of the consequences of the deprivation in orphanages on the children in both the short run and in the long run (Adler, Bowbly & Spitz, 1950).

Empirical Research

Several studies investigated depression, anxiety and self-esteem in children living in orphanages and institutional homes, and in children living with their parents.

Self-esteem of children in institutional homes and children living with their parents: In a research study by Farooqi & Intezar (2009), it was found that self esteem of orphans differed from the self esteem of children living with their parents who were between the age of 10 and 15 years. Within a sample of Pakistani children (75 orphans, 75 non-orphans), children living in orphanages had lower self-esteem than children living with their parents (t= 2.66, p <0.01) based on the Jonathan Berent's self-esteem scale (Farooqi et al., 2009). They initially predicted that children living with their parents may have lower self-esteem due to being away from their family (Farooqi et al., 2009). This was confirmed in the study when orphaned children were found to have lower self-esteem than children living with their parents (M of orphaned children = 19.26, M of children living with their parents = 17.8). Orphans are deprived of emotional support from the parental figures, and the lack of parental guidance and love contributed to lower self-esteem (Farroqi et al., 2009).

Furthermore, Mwazzabi (2010) investigated orphaned and non-orphaned children (n = 155) in Ugandan orphanages to find that children living in orphanages had lower self-esteem than children living with their parent. Children in orphanages were found to have lower self-esteem. In addition, Mwazzabi (2010) found that children living in orphanages who had higher self esteem achieved higher performance than children living

with their parents. This positive result implied that orphaned children can also be successful even without parental encouragement provided that they show high self-esteem (Mwazzabi, 2010).

Self-esteem of adolescents in institutional homes and children living with their families: *Youngleson (1973) found that* adolescents in institutional homes (n = 24, ages 15-17) have less self-esteem than adolescents living with their families. Although both samples were matched for age, sex, religion, school performance, ordinal position of birth, and parental socioeconomic status, it was still found that institutionalized adolescents showed less self-esteem than non-institutionalised adolescents (Youngleson, 1973). Initially, the sample of institutionalized adolescents was those separated from their mothers between 21 months and 10 months of age. They not only showed lower self-esteem but also showed less ability to adjust and less affiliate. Such results indicated the impact of living in orphanages even for adolescents who joined institutional homes at an earlier age. Within this context, our present study predicted that Lebanese adolescents living in institutional homes and orphanages are likely to have lower self esteem than those living with their parents. Specifically, since Lebanese adolescents living in institutional homes and orphanages are isolated from society, they are less likely to be exposed to social judgments on daily basis. This may be a protective factor for them against having a significantly lower self-esteem than Lebanese adolescents living with their parents. For this reason, it was important to investigate whether there would be a difference at all between both samples on their self-esteem.

Lebanese male adolescents living in orphanages and institutional homes are likely to have less self-esteem than those living with their parents: Farooqi & Intezar (2009) investigate the difference between the self-esteem of boys living in institutional homes and orphanages, and boys living with their parents. Farooqi et al. (2009) found a significant difference in the self-esteem of the boys living in orphanages, and boys living with their parents ($t = 2.32$, $df = 67$, $^*p < .05$). The orphaned boys showed lower self-esteem as compared to boys living with their parents (M of the orphan boys = 19.1, M of boys living with their parents = 17.4). Additionally, when comparing girls living in institutional homes and girls living in orphanages, no significant difference in self-esteem of girls from orphanages and girls living with their parents ($t = 1.58$, $df = 79$, $p > .05$). Given these results, it was predicted in our study that males living in orphanages and institutional homes are likely to have lower self-esteem than males living with their parents, where as females in both groups will have no significant difference in self-esteem.

Anxiety of adolescents living in institutions and adolescent living with their parents: Zukauskiene (1995) investigated 331 Lithuanian adolescents to find out that those who lived in long term institutional homes scored higher on depression/anxiety, and social problems than those who lived with their families. Using the Achenbach youth scale, it was found that adolescents placed in residential care as children had experienced more severe emotional and behavioural problems in comparison to adolescents who were living with their parents. Higher levels of anxiety were found among adolescents living in the long term institutional homes than those living with their parents (Zukauskiene,

1995). He also found several factors to have regression on the children's anxiety, such as abuse, neglect, separation and loss of parent combined with the long term residential care. It was found that children's anxiety increased with the loss of a parent.

Adolescents living in institutional homes (n = 134) and adolescents living with their parents were given the (n = 134) were given the Catelle Anxiety Questionnaire (*CAQ*) (Sagadi, 2005). Anxiety scores between adolescents living in parental homes and adolescents in institutional homes were compared; a significant difference was found between the boys living with their parents and boys living in institutional homes ($p <$ 0.01) with higher anxiety symptoms for the boys living in institutional homes. Similarly, the girls living with their parents has lesser anxiety symptoms than the girls living in institutional homes ($p < 0.001$). Sagadi (2005) concluded that adolescents living in institutional homes are more sensitive to having anxiety than those living with their families.

Furthermore, Mutiso (2008) administered a self-reported questionnaires *(ReADS)* for 673 a majority of orphaned adolescents living in institutional homes (above 8 years) to identify their differences on the anxiety subscales. A teacher-rated Rutters scale was used to identify emotional and behavioral problems. Both orphans and non-orphans had high levels of psychological distress with a statistically significant difference on separation anxiety subscale ($p = 0.021$). Results showed significant higher symptoms of obsessive compulsive disorder and separation anxiety symptoms for orphans than non-orphans. Another significant difference was higher panic disorder symptoms for orphans

than non-orphans. Mutiso (2008) believed there is a necessity for psychological counseling for orphans in order to eliminate the severity of the symptoms, and to help prevent debilitating anxiety in adulthood. In further analysis, it was also found that the staff could not identify psychological disorders in the children; this highlighted a necessity for psychologists to help the adolescents living in orphanages and institutional homes. Given this context, we also predicted higher prevalence of anxiety symptoms in a sample of Lebanese adolescents living in orphanages and institutional homes compared to a sample of non-orphans living with their families.

Depression of children living in institutional homes and children living with their parents: Zidron (2008) investigated the differences in depression between Kenyan orphans and non-orphans. Children were given a Beck's Depression Inventory for Youth (*BDI-Y*), a demographic interview, anthropometric measurements, testing for anaemia, clinical history and physical exam, a 24-hour dietary recall, and activity energy expenditure. Results indicated that children in orphanages and institutional homes had higher on the Beck Depression Inventory test (*BDI-Y*) ($p < 0.001$). Administering a demographic questionnaire, Zidron (2010) found a general negative mood towards children living in institutional homes with 29.4 % of children reported feeling bad about being children living in institutional home and orphanage. He also found 15 % of the institutionalized were feeling sad about being an orphan. Moreover, 7.5 % reported that it was painful to lose parents, and 5.5 % of children reported feeling of loneliness (Zidron, 2010). Such high reports of depression indicated an importance of paying attention to the mental and psychological impact of living in orphanages and institutional homes. Thus,

Zidron found higher depression for the orphans, but not necessarily less physical capabilities or more nutritional deficiencies than non-orphans.

Depression of adolescents living in institutional homes and orphanages and adolescents living with their parents: Zukauskiene (1995) measured the depression of 127 adolescents living in institutional homes and orphanages compared with those 207 adolescents living with their parents and families. The Achenbach youth self report was used to measure three scales: anxiety/depression, withdrawal and social problems (Zukauskiene, 1995). It was found that losing a parent and moving into an institution was positively correlated with the level of depression in children. Zukauskiene (1995) concluded that adolescents in institutional settings were more depressed and withdrawn. It was also found in further analysis that the adolescents in the institutional homes are more pessimistic than those living with their parents. Similarly, adolescents living in institutional homes were less likely to seek social support, use reflective thinking, and are not interested in mastery orientation in the achievement context (Zukauskiene, 1995).

Sogendo & Nambi (1997) investigated the difference between orphans and non-orphans on depression in Uganda (n= 24, 6-20 years). He selected the orphans who have lost one or both of their parents by AIDS. It was important to have all the group experience one common trauma, mainly to be orphaned by the same cause, AIDS. By controlling the trauma, there was uniformity in the orphaned children, which strengthened the validity of the study. Sogendo et al. found that orphans were more depressed (19 %) than non-orphans (12 %). Children's Depression Index (*CDI*) was used

with those scoring 18 points or below are classified as non-depressed and those scoring 19 points and above are classified as depressed. All orphans had above the score of 19 classifying them as depressed, while all non-orphans had below the score of 19 classifying them as non-depressed. Given these results, it was expected in our study that adolescents living in institutional homes and orphanages are more likely to be depressed than adolescents living with their families and parents.

Moreover, Sogendo et al. found that younger children (10-14 years) who lost a mother and were living with their father to be significantly more depressed than older children (15-19 years). Based on this evidence, it was concluded that older orphans are likely to be less depressed than the younger ones (Sogendo, et al., 1997). Additionally, this study also compared several different variables like lifespan of orphans (57 %) to non-orphans (67 %) locus of control for orphans (7 %) to non-orphans (7 %), adjustment of orphans(11 %) to non-orphans (13 %), wanting marriage (60 %) to non orphans (83 %), wanting children (62 %) to non-orphans (92 %), hoping to be in school (82 %) to non orphans (100 %), dead in 1 year (4 %) to non-orphans (0 %). These results are significant in discerning the differences between orphans and non-orphans. It was found that orphans thought they would be dead in 1 year (4 %) much more than the non-orphans (0 %) (Sogendo et al., 1997). The difference between orphans wanting children and non-orphans wanting children was also significant (Sogendo et al., 1997). It was found that orphans showed no interest in wanting kids, which indicated not wanting to have a family. Sogendo et al. believed this may be related to living without their parents, and found these results to be an indication of symptoms of depression. Such

statistical analysis reflected the importance of implementing familial orientations in orphanages, and psychological help programs for the children living there.

Furthermore, a study conducted on a majority of adolescent orphans living in orphanages in Kenya (n=100, above 8 years) showed that both orphans and non-orphans had high levels of psychological distress. They were rated using the teacher Rutters scale and as well as self-administered questionnaires for the children to identify emotional disorders. However, orphaned adolescents (2.9 %) had more depression than non orphaned adolescents (2.6 %) (Mutiso, 2008). Mutiso (2008) concluded that children living in institutional homes and orphanages are likely to have more symptoms of emotional and behavioural problems; therefore, they require special attention from teachers and additional psychological counselling (Mutiso, 2008). Given this context, our study also predicted that Lebanese adolescents living in institutional homes and orphanages are likely to have higher symptoms of depression than those living with their parents.

Deceased Parent and higher depression score in adolescents: Little research currently exists about the long-term effect of the death of both parents, but it is possible that children who lose a parent are at a greater risk for experiencing a depressive disorder at the spot or later in life (Bauman & Germann, 2005; Siegel & Gorey, 1994). Parental death during childhood was observed as a risk factor for adult depression (McLeod, 1991; Singh, Pandey, Kumar, Jain, & Yadav, 1981).

Furthermore, Sogendo & Nambi (1997) investigated the difference between Ugandan orphans and non-orphans on certain variables, and most importantly depression. Major statistical differences were found between orphans who lost their mothers and orphans who lost their fathers. First, Sogendo & Nambi ensured that all orphans in the study lost one or both of their parents by AIDS. Having a common trauma between all orphans ensured uniformity in the sample of orphaned children, which strengthened the validity of the study (Sogendo et al., 1997). Orphans (6-20 years) were compared to children from normal families without any deceased parent. Orphaned children were found to be more depressed. Younger orphans (10-14 years) who lost a mother and were living with their father were significantly more depressed than older adolescent orphans (15-19 years) (Sogendo et al., 1997). It was found that orphans who lived with their widowed fathers were more depressed than those living with their widowed mother. Because the mother is a loving figure who offers the child the necessary care, it was suggested that this is likely to explain why orphans who lost their mother were much more depressed (Sogendo et al., 1997). Orphans living with grandparents and relatives were found to be very depressed (M=19.3). Orphans living with their relatives had a score of 20.9, which is also significantly above the depression mean level of 18.0 (Sogendo et al., 1997). The living status of the parent, whether deceased or living, was concluded to affect the child's significantly, and higher depression scores were found for children with a deceased mother (Sogendo et al., 1997).

In addition, Zukauskiene (1995) compared a sample of 127 Lithuanian adolescents living in long term residential care with 204 adolescents living with their

parents on depression, anxiety, social/withdrawal and social problems using the Achenbach youth scale. Regarding depression, it was found that separation or loss of parents, followed by institutionalization is likely to have a negative impact on the cognitive and behavioural strategies adolescents use in various situations, and yield higher levels of depression in the adolescents. Additionally, further analysis showed that adolescents living in institutional homes and orphanages scored less on the following *"task irrelevance behaviour, reflective thinking, seeking social relationships, and master orientation"* (results, *p.*7). Given this context, it was necessary to investigate whether a sample of Lebanese adolescents whose parents are deceased have higher depression symptoms than those whose parents are not deceased in a sample of Lebanese adolescents living in orphanages and institutional homes.

Conclusively, given the diverse studies that compared children living in orphanages and institutional homes with children living with their parents or families, it was important to conduct a study, aimed to compare a sample of Lebanese adolescents as opposed to children living in orphanages and institutional homes to a sample of Lebanese adolescents living with their parents. Specifically in Lebanon, there has been a shortage of studies on children living in orphanages and institutional homes in comparison to children living with their parents. Our study compared Lebanese adolescents living in orphanages and institutional homes with a sample of Lebanese adolescents living with their parents on their symptoms of depression, anxiety and self-esteem. Based on the literature review above, the following hypotheses were examined:

1) Lebanese adolescents living in orphanages and institutional homes *(AOI)* are

likely to have higher symptoms of depression than Lebanese adolescents living with parents and families *(APF)*

2) Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have higher symptoms of anxiety than Lebanese adolescents living with parents and families *(APF)*

3) Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have less self-esteem than Lebanese adolescents living with parents and families *(APF)*

4) Lebanese male adolescent living in orphanages and institutional homes *(AOI)* are likely to have less self-esteem than Lebanese male adolescents living with their parents *(APF)*

5) Lebanese female adolescents living in orphanages and institutional homes *(AOI)* are likely to have no difference in their self-esteem than those living with their parents *(APF)*

6) Lebanese adolescents living in orphanages and institutional homes who have a deceased parent are likely to have higher symptoms of depression than those without a deceased parents

CHAPTER 3

Methodology

The study aimed to compare a sample of Lebanese adolescents living in institutional homes and orphanages on a long-term basis to a sample of Lebanese adolescents living with their parents on three variables, namely: self-esteem, depression, and anxiety.

Participants:

The first control sample consisted of 75 Lebanese adolescents living in orphanages and institutional homes, and the second comparison sample consisted of 75 Lebanese adolescents living with their parents (*ages* 13-18). All adolescents living in orphanages and institutional homes *(AOI)* were confidently selected given that they are living in the institutional homes on a long-term basis, and that they are between the ages of 13 and 18. Similarly, for the comparison group of adolescents living with their parents, it was ensured that adolescents from the comparison sample *(APF)* live with their own parents and families. The comparison consisted of a 75 adolescents, 45 of these adolescents attended St. Louis School in Keserwan, and 30 of them attended Haigazian Evangelical School. These students came from different religious backgrounds and various economical classes. For the sample of adolescents living in orphanages and institutional homes, five SOS institutional homes located in Batroun, Jbeil, Keserwan, Kfarhay, and Zouk were selected. The 45 adolescents, selected from these institutional homes, came from different cities in Lebanon.

Both the SOS and AFEL associations for Lebanese children and adolescents

living without their parents are non-governmental organizations (NGO) that have institutional homes and orphanages across the country. There are about 20 adolescents in each SOS institutional home, and there are several institutional homes across Lebanon. Lebanese adolescents living in these institutional homes belong to different backgrounds, their families cannot take care of them or they do not have families at all, and live without their parents in these institutional homes and orphanages on a long-term basis. SOS association is based on a nurturing environment where care-givers treat the adolescents with respect, love and care. Moreover, the institutional homes are well-equipped and furnished to ensure the adolescents there are safe and comfortable. The associations ensure that care-takers are caring to the children and adolescents living there. Also, the association opens saving funds for adolescents at the age of 15 in order to assure that they have money to go to university in the future. Adolescents and children in SOS institutional homes are often heard calling their care-taker "SOS mother", or "aunty". They visit their families depending on the agreement with the family. Many of the adolescents visit their families once per month, and some do not visit their families since their parents are deceased. In our study, 45 Lebanese adolescents from these SOS institutional homes between the ages of 13-18 fit the age demand for our sample, and were conveniently selected for the study.

Similarly, the second association, AFEL, from which 30 adolescents were selected, also promotes a nurturing and kind environment for the adolescents living there. These adolescents from AFEL institutional homes were also conveniently selected for our sample of adolescents living in orphanages and institutional homes.

Materials

Spence Children's Anxiety Scale (SCAS). Spence is a child self-report test that measures anxiety in children; it is based on the definition of anxiety in the Diagnostic Statistical Manual IV (DSM-II-R, 1987 and DSM-IV, 1994) which involves *"separation anxiety, social phobia, obsessive compulsive disorder, fears of physical injury, generalised anxiety, and panic agoraphobia" (Spence 1998).* Specifically, SCAS is made of 44 items that measure anxiety symptoms that are both specific and general. There are 6 items on obsessive compulsive disorder, 6 on panic disorder, 3 on agoraphobia, 6 on anxiety /over anxious symptoms, 6 on generalised anxiety, 6 on social phobia, 5 on physical injury, and 6 on separation anxiety. In the test, children rate on a Likert-type scale from 0 to 3 in the following manner: involving *never* (0), *sometimes* (1), *often* (2) and *always* (3), the frequency with which they experience each symptom.

Spence (1991) suggested that measuring intensity is important in the self-report of anxiety, because as the symptoms become more intense, the diagnosis becomes clearer. A total of 38 items on the SCAS lead to a total score of 114 points. The higher the score, the more the anxiety the child has on 27 of the items on the test. However, on the remaining 11 items, a higher score indicates lower symptoms of anxiety since these items are scored in the opposite manner (Spence, 1991).

Reliability and Validity: Spence (1998) found that the test was supported by a high internal consistency, and a 6 month test re-test also had a good reliability. The

internal consistency on a total of 2052 children resulted in a co-efficient alpha of 0.92, and a Guttmann split-half reliability of 0.90 (results, *p.* 558). Specifically, the reports showed a high coefficient alpha of 0.70 (separation anxiety), 0.70 (social phobia), 0.60 (physical injury fears), 0.73 (obsessive-compulsive), and 0.73 (generalized anxiety) (results, *p.* 10; Spence, 1998). Results showed that the internal consistency of the *SCAS* was high with a Cronbach alpha of 0.93, which assured it measured the construct for which it was designed.

Centre for Epidemiological Scale for Depression for Children *(CES-DC).*

Centre for Epidemiological Depression Scale for Children (*CES-DC)* is a test that has been used in many studies to diagnose depression as a first screening tool obtained from children. The test contains 20 items that measure a wide variety of depression symptoms for the adolescents and children to answer (Weissman, Rachel & Padian, 1980). Symptoms of depression assessed in the CES-DC are rated on a likert type scale, with *0* (not at all), *1* (a little), *2* (some), and *3* (a lot). Out of the 20 items on this test, a total of16 items are rated with a higher score given to those who choose the higher option. The remaining 4 items are rated in an opposite manner, with the highest score given to the lowest option. According to Weissman et al. (1980), the test measures cognitive, affective, behavioural and somatic symptoms associated with depression (*CES-DC*, manual, 1980). Weissman, Rachel & Padian (1980) developed the *CES-DC* using a cut-off score, where scores over 15 are indicative of significant levels of depressive symptoms.

Reliability and Validity: It takes 10 minutes to complete the test that was initially written for a grade 6 level. The validity of the *CES-DC* for adolescents also appears to be of an acceptable score (Faulstich, Carey, Ruggerio, Enyart & Gresham, 1986). Furthermore, a study by Faulstich et al. (1986) showed the cronbach alpha was high (0.84) in a sample of 148 respondents between 8 to 17 years. Faulstich et al. (1986) obtained a high alpha coefficient of 0.88, and an average concurrent validity of 0.44 ($p <$ than~ .005) when comparing scores on the Children's Depression Inventory (*CES-DC*, manual, 1980). .

Rosenberg Self-Esteem Test. Rosenberg (1965) defined self-esteem to be how a person evaluates his/her self-worthiness. Rosenberg Self-esteem Test *(RSE)* is a ten item is originally a Guttman scale scored as a Likert scale. The scale ranges from 0-30, with 30 indicating the highest score possible. The Likert type scale extends from strongly agree, to agree, disagree, and finally to strongly disagree. Originally, this test was developed on a total of 5,024 high school juniors and seniors from 10 schools in the state of New York.

Reliability and Validity: Rosenberg believed that only the person can report his own value, and this can be done through a valid and reliable test for self-worthiness. Rosenberg Self-esteem scale *(RSE)* presented an average to high internal consistency of 0.70, and an alpha coefficient range from 0.72 to 0.87 (Rosenberg, 1987). Another high result was the test re-test reliability for a period of 2 weeks found to be 0.85, and for a 7 month interval found to be 0.63 (Shorkey & Whiteman, 1978). Furthermore, the test re-

test reliability of the *RSE* in a period of two weeks was 0.85 among adolescents, which is a significantly high score (Sibler & Tipett, 1965). The Rosenberg Self-esteem Scale *(RSE)* was compared to Coopersmith's Self-Esteem Inventory (*Crandell,* 1974), which showed a significant correlation of 0.60 between both tests.

Demographic Questionnaire. The demographic questionnaire given to adolescents living in the orphanages and institutional homes contained several questions that were of vital importance in the further analysis section of the study. The researcher wanted to find out whether there was an interaction between having a deceased parent, and the depression, anxiety and self-esteem score. Thus, adolescents living in orphanages and institution+

nal homes were asked whether they have deceased parents. Moreover, they were asked about their "*gender, age, how long specifically in years have they been in the orphanage, and whether they have brother/sisters in the orphanage with them*". The gender question was to find whether Lebanese male and female adolescents living in institutional homes and orphanages had higher self-esteem than those living with their parents.

For the sample of adolescents living with their parents and families *(APF),* they were also asked several questions in the demographic questionnaire. They were asked about their name, age, gender, and whether they are living with their father or mother or both parents. It was important to ask their gender in order to find the differences between the means of the depression and anxiety in the sample of male adolescents living with

their parents and those living in the orphanages and institutional homes.

Procedure

A total of 45 adolescents were selected from SOS institutional homes, and 30 adolescents were selected from AFEL institutional homes (age 13-18). They were given the Spence Children Anxiety Scale Questionnaire (*SCAS*), Centre for Epidemiological Studies Depression Scale for Children (CED-SC), and the Rosenberg Self Esteem Scale (*RES*), as well as a short demographic questionnaire. Consent was granted from the administrators at the orphanages prior to the study in order to conduct it at specific dates agreeable for both parties. Visits were made to the SOS institutional homes and the AFEL institutional home. An average of 60 minutes time interval was given to complete the three tests. First, this group of adolescents were gathered at a room where they were asked to take the three tests and the questionnaire. Prior to administering the tests, the researcher explained to these adolescents that the study is confidential and that their answers will not be judged or used against them as the study is strictly for research reasons. They were urged to answer as accurately as possible, and were told that the *"truth truly makes a difference"*. They were asked to follow instructions on every test, and were told to review every question they answered to ensure they answered all the questions. They were also asked to answer a short demographic questionnaire, which encompassed of several questions about them. Although all students spoke English, they were also urged to ask about any question they deemed important.

Similarly, the comparison sample of adolescents living with their parents *(APF)*

was selected from two different schools. I visited the schools (St Louis School and Armenian Evangelical College) prior to the study to receive consent on the dates to administer the questionnaires to them; the comparison sample *(APF)* was between the ages 13-18, which corresponded with students from grade 7 to 12. On the scheduled time of the tests, students were asked to answer the three tests and a short questionnaire in a period of 60 minutes in their classrooms.

After taking the test, I debriefed the adolescents in both samples about the purpose of the study. I explained that the study aimed to compare a sample of adolescents living in orphanages and institutional homes to a sample of adolescents living with their parents on symptoms of depression and anxiety, and on self-esteem.

CHAPTER 4

Results

Reliability Analysis

The Cronbach alfa for the Centre of Epidemiological Depression Scale for Children (CED-SC) was above 0.6. The Cronbach alfa for Rosenberg self-esteem test was not as high as previous studies, but still above 0.5. We explained this may be due to the fact that the sample of adolescents living in orphanages and institutional homes may be confused about their self-esteem and have mixed emotions about it, which may have affected the consistency in which they answered the questionnaire. This explanation was suggested to explain a lower Cronbach alfa of the Rosenberg self-esteem test than previous studies.

Table 1: *Reliability of scale in current study and in previous research*

Cronbach's α in previous studies	**Cronbach's α in current study**
Child Epidemiological Depression Test 0.86 (Perkins & Lerner, 1995) 0.82 (Greavo & Zuroff, 2000)	0.784
Rosenberg Self-Esteem Test 0.72 (Blascovich & Tomaka, 1993) 0.86 (Rosenberg, 1986)	0.597

The Cronbach alfa for the anxiety test was high. Each of the six subscales of the anxiety test were examined for reliability. The total score for the anxiety's scale Cronbach alfa was 0.865. All subscales yielded higher Cronbach alfa than 0.5 except for the obsessive/compulsive (OCD) subscale was 0.472, and the social phobia subscale was 0.483. Both of these subscales were not used due to having low Cronbach alfa.

Table 2: Spence Anxiety Scale. *Reliability of the five subscales*

Cronbach's α in previous studies			**Cronbach's α in current study**
Scales	***Spence (1998)***	***Barrett & Tuerner (2003)***	
Panic Agoraphobia	0.82	0.80	0.80
Generalized Anxiety	0.73	0.77	.547
Separation Anxiety	0. 73	0.75	.658
Fear of physical injury	0.60	0.60	.601
Total	0.92	0.92	.865

Descriptives

Sample Descriptive. A sample of 75 Lebanese adolescents ($M = 37$, $F = 38$) living in institutional homes and orphanages were compared to a sample of 75 Lebanese adolescents living with their parents ($M = 23$, $F = 52$). Both samples were given depression, anxiety and self-esteem tests, and also a demographic questionnaire. Adolescents were between the age of 13-18, with mean age for the sample of adolescents

living in orphanages and institutional homes (M = 13.9533, SD = 1.83836) were compared with the mean age of the adolescents living with their parents (M = 14.6400, SD = 1.89337), with no significant difference in the means. Information from the demographic questionnaire was computed to show differences between adolescents living in orphanages and institutional homes, and adolescents living with their parents. A total of 52 % of adolescents living in institutional homes failed a class compared to 20 % of the adolescents living with their parents. A total of 61.3 % adolescents living in orphanages and institutional homes reported the smiling face as their current mood compared to 82.2 % of adolescents living with their parents. It was found that 8 % adolescents living in institutional homes reported a sad face as their current mood compared to 1 % in the sample of adolescents living with their parents. Similarly, 30 % of adolescents living in institutional homes reported the neutral face as their current mood compared to 16 % of the sample of adolescents living with their parents (see table 4). In the sample of adolescents living in orphanages and institutional homes, only 69.3 % reported their mother to be alive compared to 99 % of adolescents living with their parents (table 4).

Table 3: *Sample descriptive statistics for Gender, Mood & Failed Class*

	Institutionalized		**Non-institutionalized**	
	Frequency	**Percentage %**	**Frequency**	**Percentage %**
Gender				
•1 Male	37	49.3	23	30.7
•2 Female	38	50.7	52	69.3

Mood				
•1 Smiling Face	46	61.3	62	82
•2 Sad Face	6	8.0	12	16
•3 Neutral Face	23	30.7	1	1
•4 Failed Class	42	56	20	26

Note: the percentages and frequency for the adolescents in institutionalized compared to non institutionalized sample who chose smiling face, sad face or neutral face, as well as those with living or deceased mother, living or deceased living father.

More descriptive data: The cut off score for diagnosis of depression is any score over 30 on *CES-DC,* any score over 60 on *SCAS,* and any score below 15 on the *RSE-S* (*see* Appendix A, B, C). A total of 30.6 % adolescents living in institutional homes reported a score above 30 on the *CES-DC* in comparison to only 13.3 % of adolescents living with their parents. A total of 20.3 % adolescents living in institutional homes reported a score above 60 on the *SCAS* compared to 5.3 % of adolescents living with their parents. A total of 48 % of adolescents in the institutional homes reported a score below 15 on *RSE-S* compared to only 28 % of adolescents living with their parents (table 4).

Table 4: *Sample descriptive statistics on depression, anxiety, self esteem tests*

	Institutionalized		**Non-institutionalized**	
	Frequency	**Percentage %**	**Frequency**	**Percentage %**

•3 Depression above 30 st cut off score depression)	23	30.6	10	13.3
•4 Anxiety above 60 st cut off score anxiety)	16	20.3	5	5.3
•5 Self esteem below 15 st cut off score low self esteem)	36	48	21	28

Note: Scores over 30 in depression test, 60 in anxiety test, and 15 in self-esteem test, are the cut off scores for diagnosis for depression, anxiety and self-esteem respectively.

In the sample of adolescents living in orphanages and institutional homes, the demographic questionnaire was additionally used to compute *inter* data about the sample. It was found that 16 % of the adolescents living in orphanages and institutional homes reported their reason to live in the institution as financial, 50.7 % reported it to be having a deceased parent, 2 % reported it to be due to divorced parents, and 30 % reported it to be due to "a non-specific reason". When adolescents were asked about the best thing in the orphanages or institutional homes, 41 % reported the best thing in to be friends, 24 % reported it to be safety, 1 % reported it to be living together, and 9 % reported it to be various reasons. Similarly, 9 % of the adolescents living in orphanages and institutional homes reported the worst thing to be the bullying in the institution, 11 % reported it to be being away from family, 8 % reported it to be boredom, and 47 % reported that they have no problem whatsoever in the orphanages and institutional homes. When asked to identify if they are happy in institution, 80.7 % reported to be happy, and 18.3% reported to be unhappy (see table 5).

Table 5: *Descriptive Data on institutionalized sample's stay in institution*

Institutionalized	**Frequency**	**Percentage %**
Happy in Institution		
•1 Yes	61	81.3
•2 No	14	18.7
Reason in Institution		
•1 Deceased Parent/s	23	50.7
•2 Divorced Parents	38	2.7
•3 Financial	12	16.0
•4 Other	2	30.7
Best thing in Institution		
•1 Friends	41	54.7
•2 Safety	24	32.0
•3 Living Together	1	1.3
•4 Everything	9	12.0
Worst thing in Institution		
•1 Nothing	47	62.7
•2 Bullied by others	9	12.0
•3 Boring	8	10.7
•4 Away from Family	11	14.7

Note: the percentages for the worst and best thing represent the frequency and

percentages of the students who chose one option from the following four options.

Hypothesis Testing

Hypothesis 1: Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have higher symptoms of depression than Lebanese adolescents living with parents and families *(APF)*.

Lebanese adolescents living in orphanages and institutional homes were found to be much more depressed than those living with their parents ($t = 3.81$, $df = 148$, $p = 0.000$). In addition, when males living in orphanages and institutional homes were compared to males living with their parents, it was found that males living in institutional homes ($M = 22.8$, $SD = 8.480$, $t = 3.405$, $df = 58$, $p = 0.001$) had a higher depression score than males living with their parents ($M = 14.87$, $SD = 7.073$, $t = 3{,}553$, $df = 53.014$, $p = 0.001$). Similarly, when females living in orphanages and institutional homes were compared to females living with their parents, it was found that females living in institutional homes ($M = 26.13$, $SD = 7.743$, $t = 3.08$, $df = 88$, $p = 0.03$) had a higher depression score than females living with their parents ($M = 20.56$, $SD = 8.947$, $t = 3.157$, $df = 85.426$, $p = 0.02$). The hypothesis was confirmed that adolescents living in orphanages and institutional homes have higher depression than those living with their parents. The hypothesis was also confirmed for both genders separately, as indicated above (see table 6).

Hypothesis 2: Lebanese adolescents living in orphanages and institutional homes *(AOI)* are likely to have higher symptoms of anxiety than Lebanese adolescents living with parents and families *(APF)*.

Lebanese adolescents living in orphanages and institutional homes ($M = 48.2267$, $SD = 16.03002$, t = 6.743, $df = 148$, $p = 0.000$) were found to have higher symptoms of anxiety than those living with their parents ($M = 31.3067$, $SD = 14.67115$, $t = 6.743$, $df = 146.7$, $p = 0.000$). In addition, when males living in orphanages and institutional homes were compared to those living with their parents, it was found that males living in institutional homes ($M = 22.8$, $SD = 8.480$, $t = 4.883$, $df = 58$, $p = 0.000$) had higher scores on anxiety than those living with their parents ($M = 14.87$, $SD = 7.073$, $t = 5.087$, $df = 52.771$, $p = 0.000$). Similarly, when females living in orphanages and institutional homes were compared to those living with their parents, it was found that females living in institutional homes ($M = 48.2267$, $SD = 16.03002$, $t = 5.786$, $df = 88$, $p = 0.000$) had higher scores on anxiety than those living with their parents ($M = 31.3067$, $SD = 14.67115$, $t = 5.731$, $df = 77.013$, $p = 0.000$). The hypothesis was confirmed that adolescents living in orphanages and institutional homes have higher anxiety symptoms than those living with their parents. It was also confirmed for both genders separately, as indicated above (see table 6). .

Hypothesis 3: Lebanese adolescents living in orphanages and institutional homes (*AOI*) are likely to have less self-esteem than Lebanese adolescents living with parents and families (*APF*).

Lebanese adolescents living in orphanages and institutional homes were found to have no difference in self-esteem than those living with their parents (t = -1.387, df = 148, p = 1.67). Similarly, when males living in orphanages and institutional homes were compared to those living with their parents, it was found that males living in institutional homes (M = 16.7297, SD = 4.55612, t = -1.580, df = 58, p =.119) had no difference in self esteem than those living with their parents (M =18.6087, SD = 4.34573, t = -1.598, df = 48.498, p = .116). Likewise, when females living in orphanages and institutional homes were compared to those living with their parents, it was found that females living in institutional homes (M = 16.729, SD = 4.345, t = -.495, df = 88, p = 0.622) had no significant difference in self-esteem than those living their parents (M =18.6087, SD = 4.556, t =-.490, df = 77.102, p = 0.625) (see table 6). The hypothesis was rejected since it was found that Lebanese adolescents living in institutional homes and orphanages showed no difference in self-esteem than those living with their parents.

Table 6: *Independent T scores for depression, anxiety and self-esteem*

		Sig.	T	df	Sig. (2-tailed) p =
Depression	Equalvariances assumed	.812	3.811	148	**.000**
	Equalvariances not assumed		3.811	147.569	**.000**

Anxiety	Equalvariances assumed	.740	6.743	148	**.000**
	Equalvariances not assumed		6.743	146.854	**.000**
Rosenberg	Equalvariance sassumed	.713	-1.387	148	**.167**
	Equal variancesnot assumed		-1.387	147.467	**.167**

Hypothesis 4: Lebanese male adolescents living in orphanages and institutional homes (*AOI)* are likely to have less self-esteem than Lebanese male adolescents living with their parents (*APF*).

Based on Independent T tests, Lebanese male adolescents living in orphanages and institutional homes ($p = 0.119$) had no significant difference in their self-esteem than those living with their parents ($p = 0.116$). The hypothesis was rejected (see table 7).

Hypothesis 5: Lebanese female adolescents living in orphanages and institutional homes (*AOI)* are likely to have no difference in self-esteem than those living with their parents (*APF*).

Based on the Independent T tests, Lebanese female adolescents living in

orphanages and institutional homes (p = .622) had no significant difference in self-esteem than those living with their parents (p = 0.625). The hypothesis was confirmed (table 7).

Table 7: *Self esteem and gender comparisons in adolescents living in institutional homes and orphanages, and adolescents living with their parents*

Test Name	Sample	Number	Means	Std. Deviation	Std.Deviation Error	Significance (2- tailed) p =
rosenberg self esteem	Males living orphanages	37	16.7297	4.55612	.74902	.119
	Males living with parents	23	18.6087	4.34573	.90615	.116
rosenberg self esteem	Females living in orphanages	38	17.2105	4.33813	.70374	.622
	Females living with parents	52	17.6538	4.09152	.56739	.625

Hypothesis 6: Lebanese adolescents living in orphanages and institutional homes with a

deceased parent have higher symptoms of depression than those with a living parent.

Means for deceased father ($M = 22.29$, $SD = 6.499$) and deceased mother ($M = 7.348$, $SD = 9.499$) were computed. Univariate analysis of variance showed that father's living status ($M = 1.324, f = 0.19, p = 0.892$) and mother's living status ($M = 16.094, f = 0.226, p = 636$) had no significant effect on depression of the Lebanese adolescents ($df = 1, f = 7.49, p = 390$). The hypothesis was rejected (see table 8).

Table 8: *Effect of parent living status on institutionalized adolescents' depression score*

Tests of Between-Subjects Effects

Dependent Variable: depressionscore

Source	Type III Sum of Squares	Df	Mean Square	F	Sig. p =
Corrected Model	59.859[a]	3	19.953	.280	.839
	31649.967	1	31649.967	444.557	.000
fatherlivingstatus	1.324	1	1.324	.019	.892
motherlivingstatus	16.094	1	16.094	.226	.636
fatherlivingstatus * motherlivingstatus	53.298	1	53.298	.749	.390
Error	5054.807	71	71.194		
Total	48796.000	75			
Corrected Total	5114.667	74			

a. R Squared = .012 (Adjusted R Squared = -.030)

Further Analysis:

Independent T Test for Anxiety Subscales: Further analysis showed that in the five anxiety subscales, Lebanese adolescents living in institutional homes and orphanages had higher anxiety symptoms than those who live with their parents. Panic agoraphobia was higher for adolescents living in institutional homes ($M = 8.0933$, $SD = 5.20440$) than those living with their parents ($M = 4.1064$, SD = 4.2765) ($p = 0.000$). Also, generalized anxiety was also higher for adolescents living in institutional homes (M = 7.9200, $SD = 3.55178$) than those living with their parents ($M = 6.0800$, $SD = 3.62708$) ($p = 0.002$). Similarly, separation anxiety for adolescents in institutional homes was higher ($M = 8.4000$, $SD = 4.047$) than those living with their parents ($M = 4.9067$, $SD = 3.48034$) ($p = 0.00$) (see table 9).

Table 9: *Independent T Tests for the four anxiety subscales*

		Sig.	T	df	Sig. (2-tailed) $p =$
separationanxiety	Equal variances assumed	.237	5.668	148	**.000**
	Equal variances not assumed			144.755	**.000**
panicagorophobia	Equal variances assumed	.019	5.139	148	**.000**

	Equal variances not assumed			142.286	**.000**
physicalinjury	Equal variances assumed	.019	5.14	148	**0.00**
	Equal variances not assumed			142.23	**0.00**
generalisedanxiety	Equal variances not assumed		3.139	148	**.002**
	Equal variances not assumed			147.935	**.002**

Regression of variables on depression, anxiety and self-esteem:

Regression on Depression: Analysis showed there was a significant effect of age on the depression of adolescents living in institutional homes and orphanages (p = 0.001). Years these adolescents spent in the institutional homes and orphanages also had significant effect (p = 0.91) on their depression (see Appendix F, Table 8).

Regression on Anxiety: There was an effect of age on the anxiety of Lebanese adolescents living in institutional homes and orphanages (p = 0.028), indicating that older adolescents had more anxiety symptoms. There was an effect of the father's living status on their anxiety (p = 0.069). The mother's living status had no effect on their

anxiety ($p = 0.692$), but having a living father was shown to decrease anxiety ($t = -1.849$). Having brothers or sisters in institutional home and orphanages had an effect on the anxiety of adolescents living in institutional homes and orphanages. It was found that adolescents with brothers and sisters living with them in the same institutional home and orphanage had less anxiety than those without any siblings ($p = 0.079$) (see Appendix F, Table 8).

Regression on Self-esteem: Analysis of various variables on the self-esteem of adolescents living in institutional homes and orphanages was conducted. Times per week the adolescents living in institutional homes and orphanages saw their families had a significant effect on their self-esteem ($t = 1.640$, $p = .083$). Those seeing their families more had lower self-esteem. There was no effect of age on their self-esteem ($t = 2.596$, $p = 0.12$) (see Appendix F, Table 8).

Pearson Correlation of variables with depression, anxiety and self-esteem:

Correlation with Depression: Pearson correlations were investigated in the Lebanese adolescents living in institutional homes and orphanages. A strong correlation was found between the depression of adolescents living in institutional homes and orphanages and their age ($p = 0.001$), with higher depression indicated for the younger adolescents ($M = 13.9533$, $SD = 1.83836$). Additionally, a strong correlation was found between times per month these adolescents saw their families ($p = 0.095$), with less depression symptoms found in those who saw their families more times per month (see Appendix G, Table 9).

Correlation with Anxiety: Pearson's correlation showed a positive and strong relationship between anxiety and the age of adolescents living in orphanages and institutional homes, with higher anxiety indicated for younger adolescents ($p = 0.005$). Less anxiety was found in the adolescents who had brothers/sisters in the institutional home living with them ($p = 0.042$) (see Appendix G, Table 9).

Correlation with Self-Esteem: Only times per month the adolescents living in orphanages and institutional homes saw their parents was significantly correlated with their self-esteem. Lower self-esteem was found in adolescents who saw their families more times per month ($p = 0.092$) (See Appendix G, Table 10).

Correlations of Depression, Anxiety and Self-esteem Scales: A significant correlation was found between the depression test and the anxiety scale ($p = 0.00$). A significant correlation was also found between the depression and the self-esteem scales ($p = 0.044$). There was also a strong correlation between the anxiety and the self-esteem scale ($p = 0.014$). Notably, there was a strong correlation between depression and all the subscales of the anxiety inventory: separation anxiety ($p = 0.03$), panic agoraphobia ($p = 0.00$), generalized anxiety ($p = 0.00$), and physical injury ($p = 0.04$). It was expected that there would be a strong correlation between the anxiety subscales and depression, but it was remarkable that it was found on between all the subscales. There was a strong correlation

between the self-esteem scale and two of the subscales of the four anxiety test: panic agoraphobia ($p = 0.00$), and physical injury ($p = 0.06$). Since there was no difference in self-esteem of Lebanese adolescents living in institutional homes and orphanages and those living with their parents, it was expected that the self-esteem scale does not correlate significantly with all the anxiety subscales.

CHAPTER 5

DISCUSSION

Anxiety in Lebanese Adolescents

The total difference between the anxiety symptoms of Lebanese adolescents living in orphanages and institutional homes, and those living with their parents was significant. This may be related to the fact that adolescents living in institutional homes and orphanages live without their families and parents, which are known to be the main nurturing figures in their lives (Adler, 1940). As Adler explained, the lack of presence of the parents is a difficult experience for children and adolescents. In our study, this may have contributed to the higher symptoms of anxiety found in Lebanese adolescents living in orphanages and institutional homes. Furthermore, adolescents living without their families possibly feel that they have to face life on their own, which may lead to an increase in their anxiety symptoms.

Further analysis showed that Lebanese adolescents living in institutional homes reported higher symptoms of anxiety on all the six subscales of the Spence Children Anxiety Scale (SCAS). In fact, we expected Lebanese adolescents living in institutional homes and orphanages to have higher anxiety symptoms on some or most of the subscales, but it was remarkable that they had higher symptoms of anxiety on all the subscales than those living with their parents. It was remarkable that anxiety symptoms were higher for Lebanese adolescents living in institutional homes and orphanages than those living with their parents on all the four subscales of the SCAS. Out of all the four

subscales, the highest difference was on separation anxiety (t = 5.678) between Lebanese adolescents living in institutional homes and orphanages and those living with their parents. This significantly higher score on separation anxiety was expected in our study based on the difficult state of separation from their families that these Lebanese adolescents experience when moving into institutional homes and orphanages.

In a study by Zukauskiene (1995), analysis of variance (ANOVA) showed that adolescents living in institutional homes had higher anxiety than those not living with their parents, which was similar to our study. Zukauskiene (1995) suggested this was due to the lack of presence of parental figures in the child's life. Zukauskiene also suggested that being exposed to difficult conditions in the institutional homes contributed to higher anxiety. Furthermore, Zukauskiene investigated the type of traumatic events experienced by adolescents living in institutional homes, which was not conducted in our study. It was found that 93.5 % of the sample experienced serious abuse from their parents, 97.8 % experienced abandonment, 80.4 % experienced domestic violence, 45.6 % experienced open sexuality, 67. 4 % experienced physical abuse, and 13.1 % experienced sexual abuse outside the home (Zukauskiene, 1995). Our study had a limitation in this aspect that it did not investigate traumatic events possibly experienced by the Lebanese adolescents, which may have lead to higher anxiety symptoms. Instead, the focus in our study was to investigate how living in a context without the presence of a real family, and parents is likely to contribute to higher symptoms of anxiety. Possibly, adolescents living in orphanages and institutional homes who experienced any type of trauma are likely to have higher anxiety symptoms than those who did not experience any trauma. Further

studies are suggested to investigate personal traumas experienced by Lebanese adolescents living in institutional homes and orphanages. Because we did not investigate the possibilities for personal traumas in adolescents living in institutional homes and orphanages, analysis on how the traumas may have affected their depression and anxiety symptoms was not conducted.

Mutiso (2008) used a teacher-rated Rutters scale to find that orphans had higher separation anxiety ($p = 0.021$) than non orphans, which was similar to the results on separation anxiety in our study ($p = 0.000$). Similar to our study which found higher symptoms of obsessive compulsive disorder and panic disorder for adolescents living in orphanages and institutional homes, Mutiso (2008) found significantly higher symptoms on these two subscales for orphans than non-orphans ($p = 0.000$). These higher symptoms on panic disorder and obsessive compulsive disorder for Lebanese adolescents living in orphanages and institutional homes in our study implicated an urgent necessity for psychological intervention in order to investigate what is contributing to the anxiety.

Similar to our study, Sagadi (2005) found that African adolescents living in institutional homes had higher symptoms of anxiety than those living with their parents. When gender was controlled, we found that Lebanese females living in orphanages and institutional homes had higher anxiety symptoms than those living with their parents ($p < 0.000$). Similarly, Sagadi (2005) found that African girls living with their parents had more anxiety symptoms than those living in orphanages ($p < 0.001$). We also found that Lebanese males living in orphanages and institutional homes had more anxiety symptoms

than those living with their parents. Similarly, Sagadi (2005) found that African males living in orphanages and institutional homes significantly had higher symptoms of anxiety ($p < 0.001$). Since higher anxiety symptoms were found in both the sample of female and male adolescents living in orphanages and institutional homes in our study, we concluded that regardless of gender, Lebanese adolescents living in institutional homes and orphanages were likely to have higher symptoms of anxiety.

According to the Spence Children Anxiety Scale (SCAS), a score above the cut-off implied having a diagnosis for anxiety disorder. We found that 20.3 % of the Lebanese adolescents living in institutional homes and orphanages scored higher than the cut-off score for anxiety. On the contrary, only 5.3 % of the Lebanese adolescents living with their parents scored above the SCAS cut-off score for anxiety. Based on our findings, we concluded that Lebanese adolescents living in institutional homes and orphanages were found with a higher diagnosis for anxiety than those living with their parents possibly due to being away from their families. Physical and Emotional distancing from the family may have possibly exacerbated their anxiety symptoms.

Depression in Lebanese Adolescents

Our study found significantly higher depression symptoms for Lebanese adolescents living in institutional homes and orphanages than those living with their parents ($p = 0.000$). Our methods relied strictly on obtaining data from self-reports of Lebanese adolescents living in institutional homes and orphanages. Other studies have gone further to obtain more measurements on a sample of orphans and non orphans. For

example, Zidron (2008) administered the Beck's Depression Inventory for Youth (*BDI-Y*), a demographic interview, anthropometric measurements, testing for anaemia, clinical history and physical exam, a 24-hour dietary recall, and activity energy expenditure. Similar to our study, Zidron found that children living in institutional homes and orphanages had higher depression using the Beck Depression Inventory test (BDI-Y) ($p < 0.001$). Zidron's sample was on a younger sample of children than our sample of adolescents. The higher symptoms of depression in our study implied a requirement for psychological assistance for Lebanese adolescents living in institutional homes and orphanages. One limitation in our depression analysis was that the Centre for Epidemiological Depression Scale for Children (CED-SC) utilised in our study measured a total score on depression, and did not measure subscales on the depression. Measuring subscales would have specified the type of depression symptoms experienced by the Lebanese adolescents living in institutional homes and orphanages.

Our study found that Lebanese adolescents living in institutional homes and orphanages had higher symptoms of depression than those living with their parents. Sogendo & Nambi (1997) found similar results in a sample of African adolescents, who were orphaned by a common trauma (AIDS). However, the Lebanese adolescents in our study lived in the institutional homes and orphanages on a long-term basis due to various reasons that depended on each adolescent, and not due to one common trauma. When considering the cut-off score diagnosis for depression in the test, we found that 30.6 % of the Lebanese adolescents living in institutional homes and orphanages were depressed in comparison to only 13.5 % of those living with their parents. These findings showed

much higher depression symptoms for the Lebanese adolescents living in orphanages and institutional homes. Similarly, Sogendo et al. found that 19 % of orphans were depressed in comparison to only 12 % of the non-orphans. Evidence for higher depression symptoms found in Lebanese adolescents living in orphanages and institutional homes than in the African orphans may be due to many variables. First, different tests and methods were used in our study, which may have contributed to the higher depression symptoms found in our sample than in the African sample. Secondly, cultural reasons may possibly explain why higher symptoms of anxiety were found in the sample of Lebanese adolescents in our study than in the African adolescents who took part in the previous study by Sogendo et al. (1997). The culture in Lebanon is evidently very family oriented. Thus, Lebanese adolescents may have felt more affected by the distance from their families than adolescents living in institutional homes and orphanages in other countries. When gender was investigated, we found higher symptoms of depression in Lebanese male adolescents living in orphanages and institutional homes than those living with their parents. Similar results were found in the Lebanese female adolescent's sample, with higher depression symptoms found in female adolescents living in orphanages and institutional homes than those living with their parents. Given that both male and female adolescents living in institutional homes and orphanages had higher symptoms of depression, we concluded that regardless of gender, the depression of adolescents living away from their families and parents is higher than those living with their parents.

A similar study was conducted by Zukauskiene (1995) using the Achenbach Self-

Report Test. Similar to our findings, Zukauskiene found that adolescents living in orphanages and institutional homes were more depressed. When considering the cut-off score for the Centre for Epidemiological Scale for Depression Test for Children (CED-SC), we found that 30.6 % of the adolescents living in orphanages and institutional homes were diagnosed for depression in comparison to only 13. 3 % of those living with their parents. Thus, Lebanese adolescents living in institutional homes and orphanages were diagnosed with depression much more than those living with their parents. However, Mutiso (2008) found only 2.9 % of the Ugandan adolescents living in orphanages were depressed in comparison to 2.6 % of those living with their parents. Evidently, the difference between the Ugandan adolescents living in institutional homes and those living with their parents was not as significant as in our study. Since we found that 30.6 % of the Lebanese adolescents living in orphanages and institutional homes scored above the cut-off score for the diagnosis of depression, this indicated a necessity for further investigation of the reasons contributing to such high diagnosis on depression. Investigations can be made to find whether the environment in the institutional homes and orphanages was nurturing enough, and whether there is enough psychological counseling provided for the Lebanese adolescents. Personal traumas also experienced by adolescents living in institutional homes and orphanages can be investigated.

Self-Esteem in Lebanese Adolescents

In our study, Rosenberg Self-Esteem Scale (*RES*) was used to compare the self-esteem of a sample of Lebanese adolescents living with their parents to those living in orphanages. Similarly, self-esteem symptoms of children living in orphanages were

compared to those living with their parents by Farooqi & Intizar (2009). Our study controlled confounding variables by assuring that adolescents living with their parents did not experience any parental loss. Their self-esteem was compared to children who have been living in institutional homes and orphanages for more than a year, and who lived there on a long-term basis. Similarly, Farooqi et al. (2009) ensured all orphans who took part in the study were living there for more than 6 months and on a long-term basis. Our study found no significant difference between the Lebanese adolescents living in institutional homes and orphanages and those living with their parents, but Farooqi et al. found that orphans had less self-esteem than non orphans.

The self-esteem of Lebanese adolescents living in orphanages and institutional homes was not found to have a significant different than those living with their parents ($p = 1.67$). Many reasons could possibly explain these results. First, the institutional homes and orphanages in our study were well-equipped, and their names are generally known to be well-respected across the country. Possibly, this may have helped the Lebanese adolescents living in these institutional homes and orphanages not feel unworthy or ashamed. Also, another explanation can be considered. Possibly, living in orphanages and institutional homes that were isolated from society led the adolescents to experience no difference in their self-esteem than those living with their parents. Perhaps, Lebanese adolescents living in institutional homes and orphanages would have reported lower self-esteem had they been living in society, where they are more likely to be judged. Since they live in an isolated orphanages and institutional homes, this probably contributed to having no significant difference in their self-esteem than the Lebanese adolescents living

with their parents. Future studies are suggested to investigate the self-esteem of adolescents living in institutional homes and orphanages after they move back into society. Moreover, another explanation is that Lebanese adolescents living in institutional homes and orphanages wanted to appeal well, and may have answered in a positive manner on the self-esteem test in order not present themselves negatively. Since our study depended strictly on obtaining the adolescents ratings of themselves, this presented a limitation in our study since we had no ratings of the care-givers or teacher's for the self-esteem of the Lebanese adolescents. However, the cut-off score for the diagnosis of low self-esteem in the study was considered according to the Rosenberg self-esteem manual *(Rosenberg manual).* It was found that 48 % of the Lebanese adolescents living in institutional homes and orphanages had low self-esteem. Although no significant difference was found between Lebanese adolescents living in institutional homes and orphanages, and those living with their parents on self-esteem, finding that 48 % of the Lebanese adolescents living in institutional homes had low self-esteem was notable.

Furthermore, Mwazzabi (2010) administered Rosenberg Self-Esteem Scale (*RES-S)* to orphans and non-orphans to measure their differences on self-esteem. Our study found no difference between the self-esteem of both samples, but Mwazzabi (2010) found that orphans had lower self-esteem than non-orphans. Additionally, Mwazzabi (2010) found that orphans had higher performance than non-orphans given they both had high self-esteem, but there was no major difference between orphans and non-orphans with low self esteem on performance. However, our study compared the self-esteem of Lebanese adolescents living in institutional homes to those living with their parents,

without the impact of performance that was considered in the study by Mwazzabi (2010). However, we investigated the percentage differences of failed classes in both samples. We found that 56 % of the Lebanese adolescents living in institutional homes and orphanages failed a class in comparison to only 26 % of those living with their parents. This significantly higher percentage of failed classes for adolescents living in institutional homes and orphanages was consistent with the findings of lower performance for orphans in the study by Mwazzabi (2010).

Self-esteem and Gender

Farooqi et al. (2009) found a significant difference between the self-esteem of boys living in orphanages and those living with their parents ($p < .05$). The orphaned boys showed lower self-esteem as compared to those living with their parents. However, our study found no significant difference between the self-esteem of Lebanese male adolescents living in institutional homes and orphanages and those living with their parents. When comparing girls living in institutional homes and orphanages to those living with their parents, Farroqi et al. (2009) found no significant difference between the self-esteem of girls from orphanages and those living with their parents ($p > .05$). Similarly, our study also found no difference between Lebanese female adolescents living in institutional homes and orphanages and those living with their parents. Farooqi found that it was the difference in the male adolescents' self-esteem and not that of the female adolescents that led to a difference between the self-esteem of adolescents living in institutional homes and those living with their parents.

On the contrary, we found that in both genders, there was no difference between

the self esteem of Lebanese adolescents living in institutional homes and orphanages and those living with their parents. However, our study was solely based only on adolescents' personal ratings of their self-esteem. This resulted in a limitation in our study because we could not determine whether teachers' or parental ratings of the adolescents' self-esteem would have consistently found no self-esteem found in the difference between Lebanese adolescents living in institutional homes and those living with their parents. The reliability of the study would have been strengthened had teachers' or parental ratings of adolescents' self-esteem consistently showed these results.

Parental Living Status and Depression

Previously, variables like losing a parent and moving into an institutional home were found to lead to higher symptoms of depression in adolescents (Zukauskiene, 1995). On the contrary, analysis of variance showed there was no effect of parental living status on the adolescents' depression symptoms in our study; there was no increase in the depression of adolescents living in institutional homes and orphanages if one of their parents or both their parents were deceased. Specifically, the effect of a deceased mother on the depression symptoms had no significant effect on the depression of the Lebanese adolescent. Similarly, the effect of a deceased father had no significant effect on the depression of the Lebanese adolescent. Such findings were unexpected, as previous studies have shown that having a deceased mother is likely to lead to higher symptoms of depression in adolescents (Sogendo & Nambi, 1997). We explained that the institutional homes and orphanages in our study strictly emphasize on the policy of having extremely nurturing care-givers. Perhaps, having nurturing care-givers in the institutional homes

and orphanages was a protective factor for the Lebanese adolescents who did not feel the effect of a deceased parent since they are living in a nurturing environment. This may possibly explain why the effect of having a deceased mother or father did not yield to higher depression symptoms. Another explanation considered was that only 30.3% of the Lebanese adolescents living in institutional homes and orphanages had a deceased mother, and only 33.3% had a deceased father. Possibly, the low percentage of a deceased parent in the sample contributed to why an effect on depression was not found in Lebanese adolescents living in institutional homes and orphanages.

Additionally, Sogendo & Nambi (1997) compared a group of orphans by father to a group of orphans by mother (method, *p.* 115), and found that orphans who lived with their widowed fathers were more depressed than those who lived with their widowed mother. Sogendo et al. concluded that having a deceased mother is likely to increase adolescents' depression symptoms more than having a deceased father since the mother is the main nurturing figure.

However, such results were inconsistent with our results, which found that neither the mother's living status nor the father's living status affected the Lebanese adolescents' depression symptoms. The lack of effect of father's living status and mother's living status on the depression of the Lebanese adolescents may have several explanations. First, perhaps, had other more accurate measurements been used in the study than solely the effect of regression, it would have yielded to different results. Secondly, the Lebanese adolescents who now live in the institutional homes and orphanages on a long-term basis

may have possibly become accustomed to not having a mother or father in their daily lives. This may have indicated why their depression symptoms were not affected by the living status of their parents.

Further Descriptive Analysis

Zukauskiene (1995) used a demographic questionnaire to obtain more information on the orphans and non-orphans (e.g. traumatic events). Specific traumatic events the adolescents experienced were investigated, which was not conducted in our study. It was found that 93. 5 % of these adolescents experienced serious abuse from the parent, 97. 8 % experienced abandonment, 80. 4 % experienced domestic violence, 45. 6 % experienced open sexuality, 67. 4 % experienced physical abuse, and 13.1 % experienced sexual abuse outside the home (Zukauskiene, 1995). Since we did not investigate any personal traumatic events that may have been experienced by the Lebanese adolescents living in institutional homes and orphanages, this was a limitation in our study because we could not investigate how experiencing personal traumatic events may have possibly increased the symptoms of depression and anxiety in Lebanese adolescents living in institutional homes and orphanages.

Moreover, we found that 11 % of the Lebanese adolescents living in institutional homes and orphanages found it difficult to be away from their families and often feel lonely. Similarly, in a recent study by Zidron (2010), it was found that 29.4 % of children in the orphanages feel bad about living there, and 5.5 % of these children feel lonely. On the contrary, we found that most of the Lebanese adolescents were happy living in the

institutional homes and orphanages. Most of the Lebanese adolescents felt that the best thing about living in institutional homes and orphanages was having friends around them, followed by feeling safe and secure there. Perhaps, these reasons explain why they responded to be happy in the institutional homes and orphanages, although their depression and anxiety scores were high on the scales.

Sogendo & Nambi (1997) found that children in institutional homes were sad all the time, hated themselves, worried about everything, had little appetite, and did not sleep well. On the contrary, we found that 81 % of adolescents living in orphanages and institutional homes felt happy, in comparison to only 19 % felt sad. Possibly, these Lebanese adolescents reported being happy because they had more difficult circumstances prior to moving into the institutional homes and orphanages. The institutional homes and orphanages may have offered them security and safety, which they did not have before moving there. Another explanation for why only a small percentage of the Lebanese adolescents were sad could be that the condition in the institutional homes and orphanages are quite acceptable. The institutional homes and orphanages in our study were well-furnished, encompassed an acceptable environment, and offered a general feeling of safety and security for the Lebanese adolescents. Thus, the circumstances in institutional homes and orphanages in Africa in the study by Sogendo et al. (1997) may have been more difficult than circumstances in Lebanese orphanages and institutional homes, which contributed to higher reports of sadness in the African sample.

A point of strength in our study was that the influence of confounding variables was minimized by ensuring that all adolescents living with their parents belonged to families that were not broken up, and that all adolescents living in orphanages had been there for more than six months and lived there on long-term basis. By controlling these variables, we obtained more uniformity in the samples. Similarly, Mwazabi minimized the influence of external variables like intelligence of the adolescents, their motivational levels, home background, nutrition intake at school, and type of learning environment. Similar to our study, considering these factors as constant minimized their influence on the depression score (Mwazabi, 2010).

Further Analysis on Regression

Depression: Analysis was conducted on the Lebanese adolescents living in institutional homes and orphanages to investigate the effect of various variables on their depression. We considered the Centre for Epidemiological Scale for Depression for Children's *(CES-DC)* lowest score (0) and the highest score (60) on depression in order to investigate how depression increased or decreased with each given year (*CES-DC, manual*). Effect of age on the depression of adolescents living in institutional homes and orphanages showed there was a significance ($p = 0.001$), with an evident decrease in their depression with each given year ($t = -3.654$). Possibly, adolescents experienced better coping skills in dealing with their anxiety symptoms the older they are. Years in institution also had a significant effect on the depression score ($p = 0.091$), with an increase in depression found with each additional year they spent in the institutional homes and orphanages ($t = 1.715$). Thus, the more years they spent in the institutional

homes and orphanages away from their real families, the higher their depression symptoms. A probable explanation for this is that the greater the length of time away from their real families, the more difficult it was for them to feel better (see Appendix F, Table 3).

Anxiety: Further Analysis on the Lebanese adolescents living in institutional homes and orphanages was conducted to investigate the effect of various variables on their anxiety. We considered the highest possible score (108) and the lowest possible score (0) of anxiety on the on the Spence Children Anxiety Test (*SCAS, manual*). We found a significant effect of age on their anxiety. It was found that Lebanese adolescents' anxiety decreased significantly with each given year (t = -2.253). Possibly, the older they became, the better their coping skills with anxiety. There was also a significant effect of the father's living status (p = 0.069) on their anxiety. A decrease in their anxiety (t = -1.849) was found when they had a living father. We considered a cultural explanation this finding: the father in a Lebanese society typically represents safety and security as well as also is observed as a financial guide. Thus, this may explain the reason why having a living father improved the anxiety symptoms in the Lebanese adolescents living in orphanages and institutional homes since Lebanese adolescents may have felt more secure and safe when having a living father. On the contrary, we found no effect of the mother's living status on the anxiety of the Lebanese adolescents living in institutional homes and orphanages, which was unexpected in our study. It was expected that having a living mother decreased the adolescents' anxiety symptoms. We found that Lebanese adolescents having brothers and sisters living in the institutional homes and orphanages with them had less anxiety symptoms (p = 0.079) than those without siblings there.

Possibly, this could be explained by the fact that having family with them in the institutional homes and orphanages helped them to feel less alone, and may have given them a family to talk to when they had problems. However, years in institution showed no effect on their anxiety, nor did the times per week they saw their parents per month (see Appendix F, Table 5).

Self-esteem: Analysis of various variables on the self-esteem of adolescents living in institutional homes and orphanages was conducted. We considered the highest score (30) and the lowest score (0) on the Rosenberg self-esteem test (*RSE, manual*). It was found that the times per week the adolescents living in institutional homes and orphanages saw their families had a significant effect on their self-esteem ($t = 1.640, p = .083$). Lebanese adolescents had higher self-esteem the more times they saw their families ($t = 1.640$). Possibly, this could be explained by the fact that seeing family often gave these institutionalized Lebanese adolescents a greater sense of self-worthiness when able to visit their own real family than the adolescents who do not see their families at all. No effect of age on their self-esteem was found. Years the Lebanese adolescents spent in the institutional homes and orphanages, mother living status, father living status, and whether they have brothers/sisters with them in the institution all had no effect on their self-esteem (see Appendix F, Table 7).

Further Analysis on Pearson Correlations

Depression: We investigated how the depression of Lebanese adolescents living in institutional homes and orphanages correlated with various variables. Our study found that Lebanese adolescents' age was positively correlated with their length of their stay in

the institutional homes. In other words, the older the Lebanese adolescents were, the longer they had been living in the institutional homes ($p = 0.000$). Since these Lebanese adolescents' families could not take care of them, it was expected that the older Lebanese adolescents had been living in the institutional homes longer than the younger ones. Similarly, Zidron used the PalmPilots and Entryware to find that African adolescent orphans' age was positively correlated with their stay in the institutional home ($p = 0.05$), which like our study implied that older adolescents had been in the institutional homes longer than the younger ones (see Appendix G, Table 8). Pearson correlation was strong between the depression and age of Lebanese adolescents ($p = 0.001$), with higher depression indicated for younger adolescents. Possibly, younger adolescents are likely to have less coping skills that contribute to higher symptoms of depression. Additionally, a strong correlation was found between times per month the adolescents saw their families ($p = 0.083$) and their depression symptoms, with less depression found in adolescents who see their families more times per month. Possibly, seeing their families more gave them a psychological boost, and helped lessen their depression symptoms.

Anxiety: A strong correlation was found between the anxiety and age of Lebanese adolescents living in orphanages and institutional homes, with higher anxiety indicated for the younger adolescents ($p = 0.005$). Younger adolescents have less coping skills than older adolescents, which may have possibly led to the higher anxiety symptoms found in the younger adolescents. Less anxiety was found in the Lebanese adolescents who had brothers and sisters living in the institutional home with them ($p = 0.042$). Possibly, having siblings living with them in the institutional homes and orphanages lessened their anxiety symptoms because they had "real" family to converse

with (see Appendix G, Table 9).

Self-esteem: The times per month the adolescents living in orphanages and institutional homes saw their parents was strongly correlated with their self-esteem. An unexpected result was that lower self-esteem was found in adolescents who saw their families more times per month ($p = 0.092$) (See Appendix G, Table 10). Possibly, those who saw their families more times per month were exposed to society's judgements more. Perhaps, being judged as "orphans or institutionalized adolescents" in society may have contributed to lower self-esteem.

Recommendations for further studies

Concerning further studies on Lebanese adolescents living in institutional homes and orphanages, it would be interesting to collect ratings from other sources than the adolescents themselves. Ratings of care-givers and teachers can implicate important findings when comparing a sample of Lebanese adolescents living in institutional homes and orphanages to a sample of adolescents living with their parents. Concerning the sampling, it will be better to use a random sample to generalize the results. Concerning the questionnaire, it is suggested that further studies use a depression inventory that includes specific subscales on the diagnosis of depression.

This study inferred an important number of questions. There was no effect of mother's and father's living status on the depression of Lebanese adolescents living in institutional homes and orphanages. It would be interesting to find other ways to measure the effect of the living status of the mother and father than solely based on self-ratings of the adolescents. Possibly, the self-ratings method used in our study was not enough to

show this effect. Additionally, the personal traumas of the Lebanese adolescents were not considered in our study. We did not investigate how personal traumas experienced by the Lebanese adolescents living in institutional homes and orphanages may have affected their symptoms of depression and anxiety. During the literature review, one study showed how personal traumas affect the self-esteem of adolescents living in institutional homes and orphanages (Zaukaskiene, 1995). Possibly, future studies can consider the effect of personal traumas on the self-esteem of Lebanese adolescents living in institutional homes and orphanages as well as on their anxiety and depression. During the literature review, one study also found that orphaned adolescents who had higher self-esteem had better performance than those with lower self-esteem (Mwazzabi, 2010). This implicated a suggestion for further studies to investigate the effect of higher self-esteem on the performance of Lebanese adolescents living in institutional homes and orphanages.

Conclusion

Adolescence no doubt is a transitional period that constitutes physiological, psychological and emotional changes and developments. Adolescents living in institutional homes and orphanages do not live in a typical family life. They do not have daily contact with their real parents. There is an evidence for physical and emotional distance from their real parental figures, and from the routine of a typical family life. In general, this study showed that there may be implications for living away from the parents. Lebanese adolescents living in institutional homes and orphanages had higher symptoms of depression and anxiety than those living with their parents. This implied a suggestion to improve the nurturing environment in orphanages and institutional homes in order to help adolescents feel better. Additionally, Lebanese adolescents living in

institutional homes and orphanages were not found to differ on their self-esteem than those living with their parents. We suggested further studies to use different methods to measure self-esteem as ratings of care-givers and teachers for the Lebanese adolescents.

Finally, this study increased awareness concerning the urgent requirement for counselling and psychological assistance for Lebanese adolescents living in institutional homes and orphanages. The study implicated that Lebanese adolescents living in orphanages and institutional homes are in need of counselling in order to address any form of psychopathology they experience being far away from their real families and from their parents. Counselling and psychological assistance for these adolescents can help ensure discontinuity in any psychopathology. The environment can also be investigated in the orphanages and institutional homes, and suggestions are made to make the environment more nurturing and caring can be considered.

References

Adler (1945). The individual psychology of Alfred Adler. *A systematic presentation in selections from his writings.*

Balat, G., & Guven,Y. (2006). A comparison of the effects of experiencing pre-school education. *Educational Sciences: Theory & Practice, 6* (3). 939-945

Barkman C., Erhart M., Schulte-Markwort M, & The BELLA Study Group (2008). *European Child & Adolescent Psychiatry.* Volume 17, Supplement 1, 116-124, doi: 10.1007/s00787-008-1013-0

Bowlby, J. (1950). Maternal care and mental health. *London: Jason Aronson.* doi: ISBN 1568217579.

Bowlby, J. (1999). Attachment. *New York: Basic Books*, doi: ISBN 0465005438.

Connor, T., Stevens, S., Songua-Barke, E. (2007). Early adolescent outcomes for institutionally deprived and non-deprived adoptees: Disinhibited attachment. *Journal of Child Psychology and Psychiatry,* 48:1, 17–30. doi:10.1111/j.1469-7610.2006.01688.x

Dercon M. (2010). Mother Is more essential to orphans than breadwinner father, Research Suggests. *Oxford Host*

Depression Research at the National Institute of Mental Health (2010) Retrieved from http://www.mental-health-matters.com/depression/635-depression-research-at-the-national-institute-of-mental-health.

Faulstich M.E., Carey M.P. , Ruggiero L. (1996). Assessment of depression in childhood and adolescence: An evaluation of the Center for Epidemiological Studies Depression Scale for Children (CES-DC). *American Journal of Psychiatry* 143(8):1024–

1027.

Farooqi, Y.N. & Intizar, M. (2009). Differences in self-esteem of children living with parents vs. children living in orphanages. Retrieved from http://www.social-anxiety.com/area-self-esteem.html.

Fisher L., Ames E., Chilsom K., Savoie L.(1997). Problems reported by parents of Romanian orphans adopted to British Columbia. *Journal of Behavioral Development, 20* (1), 67–82.

Greaven, S., Santor, D., Thompson R., and Zuroff, D. Adolescent Self-Handicapping, Depressive Affect, and Maternal Parenting Styles. *Journal of Youth and Adolescence , Volume 29, Number 6,* 631-646. doi: 10.1023/A:1026499721533.

Johnson, D., Guthrie, D., Smyke, A., Koga, S., Fox, N., Zeanah, C., Nelson. (2010). Growth and associations between auxology, caregiving environment, and cognition in socially deprived romanian children randomized to foster vs ongoing institutional care. *Archives of Pediatrics & Adolescent Medicine*, doi: 10.1001/archpediatrics.2010.56.

Luijk , Juffer & Jzendoom (2008). IQ of Children Growing Up in Children's Homes. A Meta-Analysis on IQ Delays in Orphanages. Journal of *MERRILL-PALMER QUARTERLY,* VOL. 54, NO. 3, Vol. 54, No. 3, pp. 341–366.

Perkins, D., & Lerner, R (1995). Single and Multiple Indicators of Physical Attractiveness and Psychosocial Behaviors among Young Adolescents. *The Journal of Early Adolescence, 15 (3): 269-298.* doi: 10.1177/0272431695015003001. *The Journal of Early Adolescence.*

Pollak, S. & Fries, A.B. (2004). Emotion understanding in post-institutionalized

Eastern European children. *Development and Psychopathology* 16 ~2004!, 355–369. Cambridge University Press Printed in the United States of America. doi: 10.10170S0954579404044554.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rosenberg (1965). Morris Rosenberg Foundation Research Website. Retrieved from http://www.bsos.umd.edu/socy/research/rosenberg.htm

Rutter, M., Colvert, E., Kreppner, J., Beckett, C., Castle, J., Groothues, C., Hawkins, M. (1996). The Brown University child and adolescent behaviour letter. *Gale Group Host.* Retrieved from http://www.accessmylibrary.com/coms2/summary_0286-205979_ITM

Spence (1988). The measure of anxiety among children. *Behaviour Research and Therapy* 36 (1998) 545-566. Retrieved from http://www.scaswebsite.com/docs/spence-1998-scas.pdf.

Spence (1991). Center for Epidemiologic Studies Depression Scale for Children.

Spitz, R.A. (1945). Hospitalism -An inquiry into the genesis of Psychiatric conditions in early childhood. *Psychoanalytic Study of the Child,* 1, 53-74.

Songendo, J., & Nambi, J. (1997). The psychological effect of orphanhood: a study of orphans in Rakai district. *Health Transition Review,* Volume 7, 1997, 105-124

Tizard, B. & Tizard, J.(1974). The institution as an environment for development. In Richards, M. (Ed.) *The Integration of a Child into a Social World.* Cambridge: Cambridge University Press.

Weissman MM, Orvaschel H, & Padian N. 1980.Children's symptom and social

functioning selfreport scales: Comparison of mothers' and children's reports. *Journal of Nervous Mental Disorders* 168(12):736–740.

Youngeslon, M (1973). The need to affiliate and self-esteem in institutionalized children. *Journal of Personality and Social Psychology.* 26: 2, 280-286

Zeanah, C., Egger, H., Smyke, T., Neslon, C., Fox, N., Marshall, P., Guthrie, D. (2009). Institutional Rearing and Psychiatric Disorders in Romanian Preschool Children. *American Journal of Psychiatry,* 166:777-785. doi: 10.1176/appi.ajp.2009.08091438

Zohra, L., Mahmud, S., Syed, E., Janjua, N. (2010). Behavioural problems among children living in orphanage facilities of Karachi, Pakistan: Comparison of children in an SOS Village with those in conventional orphanages. *Socio Psychiatric Epidemiolgy,* doi: 10.1007/s00127-010-0248-5

Zidron, A. (2008). Impact of orphanhood on Luo children. Disseration at Ohio University. *Retrieved from http://etd.ohiolink.edu/sendpdf.cgi/ Zidron%20Amy.pdf?ohiou1220921226*

Zukauskiene, R. (2004). A comparative study of adolescents living in long term residential care and adolescents living with parents: Differences in cognitive and behavioural strategies, internalizing and social problems. *International Journal of Child & Family Welfare, 2-13*

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APPENDIX A

Spence Anxiety Inventory Test: has some positive filler items that are not scored in either the total score or the subscale scores include item numbers 11, 17, 26, 31, 38, and 43. The rest are measured in specific subscales. When added together, all these subscales yield to a complete score for anxiety. The following items measure each of the following diagnosis for a specific anxiety subscale:

Subscale	SCAS ITEMS						
.	+5	+8	+12	+15	+16	+44	
Separation anxiety							
Social phobia	+6	+7	+9	+10	+29	+35	
Obsessive compulsive	+14	+19	+27	+40	+41	+42	
Panic/agoraphobia	+13	+21	+28	+30	+32	+34	+36
Physical injury fears	+2	+18	+23	+25	+33		
Generalized anxiety	+1	+3	+4	+20	+22	+24	

TEST 1

SPENCE CHILDREN'S ANXIETY SCALE

Your Name: Date:

PLEASE PUT A CIRCLE AROUND THE WORD THAT SHOWS HOW OFTEN EACH OF THESE THINGS HAPPEN TO YOU. THERE ARE NO RIGHT OR WRONG ANSWERS.

1. I worry about things..... Never

Sometimes Often Always

2. I am scared of the dark..... Never

Sometimes Often Always

3. When I have a problem, I get a funny feeling in my stomach..... Never

Sometimes Often Always

4. I feel afraid..... Never

Sometimes Often Always

5. I would feel afraid of being on my own at home..... Never

Sometimes Often Always

6. I feel scared when I have to take a test..... Never

Sometimes Often Always

7. I feel afraid if I have to use public toilets or bathrooms..... Never

Sometimes Often Always

8. I worry about being away from my parents..... Never

Sometimes Often Always

9. I feel afraid that I will make a fool of myself in front of people..... Never

Sometimes Often Always

10. I worry that I will do badly at my school work..... Never

Sometimes Often Always

11. I am popular amongst other kids my own age..... Never

Sometimes Often Always

12. I worry that something awful will happen to someone in my family..... Never

Sometimes Often Always

13. I suddenly feel as if I can't breathe when there is no reason for this..... Never

Sometimes Often Always

14. I have to keep checking that I have done things right (like the switch

is off, or the door is locked)..... Never

Sometimes Often Always

15. I feel scared if I have to sleep on my own..... Never

Sometimes Often Always

16. I have trouble going to school in the mornings because I feel nervous

or afraid..... Never

Sometimes Often Always

17. I am good at sports..... Never

Sometimes Often Always

18. I am scared of dogs..... Never

Sometimes Often Always

19. I can't seem to get bad or silly thoughts out of my head..... Never

Sometimes Often Always

20. When I have a problem, my heart beats really fast..... Never

Sometimes Often Always

21. I suddenly start to tremble or shake when there is no reason for this... Never

Sometimes Often Always

22. I worry that something bad will happen to me..... Never

Sometimes Often Always

23. I am scared of going to the doctors or dentists..... Never

24. When I have a problem, I feel shaky..... Never

Sometimes Often Always

25. I am scared of being in high places or lifts (elevators)..... Never

Sometimes Often Always

35. I feel afraid if I have to talk in front of my class..... Never

Sometimes Often Always

36. My heart suddenly starts to beat too quickly for no reason..... Never

Sometimes Often Always

37. I worry that I will suddenly get a scared feeling when there is nothing

to be afraid of..... Never

Sometimes Often Always

38. I like myself..... Never

Sometimes Often Always

39. I am afraid of being in small closed places, like tunnels or small rooms. Never

Sometimes Often Always

40. I have to do some things over and over again (like washing my hands,

cleaning or putting things in a certain order)..... Never

Sometimes Often Always

41. I get bothered by bad or silly thoughts or pictures in my mind..... Never

Sometimes Often Always

42. I have to do some things in just the right way to stop bad things

happening..... Never

Sometimes Often Always

43. I am proud of my school work..... Never

Sometimes Often Always

44. I would feel scared if I had to stay away from home overnight..... Never

Sometimes Often Always

45. Is there something else that you are really afraid of?..... YES

NOPlease write down what it is

How often are you afraid of this thing?..... Never

Sometimes Often Always

END. THANKYOU!

APPENDIX B

Center for Epidemiological Studies

Depression Scale for Children (CES-DC)

The Center for Epidemiological Studies Depression Scale for Children (CES-DC) is a 20-item self-report depression inventory with possible scores ranging from 0 to 60. Each response to an item is scored as follows:

0 = "Not At All"

1 = "A Little"

2 = "Some"

3 = "A Lot"

However, items 4, 8, 12, and 16 are phrased positively, and thus are scored in the opposite order:

3 = "Not At All"

2 = "A Little"

1 = "Some"

0 = "A Lot"

Higher CES-DC scores indicate increasing levels of depression. Weissman et al. (1980), the developers of the CES-DC, have used the cutoff score of 15 as being suggestive of depressive symptoms in children and adolescents. That is, scores over 15 can be indicative of significant levels of depressive symptoms. Remember that screening for depression can be complex and is only an initial step.Further evaluation is required for children and adolescents identified through a

screening process. Further evaluation is also warranted for children or adolescents who exhibit depressive symptoms but who do not screen positive.

TEST 2:

Center for Epidemiological Studies

Depression Scale for Children (CES-DC)

www.brightfutures.org

BRIGHT FUTURES TOOL FOR PROFESSIONALS

Number _____

Score _____

INSTRUCTIONS

Below is a list of the ways you might have felt or acted. Please check how *much* you have felt this way during the past week, and lately.

DURING THE PAST WEEK Not At All A Little Some A Lot

1. I was bothered by things that usually don't bother me. _____ _____ _____ _____

2. I did not feel like eating, I wasn't very hungry. _____ _____ _____ _____

3. I wasn't able to feel happy, even when my family or _____ _____ _____ _____ friends tried to help me feel better.

4. I felt like I was just as good as other kids. _____ _____ _____ _____

5. I felt like I couldn't pay attention to what I was doing. _____ _____ _____ _____

DURING THE PAST WEEK Not At All A Little Some A Lot

6. I felt down and unhappy. _____ _____ _____ _____

7. I felt like I was too tired to do things. _____ _____ _____ _____

8. I felt like something good was going to happen. _____ _____ _____ _____

9. I felt like things I did before didn't work out right. _____ _____ _____ _____

10. I felt scared. _____ _____ _____ _____

DURING THE PAST WEEK Not At All A Little Some A Lot

11. I didn't sleep as well as I usually sleep. _____ _____ _____ _____

12. I was happy. _____ _____ _____ _____

13. I was more quiet than usual. _____ _____ _____ _____

14. I felt lonely, like I didn't have any friends. _____ _____ _____ _____

15. I felt like kids I know were not friendly or that _____ _____ _____ _____

they didn't want to be with me.

DURING THE PAST WEEK Not At All A Little Some A Lot

16. I had a good time. _____ _____ _____ _____

17. I felt like crying. _____ _____ _____ _____

18. I felt sad. _____ _____ _____ _____

19. I felt people didn't like me. _____ _____ _____ _____

20. It was hard to get started doing things. _____ _____ _____ _____

APPENDIX C

Rosenberg Self-Esteem Scale

A ten-item scale measuring the self esteem. Rosenberg defined self-esteem as person's self-worth.

Scores are calculated as follows: *For items 1, 2, 4, 6,* and *7:*

Strongly agree = 3

Agree = 2

Disagree = 1

Strongly disagree = 0

For items 3, 5, 8, 9, and *10* (which are reversed in valence):

Strongly agree = 0

Agree = 1

Disagree = 2

Strongly disagree = 3

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

CHOOSE THE BEST OPTION FOR YOU:

	STATEMENT	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel that I am a person of worth, at least on an equal plane with others.	C	C	C	C
2.	I feel that I have a number of good qualities..	C	C	C	C
3.	All in all, I am inclined to feel that I am a failure.	C	C	C	C
4.	I am able to do things as well as most other people.	C	C	C	C
5.	I feel I do not have much to be proud of.	C	C	C	C
6.	I take a positive attitude toward myself.	C	C	C	C
7.	On the whole, I am satisfied with myself.	C	C	C	C
8.	I wish I could have more respect for myself.	C	C	C	C
9.	I certainly feel useless at times.	C	C	C	C
10.	At times I think I am no good at all.	C	C	C	C

APPENDIX D

DEMOGRAPHIC QUESTIONNAIRE (FOR CHILDREN LIVING IN INSTITUTIONAL HOMES AND ORPHANAGES)

Please answer the following as accurately as possible

NAME-

AGE-

GENDER-

VILLAGE OF ORIGIN-

IS YOUR MOTHER ALIVE: YES/NO

IS YOUR FATHER ALIVE: YES/NO

HOW MANY DAYS PER MONTH DO YOU SEE YOUR FAMILY:

ARE YOUR BROTHERS/SISTER WITH YOU IN THE INSTITUTION

HAVE YOU FAILED A CLASS BEFORE: YES/NO

THE REASON YOU ARE IN INSTITUTION IS BECAUSE: 1)FINANCIAL REASON 2) DO NOT KNOW PARENTS 3) MOTHER'S DEATH 4) FATHER'S DEATH 5) OTHER

ARE YOU HAPPY LIVING IN INSTITUTION: YES/NO

WHAT FACE REPRESENTS YOUR MOOD MOST OF THE TIME: ☺ ☹ 😐

DO YOU FEEL YOU WILL GO BACK HOME SOMEDAY?

BEST THING IN INSTITUTION:

WORST THING IN INSTITUTION:

DEMOGRAPHIC QUESTIONNAIRE FOR CHILDREN LIVING WITH THEIR PARENTS

Please answer the following as accurately as possible

NAME-

AGE-

GENDER-

VILLAGE OF ORIGIN-

PARENTAL RELATIONSHIP STATUS: TOGETHER & MARRIED, OR DIVORCED/SEPARATED

IS YOUR MOTHER ALIVE: YES/NO

IS YOUR FATHER ALIVE: YES/NO

MOTHER'S JOB:

FATHER'S JOB:

HAVE YOU FAILED A CLASS BEFORE? YES/NO

WHAT FACE REPRESENTS YOUR MOOD MOST OF THE TIME: ☺ ☹ 😐

APPENDIX E

Table 1: Standard Deviation and Means for Hypothesis 1, 2 and 3

Group Statistics

	institutionalized	N	Mean	Std. Deviation	Std. Error Mean
Depressionscore	yes	75	24.13	8.314	.960
	no	75	18.81	8.776	1.013
Anxietyscore	yes	75	48.2267	16.03002	1.85099
	No	75	31.3067	14.67115	1.69408
Separationanxiety	yes	75	8.4000	4.04702	.46731
	No	75	4.9067	3.48034	.40188
Physicalinjury	yes	75	8.0267	3.44444	.39773
	No	75	5.4800	3.17235	.36631
Panicagorophobia	yes	75	8.0933	5.20440	.60095
	No	75	4.1067	4.24765	.49048
Generalisedanxiety	yes	75	7.9200	3.55178	.41012
	No	75	6.0800	3.62708	.41882
Rosenberg	yes	75	16.9733	4.42344	.51078
	no	75	17.9467	4.16515	.48095

APPENDIX F

Regression and correlation tables of various variables With depression score, anxiety score and self-esteem score

Table 2: Means and Regression of variables on depression score of adolescents living in orphanages and institutional homes

Descriptive Statistics

	Mean	Std. Deviation	N
depressionscore	24.13	8.314	75
Age	13.9533	1.83836	75
yearsininstitute	7.5600	4.31290	75
motherlivingstatus	1.69	.464	75
fatherlivingstatus	1.67	.475	75
permonthseefamily	3.2933	4.02953	75
Brothersisterinstitution	1.60	.493	75

Table 3: Regression Table of various variables on depression score in adolescents living in orphanages and institutional homes

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	V
1(Constant)	54.583	9.679		5.639	.000	35.270	73.897					
Age	-2.186	.598	-.483	3.654	.001	-3.380	-.992	-.355	-.405	.396	.670	1.

yearsininstitute	.457	.266	.237	1.715	.091	-.075	.988	.005	.204	.186	.614
motherlivingstatus	.591	2.045	.033	.289	.774	-3.490	4.671	.021	.035	.031	.899
fatherlivingstatus	-.306	2.054	-.017	-.149	.882	-4.405	3.792	-.030	-.018	.016	.853
permonthseefamily	-.157	.258	-.076	-.608	.545	-.671	.358	-.153	-.074	.066	.751
Brothersisterinstitution	-2.110	1.850	-.125	1.140	.258	-5.803	1.582	-.132	-.137	.124	.973

a. Dependent Variable: depressionscore

Table 4: Means and Regression of variables on anxiety score in adolescents living in institutional home and orphanages

Descriptive Statistics

	Mean	Std. Deviation	N
Anxietyscore	48.2267	16.03002	75
Age	13.9533	1.83836	75
Yearsininstitute	7.5600	4.31290	75
Motherlivingstatus	1.69	.464	75
Fatherlivingstatus	1.67	.475	75
Permonthseefamily	3.2933	4.02953	75
Brothersisterinstitution	1.60	.493	75

Table 5: Regression of variables on anxiety score of adolescents living in orphanages and institutional homes

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Toleranc	VIF
1 (Constant)	88.445	19.062		4.640	.000	50.407	126.482					
Age	-2.654	1.178	-.304	-2.253	.028	-5.005	-.303	-.295	-.264	-.249	.670	1.492
yearsininstitute	.188	.525	.051	.358	.721	-.859	1.235	-.172	.043	.040	.614	1.628
motherlivingstatus	-1.601	4.028	-.046	-.397	.692	-9.638	6.437	-.025	-.048	-.044	.899	1.112
fatherlivingstatus	-7.478	4.045	-.221	1.849	.069	-15.54	.593	-.208	-.219	-.205	.853	1.172
pemonthseefamily	.047	.508	.012	.092	.927	-.967	1.060	-.081	.011	.010	.751	1.331
Brothersisterinstitutio	6.508	3.644	.200	1.786	.079	-.765	13.780	.201	.212	.198	.973	1.027

a. Dependent Variable: anxietyscore

Table 6: Mean and Regression of various variables on self-esteem score in adolescents living in orphanages and institutional homes

Descriptive Statistics

	Mean	Std. Deviation	N
Rosenberg	16.9733	4.42344	75
Age	13.9533	1.83836	75
Yearsininstitute	7.560	4.31290	75
Motherlivingstatus	1.69	.464	75
Fatherlivingstatus	1.67	.475	75
Permonthseefamily	3.293	4.02953	75
Brothersisterinstitution	1.60	.493	75

Table 7: Regression of various variables on self-esteem adolescents living in orphanages and institutional home

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	14.421	5.556		2.596	.012	3.334	25.507
	Age	-.102	.343	-.042	-.297	.767	-.787	.583
	yearsininstitute	.006	.153	.006	.038	.970	-.299	.311
	motherlivingstatus	1.034	1.174	.108	.881	.382	-1.309	3.376
	fatherlivingstatus	1.934	1.179	.207	1.640	.106	-.419	4.286
	permonthseefamily	-.260	.148	-.237	-1.759	.083	-.556	.035
	brothersisterinstitution	-.115	1.062	-.013	-.109	.914	-2.235	2.004

a. Dependent Variable: Rosenberg

APPENDIX G

Correlation tables of depression score, anxiety score and self-esteem score with various variables

Table 8: Correlation table of certain variables with depression score in orphanages and institutionalized sample

Correlations

		Depressionscore	Age	Years ininstitute	Motherliving status	Fatherliving Status	Permonth seefamily	Brothersister ininstitution
Pearson Correlation	depressionscore	1.000	-.355	.005	.021	-.030	-.153	-.132
	Age	-.355	1.000	.535	-.049	.036	.065	-.066
	yearsininstitute	.005	.535	1.000	-.068	.145	-.187	-.141
	motherlivingstatus	.021	-.049	-.068	1.000	-.041	.280	-.012
	fatherlivingstatus	-.030	.036	.145	-.041	1.000	.271	.058
	permonthseefamily	-.153	.065	-.187	.280	.271	1.000	.046
	brothersisterinstitution	-.132	-.066	-.141	-.012	.058	.046	1.000
Sig. (1-tailed)	depressionscore	1.00	.001	.482	.428	.400	.095	.130
	Age	p= .001	1.00	.000	.339	.379	.290	.288
	yearsininstitute	p=.482	.000	1.00	.280	.107	.054	.114
	motherlivingstatus	p=.428	.339	.280	1.00	.364	.008	.460
	fatherlivingstatus	p= .400	.379	.107	.364	1.00	.009	.311
	permonthseefamily	p=.095	.290	.054	.008	.009	1.00	.347
	brothersisterinstitution	p=.130	.288	.114	.460	.311	.347	1.00

Table 9: Correlation table of anxiety score with various variables in adolescents living in orphanages and institutional homes

Correlations

		anxietyscore	Age	yearsininstitute	Motherliving status	Fatherliving Status	Permonth seefamily	Brothersister institution
Pearson Correlation	anxietyscore	1.000	-.295	-.172	-.025	-.208	-.081	.201
	age	-.295	1.000	.535	-.049	.036	.065	-.066
	yearsininstitute	-.172	.535	1.000	-.068	.145	-.187	-.141
	motherlivingstatus	-.025	-.049	-.068	1.000	-.041	.280	-.012
	fatherlivingstatus	-.208	.036	.145	-.041	1.000	.271	.058
	permonthseefamily	-.081	.065	-.187	.280	.271	1.000	.046
	brothersisterinstitution	.201	-.066	-.141	-.012	.058	.046	1.000
Sig. (1-tailed)	anxietyscore	1.00	.005	.070	.416	.036	.244	.042
	age	p=.005	1.00	.000	.339	.379	.290	.288
	yearsininstitute	p=.070	.000	1.00	.280	.107	.054	.114
	motherlivingstatus	p=.416	.339	.280	1.00	.364	.008	.460
	fatherlivingstatus	p=.36	.379	.107	.364	1.00	.009	.311
	permonthseefamily	p=.244	.290	.054	.008	.009	1.00	.347
	brothersisterinstitution	p=.042	.288	.114	.460	.311	.347	1.00

Table 10: Correlation table of self-esteem score with various variables in adolescents living in orphanages and institutional homes

Correlations

		rosenberg	Age	Year Institute	Mother living status	Father living status	Per month see Family	Brother sister in institutio
Pearson Correlation	rosenberg	1.00	-.052	.052	.035	.137	-.155	-.011
	age	-.052	1.00	.535	-.049	.036	.065	-.066
	yearsininstitute	.052	.535	1.00	-.068	.145	-.187	-.141
	motherlivingstatus	.035	-.049	-.068	1.00	-.041	.280	-.012
	fatherlivingstatus	.137	.036	.145	-.041	1.00	.271	.058
	permonthseefamily	-.155	.065	-.187	.280	.271	1.00	.046
	brothersisterinstitution	-.011	-.066	-.141	-.012	.058	.046	1.00
Sig. (1-tailed)	rosenberg	1.00	.330	.329	.381	.120	.092	.462
	age	p=.330	1.00	.000	.339	.379	.290	.288
	yearsininstitute	p=.329	.000	1.00	.280	.107	.054	.114
	motherlivingstatus	p=.381	.339	.280	1.00	.364	.008	.460
	fatherlivingstatus	p=.120	.379	.107	.364	1.00	.009	.311
	permonthseefamily	p=.092	.290	.054	.008	.009	1.00	.347
	Brothersisterinstitution	p=.462	.288	.114	.460	.311	.347	1.00

APPENDIX H

Table 11: Pearson's Correlation of Tests

Correlations

		Depression score	Anxietyscore	Separation Anxiety	Physical injury	Panic agorophobia	Generalized anxiety	rosenberg
Depressionscore	Pearson Correlation		.464**	.240**	.234**	.518**	.516**	-.164*
	Sig. (2-tailed)		.000	.003	.004	.000	.000	.044
	N		150	150	150	150	150	150
Anxietyscore	Pearson Correlation	.464**		.760**	.568**	.748**	.682**	-.199*
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.014
	N	150		150	150	150	150	150
Separationanxiety	Pearson Correlation	.240**	.760**		.363**	.492**	.419**	-.055
	Sig. (2-tailed)	.003	.000		.000	.000	.000	.502
	N	150	150		150	150	150	150
Physicalinjury	Pearson Correlation	.234**	.568**	.363**		.364**	.446**	-.154
	Sig. (2-tailed)	.004	.000	.000		.000	.000	.060
	N	150	150	150		150	150	150
Panicagorophobia	Pearson Correlation	.518**	.748**	.492**	.364**		.491**	-.307**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	150	150	150	150		150	150

Generalisedanxiety	Pearson Correlation	.516**	.682**	.419**	.446**	.491**		-.129
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.117
	N	150	150	150	150	150		150
Rosenberg	Pearson Correlation	-.164*	-.199*	-.055	-.154	-.307**	-.129	
	Sig. (2-tailed)	.044	.014	.502	.060	.000	.117	
	N	150	150	150	150	150	150	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).