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UNDERSTANDING RISK FACTORS FOR INTERNALISING AND EXTERNALISING SYMPTOMS IN INSTITUTION REARED CHILDREN IN SAUDI ARABIA

by

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ABSTRACT

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This research utilised a multi-method approach to investigate risk factors that could lead to the development of psychopathology in institutionalised children in Saudi Arabia. Chapter 1 provided a cultural context for understanding reasons that lead to institutionalisation and attitudes towards these children. Chapter 2 outlined previous research that considered the negative impact of institutionalisation on development and Chapter 3 considered several frameworks that could explain adverse outcomes in this population. Chapter 4 presented a qualitative study that highlighted, following interviews with institutionalised children and their carers, that symptoms linked to externalising and internalising difficulties, as well as reports of behaviours to conceal their social status, were evident in children. The subsequent empirical chapters explored the presence of symptoms of psychopathology in institutionalised children compared to non-institutionalised peers, after having translated key questionnaires (linked to measurements of externalising and internalising symptoms, as well as self-concept, shame, stigma, and aggressive behaviours) (Chapter 5). Chapter 6 found some evidence for perceptions of stigma in children, their carers, their teachers, and other teachers who had less familiarity of working with these groups of children. Chapters 7 and 8 used theoretical frameworks to demonstrate that children's reported perceptions of stigma were associated with symptoms of depression and anger, and that this relationship was mediated for depression and anger by children's reports of their feelings of shame (Chapter 7). In addition, it showed that social information processing models had some utility in understanding links between elevated reports of aggressive behaviours in children with endorsements of hostile behavioural response to hypothetical peers via increased interpretations of ambiguous (benign/ hostile) hypothetical actions as hostile (Chapter 8). Chapter 9 summarised how these findings fit with and extend previous research. In addition, it suggested how the findings could be used to intervene to deliver educational interventions to reduce the negative attitudes towards the institutionalised children and to provide specialised training for individuals who work with children and adolescents in institutional care, and society more broadly.

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DECLARATION OF AUTHORSHIP

I, AFAF AL-KATHIRY

declare that this thesis entitled

UNDERSTANDING RISK FACTORS FOR INTERNALISING AND EXTERNALISING SYMPTOMS IN INSTITUTION REARED CHILDREN IN SAUDI ARABIA

and the work presented in it are my own and has been generated by me as the result of my own original research. I confirm that:

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ACKNOWLEDGMENT

ABBREVIATIONS

ANOVA = Analysis of variance

BAI-Y = Beck Anxiety Inventory for Youth

BANI-Y = Beck Anger Inventory for Youth

BDBI-Y = Beck Disruptive Behaviour Inventory for Youth

BDI-Y= Beck Depression Inventory for Youth

BSCI-Y = Beck Self-Concept Inventory for Youth

BYI-II = Beck Youth Inventories –Second Edition

FA = Foster aunt

FM = Foster mother

HIWC = Home Interview with the Children

k = Kappa (Interrater Statistics)

OAS = Other As Shamer scale

SDQ = Strength and Difficulties Questionnaire

SIP = Social information processing

WASI = Wechsler Abbreviated Scale of Intelligence.

X^2 = Chi-square test

α = Cronbach's alpha

1. Chapter 1: Background and overview of the study

1.1 Introduction

This chapter provides a general background of the experiences associated with orphanhood in Islam and Saudi Arabia. It begins with a brief description of the way that orphans and children originating from unknown parents are treated in Islamic law and it explains the patterns of the institutional care in Saudi Arabia. In addition, it presents an overview of the research program including the objectives of each chapter and the general significance of the research program.

1.2 Orphanhood in Islam

The contexts linked to institutionalisation in children and adolescents are often similar across countries and can include for example, poverty, unwanted pregnancy, conflict, and parents who are unable to meet their children's needs. In Saudi terms, children who live in institutions have typically been born out of wedlock and are abandoned by their mothers. These children are sometimes referred to as foundlings - a term used to denote a deserted or abandoned child of unknown parents that has usually resulted from the fear or being accused of adultery (Mohd, 2011).

The Islamic values and customs in Saudi Arabia are reflected in its commitment to the care of orphans. Islamic law (Sharia) states that children who are unable to live with their biological parents have the right to live in a stable environment that promotes mental health and well-being (Humeish, 2010). More specifically, the Quranic verses refer to the welfare and protection of orphans and the necessary attitudes of affection and kindness or mercy that should be given to them (Shabina, 2013).

Although adoption is an alternative way of caring for orphaned or abandoned children in Western societies, it is not acceptable within the rules of Islamic Sharia. The prohibition of adoption is to protect blood ties and inheritance rights (Ishaque, 2008). For example, in Surah Al-Ahzab (The Confederates, Verse 5), Allah the Great orders Muslims to take care of orphans and even children with unknown parents saying *"Call them after their fathers: that is more just in the sight of Allah. But if you don't know their fathers - then they are your brothers in faith or your friends. There is no blame on you if you*

make a mistake therein, but (only) what your hearts premeditate. And ever is Allah Forgiving and Merciful." This verse reflects an expectation that Muslims should give an orphaned child the right to have a name, and if the child is born out of wedlock, then he/she should be treated as a brother in faith. Therefore, there is an obligation to protect an abandoned child originating from unknown parents by allowing him/her to have an identity and citizenship within the society where he/she lives (Shabina, 2013). Currently, the protection and care of orphans and children with unknown parenthood is called "sponsorship" (Kafala) - a voluntary caring that is intended to emulate how a parent cares for his or her biological son or daughter.

1.3 Institutional care for orphans and children with unknown parenthood in Saudi Arabia

In accordance with beliefs about orphanhood in Islam, institutional care for orphans and children with unknown parenthood is supervised by the Saudi Ministry of Social Affairs (Al-Jobair, Al-Sadhan, Al-Faifi, & Andijani, 2013). There are multiple services offered to children and adolescents who reside in state-owned orphanages. For example, children who have difficulties learning at school are supported by teachers or personal tutors. In addition, the Saudi Government recommends that institutionalised children are educated in middle and upper-middle class schools. On the other hand, social workers and psychologists are responsible for looking after the mental health of institutionalised children. With respect to nutrition, three high-quality daily meals are prepared and provided for the children. Each child is also given monthly pocket money. Some money is for day-to-day spending and the rest is saved in individual children's bank accounts that are set up when a child is admitted to the orphanage. Further amounts of money are given to each child on special occasions to buy clothes.

According to the figures of the Saudi Ministry of Social Affairs (Saudi Ministry of Social Affairs, 2010), the overall number of the children (age range = 0-6 years) who reside in orphanages is 380 children, of whom 83 are in orphanages located in Riyadh. From the age of 7 to 23 years and over, 777 children are placed in orphanages all over Saudi Arabia of who 155 children are in residential settings of Riyadh. The authorities encourage the system of sponsorship (Kafala) where an alternative family foster these children outside their orphanages. The approximate number of children who are looked

after/fostered by those families are 5995 of who 1404 are in Riyadh (Awni, 2013).

There are two types of institutional care systems in Saudi Arabia that are linked to the age and the developmental stages of the children, as well as the time when infants entered the nursery. Pre- 2005 infants and young children were cared for in group homes or nursery units (Type A approach). Daily care was given by four nurses who usually looked after a group of 8 to 10 infants from their birth until they reached two years of age. Each day, the duties and responsibilities for caring were equally distributed on a 12-hour shift rotation for half of the nurses. The shift rotation did not necessarily mean that the same two nurses stayed with the same group of children throughout their first two years. When infants reached the age of 2 years they were placed in groups (care units) of 6 to 8 children within the same orphanage and were cared for by two female caregivers based upon a daily shift rotation. These care units were close to each other, so that each child could be easily moved/ transferred from one unit to another within institution.

After age six, boys and girls were moved to another institution where all of their carers were female. When boys reach the age of 12 years they were moved to an all-male institution. Single sex institutions followed the same system of daily shift rotation. Girls stayed in the institution until they got married, whereas boys could leave after the age of 18 years or whenever they could be independent.

The second type of institutional care system (Type B approach) was based on the more recent development of a care system whose structure is similar to foster family systems. This new system was applied post- 2005 and is entirely administered by women, except for the orphanage guard and drivers. The orphanage (Orphanage of Type B1 approach) has 11 medium-sized villas. A typical villa represents an independent family of five children (boys and girls) whose ages range between 4 and 12 years old. There is an older sister aged above 15 years old (from the same orphanage background) who also lives in each villa. All the children in the orphanage have unknown parenthood and were transferred from the first type of care system in 2005 to the current orphanage setting. Within each family there is one foster mother (FM) who is present with the children five days a week (i.e. day and night) and is responsible for the daily care of the children, as well as the housekeeping (e.g., cooking and cleaning). In addition, she is responsible for taking children

to and from school, as well as other locations (e.g., to the hospital, library, market, and for day trips outside the orphanage). Each FM has a two-day weekly holiday and during this time another carer (the foster aunt; FA) will take on the FM's job. The FA is responsible for taking care of children in at least two villas in the orphanage.

In 2010, another institution (Orphanage of Type B2 approach) was introduced which is similar to family-like care setting, however, it also includes children from birth. In this system infants aged 0 to 2 years live in a separate unit in same building (within same institution), and are looked after by nurses. After this time, children are moved to small flats; each flat has a FM who looks after 4-5 children (boys and girls) ranging in ages from 2-12 years old, and an older sister aged 15 or above. The FM stays with children five days a week and a FA looks after the same family for the remaining two days. A further institution (Orphanage of Type B3 approach) follows the same system of family-like care; however, all children in this institution are boys aged between 11-12 years. This institution aims to help to prepare boys before they move to the male institution at 12 years of age.

The orphanage policy recommends that the caregivers (i.e., foster mothers, foster aunts) should be healthy with no infectious diseases and no previous criminal record. On the other hand, caregivers should be within the age range between 25 and 45 years old. Most orphanages require caregivers to have at least a secondary school certificate (awarded at 16-17 years of age). In some cases, however, an elementary school level might be acceptable (awarded at 11-12 years of age). The foster mother has three main roles in the orphanages. First, she is asked to provide a family-like atmosphere characterised by caring, sensitivity, and responsiveness towards the children's basic needs (e.g., nutritional needs, social and emotional needs, hygiene/health needs). Relatedly, she is responsible for accompanying children during their playing times inside the orphanage and their outside picnics and trips. Second, she is involved in modifying children's negative behaviours via punishment and reward (under the supervision of a psychologist and a social worker), as well as improving self-confidence and independence through daily activities. Finally, the foster mother has an educational responsibility towards children including the monitoring of school performance and achievement and communicating to teachers the

problems that might emerge in school (H. S. Silan, personal communication, February 4, 2014).

Few studies have examined the effects of the orphanage characteristics on different aspects of institutionalised children's development in Saudi Arabia. Al-Rasheed (2008) assessed aspects of adaptive behaviour (i.e., language skills, family roles, independence, ability to understand purchase and merchandise activities, social communication skills). She used a social survey method, naturalistic observations, and a semi structured interview with interview with 30 foster mothers and 10 social workers to collect data from 148 children originating from unknown parents (aged from 10-14 years) in three orphanages in Riyadh. One orphanage was based upon a family-like setting where boys and girls resided; whereas the second family-like orphanage was for boys only. The third orphanage was conventional in terms of shift rotation. According to foster mothers and social workers, children living in the first type of orphanage displayed higher levels of adaptive behaviour compared to their peers in the other two orphanages. In addition, the levels of language development and social communication skills were higher in this group of children compared to the other two groups. However, the level of adaptive behaviour decreased with age among all the children in the three orphanages.

1.4 Programme of research summary and thesis organisation

The programme of research outlined in this thesis explores internalising (i.e., anxiety, depression), and externalising (i.e., disruptive behaviour, anger, aggression) symptoms, and feelings of shame and stigma among institutionally reared children in Saudi Arabia. This exploration represents a highly novel investigation of a group of children who are brought up in an institutionalised setting and who have unknown parenthood. The Thesis is organised in nine chapters:

Chapter 1. This chapter provides a general overview of the whole thesis, the experience of orphanhood in Islam, and the key features of the institutional care system in Saudi Arabia.

Chapter 2. This chapter reviews studies related to core psychological constructs (e.g., attachment relationships), developmental outcomes (e.g.,

physical delays, socio-emotional and cognitive problems), and internalising and externalising symptoms among institutionalised children.

Chapter 3. This chapter outlines the theoretical frameworks that are relevant to understanding the impact of institutional rearing, and that focus on factors linked to self-concept including self-stigma and public stigma, internal and external shame, as well as those that capture social cognitive processes with the aim of explaining aggression and other externalising behaviours in development.

Chapter 4. The first empirical study in the PhD project used a qualitative design working with institutional children and their carers to explore thoughts, emotional and behavioural problems, and relationships with people inside and outside the institution. The focus of the study was to consider the specific challenges that children and their carers reported in institutions. More specifically, it aimed to start to develop links between theoretical frameworks to understand symptoms of psychopathology in children and young people who are reared in institutions in Saudi Arabia.

Chapter 5. This chapter translated and adapted English questionnaires that measure emotional and behavioural problems in children and adolescence into Arabic. It aimed to measure the constructs that were identified in Chapter 4 as being particularly relevant to this population. The first part of this study utilized the questionnaires that were translated into Arabic language following Vallerand's translation and adaptation guideline (Vallerand, 1989). The Beck Youth Inventories-II (Beck, Beck, & Jolly, 2005), and the Aggression Scale (Orpinas & Frankowski, 2001) were translated into Arabic without modifying or changing questionnaire items. A further two questionnaires, Other as Shamer Scale (Goss, Gilbert, & Allan, 1994) and the Stigma Scale (J. K. Austin, Macleod, Dunn, Shen, & Perkins, 2004), were also adapted for use with typically developing and institutionalised children in Saudi Arabia. All of the measures were tested for validity and reliability with a sample of Saudi children. The main focus of this study was to explore whether these questionnaires are valid and reliable for use with institutional reared children or/and non-institutional children.

Chapter 6. Chapters 4 and 5 highlighted that institutionalised children are perceived as different from people outside their orphanage. This chapter explored the perception of public stigma from both carers' and teachers' perspectives related to institutionalised children and the perception of stigma

reported by children themselves. It further considered whether the level of experience working with institutionalised children moderated these perceptions. This study was also expected to shed some light on the attitudes of Saudi society towards institutionalised children.

Chapter 7. This chapter extended the findings from those found in Chapters 4 – 6 to investigate links between children's perception of shame and stigma linked to institutionalisation with other internalising (e.g., self-concept, anxiety, and depression), and externalising symptoms (e.g., anger, disruptive, and aggression). Each measurement (with the exception of stigma) was compared between institutionalised children and typical school peers and between gender. The study went on to consider whether shame is important in understanding reports of elevated externalising and internalising symptoms in institutionalised children.

Chapter 8. The aim of this chapter was to focus on understanding elevated symptoms of aggressive and externalising symptoms in institutionalised children. It explored the role of social cognition and specifically attributional biases in understanding links between symptoms of aggression and children's reports of how they would respond to a potential hostile interaction with their peer group. The study considered whether there was any difference between institutionalised children and their non-institutional school peers in hostile attributions in response to ambiguous social interactions, aggressive responses, and other externalising symptoms (i.e., anger, aggression, disruptive behaviour).

Chapter 9. This chapter provides a summary of all the empirical studies and a general discussion of the findings in the context of prior research and theoretical frameworks provided in the previous chapters. Moreover, it outlines some limitations and implications for future research.

1.5 The significance of the programme of research

The programme of research outlined in this thesis uses a mixed methods approach to understand the developmental challenges experienced by children originating from unknown parents, who are raised in an institution. By exploring the specific difficulties that these children experience and considering the factors that potentially mediate outcome in this group, the thesis represents an important programme of research that has some application in the development of prevention and intervention methods to

ensure positive developmental outcomes in this population. The results will provide practical information for institutional workers, carers, and teachers about the difficulties and needs of institutional children.

2. Chapter 2: Literature review of institutional rearing and development

2.1 Introduction

A large body of research has highlighted the importance of the family environment for development in childhood and adolescence (Guralnick, 2006; Sigelman & Rider, 2009). Theoretical models and empirical research have also pointed to children's need for a caregiver who can provide for children's physical needs, as well as nurture and foster emotional, cognitive and social aspects of development (Gunnar, 2001). While the needs of children are typically met within family units, some children are not able to live with their biological parents and caregiving from other adults can occur for a number of reasons. These include situations where the physical and mental health of biological parents prevent them from caring for their children (Rushton & Minnis, 2002) and the extreme poverty status accompanied by inadequate health services for families (Browne, 2009). In addition, it is also possible that in some cases a child is orphaned or abandoned by their parent (Gibbons, 2005). Alternative care models for children without permanent parents can include placement in group homes or residential care institutions. Adoptive families are also an alternative model in some cases (Rushton & Minnis, 2008).

Several studies have found that children who live in an institutional setting are at risk of developing physical, emotional, behavioural, cognitive, and social problems (Johnson, Browne, & Hamilton-Giachritsis, 2006; Maclean, 2003; McCall, van Ijzendoorn, Juffer, Groark, & Groza, 2011). These difficulties are suggested to stem from a number of risk factors including early adversity before being admitted to the institution (e.g.,Zeanah et al., 2009), the age at which children were placed in the institution (e.g.,Smyke, Zeanah, Fox, Nelson, & Guthrie, 2010), and the length of the period that children have spent in the institution (e.g.,Ellis, Fisher, & Zaharie, 2004; O'Connor, Rutter, Beckett, Keaveney, & Kreppner, 2000; Smyke et al., 2007). Within institutions themselves, poor child-caregiver interaction (and related attachment difficulties), lack of stimulation, and the absence of a stable and consistent caregiver are argued to place children at risk for negative developmental outcomes (McCall et al., 2012). In addition, recent research has focused on

variations in genotypes as important moderators for developmental sequelae in the context of early institutional rearing. For example, the interplay between early institutional rearing and the variation in the dopamine transporter gene (DAT1) was found to play an important role in the occurrence of ADHD symptoms in instiutionalised children (Stevens et al., 2009). The effects of institutional deprivation on emotional symptoms (e.g., depression) were moderated by allelic variations in the serotonin transporter gene (5HTT) (Kumsta et al., 2010). Finally, it has been shown that problems persist into early and mid adolescence, even after removal from the institutional settings (e.g.,Beckett et al., 2006; Kreppner et al., 2010).

While evidence suggests that institutionalisation represents a risk factor in development, further studies have found that not all children who are placed in the same institutional conditions show developmental difficulties (Rutter, 2006). In fact, heterogenity and specificty of the degree and type of difficulties/symptoms is a feature of the developmental outcomes of institutionalised children, even when raised in the same institutional setting (Rutter, Kreppner, O'Connor, & The English Romanian Adoptees (ERA) Study Team, 2001; Vorria et al., 2003).

The findings of several reported studies document the effects of institutional rearing on a range of developmental domains, including physical development, attachment, affective and cognitive development, as well as symptoms of psychopathology. Across several countries all over the world, millions of abandoned or orphaned children are usually placed in institutions where they are provided with alternative care than that given by primary caregivers or families (Zeanah, Smyke, & Settles, 2006). Compared to the typical environment (i.e., two-parent family) where children are raised, the caregiving environment of these institutions have several characteristics that make them a source for early adversity for their resident children. Frequently cited findings from several studies (e.g.,Rutter, Beckett, et al., 2009; Smyke, Zeanah, Fox, & Nelson, 2009; The St. Petersburg-USA Orphanage Research Team, 2008) have revealed that these children usually exhibit many developmental delays, mental health difficulties, cognitive and language deficits, and socioemotional problems, that persist after being removed from such settings into foster care or adoptive families.

2.2 Physical development and institutionalisation

A number of studies have found that the orphanage setting has a long – term effect on the physical and health status of institutionalised children. Children who spent their early years in globally-deprived orphanges often show delayed physical growth (e.g., height, weight, head circumference), compared to their family-reared peers of the same age and gender (Van Ijzendoorn & Juffer, 2006). In addition, several studies have reported severe delays in physical growth among institutionalised children. For example, Miller, Chan, Comfort, and Tirella (2005) retrospectively compared the health and developmental status of 103 Guatemalan adopted children aged 16 months on their arrival to the USA. Three samples were included in the study: 25 children who resided in an orphanage before adoption, 56 who were in in foster care before adoption, and 22 who were in mixed-care settings (i.e.,birth families, foster care , and/or orphanage) before adoption. On arrival, it was found that z scores for all anthropometric measurements were low. For example, 16% of children had reduced height (mean =-1.04), 20% of children had low weight (mean =-1.00), and 17% of children had small head circumference (mean = -1.08). Regarding children who came from the orphanage, the 3 measurements were the lowest compared to the other two groups of children. It was also found that the cognitive achievement of orphanage children at arrival was the lowest. In contrast, those children who came from foster care had signficantly higher scores for cognitive achievement at arrival.

In a further study of a Ukrainean orphanage, Dobrova-Krol, van Ijzendoorn, Bakermans-Kranenburg, Cyr, and Juffer (2008) compared the physical growth archives of a sample of 16 of both temporarily and chronically stunted institutionalised children (3-6 years old) with an age-matched sample of family-reared children. It was found that at 48 months of age, 31% of the institutionalised children were chronically stunted and showed delayed growth compared with family-reared peers of the same age. However, the anthropometric indices (height, weight, and head cirumference) showed no group differences, except for the most chronically affected infants from the institution - those who had the lowest weight and the smallest head cirumference from their first birthdate at the orphanage. An indication for catch-up was found for children from the age of 24 months onward who showed improvement in physical growth which manifested in full catch-up in

weight and partial catch-up in height by 48 months of age. The complete catch-up for weight may be accounted for by the ability of the institutionalised children at 48 months of age to make use of the nutritional repertoires in coping with the growth-inhibiting conditions in the orphanage, since the older the child is, the more capacity for adaptation he or she has and the greater speed for growth he or she can show.

2.3 Attachment relationships

The attachment bond is a specifc type of affectional bond which is characterised by the infant's behavioural organisation of seeking comfort and security in the relationship with his or her attachment figure (Ainsworth, 1989; Cassidy, 2008). Attachment relationships can be classified into secure or insecure types reflecting variations in the ways infants behave with their attachment figure when observed in anxiety provoking situations. Infants' behavioural strategies in this situation are argued to reflect infants' expectations and feelings towards the availability and responsiveness of the adult figure (Prior & Glaser, 2006). Attachment patterns can further be categorized into organised (secure and insecure types) or disorganised patterns; the latter reflecting a lack of a coherent behavioural strategy (i.e. the behaviours do not appear to serve specific goals or intentions)(Main & Solomon, 1986). Several studies have found attachment difficulties in children brought up in institutions (Bakermans-Kranenburg et al., 2011). Researchers have pointed to the regimented nature of institutionalised childcare, the high child-to-caregiver ratios, and the frequent shift rotations of caregivers, as undermining the opportunity for children to form selective attachments with consistent and responsive caregivers (Gunnar, 2001).

Much research has found evidence of disorganised and insecure attachement relationships between institutionalised children with caregivers, adoptive family members, and peers. For example, O'Connor et al. (2003) examined the attachment relationships at age 4 years in children adopted by families in the UK from Romanian institutions. The vast majority of the children were placed in institutions within the first few weeks of life, but their ages at time of removal from the instituions varied between 0 to 42 months. At age 4 only the children who experienced instutional rearing between 0 to 24 months were examined. For this study, the group of institution reared children were further divided into two groups according to the ages at which they left the

institutions; one sample was removed from the institutional setting at an age of under 6 months (N=58), the second group comprised the children who were removed from institutional care at ages between 6 to 24 months (N=53).

The Romanian institution reared children were compared with 52 children who were adopted within the UK before the age of 6 months and who had not experienced signficant early adversity prior to their adoption. It was found that by the time the children were 4 years old (using observation, interviews with adoptive parents, and ratings of the children's behaviours during a separation-reunion paradigm) the institutionalised children were more likely to show atypical patterns of attachment (labelled as insecure-other) and less likely to show secure attachments. In addition, the duration of institutional deprivation was negatively related with ratings of secure attachment among these children. The study did highlight, however, that about a third of institutionalised children developed secure attachments with their adoptive parents. Important to note is that by the time the children were 6 years old, just over 60% in all the institution reared Romanian adoptee groups (including those adopted between 24 and 42 months) showed a secure attachment with their adoptive parents. However, just under a third in the very late placed group (those removed from institutions between 24 and 42 months of age) showed atypical attachment patterns.The study of Romanian adoptees in the UK has additionally reported that many of the children with a history of institutional rearing show a pattern of disinhibted attachment (Rutter et al., 2007) and that the pattern of disinhibited attachment is distinct from the secure/insecure classification of attachment quality (Rutter, Kreppner, & Sonuga-Barke, 2009).

A more recent study (Smyke et al., 2010) from the Bucharest Early Intervention Project (BEIP, Zeanah et al., 2003) examined the quality of attachment relationships in Romanian institutionalised children. The sample included two groups of institutionalised children aged 42 months, one group was randomly assigned to be placed into foster care (N=61), and the other group remained in the institution (referred to as 'care as usual') (N=57). These groups were compared with a sample of 51 children who lived with their biological familes and who had never been institutionalised. Using the Strange Situation Procedure (SSP, Ainsworth, Blehar, Waters, & Wall, 1978) and other measures of caregiving quality and cognitive development, the study found that children who were placed into foster care were more likely to show secure

attachments (49%) compared to those children who remained in institutions (only 17%). As a comparison, the rate of secure attachments in the family reared group was highest with 65%. Moreover, many of the children remaining in institutions showed an insecure-other pattern (40%) compared with only just under 10% in the foster care group and none in the family reared group. An effect of age at placement was also noted in that the younger/earlier a child was allocated into foster care the more likely it was that he/she would develop a secure attachment at the age of 42 months. Finally, an association was found with cognitive ability; higher scores on the Bayley scale were associated with a greater likelihood of an organised attachment pattern in the 'care as usual' group and with the secure attachment pattern in the foster care and family-reared groups.

Similarily, Smyke et al. (2012) reported longitudinal findings in the same three groups of Romanian children from the BEIP: those who remained in institutional care (N=68), those who were placed into foster care (N=68), and non-institutionalised children (N=72). This study examined the effect of foster care intervention on the signs of inhibited/disinhibited reactive attachment disorder (RAD) across different time points [baseline (i.e. before children left the institution), and 30 months, 42 months, 54 months, and 8 years]. It was found that at baseline, both disinhibited and inhibited RAD were significantly elevated in the institution reared sample. However, over the course of time, the two types showed different trajectories. For disinhibited RAD, children who had been placed into foster care had fewer signs of disinhibited reactive attachment behaviours compared to the 'care as usual group', but their scores remained elevated over time compared to the non-institutionally reared group. Also, there was an effect for the timing of intervention; the earlier the child was placed in foster care, the fewer the signs of disinhbited RAD at later ages compared with the 'care as usual group'. With regards to the inhibited type, the children who remained in instituions over time showed the highest scores and for this group there was only a slight reduction in symptoms over time. In contrast, the children who were placed in foster care showed a marked reduction in their score following removal from institutional care. At the follow-up assessments, the scores for the foster care group and the family reared group were similar.

Taken together, the findings of the above studies suggest that the lack of long-term, consistent , sensitive , and responsive caregivers can lead to

attachment difficulties that in turn can lead to unfavourable effects on the social, behavioural, and emotional development of resident children. However, these difficulties might reflect not only the lack of responsive caregivers, but also the lack of a suitable orphanage policy and an institutional structure that can facilitate the development of healthy attachment relationships between children in institutional care and their caregivers. For example, the baby homes of St. Petersburg (The St. Petersburg-USA Orphanage Research Team, 2008) were relatively better than other orphanages in other Eastern Europe countries (e.g., Romania, Ukraine) in terms of the medical care and nutrition provided to resident children. However, the structure of the child grouping in the baby homes and the high child-to caregivers ratios did not allow for the formation of healthy attachment relationships. Therefore, it should be taken into account that establishing a foster family or a family-like system early would potentially lead to less frequency of attachment disorders among institutionalised children (e.g. Smyke et al., 2010). On the other hand, the interventions (e.g. The St. Petersburg-USA Orphanage Research Team, 2008) that also include structural changes to enhance the qualification and training of the caregivers should also work to foster more positive attachment relationships between carers and children.

2.4 Emotion recognition and understanding of emotions

Previous research has established that the expression of emotion and the ability to distinguish others' emotions are essential elements of a child's social development, especially in the child's early years where the interpretation of social situations is often linked to information from facial expression (Izard, 2002). Moreover, the accurate recognition of others' facial expressions and the decoding/interpretation of the emotion cues involved in peer interactions can help to determine effective responses and related behaviour (Izard et al., 2001).

Few studies have examined the determinental effects of early institutionalisation on emotional understanding. For example, Fries and Pollak (2004) examined the ability of preschool-aged post-institutionalised children, who had been adpoted from Eastern Europe into the USA, to identify facial expression of emotions and to relate them to social situations. 18 adopted children (mean age= 53.7 months) who had lived in an institution for an average of 16 months (range of 7 to 42 months) before adoption, and 21

family-reared peers (mean age =54.1 months) were asked to complete two computerised tasks. An emotion situation task aimed to test children's ability to relate facial expressions of emotion (e.g., happy, sad, mad, scared) to short colourful illustrative vignettes of hypothetical situations. An emotion identification task assessed children's ability to identify facial expressions of emotions. It was found that the adoptees' performance on the first task was lower compared with the control group, both in terms of correctly identifying facial expressions of emotion and linking these to hypothetical social situations. Consistent with previous findings, the longer the duration of institution care, the worse their performance was on both tasks.

As part of the BEIP (Zeanah et al., 2003), Jeon, Moulson, Fox, Zeanah, and Nelson III (2010) assessed emotion discrimination among three groups of 42-month-old children: institutionalised children (N=34), previously institutionalised children who were placed into foster care (N=36), and non-institutionalised children (N=23). Three groups were compared in terms of the amount of time they spent looking at novel face pairs (fear-neutral, happy-sad, happy-fear) . Unilke the findings of the above study (Fries & Pollak, 2004), there were no group differences in discriminating the emotion pairs, indicating that the difference in the rearing context did not affect their ability for discriminating the two facial expressions within each pair.

2.5 Cognitive development

Several longitudinal and meta-analytic studies have highlighted a markedly negative effect of early institutional rearing on cognitive development (e.g.,Bakermans-Kranenburg, Van Ijzendoorn, & Juffer, 2008; Beckett, Castle, Rutter, & Sonuga-Barke, 2010; Van Ijzendoorn, Juffer, & Poelhuis, 2005). However, some studies have found that the deficits in cognitive development can be recovered if institutionalised children are placed into enhanced foster care or well-functioning adoptive families (Van Ijzendoorn & Juffer, 2006).

For example, Beckett et al. (2006) compared the cognitive outcomes of two samples of 11-year old children: 128 children who were adopted from Romania into the UK before the age of 43 months, and 50 children who were adopted within the UK before the age of 6 months and who had not experienced institutional rearing prior to their adoption. Findings revealed that children who lived in institutions for more than the first 6 months of their lives had significantly lower cognitive scores at age 11 compared to the within-UK

adoptees' sample. There was no difference between those children who were adopted from Romanian institutions before the age of 6 months and the within-UK comparison adoptees. Utilizing the data from both ages 6 and 11 years, it was found that the effects of early institutional deprivation persisted over time for the children who were 6 months or older when removed from their institutional care setting. However, there was evidence for further cognitive recovery between the age of 6 and 11 years in the group of children who were the most impaired at age 6 years (i.e., those who scored in the bottom 15%). This study has a number of important messages. Firstly, it showed that age of placement was a significant factor in the cognitive development of adpotees from Romanian institutions. There was no longer a dose-response relationship between duration of institutional deprivation and congitive development at age 11. Rather there was a step-wise increase in cognitive impairment amongst the children who were removed from institutions after the age of 6 months. Secondly, the study showed that the effect of early institutional rearing persisted up to the age of 11; many years after the children were removed from institutions. Thirdly, the findings showed that further catch-up in cognitive function continued for those children who were most impaired at age 6 years.

In a more recent study (Loman, Wiik, Frenn, Pollak, & Gunnar, 2009), cognitive functioning of post-institutionalised adoptees (N=91, mean age= 10.1 years), who were adopted at an age of 12 months, was compared to that of adopted children from foster care (N=109, mean age= 10.2 years) and a third sample of non-adopted children (N=69, mean age=10.4 years). The study measured IQ and academic performance in school (via parent report). It was found that IQ means were in the average range for all the three groups. However, the post-institutionalised adoptees showed lower IQ scores than the non-adpoted children. An indication of the effect of duration of institutionlisation was also noted, as the longer the adpotee spent in the orphanage before adoption, the poorer their cognitive functioning was at the age of assessment.

Researchers have noted that cognitive impairment cannot be limited to the consequences of institutional rearing. Rather, it can stem from severely depriving circumstances (e.g., subnutrition) that may occur in family-reared children who have also experienced severe deprivation (Rutter, 2006). Though the risks for cognitive impairment are high when institutional rearing is greatly

characterised by subnutrition and lack of stimulation (Gunnar, 2001), the heterogeneous findings of the ERA study (Beckett et al., 2006) indicated that cognitive impairment was associated with the deprived institutional rearing even when there was not evident subnutrition. The most surprising is that even though the Romanian children were exposed to prolonged institutional deprivation, some of them displayed superior intellectual functioning at 11 years.

2.6 Symptoms of psychopathology in institutionalised children

Besides the developmental delays and deficits that are noted in the physical and cognitive domains among institutionalised children, a large body of research reports high prevalence of mental health problems in institutionalised children. In particular, there has been documented evidence of increased externalising and internalising problems among children and adolescents who live in orphanages. For example, Elebiary, Behilak, and Kabbash (2010) examined the behavioural and emotional problems among a sample of school-aged (8-12 years) illegitimate (N=102) and orphaned (N=12) children in state-owned institutions in Egypt. Using an observation checklist of children's behaviours during their daily activities within their schools and orphanages, they found relatively high rates of externalising problems, including hyperactivity (66%), aggressiveness (73%), and disobedience (64%). In addition, the self-reported ratings of depression symptoms also revealed moderate levels of depression among 87% of the children and withdrawal was reported by 86%.

El Koumi et al. (2012) similarly assessed the prevalence of externalising (e.g., hyperactivity, aggression, delinquency, rule-breaking behaviours) and internalising (e.g., depression, anxiety, withdrawal) behaviours among 265 school-age institutionalised children (6-12 years) in Cairo, Egypt. It was found that the total number of children who showed externalising behaviours on caregiver-reported CBCL scale were slightly higher (159 child ,60%) than those total scores for internalising problems (152 child,58.86%). Moreover, the caregiver-reported carried out a semi-structured psychiatric interview with the children which revealed that ADHD (19.62%), oppositional defiant disorder (17.36%), and conduct disorder (9.81%) were among the most prevalent externalising problems among these children; whereas depression (10.75%)

and separation anxiety (7.17%) were among the most prevalent internalising problems in these children.

It is well establised that international adpotees, especially those from Eastern Europe, showed more externalising and internalising problems than their non-adopted peers (Juffer & van Ijzendoorn, 2005). Several studies have further shown that emotional and behavioural problems among institutionalised children who had lived in psychosocially deprived institutions persisted over time, even when children were placed into adoptive or foster families. For example, Wiik et al. (2011) examined the pattern of emotional and behavioural symptoms in three groups of children; one group of post-institutionalised children who had been internationally adopted from Eastern Europe into US families at an age of $\geq= 12$ months and who had spent the majority of their lives in institutions prior to their adoption (N=68, mean age= 9.6 years); a second group of children adopted $\leq= 8$ months of age and who were adopted from foster care or who had < 2 months of institutional care experience (N=74, mean age=9.7 years); the third group comprised non-adopted children (N=76, mean age=9.6 years). Using parent report, internalising symptoms were positively realted to the length of time spent in institutions for these children. Regarding the child-report, there were no group difference for the clinical cut-offs of ADHD and externalising symptoms. However, post institutionalised children had higher scores than the other two groups. Through child-report, it was also noted that ADHD symptoms and internalising symptoms were postively related with the duration of institutional care.

In a different study, Gagnon-Oosterwaal et al. (2012) assessed the effect of pre-adoption early deprivation on 95 school-aged international adoptees (age range=6.5 -8.6 years) compared to their age-matched non-adopted peers (N=91, age range =6.5- 8.8 years) who lived with their biological families. The results showed that post-institutionalised children reported more internalising problems; especially specific phobias, compared to their family-reared peers. Moreover, the health status at arrival was related with higher scores of specific phobias, major depression, and conduct problems at school age. Consistent with the findings of other studies of post-instiutionalised children, there were no group differences for externalising symptoms as reported by the children (e.g.,Wiik et al., 2011).

As outlined in Chapter 1, most of the institutions in the Saudi context provide good medical care, nutrition, and opportunities for building healthy attachment relationships. However, several Saudi studies have found that negative outcomes are prevalent among institutionalised children, especially those originating from unknown parents. For example, Al-Kathiry (2003) compared levels of depression and self-esteem among four groups of Saudi female adolescent orphans aged from 12 to 20 years. Two of these groups (40 originating from unknown parents and 12 orphans) lived in a residential care centre based upon daily shift rotation of two foster mothers; a third group consisted of 40 orphaned adolescents living with their kinships, and a fourth group of 40 typical adolescents living with their biological families. All 132 participants in the four groups completed the Rosenberg's Self-Esteem Scale (SES), the Arabic Child Depression Inventory (ACDI), and the Beck Depression Inventory (BDI). The results showed that the levels of self-esteem among the three groups of orphans were lower compared to their typical peers living with their biological families. Moreover, the adolescents originating from unknown parents had the lowest levels of self-esteem and highest symptoms of depression compared to the other two groups of orphans. From these findings, Al-Kathiry (2003) suggested that being out of wedlock could be a significant factor in experiencing poor self-esteem and elevated depression among adolescents originating from unknown parents.

2.7 Summary

Institutional care has been shown across several countries to be a caregiving environment reflecting a lack of providing for the basic physical and/or emotional needs of the child. In addition, institution environments are often characterised by a lack of individualised care-giving , high child-to-caregiver ratios, and the lack of socially and emotionally responsive caregivers. There is also substantial evidence showing that institutional rearing can be a source for developmental delays and disorders across physical, cognitive, and social domains. The effect of such type of alternative care system can be long-term and can persist across childhood and adolescence. However, early interventions (e.g., adoption, foster care, structural change) can be relatively efficient in reducing adverse effects and can produce considerable catch-up especially in physical development.

Taken together, research on institutionalised children has addressed the effects of early deprivation across a range of different domains of functioning, and the risk and protective factors that could increase or reduce adverse effects. To further the understanding of potential risk factors there is a need to consider theoretical frameworks that combine the effects of sociocultural (e.g., discrimination, stereotypes, prejudice) and intra-individual (e.g., shame) factors on the development of institutionalised children.

3. Chapter 3: Theoretical framework

Variations in physical, psychological and behavioural sequelae described in the previous chapter have been examined and discussed in relation to a number of risk factors, and risk processes. These encompass, for example, factors associated with the quality and duration of institutional care, factors associated with prenatal and perinatal risks, social-cognitive deficits, genetic risks and neurobiological differences (Rutter, 2006; Zeanah et al., 2006). There has been comparatively less exploration of intraindividual, or within-child, psychological processes as possible mediators of the behavioural and emotional adjustment of institution reared children. During childhood, children begin to form their identity. Living in an institution will likely influence the child's development of identity, although to date there is surprisingly little research exploring this question (e.g.,Hawkins et al., 2007). Furthermore, it is possible that being brought up in an institutional setting is associated with children experiencing stigma (e.g.,Simsek, Erol, Öztop, & Münir, 2007; Simsek, Erol, Oztop, & Ozer Ozcan, 2008) which in turn may lead to feelings of shame. The present chapter will consider a number of potential intraindividual psychological processes to understand their possible role in the psychological and behavioural sequelae of institution reared children.

A large body of literature has linked social information processing deficits to behavioural difficulties including aggression. In addition, biases in social information processing have been explored as mediators in the association between hostile and disruptive family rearing experiences and aggression with peers. Biases in social information processing have gained little attention in the context of early institutional rearing.

The chapter will first consider the effects of institutional rearing from an attachment perspective, exploring the role of an internal working model as a putative candidate in mediating adverse experiences with later social difficulties. Second, a theoretical framework of stigma (public stigma vs. self-stigma) with its consequnces and the common methods of stigma assessment will be addressed. Third, the concept of shame and the role of self in development are explored with risk factors for psychopathology. Finally, a description of Dodge's social information processing model (reactive vs. proactive aggression) and the standard approaches to measure it are presented.

3.1 Institutional rearing

3.1.1 Effects of early deprivation in institutionalised children on social functioning: Explanations from an attachment perspective

Attachment theory (Bowlby, 1969, 1988) emphasises the importance of early experiences of the child with a continuous caregiver who is caring, sensitive, and socially and emotionally responsive. These early experiences set the context for the child's formation of an emotional attachment to the caregiver. According to Bowlby, the quality of this attachment bond between the child and the caregiver is critical for the child's socio-emotional development and mental health. In particular, Bowlby (1969) proposed the notion of an internal working model to describe how children through their repeated interactions with their caregivers develop mental models of self, others and relationships. As such, the notion of an internal working model provides a theoretical framework to explain the mechanism through which early attachment experiences are linked to later behaviour. An individual's internal working model guides their expectations regarding the self in a social context and influences the formation of expectations and rules for behaviour with others (Bretherton & Munholland, 2008).

According to this model, children with emotionally responsive and caring attachment figures would learn to securely explore their physical and social world with confidence to the extent that they would build their own mental representation of the self as secure and worthy, others as caring and trusting, and the world as non-threatening (Bretherton, 2005). If the available attachment figure is not sensitive and emotionally responsive to the child's basic needs, then children are urged to build an internal working model that mentally represents the world as insecure, unstable/ unpredictable, and even hostile. In other words, children will behave (i.e., interpret others' behaviour, the self, and respond) in social contexts in ways that are consistent with their expectations of interpersonal interactions rooted in their past experiences with caregivers. As a result of insecure attachment relationship with primary caregivers, children will either withdraw/retreat from or fight/resist such world undermining their long-term development and mental health (Bowlby, 1988). Relatedly, a bio-psychosocial model of social information processing (Dodge & Pettit, 2003) proposes that in addition to the biological predisposition (e.g., genetic factors, prenatal experiences) the sociocultural context (e.g., peers,

caregivers, institutions) in which the child is born and reared could be a risk factor for developing externalising problems, such as aggression and conduct disorders ,as well as internalising symptoms (e.g., anxiety, depression).

As Bowlby (1969) hypothesised, the attachment behavioural system encompasses child behaviours that are activated by stress or fear to reach a sense of security. Such behaviours are manifested by physical or socioemotional proximity seeking and increased closeness to an attachment figure. In this sense, the attachment system is important for eliminating and reducing stress or fear in the infant (Lyons-Ruth, Zeanah, & Benoit, 2003). Institutional settings have typically failed to provide environments that nurture the formation of selective attachment bonds between children and caregivers. This is often due to the regimented nature of caregiving in institutions, high child-to-caregiver ratios, and caregivers' shift rotation (Dozier & Rutter, 2008).

The early exposure to psychosocial deprivation, such as the lack of stable and consistent attachment relationships with responsive caregivers, can interfere with later development of institutionalised children, even when institutions provide for all basic needs (Gunnar, 2001). The Russian orphanages, for example, provided adequate nutrition and medical care (The St. Petersburg– USA Orphanage Research Team, 2005). However, these institutions did not provide an opportunity for their resident children to establish stable and consistent relationships with responsive and sensitive caregivers. Remarkably, these children were moving through new groups with new caregivers to the extent that by the age of 19 months children experienced at least 60 to 100 caregivers. Moreover, there was evidence that these children when adopted from the St. Petersburg Baby Home at older ages (after 19 months of age) had higher rates of externalising and internalising problems (e.g.,Merz & McCall, 2010).

3.1.2 Risk and protective factors in institutional rearing

Several risk factors have been proposed that can increase the likelihood of developmental delay and psychiatric symptoms and disorders in institutionalised children. For example, Chapter 2 highlighted several studies of institutionalised children when reported that the severity of cognitive (e.g.,Beckett et al., 2006), socio-emotional (O'Connor et al., 2003) and. behavioural (e.g.,Ellis et al., 2004) problems is associated with the length of time children spent in institutional care and the age at which children were

placed in institutions. Other risk factors include high child-to-caregiver ratios, poor child-caregiver interaction, high rate of shift rotation,and the lack of social, physical and psychological stimulation (e.g.,McCall et al., 2012; The St. Petersburg-USA Orphanage Research Team, 2008). Finally, poor nutrition and lack of adequate medical care and stimulation were among the factors that made the Romanian orphanges globally depriving environments for raising institutionalised children in the 90s (Rutter, Beckett, et al., 2009).

While evidence suggests that institutionalisation represents a risk factor in development, further studies have found that not all children who are placed in the same institutional conditions show developmental difficulties (Rutter, 2006). In fact, heterogeniety and specificity of the degree and type of difficulties/symptoms is a feature of the developmental outcomes of institutionalised children, even when raised in the same institutional settings (Rutter et al., 2001; Vorria et al., 2003).

There are some protective factors that can reduce the likelihood of developmental delays and psychiatric symptoms and disorders in institutionalised children. For example, consistent with the reduction of caregiver-child ratios can be critical in providing stable interaction between children and the caregivers (Rushton & Minnis, 2008). In addition, individualised care and paying greater attention to the basic needs of instiutionalised children can be achieved through employing or hiring educated caregivers and providing them with the specialised training in educational activities, establishing small groups of children and assigning one caregiver for each group , and providing periodical training and supervision for the orphanage staff (The St. Petersburg- USA Orphanage Research Team, 2005; The St. Petersburg-USA Orphanage Research Team, 2008). The research teams have concluded that the socioemotional environment could be the most influential factor in institutions and enhancement in such settings would lead to improvements in most aspects of child development. Finally, adoption can be the best intervention for catch-up and recovery for cognitive and physical development among children who have experienced severe deprivation in institutions before being adopted (Van Ijzendoorn & Juffer, 2006).

In sum, institutional rearing is sometimes considered notorious/disadvantageous in terms of the severe mental health problems and chronic medical conditions that might occur as a result of both maternal deprivation and other early experiences of adversity (e.g., poor nutrition,

delayed development, lack of stimulation). These frequently-cited characteristics in addition to the special social status of their resident children in Saudi Arabia who are with permanent or even unknown parents make them a risk factor for stigma in both children themselves (self-stigma) and the people more broadly (public stigma).

3.2 Stigma

3.2.1 Introduction

Stigma is a multi-level concept that encompasses various aspects of difference and deviance that lead to damaged identity. A frequently cited theorization of stigma was postulated by Goffman (1963) which stated that an individual who has an attribute that deprives him or her from being fully accepted by others is said to have a stigma. As a result, the stigmatised individual is perceived by others as a discredited or undesirable person. Moreover, the stigmatised individual may be subject to marginalisation and oppression due to the stigma he or she already possesses (Swim & Hyers, 2001). Finally, the public are proposed to hold the negative view about the stigmatised person and try to avoid him or her in work or family, even though they seem to believe that the cause of stigma (e.g., mental health problems or other medical conditions) can strike anyone (Schnittker, 2013).

As a pioneer of stigma research, Goffman (1963) described three general types of attributes that could be triggers for stigmatisation; and these included body deformities (e.g., underdeveloped head, disabled legs) , individual attributes (e.g., criminality, addiction), and tribal stigma (e.g., race, religion). However, it is noteworthy that the concept of stigma is relational in real life situations. This means that an attribute cannot be said to stigmatise an individual without a different comparable attribute that is accepted or even usual within the same surrounding context in which they both exist (Swim & Hyers, 2001). For example, a person with unusual height might not feel stigmatised when he is surrounded by tall people. However, and depending on the situational circumstances, this person is likely to feel stigmatised in the company of average tall or short people. Moreover, the interpersonal influence and power situation are important aspects within the context of stigma. Link and Phelan (2001) stated that stigma can exist when there is an asymmetry of the social, economic, and political powers across the individuals and groups within their societies. These powers allow the co-occurrence of elements of

stigma (e.g., labelling, stereotyping, discrimination). Therefore, it takes power to stigmatise other individuals and being empowered can decrease the likelihood of being stigmatised by others. As a result of this power asymmetry, stigma includes the attitudes (prejudice), as well as behaviour (discrimination) toward the individual who has this attribute (Corrigan, Kerr, & Knudsen, 2005; Goffman, 1963; LeBel, 2008; Link & Phelan, 2001). The labelling of a group due to a marked identity is considered a separation of "us" from "them" (Link & Phelan, 2001) that is typically influenced by the culture in which an individual lives (Quinn & Chaudoir, 2009).

3.2.2 Consequences of stigma

Stigma has negative consequences for those who are stigmatised, their families, and the society where they live. In fact, it can indirectly affect the physical and psychological health of individuals , threatening their identity (Major & O'Brien, 2005). In addition, stigma acts as a barrier to life opportunties since it reduces the employment opportunties, education and housing options, utilisation of health care, and social contacts that the stigmatised person can obtain (Yang, Cho, & Kleinman, 2008). Moreover, stigma affects the families of those who have a stigmatising attribute, medical condition, or mental illness in a way that results in economic, social, and psychological burden (Östman & Kjellin, 2002). At the societal level, stigma results in a cycle of discrimination leading the stigmatised individuals to be socially isolated and deprived of the opportunty to recover and be accepted within society (Hach, 2008).

3.2.3 Self-stigma vs. public stigma and the mechanisms of stigma process

Self-stigma is the prejudice (endorsement of a stereotype and an emotional response that follows) which stigmatised individuals turn against themselves (Corrigan, Larson, & Kuwabara, 2010). When individuals with a mental illness for example, live in a cultural context that has widespread stereotypes about this illnesses and conditions, they may automatically expect and internalise the attitudes that reflect stigmatisation and loss of self-esteem (Link & Phelan, 2006). According to Corrigan et al. (2010), there are four factors that influence the perception of self-stigma. First, individuals with self-stigma should be aware of the relationship between their condition and the relevant stereotypes. Second, and given that they are already aware of the

stereotypes, self-stigma cannot occur unless these individuals are in full agreement of these stereotypes. Third, self-stigma cannot exist until the stereotypes that have been previously recognised (awareness of stereotypes) and agreed upon (agreement of stereotypes) are applied to themselves and to the stigmatising beliefs that exist in the cultural context to which they belong (application of stereotypes). Finally, the personal effect comes as a result of the three above factors leading to a decrease in levels of self-efficacy and self-esteem (Watson, Corrigan, Larson, & Sells, 2007).

Public stigma comprises the reaction of the public towards people with stigmatising conditions or attributes (Hach, 2008). It consists of three main components: stereotypes, prejudice, and discrimination. In the first component, stereotypes reflect labels or marks that are associated with undesirable attributes in the minds of the public and the labelled person as well (Link & Phelan, 2001). The shift from stereotyping to public stigma should pass through a second component (i.e., prejudice) that encompasses a prejudicial social typing of separating the stigmatised persons from others in the same stigmatising cultural context (Rogers & Pilgrim, 2005). Discrimination is the third component that involves a general profile of disadvantageous treatment of the stigmatised groups in terms of depriving them from life opportunities (e.g., income, education, housing, health care) (Link & Phelan, 2001).

Several studies have examined both public and self-stigma in individuals with mental health difficulties (e.g.,Corrigan & Wassel, 2008; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Gray, 2002) and chronic medical conditions (e.g., Austin, et al., 2002). The role of stigma in understanding symptoms of psychopathology in institutionalised children has not been extensively investigated. In one study, Cluver, Gardner, and Operario (2008) compared psychiatric symptoms among three groups of 10-19-year-old children: children orphaned by AIDS (N=425), children orphaned by non-AIDS causes (N=241), and non-orphaned controls (N=278). It was found that AIDS orphans showed higher levels of stigma compared to the other two groups. In addition, these elevated levels of stigma were associated with increased symptoms of conduct disorder, depression, and anxiety among the AIDS-orphans compared to the other two groups.

In several follow-up studies (Cluver & Orkin, 2009; Cluver, Orkin, Gardner, & Boyes, 2012) with the same three groups of children, it was found

that when compared with other-orphans and non-orphans, the AIDS- orphans still experienced higher levels of psychiatric symptoms, including anxiety, depression, conduct disorder, and post-traumatic stress disorder as their age increased. These findings reflected the elevated effect of chronic medical conditions, such as AIDS on the persistence of stigma among these affected children over time. In addition, it raises questions about the lack of social support from the society.

Despite the prevalance of stigma of mental illness, there is still some underestimation of this phenomenon due to the limitations of its measurement (Schnittker, 2013). For example, the social desirability bias of reporting prejudice can affect the measurement of social distance, since more positive attitudes can be pronounced among respondents towards the stigmatised person (Link, Yang, Phelan, & Collins, 2004). Personal experience with severe mental illness can also lead to more negative reports of others' beliefs about stigmatised individuals (Schnittker, 2013). Finally, it is difficult to measure structural discrimination associated with institutional policies and practices through traditional quantitative measures (Corrigan, Markowitz, & Watson, 2004).

3.2.4 Summary

Stigma is a multi-dimensional concept that has a relational nature. For stigma to occur there should be individuals who are characterised by a social identity that is relatively devalued and discredited in comparison to another supposedly ideal or better identity within the same context where they both exist. This devaluation of the individual's social identity through stigma can have negative outcomes on physical and psychological health of the stigmatised individual, as well as their life opportunities.

3.3 Shame

3.3.1 Introduction

Shame is depicted as feelings of failure and unworthiness that emerge when someone does something wrong and in turn his or her interpretation of this wrongdoing makes the whole self flawed and powerless. It is " a self-conscious emotion , evoked in situations of failing to achieve goals of personal importance and attributing the outcome to internal uncontrollable caues such as lack of ability or intelligence" (Bidjerano, 2010, p. 1352). In addition , shame

can be a product of self-evaluation which is consciously or unconsciously experienced by the shamed individual to give him or her a moral feedback on the societal acceptance of his or her behaviour (Tangney, Stuewig, & Mashek, 2007).

Unlike primary emotions (e.g., sadness, happiness, anger, fear) that can be recognised by distinctive and universal facial expressions, shame as a self-conscious emotion, is complex in nature and its experience requires cognitive abilities (e.g., attribution, self-reflection, self-evaluation) which emerge later in development (Tangney & Salovey, 2010). Shame can be further described as a moral emotion since it works to inhibit socially undesirable/unacceptable behaviours that violate the rules and standards of the society to which the individual belongs (Tangney et al., 2007).

3.3.2 Understanding shame

Self-conscious emotions are centred around the self and they are evoked when there is a discrepancy between the ideal self-goal and the actual or realised goals. Shame, in this account, represents painful feelings resulted from self-goal incongruence/discrepancy (Kristj´ansson, 2010). In addition, the affect-laden awareness of the shamed self reflects that the shamed person is also aware of the exposure of his or her flawed self in the eyes of the others (Mascolo & Fischer, 2007).

In his account of the role of self in the elicitation of self-conscious emotions, Lewis (2008) provides a theoretical model for the development of shame. At first, shame as self-conscious emotion encompasses a set of standards, rules, and goals (SRGs) that are products of the culture where the individual grows up. Second, acquiring SRGs means that individuals can evaluate their behaviours, thoughts, and feelings and claim responsibility for them or blame others for their wrongdoing. Third, the cognitive evaluation of behaviours, thoughts, and feelings against a set of acceptable SRGs is the real stimulus for emotion of shame. According to this process, shamed individuals evaluate themselves either claiming their own responsibility for their wrongdoing (internal attribution) or blaming the others for their shamed self (external attribution). In this account, shame emerges as a set of cognitive, attributional and evaluative processes that produce an interpretation of situations or experiences of failure leading to the elicitation of shame.

3.3.3 The development of shame

Developmental research has shown that children from the age of 9 years can understand the meaning of shame and differentiate it from guilt. For example, Olthof, Schouten, Kuiper, Stegge, and Jennekens-Schinkel (2000) asked children to imagine hypothetical shame-only situations (e.g., Erick goes red in the face) in which the main character behaves in an incoherently/strange manner without causing harm to others. In addition, they asked children to imagine situations of shame and guilt in which this protagonist behaves incoherently to cause harm to others (e.g. Erick goes red in the face. Erick does his best to be nice to his mother). It was found that children aged 9 to 11 were able to distinguish feelings of shame from situations eliciting shame and guilt together. Higher ratings of shame were also found in shame-only situations versus shame-and-guilt situations. When they are exposed to shameful experiences, children have also been found to exhibit both internalising and externalising responses, including aggression or anger towards those who caused or were the witnesses of a shameful situation (Thomaes, Stegge, & Olthof, 2007).

3.3.4 Shame and psychopathology

Across a range of both quantitative and qualitative assessment methods and across various ages and populations, there is consistent evidence that shame is related to psychopathology (Tangney & Salovey, 2010). For example, several cross-sectional studies found a relationship between shame and externalising symptoms, such as anger and aggression (e.g.,Hejdenberg & Andrews, 2011; Tangney, Wagner, Fletcher, & Gramzow, 1992; Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996) and internalising symptoms, such as anxiety and depression (e.g.,Ang & Khoo, 2004; De Rubeis & Hollenstein, 2009).

Individuals who are shame-prone are characterised by a tendency to externalise blame and exhibit anger, as displayed through physical and verbal aggression, indirect aggression (causing harm to something important to the target), self-directed aggression, and ruminative unexpressed anger (Tangney et al., 2007). Tangney and Salovey (2010) argued that this association between shame and the above symptoms can be accounted for by emotions linked to an individual's feelings about others' negative real or even imagined evaluations of his or her self. This experience leads the shamed individual to adopt either

one of the two paths: withdrawal from the other and/or direct blame and anger/aggression to others as a mechanism to protect the self. Several studies have also shown a link between shame and anger among children. For example, a large-scale study by Tangney et al. (1996) involving children from 9 to 14 years found that shame proneness was significantly correlated with anger arousal, as well as self-aggression, self-harm, and direct and displaced aggression.

In a further study (Ferguson, Stegge, Miller, & Olsen, 1999), children aged 5 to 12 years were asked to judge the emotional reactions in a scenario-based measure of self-consciousness. In addition, it measured parent-report behavioural and emotional symptoms that their children had experienced during the last 6 months. The results showed a significant correlation between children's responses toward the hypothetical situations involving shame and their parents' ratings of internalising (e.g., depression, anxiety, withdrawal) and externalising (e.g., aggression, cruelty) symptoms. Through parents' reports, children displayed more internalising than externalising symptoms. However, the children who scored higher across both symptoms also showed more shame proneness. Likewise, in a more recent study (Ferguson, Stegge, Eyre, Vollmer, & Ashbaker, 2000), shame was reported to be associated with internalising symptoms (depression, state and trait anxiety) by mothers of 6 - 13 year- old children.

3.3.5 Summary

Shame is a negative and painful self-conscious emotion that emerges from situations of failure and the discrepancy between ideal self-goals and actual goals. Sometimes, shame plays a moral and adaptive function as it gives immediate or later feedback on one's behaviours, thoughts, and feelings against the standards, rules, and goals (SRGs) that are acceptable in his or her culture. It can be a self-repairing or self-destructive emotion depending on the interpretation the individual gives to their evaluation of his or her failure experience.

3.4 Dodge's social information processing model

3.4.1 Introduction

Multiple factors and mechanisms may contribute to child aggression. In addition to the environmental, economic, and genetic factors, there are several social-cognitive factors (e.g., general knowledge structures and social information processing) that can explain the nature of aggressive children's thinking and the biases and deficits of information processing that may lead to the use of aggression as a strategy for solving their problems (Dodge, Coie, & Lynam, 2006). Moreover, children with early experience of derprivation and maltreatment may have difficulty identifying and interpreting social cues and the social boundaries between them and others to the extent that they may dipsplay several maladaptive behaviours such as aggression or indiscriminate friendliness (Rutter, 2002). Researchers have considered the links between children's ability to think about social situations and symptoms of psychopathology. Research that has utilised this framework focused on understanding the externalising and internalising problems in children and adolescents. Attributional biases have been linked to increased symptoms of depression (Dodge, 1993; Quiggle, Garber, Panak, & Dodge, 1992), and anxiety (Luebbe, Bell, Allwood, Swenson, & Early, 2010). Moreover, there are other risk factors that foster or are associated with hostile attribution, including maltreatment, modelling of hostile attribution by adults and peers, failure in important real-life tasks (e.g., basic calculation, reading), and rearing in a society that emphasises self-defence and retaliation (Dodge, 2006).

3.4.2 Dodge's SIP model

Dodge's SIP model of child aggression (Dodge, 1986) was originally proposed to identify cognitive characteristics that could lead children to display aggressive responses in social situations. Later, Crick and Dodge (1994) elaborated and reformulated the model to make circular in a way that fitted the parallel and simultaneous way of processing social information and to provide an experimental understanding of processing a single stimulus/situation (Nigoff, 2008).

The reformulated model (Crick & Dodge, 1994) breaks information processing into six sequential steps. The first step is the selective encoding process of social cues from the environment through the senses. If the encoding process is not accurate or attending to the appropriate cues is

insufficient, deviant responses can occur. Moreover, the selectively encoded cues can be stored and integrated with the past database of experiences to support future interpretation of the situation. Accordingly, and due to their frequent exposure to hostile and violent environment, it has been found that highly aggressive individuals are more likely to attend to aggression or hostility-evoking stimuli or cues than their moderate or low aggressive peers (Sestir & Bartholow, 2007).

The second step involves the interpretation process of the selectively encoded cues from the first step and the integration of these cues with the past experience and existing social stimuli and cognitive content to produce a meaningful understanding of the situation. Here, social perception may be influenced by the alternative interpretation of the same cues previously encoded. In particular, social perception may be affected by the causal attributions that can be generated about others' behaviours and intentions depending on the salience of the cues being processed (Huesmann, 1998).The hostile attribution bias is an example of the deficiency that may happen during this step. When individuals interpret ambiguous social cues and stimuli as threatening , hostile attribution bias is generated and in turn aggressive retaliation or reactive aggression is more likely to occur (Crick & Dodge, 1994).

The third step involves the clarification of goals for the previously encoded and interpreted social situation. Then comes the fourth step where there is a search for the behavioural responses that can fit the outcomes of the first two steps and the goals that have been clarified in the third step. The combination of past experience, the ability to generate responses, and processes from the first three steps are used to construct the possible response to the situation. It is worth noting that this step is proposed to be influenced by the socialisation context where children develop (Crick & Dodge, 1994).

In the fifth step, a situation-specific response is chosen based upon the child's abilities to carry out the decision he/she has made. In addition, an analysis of the consequences of such choice can be biased in terms of the previous steps and past experience. The final step of SIP concerns the enactment of the previously selected response. It is the culmination of the whole process and it can be affected by past experience and the chosen responses. At the end of this step, others' reactions to the enacted behaviour

will establish a new social cue for a new cycle of SIP. In fact, others' responses will be integrated into the child database of past experiences and will affect the way SIP steps work during future situations (Crick & Dodge, 1994). Dodge's (Dodge, 1986) model and Crick and Dodge's (Crick & Dodge, 1994) reformulated model of SIP have been supported by empirical studies that mostly highlighted the differences between aggressive and non-aggressive children with respect to each step of the SIP model and the factors that could predict aggression.

3.4.3 Reactive vs. proactive aggression

The SIP model can be further used to differentiate between individuals who are proactively aggressive and those who are reactively aggressive based on the motives of their behaviours. Proactive aggression is defined a "learned aggressive behaviour, typically non-emotional, emitted to achieve a purposeful goal - for example, one child shoving another to cut in line" (Boxer & Tisak, 2003, p. 362). It is outcome-oriented aggression that is utilised as an instrumental means to secure rewards and positive outcomes from others or dominate them (Vitaro & Brendgen, 2005). Reactive aggression is an "aggressive behaviour provoked or influenced by a negative emotional reaction to a situation or event-for example, a bullied child lashing out from fear" (Boxer & Tisak, 2003, p. 362). In addition, reactive aggression can be seen as an immediate and impulsive response to goal blocking or real perceived threat and it is usually accompanied by anger and frustration (Vitaro & Brendgen, 2005).

With regards to the above distinction, Crick and Dodge (1996) hypothesised that children who are reactively aggressive have a bias in the second step of the SIP model and in turn, they are more likely to interpret their peers' intents in ambiguous situations as hostile. On the other hand, those who are proactively aggressive have biases in the third, fourth, and the fifth steps of the SIP model, and therefore they would evaluate the aggressive response they have selected and its consequences in the direction of positive rewards and outcomes.

Several studies have examined how the two dominant functions of aggression (i.e., reactive vs. proactive) are related to the differences that children exhibit regarding processing social information. For example, Dodge and Coie (1987) examined differences in hostile attributional bias in three

groups of school children (6-9 years old) : those who showed some reactive aggression, proactive aggression, and non-aggressive controls. The children were presented with a videotaped vignettes depicting ambiguous actions by their peers and they were asked to interpret the intents of their peers. It was found that reactively aggressive boys had hostile biases and errors in their interpretation of their peers' social cues. Specifically, they found that reactively aggressive boys attributed hostile intent to ambiguous situations. In contrast, the proactively aggressive sample did not differ from the non-aggressive control group in the amount of the hostile attribution biases. Further studies have shown that that hostile attribution biases in 9-12-year-olds predicted reactive aggression. Reactively aggressive children attributed more hostile intent to their peers' acts than their proactive and nonaggressive samples (Crick & Dodge, 1996).

Supporting evidence for the relationship between the two types of aggression (reactive vs. proactive) and generating hostile attributions was found in a recent study that asked a sample of aggressive children aged 7 to 13 years (N=54) and their age-matched non-aggressive controls (N=30) to answer open-ended questions after listening to an audiotaped vignette depicting a peer ambiguous provocation that was supposed to hinder them in a social situation (Orobio de Castro, Merk, Koops, Veerman, & Bosch, 2005). Moreover, their attributional bias to their own emotion and their peers' emotions were also assessed using an open-ended question. It was found that aggressive children; compared to controls, attributed more hostile intents to their peers' ambiguous acts, became more angry and were less adaptive in emotion regulation, resulting in more aggressive responses. After controlling for the effect of reactive aggression, the proactively aggressive children attributed less hostile intent and became less negative in their evaluation of their aggressive responses.

Research has focused on SIP in the context of peer relationships. However, several studies have shown that the role of SIP in the development of behavioural and emotional symptoms is also present in the children's relations with adults. For example, Bickett, Milich, and Brown (1996) compared mothers of aggressive boys and mothers of non-aggressive boys in terms of the ability to interpret hypothetical situations involving themselves with their boys, husbands, and a peer interacting with their boys. Also, they were asked to infer a hypothetical interaction between their boys and their classmates and

teachers. It was found that hostile attribution biases in aggressive boys were linked to the general tendency of mothers to interpret ambiguous situations as hostile and this hostility could be predictive of their offspring's aggressive responses towards those involved in the situations.

3.4.4 Summary

The Dodge's SIP model provides an effective theoretical framework to explore mechanisms/processes used by children to interpret the social situations in which they are involved and how these mechanisms or processes would shape their responses to such situations. In fact, Crick and Dodge (1994) described these processes and mechanisms of child aggression in terms of the causal attributions, since they may explain how aggressive children judge the behaviours and intentions of their peers and their own success and failure in social situations.

3.5 Conclusion

The early depriving experiences of institutional rearing and associated negative outcomes can be integrated as a first element in a multi-dimensional approach of exploring the risk factors that may influence the development of institutionalised children. This approach can also start to assess the effect of the sociocultural context where children are being reared by measuring the levels of percieved stigma children convey and the public social stigma others have towards them. Levels of stigma can affect children in a way that may increase the likelihood of expressing feelings of shame and other related symptoms. Thirdly, the early experience of social and emotional derprivation can influence the structure of knowledge and the SIP mechanisms children use to process and interpret social interactions with peers.

4. Chapter 4: Exploration of thoughts , feelings, and behaviours in institutionalised children and their carers

4.1 Introduction

The Saudi authorities (i.e., Ministry of Social Affairs) are mainly involved in the care of children who had been deprived of their biological parents or those originating from unknown parents through improving the quality of services offered by state-owned orphanages to these children. The Saudi society is, however, characterised by a pattern of culture that rejects and marginalises children of unknown parents. This chapter aims to investigate different aspects of socio-emotional development (e.g., feelings, behaviours, relationships, and cognitions) among children originating from unknown parents living in an institution in Saudi Arabia.

A number of studies suggest that children who were abandoned from birth and placed in institutions can display both internalizing problems, such as depression and anxiety (e.g.,Ayaz et al., 2012; Vorria, Rutter, Pickles, Wolkind, & Hobsbaum, 1998), and externalising problems , such as aggression and rule-breaking (e.g.,Erol, Simsek, & Munir, 2010; Thabet, Mousa, AbdulHussein, & Vostanis, 2007). Other studies (e.g.,Roy, Rutter, & Pickles, 2004; Smyke, Dumitrescu, & Zeanah, 2002) have demonstrated that institution reared children show a lack of selectivity in their relationships with caregivers and peers compared to non-institution reared children. Most of the research on institutionally-reared children has focused on the factors related to the prevalence and presentation of such behavioural, emotional, and social difficulties.

There is, however, a paucity of studies that address children's perception of their origin and history and how this perception might affect their development. This is particularly relevant in countries where illegitimacy is a common reason for children being raised in institutional care (Gibbons, 2005). For the present study, the researcher utilised a qualitative approach by applying a semi-structured interview to a group of institutionally-raised children and their carers. This selection of carers and their children may contribute to previous studies that explored the development of children who are raised in an institutional setting.

Qualitative methods have the advantage of using open-ended questions and probing techniques that provide the participants with the opportunity to respond in their own words, rather than forcing them to choose from fixed responses (e.g., "Yes." or "No."). In addition, according to Wilkinson, Helene, and Yardley (2004), semi-structured interviews follow emotional rather than rational lines of thinking. In other words, during the interviews, the participant provides answers that may reflect his/her personal reaction to the phenomenon under investigation.

The study aims to address the paucity of studies that considered illegitimate children's experiences in the context of the experience of institutional rearing and related effects on child development.

4.2 Objectives of the study

The main objective of this present was to explore the feelings, behaviours, relationships, and cognitions among Saudi children originating from unknown parents who have been reared in an institution from birth and their carers. A number of sub-objectives can be summarized as follows:

1. To understand the nature of institutionally-raised children's feelings, behaviours, thoughts, and relationships in terms of the Saudi cultural perspectives about being born out of wedlock and reared in institutions.

2. To classify the five major themes (i.e., satisfaction, feelings and behaviours, relationships, attachment, and self-perception) for children and their carers into categories and sub-categories.

3. To describe how prevalent the positive and negative aspects of each of these themes in children and their carers.

4. To utilize the information obtained from the qualitative analysis of transcribed interviews to inform the selection of quantitative measures (e.g. questionnaires) to be used in the second study.

5. To consider whether there are additional issues that are of particular relevance to illegitimate children in Saudi Arabia.

4.3 Methods

4.3.1 Participants

This study included two groups of participants: children and caregivers. The sample of children consisted of 18 children with unknown parenthood (9 boys and 9 girls) out of 29 children whose age ranged between 7 to 12 years.

All children were from one institution in Riyadh that follows the Orphanage of Type B1 approach (see Chapter 1). The method of selection was based on the list of the children's names that was suggested by the head of institution and supported by the psychologist and the social worker. The institutional staff suggested that listing particular names could help the researcher as these children showed better levels of understanding and school performance compared to other children in the institution and who were happy to take a part of the study. Moreover, these children were admitted to the current institution in the same period (2005) during which they had been transferred from another institution. The age range of children was changed from 7-12 to 9-12, after the researcher had noticed that three children from age 7 and 8 had some difficulties of understanding the interview questions (see Table 4.1) and it was decided that they had to be excluded from the study. A further three children withdrew from the interviews after IQ scale was completed because they did not want to continue the interview; one of them finished just one subscale (see Table 4.1). Therefore, the participants in the final children's sample included 6 boys and 6 girls (mean age =10.66 years, SD = 1.15).The distribution of the children in each school grade was as follows: 1 boy and 1 girl from the 3rd grade; 2 boys and 2 girls from the 4th grade; 1 boy, 1 girl from the 5th grade; and 2 boys, 2 girls from the 6th grade. The distribution of the children's age, school grade, and IQ can be seen in Table 4.1. A comparison of the children who took part in the interview compared with those who didn't revealed that they (i.e., all excluded children except one who was not tested) had significantly lower IQ scores (t (15) = 3.18, $p < .01$), while there was no difference in age between these groups (t (16) = 1.40, $p > .1$).

The second sample consisted of caregivers ($N = 8$) from the same institution, 4 of them were foster mothers (FM) who stay with children in one villa for five days a week, whereas 4 of them were foster aunts (FA), who stay with children in two different villas (or more) in the institution for two days a week when the foster mother has a holiday. All the eight caregivers volunteered to take part in this research.

Table 4.1

Characteristics of the children's group

Participants included (N=12)			Participants excluded (N=6)		
Gender	Age	IQ	Gender	Age	IQ
Boy	9	97	Boy	7	75
Boy	10	113	Boy	11	87
Boy	10	98	Boy	12	80
Boy	11	107	Boy	12	73
Boy	12	103	Girl	7	85
Boy	12	103	Girl*	8	-----
Girl	9	102			
Girl	10	97			
Girl	10	83			
Girl	11	83			
Girl	12	85			
Girl	12	82			

* This girl did not complete the IQ test

4.3.2 The interview protocol

The interview protocol was a semi-structured interview, and the interview questions were developed by the research team (developmental and clinical psychologists). Moreover, the research team has suggested the use of prompts to assist the researcher whenever a participant did not understand any of the initial questions during the interview. However, there were some differences between the two groups in terms of the questions being asked about each of these major themes. Drafts of interview questions were discussed by the supervisory team and consensus was reached for the final version. The semi-structured interview consisted of the following themes:

Satisfaction :

Work satisfaction (carers): aspects of jobs which make them satisfied /unsatisfied and the things they want to change about it.

Life satisfaction (children): what children like/dislike about their life in the orphanage and the things they want to change about it.

Feelings and behaviours:

Feelings and behaviours (for carers): aspects of the job which make them feel happy / sad.

Feelings and behaviours (for children): aspects of their life in general which make them feel happy / sad.

Attachment: seeking help from a person when the children have problems

Relationships:

Relationships (carers): the types of interaction between them and the children whom they look after.

Relationships (children): the types of interaction between them and their foster family (carers, siblings), workers, orphanage peers, school peers and teachers.

Self-perception:

Self-perception (carers): how they view institutionalised children, how they think other people (from inside and outside the institution) view them. In addition, how they think institutionalised children view themselves.

Self-perception (children): how they evaluate themselves in general and how they view themselves by comparing themselves with other children from in/outside the institution.

The full interview schedules can be seen in Appendix A1 and Appendix A2.

4.3.3 Procedures

Ethical approval for this study was obtained from the School of Psychology's ethics committee at the University of Southampton, UK. Official permission was then granted from the Saudi Ministry of Social Affairs. Finally, having obtained this permission, a meeting was held with the head of the institution to explain the aims of the project (see Appendix E1) and to get her acquainted with the protocol.

The first meeting with all participants (children and caregivers) was arranged by the head of the institution/orphanage to explain to them the general aim of the project. Then the researcher contacted the psychologist and the social worker for the same purpose. Prior to starting the interviews, the researcher explained the main objectives of the in general project for each participant and informed them about their right to withdraw at any time from interview (see Appendix E4 and Appendix E5). All the children's interviews were carried out in the psychologist's room, whereas the caregiver's interviews were carried out in their house in the institution. All participants signed the consent forms to participate in the study.

The interviews with the children lasted 23-35 minutes, and 35-40 minutes with the caregivers. The tape-recorded interviews were transcribed by the researcher.

Prior to asking the interview questions for each child, the researcher instructed every child to complete two subtests of Wechsler Abbreviated Scale

of Intelligence WASI- Arabic Version (Al-Baily, Al-Saratawi, Abouhelal, Al-Karyoty, & Abdulfatah, 2007): Vocabulary and Matrix Reasoning. The researcher told the children that they would play a game consisted of questions about vocabulary and geometric shapes. This way of administrating the subscales helped the researcher to be sure that the every child would understand the subsequent questions of the interview as agreed upon earlier with the research team. These two subscales were administered in around 10-15 minutes.

4.3.4 The interview content

1- **Introduction:** This part of the interview included a general introduction to the project and illustrated that this study is about children who are being reared in the institution and how they feel and behave. In this section, participants were also informed about confidentiality of their answers and their right to withdraw their participation at any time.

2- **Satisfaction:** Children were asked to describe how they find living in the institution, whereas caregivers were asked to describe how they find working in the institution.

3- **Sources of feeling happy and feeling sad**: Children were asked to describe things that make them feel happy or sad in general, whereas caregivers were asked to describe aspects of their job that make them feel happy or sad.

4- **Type of relationships:** Children were asked to describe their relationships with other people in and outside the home, whereas caregivers were asked to describe the type of relationships between themselves and the children they look after.

5- **Attachment and help**: Both groups were asked about the person that the child asks for help when he/she has a problem.

6- **Self-perception**: Both children were asked to describe themselves and to compare themselves to other children in and outside the institution. On the other hand, caregivers were asked to describe how they view children in the institution compared with other children outside the home, and how they think these children view themselves as well. Moreover, the caregivers were asked to describe how others inside and outside the institution view children compared with other children outside the home, and how they (the others) think these children view themselves.

7- **Summary:** the researcher thanks each participant for her/his assistance.

4.3.4 Data Analysis

All participants' responses were submitted to qualitative data analysis. For the present study, content analysis was considered an effective method that could help the researcher to catch the meaningfulness of participants' expressions, and descriptions of the circumstances related to being raised in the institution. According to Helene and Yardley (2004), content analysis is appealing because it offers a model for systematic qualitative analysis with clear procedures for checking the quality of the analysis conducted. Moreover, the use of content analysis permits combining analysis of the frequency of codes with thematic analysis of their meaning in context, thus adding to the advantages of qualitative analysis as a whole.

The transcripts were analysed in a number of phases. First, the researcher transcribed the interviews in Arabic language from their audio taped recordings. Secondly, the researcher listened again to the tapes and reviewed the transcription to ensure that it was identical to what had been said by the participants during the interviews. Thirdly, the transcripts were translated into English. Fourthly, the researcher read all transcripts before and after translation to compare between both versions and ensure that the meaning of words did not change after the translation step. In the fifth phase, the researcher recruited one of the bilingual staff at the Psychology Department at the Faculty of Education in King Saud University in Riyadh to review four transcripts for meaning equivalence. The next phase was to read all transcripts and break the data (transcribed interviews) into units and categories to develop the initial themes. Several feelings and behaviours, which were not previously predetermined, voiced during the interview with both groups. Then, during a joint meeting between the research team, categories and themes were refined and improved. The researcher, by applying content analysis on the transcribed interviews, classified five pre-determined major themes: satisfaction, feelings, attachment and help, relationships, and self-perception. These themes were modified for both groups of participants. Finally, the coding scheme suggested by the research team was based upon two different ways: coding predetermined themes in terms of the meaning of each sentence and phrase under each question; and coding feelings and behaviours voiced during the interviews by counting the frequency of the related expressive words. (see Appendix A3 and Appendix A4).

4.3.5 Assessing quality of rater coding

Qualitative data, such as those generated by semi-structured interviews, often provides extensive, richly detailed observations on a small number of subjects (De Viers, Elliott, Kanouse, & Teleki, 2008). In most of these interviews, it is widely known that some researchers measure various characteristics of the interviewees by having two or more raters or observers assign scores to observed categories or items. When using such a technique, it is desirable to measure the extent to which two or more raters agree when rating the same set of things. Relatedly, the textual passage (not the person or persons from whom the passages were derived) is considered as the unit of analysis. Viewed from that perspective, the sample size could be defined as the number of passages to be coded, not the number of subjects.

There are a number of statistical estimators or indices that can be used to measure the inter-rater agreement. For example, Cohen's Kappa (K) is a chance-corrected measure of agreement between two raters, each of whom independently classifies each of a sample of subjects into one of a set of mutually exclusive and exhaustive categories (Cohen, 1960).

According to Landis and Koch (1977) the different ranges of values for Kappa represent different degrees of agreement between the raters. For example, they stated that values greater than 0.75 or so represent excellent agreement beyond chance, values below 0.40 or so represent poor agreement beyond chance, and values between 0.40 and 0.75 represent fair to good agreement beyond chance.

De Viers et al. (2008) suggested that pooled Kappa can be used to summarize interrater agreement for qualitative data when we have many items (e.g., categories) but few participants. For the current measurement, we have used one Kappa estimator for the observed categories of all the randomly selected participants (in both the children group and the caregivers group) instead of calculating the separate Kappa for each participant.

To measure the interrater agreement with regard to the coding of categories in the children's sample, the researcher and one of her supervisors rated the coding system in 4 randomly selected transcripts from the children sample. All the four transcripts were rated by the same two raters. Using the pooled kappa estimator (k), it was clear that the agreement between the two raters was excellent ($k = 0.93$).

Applying the same procedure for computing pooled kappa estimator (k) to measure the reliability of the coding of categories in the caregivers sample, the researcher and one of her supervisors rated the coding system in 4 randomly selected transcripts from the caregivers sample. All the four transcripts were rated by the same two raters. It was also clear that the agreement between the two raters was excellent (k =0.91).

4.4 Results

The results of the present study are based upon the content analysis of the participants' (carers and children) answers to some questions which were asked in a form of semi-structured interview. Five major themes (see the methods section) were analysed and the number of participants in each theme or its sub-category was reported. Each participant sometimes reported more than one sub-category.

4.4.1 Results (Carers)
Work Satisfaction

In the first part of the interview participants (carers) were asked to report how they found working in the institution. All of them reported ($n = 8$) some negative and positive aspects of their job. For example, all carers mentioned that they were satisfied with their job in general.

"For me it's comfortable because I have no responsibilities. I'm not married and I don't have children, so it's fine for me to work here." FM

"As I'm responsible for this Villa I'm happy with staying and working there." FM

"Good, because I have difficult circumstances I need to work here." FA

Some of them ($n = 6$) reported that they were satisfied with their job because they liked working with children.

"Children are the ones who make me like working here." FM

"I like working with these children." FA

Six carers reported that they disliked doing multiple tasks which they are asked to manage such as the housework and accompanying children to school and hospital.

"In fact, I dislike accompanying children to school and bringing them back to the orphanage. Moreover, I dislike doing housework. Nevertheless, we are required to carry out these tasks. I worked in an orphanage in Medina, but the system was different as we weren't responsible for transporting children to school and bringing them back." FA

"We accompany children to the hospital, and sometimes to the market or the bookshops. Tell me how I can find enough time to do the housework, raising children, taking care of their lessons, and the cooking that never ends. I am also required to sit with the children. These are just some examples of the negative things that bother me." FM

Four carers mentioned that they were dissatisfied with how children were treated by their older sister, mother or aunt.

"I dislike the way of treating children. For example, punishment is prevalent here; and for any reason the child is punished by all: the Mother, the Aunt, and the older sister. Once, I wanted to move to another Villa because I had clashed with the Mother who punished the children severely." FA

"Nothing in particular, but sometimes I and elder sisters have a few disagreements about things related to little children and their learning." FM

Five carers mentioned also other different aspects that they dislike about their job. For example, they reported that they disliked being away from their biological children, having a short holiday, and being blamed by other workers for any mistakes.

"My job here is nice, but the holiday is too short. I work as an Aunt who is responsible for three villas. I assign two days for the first villa, two days for the second villa, and 36 hours for the third one. My holiday is only 36 hours, and this means that when a Mother is on holiday I take her place in three villas. I want the holidays to be much longer." FA

"Moreover, they interfere with my way of dealing with the children and punishing them. I'm the Mother, and I'm the only person who is fully aware of the child and his behaviour. If a child didn't go to school, they would blame me although I tried to persuade him to go and he refused. Meanwhile, if I argue with a girl and make her go to school, they also blame me." FM

In the second part of the satisfaction section, the researcher asked the participants about what they wanted to change in their life if they had the ability to do so. Four participants reported that they wanted to change how children were treated by others (workers or older sisters) whether positively or negatively.

"Providing these children with whatever they want is a wrong idea. I should teach them that if they get what they want one time there will be twenty times of "No" FM

"Generally, in the orphanage I'd want to change elder girls' attitudes towards their younger sisters. I can't tell you how these girls control the youngest." FM

Additionally, four carers reported that they want to change the quantity and nature of caregivers' responsibilities.

"I'd want them to provide us with a worker in order to help us cleaning the Villas so that we could have enough time for our children. Our job shouldn't be limited to cleaning, cooking. "FA

"I'd like them to understand the Mother's status because she is the most stressed in the orphanage. She (Mother) has enough of housework stresses." FM

Also some participants (*n*=4) mentioned that they liked to change the children's behaviours.

"I'd want the children to change their behaviour and treat everyone well." FM

"I'd also want to make children love each other and change their way of treating each other. For example, they are characterised by selfishness as they often say, "This is our Home and nobody has the right to share it with us." FA

Two carers reported that they wanted to change how other workers viewed carers' responsibilities and stop blaming caregivers.

"When a problem happens some social workers put the blame on me. Well, they had been here before I came and they didn't change anything. They want me to solve any problem. Sometimes, they make us bear an intolerable burden." FM

Feelings

In this section of the interview participants were asked about aspects of their job that made them feel happy or sad. Although questions concentrated on two major feelings (happiness and sadness), other different feelings were also talked about. Some of these feelings were related to the carers themselves, whereas other feelings were related to children.

All carers generally reported equivalent feelings of sadness and happiness in different situations. For example, four participants reported that they felt happy when they believed they could help children who have problems.

"I feel happy when I help a child get rid of his problems and pains." FA

"I feel happy about my job because I can help these children get rid of being marginalized in society." FA

Three carers mentioned that they felt happy when they provided children with their needs.

"I feel happy if I can do anything for these children or provide them with a service they need." FA

"I'm happy that they (children in the Villa) eat whatever I make. When they thank me at lunchtime I get happy. They honestly thank me for anything I make." FM

The same number of participants (*n*=3) reported that their interaction with children was the factor that made them feel most happy.

"My happiness and comfort is when I sit and talk with my children. I also feel happy when we sit together for a meal or when we go upstairs for a talk." FM

"For me, I like to interact with the boys and the girls in my Villa. I play with them, and if I have more leisure time they ask me to play with them and I never say "No" because this makes me feel happy." FA

Few participants (*n*=2) mentioned two different features that made them feel happy: when children were happy, and when children succeeded in school.

"I have got this feeling when I see my children happy and successful in their studying." FM

"When the children are happy I feel as if I'm happy." FM

On the other hand, some carers reported other aspects of their job that made them feel sad. Six carers indicated that children's behaviour (and how the children viewed themselves) was a source of their feelings of sadness.

"But there are things I can't change and this really makes me feel sad. For example, the word "orphan" is a big problem for them and they sometimes use it to call each other names." FA

"I feel sad about the violence among these children." FA

"The most upsetting thing about these children is that they don't know the value of the gift they enjoy although the government provides them with everything they need. For them, they don't know the value of what they have because they got it easily." FA

Half of the participants (*n*= 4) reported that they felt sad when they couldn't help children when they faced problems and when they cannot provide them with their needs.

"My heart broke to hear that, so I couldn't help her relieve her pain." FA

"Nothing in particular, but if I see them distressed and I cannot help them relieve their problems I'll feel sad." FM

Three carers mentioned that most stressful aspect of job were doing tasks and bearing the responsibility of them.

"…of course, these stresses and the tasks I should do outside the orphanage make me sad." FM

"As I have told you I'm not here only to do the housework, so this misunderstanding makes me feel sad." FA

Three carers reported that being blamed by other workers for small mistakes was one of reasons that made them feel sad.

"I also feel sad when they say I've changed for the worst even if I've become better than before. This really makes me distressed." FM

"Another situation made me sad after the administration had sent me a notification about one of my girls who wanted to go to Villa No. 14 because their mother sits with them telling stories and jokes." FM

Few carers (*n*=2) mentioned other aspects that made them feel sad. For example, one carer felt sad when she was away from her biological children.

"I feel sad to leave my own children for days and work in the orphanage because of my difficult circumstances." FA

Another example of feeling sad occurred when other carers were incapable of hugging or kissing children was also mentioned by other carers.

"On the other hand, we are used to hugging and kissing our own children, but here this can be misunderstood. I think that children need this hug, but they cannot get it." FA

With regard to other emotions, six carers reported that they sometimes felt angry.

"If my children need something when I'm angry; they restore friendly relations with me before they ask for this thing." FM

"When I'm angry about something outside the orphanage my face expressions change and my children say, "You know Aunt X is angry." FA

Other examples of aggressive behaviours were reported (*n*=4).

"However, when they make mistakes I give them a chance to be forgiven if they admit their mistakes. I always tell my children I'll give them a first and a second chance, but if they make mistakes for a third time they will deserve punishment for it." FA

"Punishment is prevalent here; and for any reason the child is punished by all: the Mother, the Aunt, and the older sister." FA

Other feelings and behaviours related to children were found in all the participants' responses. For example, six carers gave examples related to sad feelings among children.

"I like their stories and jokes. I also like them when they tell me what comes into their minds, who they are angry with, and what bothers them. They don't like to see themselves different from other children outside the institution." FM

"If I tell a child that he or she will be punished, and he feels sad about hearing this I also feel sad. However, my punishment doesn't last for a long time and I immediately forgive them." FA

"One girl told me 'When I go to the market, I feel that I'm lonely there, I feel isolated from people there." FA

A similar number of carers (*n*=6) reported other situations when they saw anger among children in some situations.

"On the other hand, they get angry if someone outside of the orphanage knows they are orphans." FA

""In fact, anything they want from the Administration they get, and if a child doesn't get what he wants he'll start to blame the Administration for refusing his requests. And to avoid making the child angry, they will do whatever he wants." M

Children's feelings of happiness were evident in five of the participants' responses.

"When the children are happy I feel as if I'm happy." FM

"As I have mentioned before I feel happy when I can make my children relaxed and satisfied." FA

However, some carers (*n*=4) referred to children's displays of aggressive and disruptive behaviours.

"Quarrels between them were so violent that I cannot reach a compromise between them." FA

"I feel sad when older sister punishes children. I can't tell you how severe this punishment is." FM

"They beat each other to the extent that anyone would believe that they don't have feelings of pain. The beaten and the winner surprisingly forget what has happened between them and all becomes normal between them." FA

Stubborn and disobedient behaviours among institutions' children were evident in the response of four carers.

"X" is the most troublesome girl as she is too stubborn and as she grows up she gets more and more stubborn. I cannot control her." FM

"They sometimes become stubborn and imitate adults' behaviours, even the negative behaviours." FA

Five carers reported other negative behaviours (e.g., disruptive behaviours, telling lies) among their children.

"They always repeat the word "boredom", so they try to irritate anybody. Once, they played with the fire extinguisher outside their home. Sometimes, they set fire to some paper in the backyard of the Villas." FM

"This girl began to tell lies such as "Mother doesn't provide me with lunch or wake me up for school. When older sister told me about those lies, I got angry and burst into tears." FM

In addition, other feelings were also evident in participant's responses (*n*=5), for example, references to the children feeling embarrassed, bored, jealous and fearful.

"I'd want these children to be accustomed to the word "orphan" and not feel embarrassed about it." FA

"They know that what they had done was dangerous, but they always justify it by saying they were so bored that they would search for something new to make." FM

"I notice that other children become jealous of her because they think that she took their place in my heart." FM

"They feel afraid of meeting someone for the first time." FA

Relationships

In this section, participants were asked to provide more information about their relationships with the children whom they look after. Seven carers reported that they liked the times at which they were communicating, playing, and joking with children.

"I like their stories and jokes. I also like them when they tell me what comes into their minds, which they are angry with, and what bothers them." FM

"I like talking with them; and when a child asks me questions and I answer him. Secondly, when we sit together I feel as if we have a small family meeting. Thirdly, I like playing with them." FA

"My most beautiful moments with them are when we talk to each other about what has happened during the day." FM

Similarly, six carers reported that they had positive relations with children in general.

"Everything is good about them, I cannot tell you something in particular about them." FA

"My relationship with them is good in my Villa and the other Villas." FA

Only one carer reported that she was specifically happy about her relationship with the children whom she looked after because they displayed some positive behaviour, such as apologizing to others for making mistakes.

"They always apologize to me for anything wrong they do. If a child makes me angry, he apologizes to me before I get into my room. He stands in front of me and says, "This is the last time I make mistakes. I'm sorry, please forgive me." FM

A number of carers also pointed to some difficulties they had faced in their relationships with children. For example seven carers mentioned that children's behaviours were the most difficult they had to face.

"This girl really makes me very tired; and all my efforts with her were in vain. I was irritated by her behaviour. Now, I avoid her in order not to clash with her." FM

"In fact, they quickly get angry about anything. When they are angry I sometimes argue with them and sometimes I ignore them until they calm down." FA

"They are quickly affected by others around them. It's difficult to keep them in a specific status. Furthermore, I find difficulty dealing with the adolescents." FM

Three carers mentioned that they found it difficult to convince children to study their lessons.

"I have tried many times to convince them and make them understand the importance of learning in order to guarantee a good future for them, but all my efforts were useless." FA

Three carers reported other general difficulties they had faced with the children whom they looked after.

"When I first came here, "X" (in Villa No. 12) didn't talk to me and didn't shake hands with me as if I wasn't there. He remained like this for a week and this made me feel sad." FA

Attachment

The main question in the fourth section of the interview was related to a person whom the child could ask for help when he/she has a problem. Three carers reported that the child usually asked them (the FM) for help. Three carers also reported that the child asked the aunt for help when he/she had a problem.

"As soon as any problem happens they come to me for help." FM

"You know that the Mother stays in one Villa for five days and the Aunt stays in more than a villa for two days only, this doesn't matter. Sometimes "X" asks me for help even when I'm not in her Villa. She leaves her Villa and comes to me to complain about her mother saying, "You Aunt are close to me." FA

Three carers reported that children did not ask them or anyone for help.

"Frankly speaking none of them has asked me for help." FA

"Sometimes, they keep it secret, and sometimes they don't. I sometimes find out from records (school records) that a child has made trouble at school." FM

Only one carer reported that children preferred to ask other children in the orphanage for help.

"He/she always ask his/her brothers or sisters inside or outside the house (In the orphanage) for help, and tries to hide the problem from his/her mother." FA

Self Perception

In this section, participants were asked four different questions about self-perception. The first question was related to how the carers viewed children in the institution. Five carers reported that they viewed the children whom they looked after as generally different from the other children outside the institution.

"They are different from those children outside of the Institution." FA

"They are different from the other children outside the orphanage." FA

Five carers viewed the children as being mollycoddled compared to children outside the institution.

"In fact, they are provided with everything they want, but unfortunately they don't know the value of the gifts they enjoy. Sometimes, children outside the Institution are deprived of many things and cannot get what they want while our institutional children can." FA

"Children in the Institution are deprived of their actual parents, they are provided with many services to compensate them." FM

Four carers reported that they viewed their children as being more aggressive as compared to other children outside the institution.

"On the contrary, some of them are more aggressive than those outside of the Institution; and this may be a result of bad treatment towards them." FA

"In terms of their behaviour, our children are more aggressive towards other people outside of the orphanage. Whenever a small problem happens or someone treats them badly they become vengeful." FA

Additionally, four carers reported that they had neutral views towards their children as compared to other children outside the institution.

"I expect them to be similar to other children." FM

"I don't think there is a big difference between them." FA

In the second question, the carers were asked about how children viewed themselves as compared with the other children outside the institution. Six carers reported that the children viewed themselves as generally different from those outside the institution.

"They feel a difference between them and the other children." FM

"Of course, they think that there is a big difference between them and the other children." FA

All of the carers (*n*=8) reported that the children viewed themselves as being different from the others outside the institution with regard to their deprivation of biological family.

"They ask why they don't have any fathers like other children and sometimes they don't want to be controlled by any fathers." FM

"They think people from outside the orphanage are so proud that they have parents, and they often name other children as children of real families." FA

In contrast, one carer said that the children whom she looked after viewed themselves as neutral in comparison with those outside the institution.

"I don't think my children feel this difference." FM

With regard to how workers saw children as compared with those outside the institution, the carers were asked the third question (What about the social workers and other employers in the Institution, how do they see your children compared to those from outside?). Six carers reported that workers viewed the children whom they served as being generally different from those outside the orphanage.

"I think they sympathize with them because they (the employers) understand that these children are deprived of their parents and need special care." FM

"The employees provide them with everything as a sign of mercy towards them." FA

On the contrary, five carers mentioned that workers considered the children whom they looked after as being no different from others outside the institution.

"Them (I think), there is no difference. I didn't deduce anything from the workers' comments and notices about the children in the orphanage." FM

"I don't think they view them differently." FA

One carer reported that she did not know how the workers view the difference between the children being reared inside the institution and those outside it.

"Exactly I don't know." FM

The fourth question (How do you think that people outside the Institution see your children?) focused on how the other people outside the institution viewed the institutionally-reared children who live with their biological families. Seven carers reported that the others viewed the institutionalised children as being different in comparison to those typical children outside the institution.

"At first they treat them normally until they know that they are illegitimate their attitudes towards these children totally change in negative way. Moreover, at school our Institutional children are not desirable and any problems they make will be against them." FM

"If they know that this boy or girl is an illegitimate child they will avoid him." FA

Five carers made neutral comments about institutionalised children compared to those outside the institution.

"People around me such as my family, they treat these children normally." FM

"Some people are aware of this problem and see them normally." FA

One carer suggested that others' view of institutionalised children depends on their educational background (others' educational backgrounds).

"It depends upon their educational background and their awareness of institutionalised children." FM

Finally, four carers mentioned that the others viewed the institutionally-raised children to be treated with pity, compared with those children outside the institution.

"They have sympathy for these children because of their parental deprivation." FM

"They don't treat them differently because these children are orphans and deserve pity." FA

Summary of results from the carers

The carers reported general feelings of satisfaction with their jobs in the orphanage, although they still raised some negative aspects. For example, most of the carers point to the children as their source of job satisfaction and they considered the stressful tasks as a main factor of their dissatisfaction with their job. Relatedly, some carers expressed their dislike of the way in which the others (e.g., older sisters) treated children.

The carers' feelings of happiness were related to helping children and providing them with their needs, as well as interacting with the children. Most of the carers also reported feeling sad as a result of the children's behaviours. Additionally, feelings of anger were prevalent in the majority of the carers; and some of them described aggressive behaviours toward children. Although the carers' relations with children were generally positive, some carers described evident difficultly communicating with them because of their negative behaviours such as aggression and stubbornness. With regard to attachment, most of the carers reported that the children seek help from them when having trouble. However, a few carers indicated that the children sometimes prefer not to seek help from anyone.

From the carers' points of view, children were more reported to be more mollycoddled than their peers outside the orphanage. For some carers children were also viewed as being more aggressive than other children outside the orphanage. In addition, most of the carers reported that the workers and others outside the orphanage have pity on their children. While some carers thought that there were no differences between children from inside and those from outside the orphanage, all carers thought that institutionalised children viewed themselves differently compared with non-institutionalised peers.

4.4.2 Results (Children)
Life Satisfaction

Participants (children) endorsed positive and negative features of living in the institution. All participants (n = 12) reported different aspects of positive life in the institution such as playing, sports, parties and picnics.

"I like playing and parties. I like playing with children. But when we stay for long time in the orphanage without going for a picnic, I get bored." (G/11)

"I like playing football the most." (B/12)

"I like playing with children; I mean all children in the house and from other Villas." (G/9)

"I like playing with children." (B/10)

Some of them mentioned that they are satisfied with living in the institution in general.

"My life here is nice." (B/11)

"It's O.K." (G/10)

Four children reported that they are satisfied with their family (FM and foster siblings who live with them in the institution)

"I like everything here. I like my mother and my school. I like praying and playing with my brothers and other children."(B/9)

"I'd like to stay here forever with my brothers and sisters." (B/11)

"I like playing with my brothers/sisters." (G/10)

Nine children reported that the most things they are dissatisfied with were punishment, fighting and name-calling.

" I dislike hitting each other and telling on others." (G/9)

"I dislike children who hit me and call me by name of creep animal." (G/12)

"When they punish us; but aunt cannot punish me because I resist her." (B/12)

"I dislike fighting, insulting, and humiliating others' looks." (B/9)

General negative aspects of living in the institution were raised by five children.

"I dislike studying. Here teachers come every day to teach us and make us

study all the time."(G/10)

"I find living here not good" (B/10)

Three children reported that they are dissatisfied with their family (foster siblings/mothers).

"My mother punishes me the most if I do something wrong. She doesn't let me go out of the Home and I only sit down in the hall. If the problem gets bigger, she tells me to go to the room upstairs for a few minutes; and then she forgives me" (G/12)

"My brothers don't like me. I don't know why! I asked them if they like me and they say they don't." (B/10)

Another issue associated with children's life satisfaction relates to aspects of their life that they would like to change. Five children reported that they do not want to change anything in their life.

" I don't want to change anything." (G/11)

" All things are good. I don't want to change anything." (B/10)

However, ten children described different characteristics that they would like to change such as self-behaviours, self-skills and other subjects related to themselves.

"I'd like to get better in handwriting because other children make fun of my handwriting" (B/11)

"I wish that I didn't cry a lot when someone beat me, or when someone embarrasses me or even call me names" (G/10)

"When someone argues with me and my Sister, we wish we hadn't been in the home. We wish we were children of a real family" (G/12)

"I want to be better at school "(B/12)

Seven participants wanted to change others' behaviours towards them.

"I want children to like me and stop arguing with me" (G/12)

"I want my mother not to hit me and my brothers not to wear my clothes."(B/10)

"Everything is nice, but I do not want them to punishing us by beating or let us stay at home for hours." (B/12)

Four participants wanted to change others' behaviours towards each other.

"I'd like also my Brothers and Sisters not to beat each other." (G/10)

As well as changing things about themselves and other people in the home, nine other children noted aspects of their school that they would like to change.

"I wish I could change my school because today one girl came to our home with some other visitors." (G/10)

"Studying at public schools is boring, but children at private schools go for trips and have programs."(G/11)

"I want to move to another school. I want to go to X's (child in another home in the orphanage) school because he's there alone. I don't like my school and the teachers there." (B/10)

"I'm bored with my school for a long time. I told them I would leave, but they refused my request because this is my last year in school." (B/12)

Four children also mentioned that they want to change their family (siblings, the orphanage itself)

"I want to move to Villa No. 2 because my sister "X" who was with me at the previous home." (B/10)

"I only want to leave the home and move to the Boys' Home" (B/12)

"I also want to get "Nasser out of our Home and replace him with somebody else (e.g. "Y" or "Z") because he is annoying and always shouts aloud." (B/10)

A further four children expressed a desire to have different objects, e.g., more clothes, mobile phone…etc.

"I'd like to have a lot of clothes and shoes, so I could change them all the time." (G/10)

"I want them to bring me a horse and a mobile phone." (B/10)

Feelings/Behaviours

In this part of the interview, participants were asked four questions with regard to what makes them feel happy and sad. In addition, they were asked what they do when they feel happy and sad. Typically, three to four core feelings/ behaviours were mentioned by each respondent including happy, sad, aggression, and anger. In addition, further behavioural descriptions reflected disruptive actions, and behaviours reflecting underlying shame.

Several other feelings and related behaviours were also each raised by one or two children and included, for example, embarrassment (n=5), fear (n=6), boredom (n=5), lying (n=2), and jealousy (n=1).

Feelings of happiness were evident in all participants' responses.

"When I and some children went for a trip I felt very happy laughing and playing for a long time." (B/9)

"......I also feel happy when I play with other children......I enjoy it and tell funny jokes to other children..." (B/12)

"When I feel happy- I laugh and play with other children I also tell those jokes." (G/10)

Participant's responses referred to different objects and activities that make them feel happy. For example, some children (*n* = 7) said that playing (with toys, or other children) makes them happy,

"Playing PlayStation and small toys." (B/12)

"I spent all my money on riding the horse, I rode him very fast." (B/10)

whereas others (*n* = 7) considered picnics and travel as sources of happiness.

"When they tell me I'll get out of the orphanage for a picnic, I get happy." (G/11)

"Playing, joking, and going to the theme park." (G/10)

Similarly, feelings of sadness were reported in all participants.

"I feel sorry for small children in the home because when they play football with the older children they get beaten." (G/10)

"I became sad when my mother left the home. I was in Grade Four." (G/12)

"I only remember what I have said before about the boy who cried. I was angry and told myself I shouldn't have done that." (B/12)

"I cried, even my Mother and my brothers and sisters cried....I cried a lot." (B/11)

Children attributed their feelings of sadness to several sources such as fighting and name-callings (*n* = 6), and confinement and punishment (*n* = 4).

"When I say something and someone tells others about it (when someone tell on me)." (G/10)

"When a girl came and called me Crazy! I didn't understand why she insulted me and I started to cry and go around the school." (G/12)

"I also feel sad if they lock me up inside my room. Sometimes I cry, sometimes I knock the door hard until they open it." (B/11)

"Last Wednesday, my older sister beat me, because I didn't tidy my closet and I cried."(G/10)

Five children reported different sources of sadness related to people getting angry, failure in exams and when another person reneged on their promise.

Although children were asked to comment on happiness and sadness, other feelings and behaviours were evident in all participants' responses. For example, all participants talked about verbal and behavioural aggression.

"When someone insults me I insult them back. I have the right to do so. If they call me names I insult them back, and if they hit me I hit them." (G/11)

"Once, I was wearing my belt and someone called me (black) I got the belt out and hit him with it. Another time I slapped someone (who called me names) with my shoes."(B/9)

"Children are always fighting and they don't feel any physical pain. They cry a little and return again to fight each other. They insult each other with very bad words (May God curse your mother and father)."(G/10)

There are several examples of feeling anger were reported by ten children.

"I also get angry when someone calls me names such as fatty girl or other insults." (G/11)

"Students in school make me angry." (B/10)

Nine participants reported that they sometimes behaved disruptively.

"Once I was playing with a cat, a girl came and beat it and inserted a stick inside its ears." (G/10)

"I make myself a little devil to be kicked out of school."(B/10)

""X" accused me of doing everything wrong. He made the bathroom dirty, spilled the water down the floor, scattered the winter clothes, and made everything untidy. He told my mother that I did that." (B/10)

Seven participants reported that they do not want other people to know that they are orphans, reflecting underlying shame.

"I don't want the girls at my new school to know I'm from the home." (G/9)

"I didn't want them to know I'm an orphan. Now all the schoolboys know I'm orphan except for Grade 1. I don't want them to know our orphanage." (B/10)

Attachment

The main question in the third part of the interview related to a person whom the child seeks for help when he/she has a problem. Six children said that they preferred to ask their mother for help.

"If someone older than me beats me and I couldn't hit him back I go to my mother for help." (G/10)

"If this person, who hits me, is older than me I tell my mother and she protects me from him." (B/9)

whereas five asked their older sister.

"If I have a problem in the home I ask my older sister for help." (B/12)

"If someone hits me I just go to my older sister and tell her about it." (G/12)

Four children reported that they do not need help from anyone.

"Nobody, I don't complain to anyone. When they call me names, I insult them back with the same names and they cry." (G/11)

"I never think of anyone helping me." (B/12)

Three children said that they asked the social worker when they are in trouble and one child mentioned that the guard of the orphanage was the person whom he asked for help.

"I tell the social Workers about my problem. I don't tell my Mother or brothers/sisters, no need to tell them" (B/10)

"I know only "X'' (the home's guard, he can help me."(B10)

Relationships

This section of the interview was divided into two parts. The first part was about the type of relationships with people inside the institution. Both sides of relationships (positive and negative) were reported by most participants (*n* = 9).

Nine participants viewed their family as the best family in the institution,

"I think Villa 13 (my family) is a perfect one, but sometimes Villa 14 is better." (B/11)

"We are good family also." (G/10)

, whereas eleven children viewed other families as better than their own.

"X's Family- is perfect family- because she is my sister, and I want to be with her. And her mother is better than my mother." (B/10)

"I want to go to Villa No. 5 because they had no problems." (G/12)

Seven children reported that they like their mothers,

"All is good with them. I like my mother and she likes me." (B/11)

"I like my mother the most." (B/10)

"I'm happy with my mother and I like her." (G/12)

,whereas just two participants mentioned negative relationships with mothers.

"Mother "X" came after mother 'Y" had left us. We cried when she left us, but Mother "X" told us, "If I see anyone talking about mother "Y" or crying over her, I'll slap him on the face."(B/10)

Five children reported that they have positive relationships with other children in the orphanage.

"I don't have any problems with my brothers and sisters." (G/12)

"I like all brothers and sisters." (G/10)

"My friends at school are the same friends in the family." (B/10)

In contrast, eight children reported negative relations with other children.

"I don't like the rest of my brothers/sisters because they hate me." (B/10)

"A lot of them beat me, and call me names." (G/11)

The relationships with other people (workers) inside the institution tended to be positive as reported by seven participants.

"The Nurse and the Social Workers are good." (G/9)

"They're all good." (B/10)

The second part of this section was about the relationships children have with people outside the institution. Ten participants reported negative relationships with children in school;

"They're boring, and they make me angry. When we agree on doing something I find they did it without telling me."... I don't play with them. I have one friend Nora from the orphanage and the others don't play with me. They are boring." (G/11)

"Once I slapped a girl because I called her but she ignored me, and she told me to shut my mouth. I told her she the one who must shut the mouth. I pushed her down on the ground because she deserved this." (G/10)

"I only have one friend and the rest have already friends. Once a teacher asked us to invent something new and everyone refused to cooperate with me except for ''X" who accepted me and became my friend (he's from another orphanage)." (B/11)

,whereas eight children viewed their relation with children in school as positive.

"Good, all of them are my friends. I've known them since Grade One."(B/12)

"I'm happy with them. I haven't had any problems with them for a long time because the head of the school gave the students certificates for the well-behaved. He gave me one." (B/12)

With regard to the relationships between children and their teacher, nine children described positive relationships with some teachers also, whereas eight children had negative relations with some of them.

"They are good." (G/9)

"I like the teachers of science, history, and geography. The other is OK, but our math's teacher hits us a little bit on our head with a pen." (B/11)

"Once I had a problem with a teacher. I wasn't listening to her during the lesson and she hit me." (G/12)

Self-perception

In this section, participants have been asked three questions related to self-perception. In the first part children were asked to describe themselves. Nine of participants evaluated their behaviour positively and three also referred to positive identities.

"I'm clean and strong. I also tell the truth." (G/10)

"I don't find anything I hate about myself." (G/9)

"I like everything about myself except for dirty words." (B/12)

Ten children reported that they did not like the way they behaved,

"I don't stand by myself. I tell on others." (G/10)

"I don't want to get angry with small children." (B/9)

"I'm a liar and tell on others." (B/12)

"When someone calls me name I insult him/her back." (G/10)

, and only one child revealed negative perceptions of different aspects of his identity.

"Nothing good about myself." (B/12)

In the second part of this section, participants were asked to compare themselves with other children in the orphanage, and then they were asked to compare themselves with children from their school. When comparing themselves with other children from the orphanage, eleven children made positive comparisons.

"No, I'm different; they beat each other and they tell lies. When I beat them,
I just joking with them but they beat seriously." (G/10)

"I'm better than children in the orphanage in playing because I'm faster and they cannot catch up with me." (B/9)

Six children made negative comparisons between themselves and other children in the orphanage.

"But, I'm not the best in studying my lessons. ''X'' is the best." (B/12)

"Some children are better than me at studying." (G/10)

Five participants said that they thought all children in orphanage were the same.

"I and my brothers are the same. Also I and other children in the orphanage are same." (B/12)

In relation to children outside the orphanage; nine children compared themselves negatively.

"They participate in the class and joke with each other." (G/10)

"They're better than me at studying, playing football, and painting. They have fathers." (B/11)

Seven participants compared themselves positively.

"I'm better than them because they always insult each other and I don't like this. They aren't better than me at anything." (B/9)

"I'm cleaner and tidier than them. They're disgusting. I dislike them." (G/10)

Only four children mentioned that there were no differences between them and other children from their school.

"In the school we are all the same. All of us are naughty. We take each other's stuff. I behave like them, so that they don't know I'm from the orphanage." (G/11)

Summary of results from the children

All children displayed satisfaction with activities in the orphanage, however, they also described being dissatisfied with punishments from the FM or older sisters. Most children expressed a desire to change others' aggressive behaviours (e.g., hitting, ridiculing, and punishment) towards them. Moreover, a large number of children also wanted to change aspects of their own behaviour (e.g., being nice to others) and abilities (e.g., school achievement and sporting skills). With regard to their school, some children said that they would like to be transferred to another one.

All children were able to describe behaviours and activities that made them feel happy, as well as those that made them sad. Accordingly, most descriptions of happiness related to the entertaining activities they enjoyed in the orphanage. Fighting and name calling by the other children was a significant factor related to feelings of sadness. In addition, being punished by their FM or older sister was also another source of sadness. Additionally, most of the children described anger and shame-related emotions. i.e., being ashamed of revealing their identity as orphans. All children reported a tendency to act verbally and physically aggressive toward their peers/siblings in the orphanage and school.

With respect to help-seeking behaviours, the FM and the older sister were the first people whom the children said they would ask for help. However, a few children considered themselves as independent and not needing help from anyone else. In the orphanage, descriptions of children's relations with the family with whom they live were generally positive; though most of them viewed other families as better than their own. In comparison, not all the children's relations with the teachers were positive and the children's relations with peers in school tended to be negative.

The analysis of children's interviews indicates that the children were able to make both positive and negative comparisons with peers and siblings.

In addition, the majority of the children also viewed their own as well as the others' behaviours as negative and they expressed a desire to change themselves.

4.5 Discussion

The present study investigated the feelings, behaviours, and thoughts of illegitimate children in Saudi Arabia who have been raised in an orphanage setting from birth, and their carers. The open-ended interview methodology was used to explore five major themes (i.e., carers' job satisfaction /children's life satisfaction, feelings and behaviours, relationship, attachment, and self-perception). The results of the present study are summarized in relation to these themes by considering carers' views first, followed by children's views. Where possible, both similar and divergent themes raised by both children and their carers are highlighted. In addition, links between reported findings and the broader literature on children who live in institutions are also discussed.

Considering the feelings of carers in relation to their level of satisfaction associated with their role in the institution, the results highlighted that all carers (foster mothers and aunts) reported that they were generally satisfied with their job. Some carers attributed their satisfaction to working with children in the orphanage; although all noted that they spent more time with the institutionally-reared children than they do with their own families. Most carers also voiced some dissatisfaction with their work load and job expectations (e.g., having to do multiple tasks, and housework) and expressed a desire to have fewer responsibilities and duties. In addition, some carers reported concerns with the way the children within the orphanage are treated by the mothers, aunts, and old sisters; specifically in relation both to the level of punishment they experienced, as well as the extent to which children were indulged or mollycoddled by the institution carers.

The treatment of children by their carers may reflect a lack of carers' training in caring for such a group of children. The care system in the orphanage does not require the carers to have professional background in child care. This finding is consistent with a Russian study (Groark, Muhamedrahimov, Palmov, Nikiforova, & McCall, 2005) which indicated that caregivers had little training in caring for institutionalised children; and thus they lacked social responsiveness when interacting with the children. The

negative outcomes which the children displayed in the Russian study were mainly caused by the lack of training among their caregivers and not institutional deprivation as all aspects of care (e.g., medical care, and nutrition) were adequate.

Carers were also asked about the aspects of their job that made them feel happy and sad. Most reports of emotions were related to the children they looked after, with happiness being associated with helping the children when they were in trouble, and playing and communicating with them. Sadness, in contrast, was linked to the carer's reports of their inability to help children when in trouble and to children's behaviours (e.g., the level of violence exhibited by children as well as children's own perceptions of themselves as orphans). Most of the carers also indicated that they sometimes felt angry. However, they did not attribute their anger to any specific source. The feeling of anger may be caused by work-related stress and dissatisfaction (e.g., multiple tasks, and long work days) or it may be linked to punishment and aggression in the orphanage.

This finding is consistent with an American study (Norvell, Walden, Gettelman, & Murrin, 1993) that examined stress-related symptoms (e.g., anger, depression, and psychosomatic symptoms) among a sample of 63 supervisors in child care. The results of this study indicated that the supervisor could not control their anger in stressful situations with children and other staff. It is possible that the lack of professional training among the orphanage carers in the present study made it difficult for them to deal with stressful situations when interacting with children. As a result, they resort to punishment as a quick solution to manage problematic behaviour the children displayed. In fact, providing carers with appropriate training can promote positive interactions with the institutionally-reared children and enhance general aspects of their life. This is consistent with the intervention study of St. Petersburg orphanages (Groark et al., 2005) which indicated that providing carers with adequate training led to increases in their knowledge of child development and better relationships with children.

Although, carers were asked about what they felt about their job, various feelings and behaviours related to children who they look after were reported. For instance, sadness and anger were mentioned by most of the carers; and some behaviours such as aggression and stubbornness were also

reported. This finding is consistent with the mother/caregiver reports (e.g.,Simsek et al., 2008) which indicated that, compared to their typical peers living with their biological families, the institutionally-reared children displayed more externalizing than internalizing problems. Despite the prevalence of negative feelings and behaviours among the children, most of the carers in the present study pointed to general happiness among children.

Considering carers' reports of their relationships with children, most carers raised positive and negative aspects. They reported that the most enjoyable moments for them were when they talked, communicated, joked, and played with the children. It appeared that these responsive and sensitive behaviours from caregivers benefited children as they enhanced interactions with them. However, carers still faced some difficulties associated with children's behaviour (e.g., violence, stubbornness, emotional ambivalence) related to the children's behaviours. As mentioned earlier, this may indicate a lack of professional training among carers with respect to how to deal with such a group of institutionalised children. More specifically, The St. Petersburg-USA Orphanage Research Team (2008) indicated that the use of intervention programmes can lead to more positive attitudes toward their jobs, and positive affect (e.g., more attention) and behaviours toward children.

The present study focused on one attachment-related aspect: the person whom the children sought for help when they had problems. Children's help-seeking behaviours reflect the availability, responsiveness, and trustworthiness of their caregivers. Bowlby (1969) suggested that if the child receives responsive care, they will expect their caregiver to be available and supportive to them when they have problems or need protection and security when faced threat from others. The majority of the carers reported that their children sought help from them. Whether the children sought help from foster mothers or aunts, they often found an adult figure to seek help from when in trouble.

The notion that institutionalised children described help-seeking behaviours towards such adult figures (e.g., carers) cannot be considered an indication of the absence of any evident attachment problems among the children. Although the methodology (i.e., open-ended interview) used in the present study helped to explore one aspect of attachment behaviours (i.e., seeking help from others) among the institutionally-reared children, it was not

clear whether there were any other classifications of attachment behaviours among these children.

To understand attitudes toward the institutionalised children, the carers were asked to report their own views and what they thought of others' (e.g., workers, people outside the orphanage, and the children themselves) views toward such children. Most carers expressed the view that the institutionalised children were different from their typical peers who lived with their biological families. For example, some carers indicated that children lived in positive environment (i.e., they were provided with all their materialistic needs). On the other hand, some carers made negative comparison with peers outside the orphanage to highlight increased aggression. The children's aggression was previously confirmed by the carers' answers when they were asked about the difficulties they faced with the children. However, some of the carers viewed children as not different from non-institutionalised children. In relation to the others' views about the children, most of the carers reported that the workers (e.g., social workers, psychologists, and administrative staff) were aware of the parental deprivation among the institutionalised children. Therefore, these workers tried to compensate them by attending to their needs.

The majority of carers reported that people outside the orphanage had negative views toward the children being reared in the orphanage. Most community members in Saudi Arabia have compassionate attitude toward the orphans, who had lost one or both parents. The teachings of Islam prohibit the Muslims from treating orphans with oppression and injustice (Nabulsi, 2010). In the present study, however, negative views were the most pronounced compared with other views (i.e., positive and neutral views). Similarly , teachers' reports in previous studies which indicated that some institutionalised children were stigmatised (i.e., evaluated negatively because they lived in an orphanage) by their school peers and others in the society (Simsek et al., 2007). In contrast, the results of the present study found that some carers reported that some of the outsiders treated these children with pity because of their status as orphans; whereas other carers noted that the some community members did not find any differences between these children and their typical peers outside the orphanage.

In relation to children's own views about themselves, all carers thought that children considered their lack of biological families was a source of

difference between them and non-institutionalised children. This awareness of being different was obvious when the children went to restaurants and theme parks outside their orphanage.

Although children reported that they were satisfied with their life in the orphanage, the results highlighted that all children liked the entertainment activities (e.g. playing, picnics). Most children also reported that they were dissatisfied with being punished by others, and fighting and name-calling with their peers in the orphanage. This could explain why children's wanted to change others' behaviours towards them (e.g., punishment, hitting, and arguing).This finding was cited earlier by some carers in relation to how their children were treated by other foster mothers, aunts and older sisters. Additionally, children wanted to change some of their own behaviours (e.g., impoliteness and insulting others) and skills (e.g., handwriting). Concerning their academic life, some children reported that they wanted to change their school because boredom and the desire to be with their orphanage peers.

Regarding the type of feelings and behaviours from children reports, different externalizing and internalizing problems were described. For example, externalising behaviours (e.g., aggression, and disruptive behaviours) were evident in all children's reports; Some of the carers reported the same finding especially with aggressive behaviours. This is consistent with several studies (e.g.,Roy et al., 2004; Simsek et al., 2007; Smyke et al., 2002) which indicated that some externalising behaviours (e.g., aggression, and rule breaking, and inattention/ overactivity) were prevalent among institutionally-raised children compared with typical peers living with their biological families. In addition, other internalising problems such as sadness and anger were discussed by most of the children. This finding links to the carers' reports about the children's feelings (e.g., sadness).

Moreover, it was evident that about two thirds of the children experienced shame-related feelings (e.g., negative feelings around disclosing their status as institutionally-reared children to their school peers). In the same context, this finding is similar to teacher reports and research which in a study which found that orphanage children had shame-related feelings, such as being afraid of making mistakes and being subject to criticism from others (Simsek et al., 2007). In fact, being afraid of making mistakes is one of the components of shame (Gilbert, 1998) and it reflects a set of negative cognitions and beliefs about the self (i.e., one is seen by others as inferior and

inadequate). This does not necessarily mean that the children in the present study were not happy. Feelings of happiness were reported by the majority of them, and was reflected in descriptions of activities they participated in such as playing, picnics, and travels.

Concerning the type of relationships the children had with others, around two thirds of the children described liking their foster mothers. However, their relations with their peers in the orphanage were typically inked to negative rather than positive comments. This pattern of relationships with peers was reflected in their emotional ambivalence (i.e., easily gets angry and easily calms down). This pattern of negative relations is consistent with some studies which have reported that institutionalised adolescents and children often display social problems (Warger & Kleman, 1986), and problematic relations with their peers (Hutchinson, Tess, Gleckman, & Spence, 1992). With regard to the relationship with the other families in the orphanage, some children viewed them as better than the family where they stayed and for different reasons (e.g., having fewer problems with siblings, and receiving responsive treatment by their siblings).

The quality and quantity of communication and contacts between institutionalised children and their foster families may affect positively or negatively how they view their families. For example, Kufeldt, Armstrong, and Dorosh (1995) asked 40 foster children to complete a structured assessment on the birth families they were separated from and on their foster families. The results indicated that the children rated their foster family as normal in terms of their functions (e.g., communication, and affective involvement and expression), whereas they tended to consider their own families as a problematic families. In the present study, the relation with the orphanage workers (e.g., social workers, psychologists) tended to be positive in general.

Most of the children indicated that their relations with their school peers were negative. For example, the children reported that they preferred to make friends with their institutionalised peers, rather than, other typical school peers. In addition, their negative relations with the school peers were expressed by their verbal and/or physical aggressive behaviours (i.e., reactions to being criticized of being orphans). This is consistent with the results of naturalistic observations and carer's reports in a Greek study (Vorria et al., 1998) which examined social adjustment of 41 group care children aged 9 to 11 years and their family-reared peers who lived with their biological families.

In comparison to their family-reared peers, the group care children displayed more sociability problems (e.g., being alone most of the time, less participation in team games). Most of the children in the present study reported positive relations with school teachers, but equally there were also negative relations. The children's negative evaluation of their teachers resulted from being punished for their behaviours. However, there was no clear evidence as to whether the teachers treated these children differently in terms of their identity as institutionally raised orphans or because of increased challenging behaviour.

In relation to the adult figures whom the child asked for help, about half of the children preferred to ask their foster mothers for help when they had problems. Some of the children pointed to their older sisters as the first source for them to seek help. This finding was not consistent with the carers' reports, which did not mention the older sisters as sources of help. Nevertheless, the children preferred to ask their foster mothers for help as they were often more available to them; whereas the older sisters were preferable because they were closer (i.e., they were from the same institutional background) to the children. In general, these findings from the carers' and children reports agree that there were no clear indications of help-seeking problems.

To understand how institutionalised children viewed themselves, they were asked to make a comparison with their peers from both inside and outside the orphanage. Most children made positive comparisons with their institutionalised peers (e.g., more polite, more competitive in games, and cleaner), whereas some of them compared themselves negatively with institutionalised peers; especially with aspect to the academic achievement. In contrast, most children compared themselves negatively to their school peers. For example, the children tended to compare themselves negatively with the other typical peers by using a frequently spoken expression: "The children of real families". This finding is consistent with Crocker and Major (1989) who have suggested that stigmatized individuals often try to protect their self-esteem by valuing their own group.

Overall, the children's self-evaluations were based upon both their positive (e.g., telling truth, and being sensitive to younger peers) and negative (e.g., telling on others, and name-calling) behaviours. However, their negative behaviours were most prevalent when they evaluated themselves.

4.6 Conclusion

Although institutionalised children live in a stable environment in terms of the carers' availability and consistency, there were some externalizing and internalizing symptoms among most of them. Reports of these symptoms were generally consistent between children and their carers. All children reported feeling happy and satisfied with certain aspects of life in the institution. The children's relationships with foster mothers and other workers were also generally described as positive; whereas their relations with their school peers tended to be negative. There was some, however, evidence that the children viewed themselves as being different from their typical peers outside the orphanage. As a result, they reported trying to hide their status from others; and this view was supported by carers who indicated that other people outside the orphanage compared them negatively with other children. These findings suggest negative cultural attitudes toward the institutionalised children in the Saudi society.

The present study was an exploratory investigation. While the study highlighted positive aspects of children's lives, there were negative behaviours and perceptions reported by children and their careers. Reports of challenging behaviours by both children and their carers raised further questions about underlying causes of externalizing and internalizing symptoms evident in both groups. In addition, both children and carers reported perceptions of behaviour reflecting feelings of shame and stigma around institutionalisation. These views might stem from the cultural attitudes of Saudi people toward the children originating from unknown parents, as well as children's awareness of their own status as being of unknown parents. The present study relied on the views and perceptions of a small sample of children and their carers. The next chapter aimed to look more systematically at symptoms of psychopathology in a larger sample of institutionalised children and non-institutionalised peers. In order to achieve this goal several key questionnaires measures were translated from English into Arabic (reported in Chapter 5). Across the remaining chapters in the thesis (Chapters 6 and 7) the broader aim was to build on the results of the qualitative study to investigate whether children's perceptions of others attitudes and behaviours towards them including negative perceptions from others (i.e. stigmatisation) and related emotions (i.e., shame) would help researchers and professionals working in institutions to start to understand the

origin of challenging behaviour in this group of children and adolescents and specifically within the context of institutionalisation in the Saudi context.

5. Chapter 5 : Questionnaire adaptation and translation process

5.1 Introduction

There is an increase in the number of educational and psychological measures being translated into multiple languages for use across diverse cultures (Hambleton & Zenisky, 2011). One of the core challenges facing psychologists is to establish that translated instruments are valid and reliable (Beins, 2010). For example, researchers need to ensure that measures are culturally acceptable and appropriately translated for the target individuals to whom they will be administered (Cha, Kim, & Erlen, 2007). With regard to psychological measures, Geisinger (1994) noted that the process of adapting measures is often done without paying much care to the differences that exist between the culture in which the original instruments were developed and the target culture of the adapted ones.

Different approaches to cross-cultural translation have been adopted to translate original versions of instruments from one language into target ones. One approach involves a committee panel of two or more experienced translators who independently produce two versions of the translated instrument (Sperber, 2004). In contrast, the technical approach to translation (Kleinman, 1987), is based on several processes including translation by a group of bilingual translators, back translation of the translated instrument into the source language by another group of bilingual translators, and negotiating the differences between the two groups to reach a final version of the translated instrument. A third approach is the standard back translation (Brislin, 1986; Brislin, Lonner, & Thorndike, 1973), which has been the most commonly used method of translating instruments in the field of social sciences. It involves two versions of the instruments: one in the source language and the other back translated in the target language. The comparison of the two versions allows for discovering issues and problems relevant to both content and constructs equivalence of the two instruments; and therefore allows for the adjustment of the final version.

The literal or back-translation of measures from one language into another language does not necessarily ensure validity (Su & Parham, 2002). The items of the translated measures are said to be valid for use across different cultures if they are both translated literally and adapted culturally to

ensure their content validity across cultures (Beaton, Bombardier, Guillemin, & Ferraz, 2000). In other words, achieving equivalence between the original version and the target version of a measure involves both linguistic and cultural considerations of the target population to whom the translated measures will be applied (Banville, Desrosiers, & Genet-Volet, 2000).

To avoid the problems resulting from literal or back translation, Vallerand's method (Vallerand, 1989) is adopted in the present study. It is a cost effective technique that can be implemented with few resources. It consists of a multi-level procedure that relies mainly on a committee of translators and subject matter experts, bilingual reviewers, and lay participants who are administered both the original source of instrument and the translated version to determine the construct equivalence of the items. It also makes use of statistical procedures to ensure that the translated measure is valid and reliable which applied in the target culture.

In addition to the usefulness of translating measures from one language to another, the adaptation of existing measures for a new target population is needed, especially when this new population is culturally different to the original population with whom the measures are used (Geisinger, 1994). The adaptation of such exiting measures is a multi-level process that involves removing some items of the original measure, replacing some items with new ones, and applying several translation processes that emphasize the equivalence of concepts (Tran, 2009). One method of assessing the validity of the adapted measure is through an analysis of the similarity of research findings between the two versions (Hambleton & Patsula, 1998).

The current study translated a series of questionnaires related to children's behaviours and feelings from English into Arabic following Vallerand's translation and adaptation guidelines (Vallerand, 1989). Its aim was to establish the validity and reliability of scales that will be used with Saudi children. These include Beck Youth Inventories-II (BYI-II, Beck et al., 2005), the Aggression Scale (Orpinas & Frankowski, 2001) , the Other As Shamer Scale (OAS, Goss et al., 1994), and the Stigma Scale (Austin et al., 2004). All measures will be administered to institutionally reared and typically developing children growing up with their biological parents, expect for the Stigma Scale which will be administered only to institutionalised children and their carers. The study had two specific goals:

1. To investigate the extent to which the instruments are culturally acceptable with children from Saudi Arabia; and
2. To explore the reliability and the validity of the adapted and translated questionnaires

5.2 Methods

5.2.1 Ethical approval

Ethical approval for this study was obtained from Psychology's Ethics Committee and the University's Research Governance body at the University of Southampton, UK, and the Ministry of Education in Saudi Arabia. Before starting the translation and adaptation processes of the Beck Youth Inventories-II (BYI-II, Beck et al., 2005), the Aggression Scale (Orpinas & Frankowski, 2001), the Other as Shamer scale (OAS, Goss et al., 1994) and the Stigma Scale (Austin et al., 2004) , permissions were obtained from their original authors to translate the scales into Arabic and to use them in the current study. The Ethical Committee of Southampton University and the Saudi Authority of Institutional Care required the researcher to delete item (e.g., I wish I were dead) in Beck Depression Inventory since it expressed suicidal thoughts. As a result, the Beck Depression Inventory had 19 items instead of 20.

5.2.2 Measures

Beck Youth Inventories –II (BYI-II, Beck et al., 2005). Self-report symptoms of self- concept, anxiety, depression, anger, and disruptive behaviours can be measured individually by using the Beck Youth Inventories, Second Edition(BYI-II, Beck et al., 2005), that comprised five scales: self-concept (BSCI-Y), anxiety (BAI-Y), depression (BDI-Y), anger (BANI-Y) and disruptive behaviour (BDBI-Y), developed for use with children and young people aged between 7-18 years. These inventories can be used separately or in combination; each scale contained 20 items in approximate length and taking around 5 to 10 minutes each to complete. The responses to each item are rated on a 4- point Likert scale ranging from 0 = never to 3 = always, generating a minimum score of 0 and a maximum score of 80. For each scale, scores can be converted to T-scores. For anxiety, depression, anger and disruptive behaviour scales, T-scores of 70 and above considered as extremely elevated, 60-69 represent moderately elevated, 55-59 indicated mildly

elevated, 55 and below indicated as average. For the self-perception T-scores greater than 55 indicate above average, 45-55 are average, 40-44 are lower than average and T-scores which are equal or smaller than 40 is much lower than average.

Beck et al. (2005) showed high internal consistency ranging from .86 to .96 across the age range from 7 to18 years for each scale. In addition, test-retest reliability was good and ranged from .74 to .93 when tested a week apart. The authors also reported that all BYI-II subscales had a significant correlation with Child Depression Inventory (CDI, Kovacs, 1992) ranging from .47 to .72; and correlated significantly with Piers –Harris Children's Self Concept Scale (Piers, Harris, & Herzberg, 1996) with a range of .37 to .67.

The Aggression Scale (Orpinas & Frankowski, 2001) was designed to measure symptoms of aggression in young adolescents. It consists of 11 items that describe different physical and verbal forms of aggressive behaviours. Adolescents are asked to report on whether the behaviours occurred in the previous week; providing some indicator of current aggressive behaviour. The response for each item is based upon the frequency of such aggressive behaviours which range from 0 times through 6 or more times, generating a possible score between 0 and 66. The authors of the scale report good internal consistency, ($\alpha > .87$) and concurrent and construct validity with similar measures. For example, positive associations were found between scores on the aggression scale and questions related to the frequency of injuries due to fights, weapon carrying, and alcohol use (Brener, Collins, Kann, Warren, & Williams, 1995); mean aggression scores were positively correlated with alcohol drinking in adults and negatively correlated with parental monitoring and academic achievement. (see Appendix B1).

The Other as Shamer scale (OAS, Goss et al., 1994) is designed to measure external shame (how the person thinks that others view him/her). Although it is originally used with university students, the researcher found that it can be adapted and applied to measure how the institutionalised children think that "the Other" views them. It is a self-report instrument with 18 items that require responses based on a 5-point Likert scale ranging from 0 = never to 4 = almost always (generating a total score from 0 – 72). The scale has three dimensions: "inferiority", "emptiness feelings", and "how others behave when they see me make mistakes". All inter-item correlations were positively significant at .05 level. All sub-scales were significantly and

positively correlated. In addition, the authors reported a significant positive correlation between the OAS and the Internalised Shame Scale (Cook, 1993) which was found to correlate with the all three factors of the OAS. (see Appendix B2)

The Stigma Scale (Austin et al., 2004) was originally developed as a self-report measure of perceived stigma among children with epilepsy and their parents. The item phrasing of the stigma scale related to secrecy/concealment and being different from others were similar constructs to what the children and carers reported in Chapter 4.The parent scale consists of 5 items that reflect parents' perceptions of how others might view their child. The child scale consists of 8 items that reflect how he/she perceive how others' view them due to their epilepsy condition. Both scales require responses based on a 5-point Likert scale ranging from 1 = strongly disagree, to 5= strongly agree making a total score from 5-25 for parents and 8-40 for children. No psychometric properties were reported for this scale. (see Appendix B3 and Appendix B4).

5.2.3 Procedures

The aim of the current study was to translate and adapt scales to use with children from Saudi Arabia (see Chapters 6 and 7). Two published questionnaires: BYI-II (Beck et al., 2005), the Aggression Scale (Orpinas & Frankowski, 2001) were translated following the translation procedure outlined by Vallerand (1989). The Other as Shamer (OAS, Goss et al., 1994) and the Stigma Scale (Austin et al., 2004) were modified and adapted into Arabic to be administered to children in the Saudi culture.

5.2.3.1 Translating the Beck Youth Inventories-II (BYI-II) and the Aggression Scale

Vallerand's method for translation is a complex, well-defined process that aims to ensure that the translated versions of the original measures are culturally valid and equivalent (Banville et al., 2000). Vallerand (1989) suggested seven steps for the translation and adaptation of questionnaires. The first three steps are concerned with the translation process itself; while the last four steps represent the necessary statistical procedures for assessing the validity and reliability of the translated version and establishing the norms.

1) **Preparation of preliminary version:** this step involves both forward translation from the source language into the target language and back

translation from the translated version into the original language of the
instrument

2) **Evaluation of the preliminary version and preparation of an
   experimental version**: this step determines the similarities between the
   back-translated version and the original source of the instrument

3) **Pre-test of the experimental version**: this step aims to pilot the
   experimental version of the instrument on a representative sample of the
   target population

4) **Evaluation of concurrent and content validity**

5) **Evaluation of reliability**

6) **Evaluation of construct validity**

7) **Establishing norms**

**Step 1: Translation of the instruments and development of preliminary
versions**

Two expert translators with university degree in English translation were
asked to produce two independent versions of the BIY-II and the Aggression
Scale in Arabic. Following Banville et al. (2000), the translators were instructed
to consider the meaning of the items and not just the literal translation of
them. The two independent translations (T1, T2) were checked for any
linguistic inconsistencies by a third translator with a university degree and the
researcher to establish one common version for each translated scales. Two
new translators with the same university degree were hired to back-translate
those two common versions into English. Then, comparisons between the two
back-translated versions (BT1, BT2) were made by two further translators. The
purpose of this back-translation is to ensure that the translated versions
reflected the same item content of the original versions. It also serves to
highlight clear differences in the wording of the translations.

Step 2: Committee review and evaluation of the Arabic preliminary version

This step involved the evaluation of the back translated versions (BT1,
BT2) compared to the original versions to determine similarities. A committee
composed of 5 native speakers of English compared BT1 and BT2 with the
original versions. They revised the items that had a different meaning to the
original version and retained items with similar meaning; even if they had a
different wording. When every item across all the scales was revised an
experimental version was produced to establish preliminary Arabic versions of

the BYI-II and the Aggression Scales. After the Arabic preliminary versions of the two measures had been created, a panel of 2 bilingual PhD students at Southampton University, UK and one bilingual teacher at King Saud University, Saudi Arabia and one expert/certified translator reviewed and evaluated the Arabic versions of the translated scales to ensure that the translations were meaningful and related to the original purpose of the items regardless of the exact wording. Then, a committee of 10 lecturers and professors from Department of Psychology at King Saud University assessed all the components of the questionnaires including the instructions, scoring, content of each item, and the appropriateness of the wording of the items for children.

Step 3: Pre-testing the instruments

This step recommends the use of a sample of children to ensure that the Arabic version is meaningful. Here, preliminary versions of the Arabic BYI-II and the Aggression Scale were pre-tested on a convenience sample of 12 typically developing children (6 boys and 6 girls) aged from 8 to12 years old to make sure that they understood all the terms in the Arabic translated questionnaire version. Each child was individually asked by a psychologist, who read every item to the child, to underline the items and/or the words that he/she found difficult to understand or that they found it not clear enough. Then each child was asked if he/she had any suggestions or alternative expressions for these difficult or unclear words or expressions.

In this step, several techniques were required to assess the validity and reliability of the translated versions, including bilingual participants to complete both the English and the Arabic versions. Since there were not enough bilingual children to complete the translated and the original versions of the scales, 30 bilingual postgraduate students, teachers, and psychologists were involved in this stage and they were asked to read and comment on both the English and the Arabic questionnaire versions.

Vallerand (1989) further recommends assessing the level of proficiency of the both native and second languages before pre-testing the preliminary versions of the translated scales. For the current study, the ability to understand, read, write and speak both languages was assessed by a self-evaluation test (see Appendix C). The score ranged from 1 (very little) to 4 (perfectly) for each language skill/ability. A score of 12 or more was judged as acceptable for each language. As expected, all 30 participants had a high score

for the Arabic self-evaluation (maximum score) since it is their native tongue. In English, 16 participants scored between 14 to 16, and 4 participants scored between 12 to13. Ten participants scored less than 12, and thus they were dropped from the evaluation. A counter-balanced design was implemented to pre-test these preliminary versions. Half of the participants (N=10) started by reading the English version, and then the Arabic version; and the other half began with the Arabic version. After a one-month interval, the second half (N=10), began with the Arabic version in the first round, and then, they answered the English version followed by the Arabic version.

Having completed this step of Vallerand's method, the following steps (Steps 4 - 6) assessed the reliability and the validity of the translated measures in the Saudi culture.

Step 4: Evaluation of the concurrent and content Validity

Many researchers assess the validity of the translated measure by using content and concurrent validity (Coaley, 2010). Content validity is a qualitative approach which reflects the simplest level of validity. It assesses whether the content of the items have been adequately sampled from the domain of items relevant to the conceptual variable being measured (Goodwin, 2010). A panel of 2 bilingual PhD students at Southampton University, one bilingual teacher at King Saud University, and one expert/certified translator reviewed and evaluated the Arabic versions of the translated scales to ensure that translations were meaningful and related to the original purpose of the items regardless of the exact wording. In general, there were no differences between the two versions.

Study variables were tested for normality to determine which statistical procedures will be adopted for analysis. The data collected from the bilingual sample (N=20) was tested for normality using the Kolmogorov-Smirnov test (K-S test). All of the Arabic versions of the scales were normally distributed expect for the anxiety scale and the aggression scale. Similarly, the data from the English versions were normally distributed expect for anxiety, disruptive and aggression scales.

Concurrent validity assesses the validity of the original version and the Arabic version. It typically involves looking at links between a new measure being developed or translated with the results of an already valid measure relevant to the construct being measured (Sireci, 2005). Since the English

versions of the BYI-II and the Aggression Scales have already been validated, the scores of their original versions can be compared with the scores of the translated versions using paired tests and Pearson correlation coefficients.

Paired t-test and correlation. To compare mean scores on the English and translated Arabic versions of the questionnaires paired t-test were used. Table 1 showed that there were no significant differences in mean scores between the English (original version) and the Arabic instruments (translated version). Additionally, further analysis indicated that there were significant correlations (*p*< .001*)* between the English and the Arabic versions of all research questionnaires (see Table 5.1). It is worth noting that the Depression scale has 19 items with the omission of the item for suicidal ideation.

Table 5.1
Mean, SD, and Correlations between the English and Arabic Versions of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale (N=20).

Scales	English		Arabic		
	Mean* (± SD)	Range	Mean (± SD)	Range	Correlation
Self-concept[a]	40.30 (±7.10)	27.00 - 55.00	40.50 (±6.88)	31.00 – 57.00	.90**
Anxiety[b]	19.70(±11.03)	6.00 - 48.00	19.60 (±11.25)	4.00 – 46.00	.93**
Depression[a]	12.60 (±7.30)	2.00 - 29.00	11.40 (±6.32)	2.00 – 29.00	.74**
Anger[a]	14.85 (±5.93)	3.00 - 25.00	14.40 (±7.73)	3.00 – 30.00	.84**
Disruptive Behaviour[b]	6.45 (±5.17)	0.00 - 20.00	5.95 (±4.44)	0.00 – 18.00	.89**
Aggression Scale[b]	9.15 (±9.15)	0.00 - 30.0	9.50 (±9.69)	0.00 – 30.00	.99**

*In all cases, paired sample t-tests showed that t < 1 and p > .1, **p <.001*
,[a] Pearson correlation, [b] Spearman correlation

Step 5: Reliability

The reliability of a questionnaire can be assessed in several ways. Test-re-test reliability indicates the consistency or stability of a test over a specific period. Internal consistency assesses the extent to which items within a questionnaire measure the same construct (Groth-Marnat, 2003).

To evaluate the internal consistency of the experimental versions of the two measures among the same sample of the bilingual adults (N=20), Cronbach's alpha test was used. For all scales across both versions of the questionnaire , $α > .70$ for Arabic version and $α > .73$ indicating satisfactory levels of reliability for such scales (Sireci, 2005).

The test-retest reliability of the experimental version of each scale was obtained by asking the same sample of bilingual adults (N=20) to complete each version two times at one-month interval with the same counter-balanced

design implemented in Step 3. For the Arabic experimental version of the questionnaire, correlations ranged from $r = .52$ (Disruptive behaviour) to $r = .80$ (self-concept); and in all cases $p < .05$. For the English version of the questionnaire, correlations ranged from $r = .46$ (self-concept) to $r = .75$ (anxiety); and in all cases $p < .05$.

Step 6: Construct validity

Cross-cultural research assumes that there are cross-cultural differences in the domain of the construct or variable being measured (Woolf & Hulsizer, 2010). Moreover, examination of construct validity is essential to ensure equivalence of methodology and assessment across diverse population. According to Vallerand (1989), it is necessary to examine that the translated measures accurately assess a theoretical construct, as outlined in the literature by the use of construct validity.

For this step, construct validity was established in all of the Arabic experimental versions by measuring the correlations with each other and comparing their results with those obtained from the original versions. As shown in Table 5.2, not all of the Arabic versions were correlated with each other. Most of the scales of the BYI-II that were correlated showed a significant level of correlation ranging from .48 to .79, expect for BYI- Self-concept. The Aggression Scale was significantly correlated with BYI-Anger, $r(20) = .45$, $p < .05$; while it had no correlation with BYI-Disruptive behaviour scale.

Table 5.2
Correlations of Arabic Versions of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour) Scales and the Aggression Scale (N=20).

Measures	1	2	3	4	5	6
1. Aggression	--	-0.13[b]	.62**[b]	0.33[b]	.45*[b]	0.38[b]
2. Self-concept		--	-0.15[b]	-0.26[a]	-0.17[a]	-0.22[a]
3. Anxiety			--	.48*[b]	.79**[b]	.49*[b]
4. Depression				--	.67**[a]	.42[a]
5. Anger					--	.52**[a]
6. Disruptive behaviour						--

*$p < 0.05$; **$p < 0.01$; [a] *Pearson correlation*; [b] *Spearman correlation coefficients*

Table 5.3

Correlations of English Versions of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour) Scales and the Aggression Scale (N=20).

Measures	1	2	3	4	5	6
1. Aggression	--	-.24 [b]	.66** [b]	.24 [b]	.56* [b]	.50* [b]
2. Self-concept		----	-.22 [b]	-.06 [a]	-.08 [a]	-.28 [b]
3. Anxiety			---	.58** [b]	.80** [b]	.49* [b]
4. Depression				---	.55* [a]	.47* [b]
5. Anger					---	.74** [b]
6. Disruptive behaviour						--

*$p < 0.05$, **$p < 0.01$, [a] *Person correlation coefficients*, [b] *Spearman correlation coefficient*

Further analyses aimed to establish reliability and validity for the translated questionnaires in a child sample. A sample of 120 primary school students (from grade 1 to grade 6, with age range from 7 to 12 years) was recruited from 8 schools in Riyadh, Saudi Arabia. Children completed the translated version of the Arabic version of the BYI II questionnaires and the Aggression Scale at time point 1 and then again 2 weeks later. Twenty questionnaires were not completed, and therefore the final sample consisted of 100 (60 girls, 40 boys).

Children completed the questionnaires in two sessions on the same day with a 10- minute break between each session. For the girls' sample, groups consisting of five girls were fully instructed by the researcher to complete all questionnaires; whereas groups of 5 to 7 boys were instructed by the social worker to complete the same questionnaire in the boys' schools. Fourteen girls and 10 boys from grades 1 and 2 were excluded since they did not fully complete their questionnaires; and this may reflect difficulty with understanding the content of the items.

Study variables were tested for the assumption of normality to determine which statistical procedures would be adopted for analysis. The children sample (N=76, girls=39, boys=37) was tested for normality using the K-S test. Self-concept and anxiety were normally distributed; while the rest of scales were not, even after being subject to several transformations (e.g., square root, reciprocal). One boy was excluded from the sample since his scores had extreme outliers.

Descriptive statistics were obtained for the remaining 75 children (girls =39, boys=36, see Table 5.4) and for their age bands (see Table 5.5). The deleted item ("I wish I were dead.") of the Depression scale was treated as a missing item to make it easier to convert its raw score into a T-score.

Table 5.4

Descriptive Statistics of the Arabic Version of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale (N=75)

<u>Groups</u>	<u>Scale</u>	<u>Range</u>	<u>Mean (± SD)</u>
All children (N=75)	Self-concept	15.00 – 63.00	64.04 (±10.52)
	Anxiety	33.00 – 90.00	53.95 (±12.96)
	Depression	34.00 – 93.00	51.60 (±14.59)
	Anger	30.00 – 86.00	49.33 (±13.06)
	Disruptive behaviour	35.00 – 96.00	49.39 (±11.37)
	Aggression Scale	0.00 – 66.00	13.35 (±14.83)
Girls (N=39)	Self-concept	15.00 – 63.00	45.30 (±11.50)
	Anxiety	33.00 – 90.00	54.49 (±12.97)
	Depression	34.00 – 90.00	53.13 (±13.97)
	Anger	30.00 – 69.00	46.79 (±10.17)
	Disruptive behaviour	35.00 – 78.00	49.51(±10.39)
	Aggression Scale	0.00 – 49.00	11.03 (±12.37)
Boys (N=36)	Self-concept	16.00 – 63.00	46.83 (±9.45)
	Anxiety	34.00 – 86.00	53.36 (±13.11)
	Depression	34.00 – 93.00	49.94 (±15.25)
	Anger	32.00 – 86.00	52.08 (±15.28)
	Disruptive behaviour	35.00 – 96.00	49.25 (±12.50)
	Aggression Scale	0.00 – 66.00	15.86 (±16.92)

Table 5.5
Descriptive Statistics of Age Bands (9-12 years) of the Arabic Version of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale (N=75)

Age bands	Scale	Range	Mean (± SD)
9 years (N=28)	Self-concept	16.00 – 63.00	45.50 (±10.85)
	Anxiety	33.00 – 71.00	47.79 (±9.55)
	Depression	34.00 – 80.00	47.11 (±12.71)
	Anger	30.00 – 66.00	45.14 (±9.17)
	Disruptive behaviour	38.00 – 71.00	47.68 (±8.85)
	Aggression Scale	0.00 – 27.00	8.10 (±6.75)
10 years (N=12)	Self-concept	15.00 – 63.00	50.50 (±13.54)
	Anxiety	42.00 – 86.00	57.42 (±14.48)
	Depression	35.00 – 90.00	47.50 (±15.10)
	Anger	37.00 – 86.00	59.67 (±17.37)
	Disruptive behaviour	41.00 – 96.00	54.83 (±16.36)
	Aggression Scale	0.00 – 54.00	19.08 (±18.22)
11 years (N=18)	Self-concept	30.00 – 61.00	45.05 (±7.83)
	Anxiety	34.00 – 74.00	53.66 (±11.53)
	Depression	35.00 – 80.00	51.50 (±12.81)
	Anger	31.00 – 69.00	44.83 (±11.01)
	Disruptive behaviour	35.00 – 63.00	46.56 (±9.53)
	Aggression Scale	0.00 – 66.00	16.17 (±18.47)
12 years (N=17)	Self-concept	22.00 – 56.00	44.82 (±10.21)
	Anxiety	36.00 – 90.00	61.94 (±13.94)
	Depression	37.00 – 93.00	62.00 (±14.76)
	Anger	32.00 – 80.00	53.70 (±12.52)
	Disruptive behaviour	37.00 – 78.00	51.35 (±12.02)
	Aggression Scale	0.00 – 47.00	14.94 (±16.27)

The test-retest reliability coefficients were positive for all translated questionnaires; see Table 5.6. These results indicate that the instruments are reliable measures and appropriate for use among the target population.

Table 5.6
Correlation Coefficients between Test and Retest of Arabic Versions of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale (N=75)

Scales	Correlation
Self-concept[a]	.45**
Anxiety[a]	.31**
Depression[b]	.32**
Anger[b]	.54 **
Disruptive behaviour[b]	.75 **
Aggression Scale[b]	.64**

**p<.01 ; [a] *Pearson correlation,* [b] *Spearman correlation*

Correlation coefficients were computed for all the Arabic version of BYI-II scales with each other. As shown in Table 5.7, all of the Arabic versions were correlated with each other expect for BYI- Self-concept. This type of construct validity was also assessed by the original authors of the BYI-II. They found that the highest correlations were with depression, anxiety, and anger; particularly in adolescents aged 15 to 18 years. The scales of BYI-II that were correlated showed a significant level of correlation range from .27 to .69. Regarding the Aggression Scale, it was found that there was a significant correlation with BYI-Anxiety, $r(75) =.33$, $p<.05$ and the BYI-Disruptive behaviour, $r(75) =.27$, $p<.05;$ while it had no correlation with BYI-Anger inventory.

Table 5.7
Correlation Matrix among the Arabic Versions of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales (N=75)

Measures	1	2	3	4	5
1. Self-concept	--	.06[a]	-.17 [b]	.01 [b]	.05 [b]
2. Anxiety		--	.73** [b]	.36** [b]	.23* [b]
3. Depression			--	.28* [b]	.21 [b]
4. Anger				--	.46** [b]
5. Disruptive behaviour					--

**p<.01, *p<.05 , [a]*Pearson correlation,* [b] *Spearman correlation*

The internal consistency for each of the scales for all children (N=75) was good (in all cases $\alpha > .85$).

Step 7. Establishing norms

Having judged the validity and reliability of the translated measures, the final step of Vallerand's method is to establish norms. This can be done by comparing the scores of such translated measures to those of other test takers. Other means of establishing norms are by using simple statistics such

as average, standard deviations, percentile rank, and T and Z scores. However, this type of norm-referenced validity depends on whether the reference group is appropriate in terms of sample size and cultural aspects of those to whom the original versions of measures were translated (Banville et al., 2000). For the present study, descriptive statistics (means, standard deviations, and ranges) were computed instead of establishing norms (see Table 5.8). The data from the above 75 children and the data collected from another sample of 58 children who had completed the same BYI-II and the Aggression Scale in the main study (Study 4) were used for computing these descriptives. The use of the 133 children (80 boys, 54 girls) with an age range of 9 to 12 years aimed at maximizing the sample size.

5.2.3.2 Methods and procedures for adaptation of the OAS and Stigma Scale

Following the results of Study 1 (see Chapter 4), the OAS scale was originally established to evaluate feelings of shame from expectations of how others evaluate the self. Goss et al. (1994) suggest that there is a significant correlation between how an individual evaluates his/her feelings of shame and how others evaluate him/her. Having reviewed many studies of shame in children (e.g.,Ferguson, Stegge, & Damhuis, 1991; Olthof et al., 2000), it was found that some of them mostly use scales (Tangney, Dearing, Wagner, & Gramzow, 2000) which are based on pictorial scenarios that do not fit into the Saudi culture. Moreover, most of these scales do not measure guilt-free shame in in children. On the other hand, the original version of OAS was originally developed for university students. However, the research team found it adaptable for the target sample (children age 9-12) in terms of its item contents and the way of responding to its items.

Table 5.8
Descriptive Statistics of Age Bands for the Arabic Version of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale (N=133)

Age band 9-10	Scale	Range	Mean (± SD)
Boys (N=44)			
	Self-concept	16.00 – 63.00	50.64 (±8.54)
	Anxiety	16.00 – 75.00	43.57 (±13.63)
	Depression	34.00 – 80.00	42.11 (±9.59)
	Anger	31.00 – 86.00	45.79 (±14.28)
	Disruptive behaviour	37.00 – 96.00	46.59 (±11.54)
	Aggression Scale	0.00 – 54.00	8.55 (±10.57)
Girls (N=28)	Self-concept	15.00 – 63.00	49.43 (±11.87)
	Anxiety	33.00 – 86.00	46.75 (±12.35)
	Depression	34.00 – 90.00	46.61 (±12.89)
	Anger	30.00 – 57.00	40.93 (±7.66)
	Disruptive behaviour	38.00 – 71.00	45.32 (±7.43)
	Aggression Scale	0.00 – 37.00	8.68 (±10.09)
Age band 11-12			
Boys (N=36)	Self-concept	39.00 – 64.00	50.19 (±8.00)
	Anxiety	34.00 – 86.00	48.97 (±12.78)
	Depression	35.00 – 93.00	46.75 (±14.04)
	Anger	32.00 – 80.00	41.89 (±11.37)
	Disruptive behaviour	35.00 – 62.00	41.92 (±7.26)
	Aggression Scale	0.00 – 60.00	14.00 (±16.52)
Girls (N=26)	Self-concept	22.00 – 62.00	47.54 (±10.55)
	Anxiety	35.00 – 90.00	54.73 (±13.17)
	Depression	34.00 – 83.00	53.15 (±13.40)
	Anger	31.00 – 96.00	46.23 (±12.11)
	Disruptive behaviour	35.00 – 78.00	49.46 (±11.73)
	Aggression Scale	0.00 – 37.00	9.85 (±13.18)

The following steps were followed for this purpose:

1- Preparation of the preliminary version

The scale items were modified by the research team who suggested that the changes should cover the language of the items and of the way of responding so that the children could understand both of them. The purpose

of this part of the study was to measure the global evaluation of how the children expect others to evaluate them. A small number of items were excluded from the original version of OAS since they were judged to be too complicated to be understood by children. These included items related to emptiness factor (i.e., Others see me as fragile; Others see me as empty and unfulfilled; Others think there is something missing in me; and Other people think I have lost control over my body and feelings). Goss and colleagues (1994) found that the inferiority factor in the OAS accounted for the largest proportion of the variance in the experience of shame. Therefore, the inferiority factor was argued to be more central to the concept of shame.

2- Committee review of the English OAS version

Five native speakers from the University of Southampton were asked to review the adapted English versions of OAS to check the semantic equivalence of each item compared with the items of the original version (see Table 9). After discussing with the committee and the supervisors, some changes were considered important for this adapted version.

Table 5.9.
Original and adapted items of the Other as Shamer scale (OAS)

Item	Original items	Modified items
1*	Other people see me as not measuring up with them.	Other people see me as unequal to them.
2*	I think that other people look down at me.	I think other people despise me.
3*	I feel other people see me as not good enough.	I feel other people see me as bad person.
4*	Other people see me as small and insignificant.	Other people see me as small and they think I don't matter.
5*	I feel insecure about others' opinions of me.	I feel unconfident (worry) about other's opinion of me.
6*	People see me as unimportant compared to others.	Other people see me as unimportant compared to others
7*	Other people see me as defective as a person.	Other people think there is something wrong with me.
8*	Other people put me down a lot	Other people try to make me look silly.
9**	Others are critical or punishing when I make a mistake.	Others are critical or punishing when I make a mistake.
10**	Other people always remember my mistakes	Other people always remember my mistakes.
11**	People distance themselves from me when I make a mistake	Other people keep away from me when I make mistakes.
12**	Other people look for my faults	Other people look for my faults.
13**	I think others are able to see my defects.	I think others can see my faults.

* factor 1: inferiority, ** factor 2: how others behave when they see my mistakes

3- Establishing the Arabic version

The reviewed version of the adapted OAS was translated into the Arabic language by the same qualified translator. Then the researcher and other three bilingual PhD students from Southampton University reviewed and compared the meaning between the Arabic version and the last modified version. After this Arabic 'preliminary' version of OAS had been created, a committee of 10 lecturers and professors (Department of Psychology at King Saud University) reviewed the new OAS to make sure that scale items were acceptable and comprehensible to the target samples of children. These items were piloted on a group of typically developing children (6 boys and 4 girls) living with their biological parents with an age range of 8 to 12 years. A psychologist read the instructions and asked each child to underline any items that they found too difficult to understand. After this step the Arabic preliminary version was ready to be tested for validity and reliability. Most of the children did not have any difficulties with the items; and therefore no further changes were made to the wording of these items.

4- Evaluation of reliability and the validity
Reliability and validity

Following the same procedures of content validity which were already done in the previously mentioned steps, the committee were asked to check if the scale's items were appropriate for the target sample and if they were related to measuring the global feelings of shame. Construct validity of this scale is assessed in Chapter 7. Cronbach's alpha test was used to examine the internal consistency for the Arabic OAS among a sample of 89 Saudi primary school children (grade 3-6, 50 girls, and 39 boys) with an age range of 9 to 12 years. The Arabic preliminary version of OAS showed a good alpha level (α = .90). In order to assess test-retest reliability, the children completed the questionnaire again between 10 to 14 days after the first administration. The time span between test and re-test varied slightly due to school timetables, which could not be changed. For test-re-test analyses, the Pearson correlation coefficients were computed as the data were normally distributed after square root transformation; and it was good, $r(89)$ = .65, p < .001. These results indicated that the Arabic version of the OAS scale is reliable and appropriate for use among Saudi children.

Exploratory factor analysis was another statistical procedure carried out to evaluate how reliable the OAS subscales were. The scale items were entered into principle components analysis with varimax rotation. Two factors were initially extracted based on eigenvalue which was greater than 1.00 and by examining the scree plot. The first factor accounted for 34.70% of the variance and second factor for 22.06%. The first factor captured the'' Inferiority'' construct, and the second factor captured the construct of "How others behave when they see me make mistakes'' (see Appendix D). The descriptive statistics and the internal consistency for the two factors are shown in Table 5.10.

Table 5.10
Descriptive statistics for the Other as Shamer Scale (OAS)) factors (N = 89)

	No. of items	M (SD)	Skewness	Kurtosis	Alpha
Factor 1	8	7.13 (5.35)	.65	-.30	.87
Factor 2	5	3.91 (3.04)	.78	.03	.73

Stigma scale

As a result of the qualitative study, institutional children reported perceptions of being different to their school peers, they described their school peers as children of a real family and their reports suggested that they prefer to hide their social identity from other people in school. Thus, stigma was an important variable to be evaluated for the coming study. The Stigma Scale (Austin, et al., 2004) , originally established for assessing perceived stigma in children with epilepsy and their parents, was found to be appropriate for the sample of institutionalized children.

1- Preparation of the preliminary Stigma Scale

The current study utilised the Stigma Scale (J. K. Austin et al., 2004) to measure perceptions of stigma in institutionalised children. This scale was originally developed to measure perceptions of stigma in the parents of children with epilepsy, as well as perceptions of the children themselves. In the current study, the term "epilepsy" was replaced with "being in the institution" in both the original Child Stigma Scale and the Parent Stigma Scale. In addition, the research team suggested some minor changes in expression of some items; and added some new items to the carer version.

2- Committee review of the English versions

Five native UK speakers from the University of Southampton reviewed the amended version of the Stigma Scale by comparing the meaning of their

items with the items of the original versions. No changes were made for the amended version (see Table 5.11, Table 5.12).

Table 5.11
Original and adapted items of the Stigma Scale-Carer version

Item	Original items	Modified and amended items
1	People who know that____has a seizure condition treat him/her differently.	When people know that the children are from the institution they treat them differently.
2	It really doesn't matter what I say to people about____s seizure condition, they usually have their minds made up.	It doesn't matter what I say to people about children reared in the institution, they have usually made up their mind.
3	____always has to prove him/herself because of the seizure condition.	Institutionalised children always have to prove themselves to people outside the institution.
4	Because of the seizure condition,__will have problems in finding a husband or wife.	Institutionalised children will not have problems in finding a husband or wife.
5	In many people's minds, a seizure condition attaches a stigma or label to____.	In many people's minds, being in an institution comes with stigma or label.
6		*People generally think that children from institutions will behave badly.
7		*People would generally be happy if their children made friends from an institution.

*Added item

Table 5.12
Original and adapted items of the Stigma Scale-Child version

Item	Original items	Modified items
1	How often do you feel different from other kids because you have a seizure condition?	How often do you feel different from other children because you live in an institution?
2	How often do you feel people may not like you if they know you have a seizure condition?	How often do you feel people may not like you if they know you are from an institution?
3	How often do you feel other children are uncomfortable with you because of your seizure condition?	How often do you feel other children are uncomfortable with you because you are from an institution?
4	How often do you feel people may not want to be friends with you if they know you have a seizure condition?	How often do you feel people may not want to make friends with you if they know that you are from an institution?
5	How often do you feel people would not want to go out with you or ask you to parties if they know you have seizures?	How often do you feel people would not want to ask you to parties if they know that you are from an institution?
6	How often do you feel embarrassed about your seizure condition?	How often do you feel embarrassed because you live in an institution?
7	How often do you keep your seizure condition a secret from other kids?	How often do you keep it a secret from other children that you live in an institution?
8	How often do you try to avoid talking to other people about your seizure condition?	How often do you try to avoid talking to other people about the institution that you live in?

3- Establishing the Arabic versions

The adapted version of the Stigma Scale was translated into Arabic language by the same qualified translator. The researcher and three bilingual researchers (3 PhD students from Southampton University) reviewed the equivalence of meaning between the Arabic and English versions. After the Arabic preliminary version of the stigma scale had been created, a panel of 10 lecturers and professors (Department of Psychology at King Saud University) reviewed the new Child Stigma Scale and the Carer (Parent) Stigma Scale to ensure that the content of their items were comprehensible to the target samples of children and their carers.

4- Evaluation of reliability

Regarding the teacher/carer version of the stigma scale, the education authority suggested 5 schools for girls and 5 schools for boys with no institutionalised children. As a result, 50 primary school teachers (25 male teachers, 25 female teachers) from different areas in the city of Riyadh, were selected to take part. Teachers were informed about the aims of the study and they were asked to provide their written consent to take part (see Appendix E6). Female teachers completed the questionnaires independently and they had the opportunity to ask the researcher if there were any items that needed clarification. However, recruitment and completion of questionnaires by male teachers who worked in separate schools for boys followed a different procedure. In this case, the researcher contacted the head of each school and the affiliated social worker to explain the study purpose. The social worker in each school was asked to contact the researcher for clarification if any teacher experienced difficulties completing the questionnaire or had difficulties understanding any of the items. 9 teachers from the boys' schools were excluded from the sample due to missing multiple items and for failing to complete the second administration. Therefore, final sample was 41 teachers (25 females, 16 males).

Cronbach's alpha was used to examine the internal consistency among the 41 teachers and it was showed an acceptable level (α = .71). In addition, to assess test-retest reliability, the teachers completed the questionnaire again 2 weeks after the first completion. For test-re-test analyses, Pearson correlation coefficients were computed as the data were normally distributed, and it was, $r (41) = .45$, $p < .01$. These results indicated that the adapted of the Arabic version of the stigma (teacher/carer report) is reliable and appropriate

for use among a Saudi sample.Regarding the child version of the stigma scale, the reliability and validity will be tested in study 3 (Chapter 6 and 7).

5.3 Summary

The current study used Vallerand's (1989) method to translate the BYI-II (BYI-II, Beck et al., 2005) and the Aggression Scale (Orpinas & Frankowski, 2001) from English into Arabic. In addition, it developed Arabic versions of Other as Shamer scale (OAS, Goss et al., 1994) and the Stigma Scale (J. K. Austin et al., 2004) for use with typically developing and institutionalised children in Saudi Arabia. Following translation, all BYI-II questionnaires and the Aggression Scale had good test-retest reliability and internal consistency for both adult and child participants. In addition, the Arabic BYI-II scales were significantly correlated with each other; except for the Self-concept inventory. The expected patterns were found in relation to the correlations between key scales. For example, BYI-II scales (anxiety, anger, and depression) were positively inter-correlated, see also Beck et al. (2005), who found the highest correlation among the same three scales. The self-concept inventory in the current study had no correlation with the other 4 BYI-II scales. This contradicted the findings of Beck et al. (2005) which showed that self-concept had the lowest correlation with the other 4 scales in young children.

Regarding the validation of the Arabic versions of adapted OAS, the internal consistency was high, while the two-week test-retest reliability was acceptable. The adapted versions of the Stigma Scale was intended to be used with institutionally-reared children. However, it was not possible to establish the validity and reliability of these scales due to the small numbers of children and their carers at this stage of the study. Although the translated and the adapted versions of the study's instruments showed good levels of content validity and reliability, several implications for future research were identified. For example, there is a need for additional psychometric procedures to establish the norms for such measures in Saudi culture. According to Banville et al. (2000), instrument validation in cross-cultural research is evaluated by multiple psychometric properties; including means, standard deviations, variances, and T and Z scores with adequate sample size to reduce errors in sampling. Therefore, there is a need to re-examine the psychometric properties of the translated and adapted scales with a larger sample for instrument validation in the Saudi culture.

In summary, the Vallerand's method proved to be an efficient approach to test the preliminary psychometric properties of the translated scales among bilingual individuals and the full psychometric properties of the translated instruments among target Saudi children.

5.4 Limitations of the study

There are some limitations to be considered. First, the restrictive school timetables did not enable the researcher to administer all scales for the same children within the scheduled one-week re-test period. Secondly, the time allowed (30 minutes for each group of children) was too short for applying the OAS scale among the same children who had completed the translated versions of BYI-II and the Aggression Scale. In addition, it was not possible to assess the construct validity between the OAS and the BYI-II subscales. Finally, gender segregation in Saudi society does not permit the researcher to administer any scale in boys' schools. As a result of this cultural restriction, a male social worker in each school did the task instead.

6. Chapter 6: Exploration of perceived stigma in institutionalised children

6.1 Introduction

The results of the qualitative study (Chapter 4) highlighted perceptions of stigma from institutionalised children and their carers towards children originating from unknown parents and raised in an orphanage. The current study aimed to explore this issue further using questionnaire measures with a larger sample of children and with carers and teachers in schools who did or did not have experience of teaching institutionalised children. Using self and adult report allow some exploration of the conceptual distinction between self and public stigma (Corrigan & Kleinlein, 2005). The inclusion of adults who work inside and outside of the institution provides an opportunity to explore issues around stigma for groups of individuals who work directly with institutionalised children compared with those who have less contact.

Stigma is a complex phenomenon that has been linked to poor mental health, physical and mental disability, academic underachievement, low social status, poverty, and poor access to housing, education, and employment (Major & O'Brien, 2005). In an early definition, Goffman (1963, p. 3) described stigma as an attribute that discredits an individual and reduces him or her "from a whole and usual person to a tainted discounted one." More recently, two main types of stigma: public stigma and self-stigma are commonly used (Corrigan & Kleinlein, 2005). Public stigma refers to the situation where a society discriminates against individuals because they differ from the norm in some way (e.g., mental illness or chronic medical conditions). It can also include negative attitudes towards groups based on attributes/features such as skin colour, sexual orientation, and income (Rüsch, Angermeyer, & Corrigan, 2005). When negative attitudes are apparent, some individuals will try to conceal symptoms (e.g., related to mental illness) from other people, e.g. colleagues in their workplace, to avoid being the victim of stereotypes and prejudice (Link & Phelan, 2001). The labelling of a group based on specific attributes is suggested to imply a separation of "us" from "them" (Link & Phelan, 2001) that is typically influenced by the culture in which an individual lives (Quinn & Chaudoir, 2009).

In addition to public stigma towards individuals' attributes, these individuals may internalise and turn the stigmatising attitudes from the general public against themselves (Corrigan & Watson, 2002a). This self-stigma can be described as a perception of the self that is characterised by feelings of rejection, shame, and the tendency to withdraw from others (Corrigan & Kleinlein, 2005). Self-stigma is also known as "personal concealable stigma" (Quinn & Chaudoir, 2009, p. 635) to indicate a stigmatized identity that the individual possesses, such as a history of mental or physical illness or personal trauma (e.g., experiences of childhood sexual abuse). Individuals who report perceived self-stigma have been found to also relate those reflecting poor self-esteem, negative emotions (symptoms of anxiety and depression), behavioural withdrawal from others, and a tendency to hide their stigmatized status from others (Corrigan & Watson, 2002b).

Most studies on stigma have been carried out with adults who are diagnosed with a mental illness (e.g.,Angermeyer, Matschinger, & Corrigan, 2004; Mickelson, 2001) or who have a chronic medical condition (e.g., Austin et al., 2002; Rho et al., 2010). There are few studies that have explored the possible stigma experienced by AIDS-orphaned children and young people who have grown up in urban deprived settlements (e.g.,Cluver et al., 2008; Cluver & Orkin, 2009). Most of the studies of stigma in children and adolescents have investigated those with mental health symptoms. For example, Kranke, Floersch, Townsend, and Munson (2010) found that there was a significant link between the use of psychiatric medication and the endorsement of stigma themes such as shame, secrecy of diagnosis, and medication use among outpatient children aged from 12 to 17 years old. In another study (Rose, Joe, & Lindsey, 2011), there was an association between the severity of depression and the level of self-stigma among 12-17- year- old adolescents. Other researchers have studied stigma in children with chronic medical conditions. For example, it was found that social distance and perceptions of dangerousness as indicators of stigma were more pronounced in 8-18- year-old children with depression than those with ADHD and asthma (Walker, Coleman, Lee, Squire, & Friesen, 2008)

Researchers have argued that stigma is a socially constructed feature (LeBel, 2008). Therefore, it is important to study it at both the intra-individual level and the external or cultural level (Quinn & Chaudoir, 2009). Corrigan, Green, Lundin, Kubiak, and Penn (2001) highlighted several factors that

moderate the level of public stigma: these include familiarity with mental illness and social distance from the stigmatized person. Studies have shown that individuals who are close to persons with a stigmatized identity, and who are more familiar with the symptoms or conditions associated with the stigmatized condition, are less likely to have stigmatizing attitudes towards these individuals (Angermeyer et al., 2004). In contrast, individuals who have stigmatizing attitudes are more likely to be socially distant from those persons who are stigmatised.

The present study aimed to extend current research to explore the perception of public stigma (from carers and teachers) and the experience of self-stigma (by children themselves) related to children originating from unknown parents in Saudi Arabia who were raised in an institution from birth.

In addition, following previous studies, it compared reports of adults who have direct contact with institutionalised children (teachers and carer's reports) with those who have had no contact (other teachers) in order to explore whether direct experience with the institutionalised children affected the reported perceptions of public stigma. Since Saudi society has a negative view of having children out of wedlock, it was anticipated that all groups (carers, teachers with and without experience and children) would report perceptions of stigma. Furthermore, it was expected that adults who had direct experience of working with institutionalised children would report increased perceptions of stigma, reflecting increased social distance in this group.

6.2 Methods

6.2.1 Participants

Carers and teachers. Thirty-one female carers (age range: 35-45 years) who work in institutions with children and young people as foster mothers (N=18) or foster aunts (N=13) were recruited from three institutions of Orphanage Type B (family-like system), in Riyadh, Saudi Arabia (for more details see Chapter 1). The education level for most carers is limited to middle school (i.e., they typically left formal education at the age of sixteen). This was true of the current sample, with the exception of one carer who had a university degree. In addition, 142 teachers (43 females, 99 males, age range 30-40) recruited from 26 schools (17 for boys and 9 for girls) where institutional children learn, who have experience working with children from institutions and 41 teachers (25 females, 16 males) who have participated in a

pilot sample (see previous chapter) and who had no experience of teaching these children.

Children. All children in the three institutions were approached (N=58, boys = 44, girls= 14) aged 9-12 years. They were selected on the basis of not having any developmental delays or medical conditions. Ability was assessed using the evaluation of school system as regulated by the Saudi Ministry of Education. There is a 4-point scale on which a child's achievement can be assessed by teachers with regard to taught subjects. This scale involves 1 as an indicator of above average to excellent performance in the basic knowledge and skills required for all taught subjects. The 2-point is for average performance of these knowledge and skills. For the minimum basic skills and knowledge, a 3-point is considered; and the 4-point is for the lack of one or more skills and knowledge for the subjects taught at schools.

6.2.2 Questionnaire measures

The stigma scales (Austin et al., 2004) outlined in Chapter 5 and adapted and translated into Arabic were used in the current study. The carer/teacher version of the stigma scale included 7 items. Responses were scored on a 5-point Likert scale ranging from 0 to 4 generating a total score from 0 to 28. The child's version of the scale included 8 items, each of which is scored from 0 to 4 generating a total score ranging from 0 to 32. A higher score in both scales indicating greater perception of stigma.

6.2.3 Procedures

Ethical approval. Before administrating the Stigma Scales with study groups, permissions and approvals for this study were obtained from University of Southampton ethics' committee and University Research Governance procedures, as well as the designated Saudi Authorities (i.e., Ministry of Social Affairs and Ministry of Education).

Data were collected from the three above 3 institutions in Riyadh, Saudi Arabia. All these institutions followed the same family-like system outlined in Chapter 1, where children are provided with care by female carers. There were, however, some differences in the periods they have adopted such new system: 7 years in Orphanage of Type B1 approach , 2 years in Orphanage of Type B2 approach , and 3 years in Orphanage Type B3, during the application of the study. Orphanage of Type B1 approach provides services for boys aged 4 to 12 and for girls aged 4 to an unspecified age. On the other hand, Orphanage of

Type B2 approach provides services for boys from birth to 12 and from birth to an unspecified age for girls. It should be noted that all boys above 12 years in both institutions are moved into the male section. Orphanage of Type B3 approach only looks after boys aged between 9 to 12 years old to prepare them for their move into the older male section. The purpose of the study and the instructions for applying the scales were explained verbally and in writing to the head of institutions (see Appendix E1). In addition, the aim of the study was explained to the children verbally and they provided written assent before taking part (see Appendix E4). The stigma scale-child version was completed by each child individually in the psychologist's room within the institution.

Foster mothers from the above institutions were asked to complete the study measures in their own villa inside the institution, whereas the foster aunts completed the questionnaires in a separate private room allocated to the researcher. The aim of the study was outlined for all participants and a consent form (see Appendix E5) was given to all carers to request their agreement to participate in the study. They were offered the opportunity to ask about any questionnaire item that was not clear, or if they would like the researcher to read all questionnaire items. Data for the two samples of teachers (with and without experience of institutionalized children) were collected on two separate occasions. 142 teachers with experience were recruited from the same schools that the institutional children attended. They were told about the aims of the study and they were asked to provide their written consent to take part (see Appendix E6).Female teachers completed the questionnaires independently and they had the opportunity to ask the researcher if there were any items that required clarification.

Recruitment and completion of questionnaires by male teachers who worked in separate schools for boys followed a different procedure. In this case, the researcher contacted the head of each school and the affiliated social worker to explain the purpose of the study. The social worker in each school was asked to contact the researcher for clarification if any teacher experienced difficulties completing the questionnaire or had difficulties understanding any of the items. The data for the second group of teachers (n=41) with no experience of teaching institutionalised children (see Chapter 5) were used in the current study to compare their levels of stigma with the other group of teachers (n=142) and carers.

6.3 Results

6.3.1 Preliminary Analysis

The assumption of normality for both stigma questionnaires (carer/teacher version, child version) was examined using a one-sample Shapiro-Wilk's test (Field, 2005) . Data from each group were normally distributed. Descriptive statistics (ranges, means, and standard deviations) as well as internal consistency (Cronbach's alpha) for each group (carers, experienced teachers, non-experienced teachers, and institution children) are reported (see Table 6.1).

Table 6.1

Mean Scores, Standard Deviation (SD), Range and Internal Consistency (Cronbach's alpha - α) for Carer's (n = 31), Experienced (n= 142) and Inexperienced Teacher's (n = 41) Perceptions of Stigma (/7 items) and Child (n = 47) Self-report Stigma Scale (/8 items).

	Teachers		Carers (n=31)	All children (n=58)
	Experienced (n=142)	Inexperienced (n=41)		
M	2.33	2.41	2.17	2.65
SD	.57	.69	.60	.68
Range	.86 - 3.71	.71- 3.43	.86 - 3.14	1- 4
α	.59	.71	.55	.73

Table 6.1 shows some variation in relation to the internal consistency of the completed questionnaires for each of the participant groups. While the children and inexperienced teacher groups showed good internal consistency (> .7); this was poor for the carers and experienced teachers (<.6). However, Nunnaly (1967, cited in Henson, 2001; Peterson, 1994) suggested that Cronbach's alpha values between .50 and .60 can be considered satisfactory for exploratory studies.

6.3.2 Main results

To explore public stigma among the carers, teachers who had experience with institutionalised children, and teachers who had no experience with the institutionally-reared children, the mean scores across the three groups were compared. The findings suggested that the mean scores were not significantly different from each other (F (2,211) = 1.483, p = .229, ω= .12). The findings suggested that the direct experience with the children did not influence the perception of stigma towards them.

Since the self-stigma scale had a greater number of items (8 items) than the public stigma scale (7 items), the mean for children's scores on self-stigma was calculated separately by dividing the total score by numbers of items. Then the mean scores of all the study groups were compared with each other. There was a main effect of group on stigma scores (self and public stigma).

Post hoc comparisons using the Tukey HSD test indicated that the mean score of the perception of self-stigma among institutionalised children (M= 2.65, SD = .68) was significantly higher than the perception of public stigma among their carers (M= 2.17, SD = .60) and the teachers with experience with institutionalised children (M= 2.33, SD = .57) (see Fig 6.1). However, it was found that there was no significant difference (M= 2.41, SD = .69) between the perception of self-stigma among institutionalised children and the perception of public stigma as reported by teachers with no experience with institution-reared children.

Fig. 6.1
Mean score differences in the perception of self- stigma in children and public stigma in the carers, experienced teachers, and inexperienced teachers
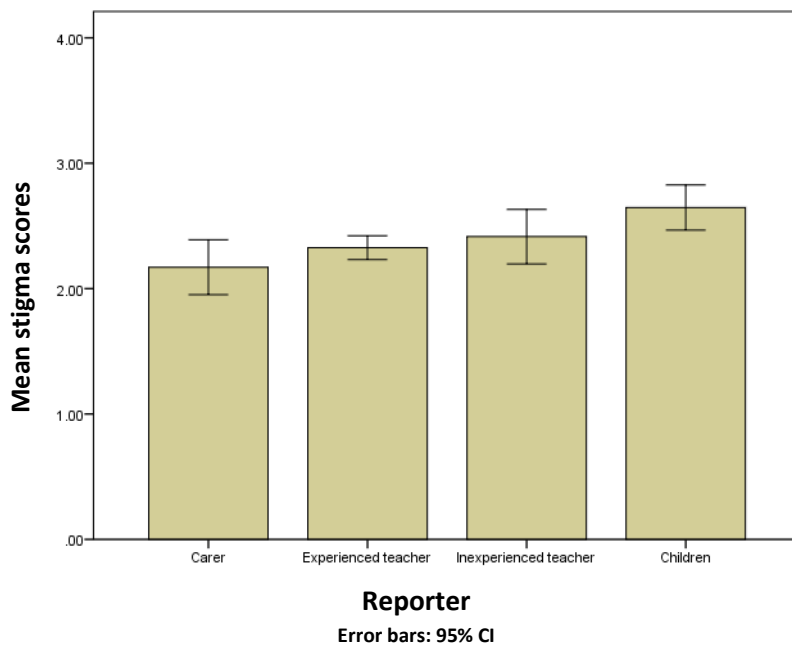
6.4 Discussion

Exploring the level of public and self-stigma related to institution-reared children in Saudi Arabia across different groups (carers, teachers and children) revealed a number of important findings. Although there were no significant

difference in public stigma between the study groups (carers, teachers) in terms of their direct experience and closeness with institution-reared children, inexperienced teachers scored higher than both experienced teachers and carers. Though there were no significant group differences, indicating that the results did not support the proposition that the more familiar a person is with a stigmatised population the less he or she will report stigma towards them (Angermeyer et al., 2004) . One caveat in relation to this finding is that the current study measured individual's views on other people's perceptions of institutionalised children, and not how they themselves felt.

The current finding should be treated with caution since the familiarity effect has been studied on samples of individuals who often have family members with severe mental illnesses. A recent study (J. Austin et al., 2002) on the stigma of having epilepsy found that there was a lack of knowledge and familiarity with epilepsy among a sample of adolescents aged 13 to 18 years. This lack of familiarity about the causes of epilepsy and the relevant signs and symptoms was significantly correlated with stigmatising attitudes about the illness. Similarly, Angermeyer et al. (2004) examined the relationship between familiarity with mental illness and the stigmatising attitudes towards mental illness among a sample of community German individuals aged 18 to 65 years. Participants who were familiar with mental illness were less likely to believe that people with mental illness were dangerous, and they had less desire to be socially distant from these people.

Regarding the stigma of having a disability, Buljevac, Majdak, and Leutar (2012) carried out a qualitative study on a focus group of five participants with different types of disabilities (3 visual impairment, 1 with spinal cord impairment, 1 with motor function impairment) and another focus group with 7 social workers and one special education teachers. The content analysis of the interviews with both groups indicated that there were two types of factors affecting the stigma of disability. The first factor is the internalised feelings of being different (self-stigma) because of stigmatising attitudes and stereotypes of the public against them; whereas the second factor is the discrimination and labelling (public stigma) that the wider community has against these people. The above studies consider individuals with severe mental illness and disability as dangerous and fearful. The Saudi cultural context in the present study does not treat children originating from unknown parents as dangerous and fearful.

Considering child reports of self-stigma, the study found that child scores were significantly higher than scores of experienced teachers and carers (while there was no difference with inexperienced teachers), highlighting that elevated scores in relation to public and self-stigma are most evident in inexperienced teachers and children themselves (but only child self-report scores differed from carers and experienced teachers). Several studies (e.g.,Bathje & Pryor 2011; Evans-Lacko, Brohan, Mojtabai, & Thornicroft, 2012; Mojtabai, 2010) have shown a significant impact of negative public attitudes on the internalized perceptions of stigma among individuals with mental illnesses. These studies generally conclude that the higher the impact of stigmatizing attitudes (public stigma), the higher the self-stigma is among such individuals. Regarding the children's self-reported scores on items 7 ("How often do you keep it secret from other children that you live in an institution?") and 8 ("How often do you try to avoid talking to other people about the institution that you live in?"),it was found that they preferred to conceal their social identity from others and avoided talking to others about their institution; which in turn means that they were relatively aware of other people's attitudes towards them. Although there is a clear difference between public and self-stigma, the current study's findings cannot address the impact of public stigma on internalized stigma among institution-reared children even though negative attitudes towards institutionalised children were still voiced.

6.5 Conclusion

The findings of the present study showed that there were some negative attitudes towards institutionalised children, and these were marginally elevated in people who do not have experience with them. In addition, institutional children perceived stigma about being reared in the institution and preferred to hide their identity from other people.

The present study is not without limitations. First, although the current study yielded significant findings concerning public and self-stigma, the adapted public stigma scale assessed others' views towards institutionalised children and not the respondents' own views. Therefore, it was difficult to decide whether the respondents reflected the others' views and /or their own views and the impact of familiarity with institutionalised children. Second, the pubic stigma scale did not cover important other components of public stigma, such as stereotypes, prejudice, and discrimination, as suggested by models of

stigma (Link & Phelan, 2001). Third, the study was limited to a sample of teachers and carers; and this sample cannot be sufficient to generalize the findings on public stigma. To have a clear view about the impact of public stigma on institutionalised children, other large-scale samples from the general public (e.g. school peers' parents) should be included in further replication of the results.

The current study raises implications for future research. First, there is a need for a common measure for assessing both public and self-stigma among institutionalised children and the general public with the use of items that target the respondents' own views rather than others' views. Second, further studies should investigate the components of public stigma (e.g., stereotypes, discrimination, prejudice) in Saudi society and their impact on self-stigma of such children. Third, more research should focus on examining the association between self-stigma and emotional and behavioural aspects among those children. Finally, there is a need for measuring public stigma among biological parents of typical school peers to examine how it may affect the relations of those peers with institutionalized children.

7. Chapter 7: Internalising and externalising symptoms of institutionalised children

7.1 Introduction

The results of Study 3 found that institutionalised children reported feeling stigmatised about being reared in institutions and that they tried to conceal this status from others. These findings fit with previous research, which has found that feelings of stigma are common among institutionalised samples and that these feelings may act as risk factors for the development of externalising and internalising disorders. For example, Simsek et al. (2007) found that stigmatisation was a risk factor for emotional (e.g., anxiety, depression) and behavioural (e.g., aggression, rule-breaking behaviours) symptoms among institutionally-reared Turkish children and adolescents aged 6 to 17 years. Further studies on AIDS-orphaned children (e.g.,Cluver et al., 2008; Cluver & Orkin, 2009) have examined health-related stigma (e.g., being an AIDS orphan) and its relation with other emotional and behavioural variables and have similarly found that it was linked to increased prevalence of depression, peer relationship problems, posttraumatic disorder, conduct disorder, and delinquency (Cluver et al., 2008).

The stigma that institutionalised children perceive can be explained by their awareness of the way their society views them and their acceptance and internalisation of these stigmatising attitudes. Corrigan, Watson, and Barr (2006) considered the internalisation of stigma as a three-stage process that begins with an awareness of common public stereotypes (stereotype agreement). Corrigan et al. argued that this awareness becomes self-relevant when the affected individuals believe that these common stereotypes apply to them (self-occurrence). For example, a person can apply stigma from the general public to himself or herself by endorsing with the notion that "I agree with the public; that all people with mental illness are morally weak" (Corrigan et al., 2006, p. 876). Secondly, the process of stereotype agreement is suggested to become more painful when it applies to the self. This self-concurrence process exists when individuals have the belief that the internalised beliefs within their culture apply to them: "That's right, I am morally weak for being mentally ill!" (Corrigan et al., 2006, p. 876). In the third stage (self-esteem decrement), the stigmatised individual's self-esteem is proposed to decrease due to negative internalised stereotypes.

Further research has found that individuals who perceive stigma, report negative emotions such as embarrassment, shame, fear, anger, and social withdrawal (Link et al., 2004). Harter (2001) , for example, noted that there are two profiles of self-evaluations: positive and negative, and that when individuals evaluate themselves, they typically endorse or feel the judgments of important others. As a result, an individual's own sense of self-worth or self-esteem can be influenced by the approval and support they receive from significant others. A negative evaluation from others can, for example, be a threat to an individual's social self (Dickerson, Gruenewald, & Kemeny, 2004) and a source for shame and stigma. Consistent with this view, Gilbert (1998) has shown that feelings of shame involve a sense of shrinking and being small and powerless, which are linked to decreased levels of self-worth or self-esteem.

Feelings of shame are often expressed by individuals when they blame themselves or are blamed by others for their condition or circumstances (Lewis, 1998). This means that individuals who feel shame and blame themselves tend to perceive themselves as being put down by others (Gilbert, 2000). Shame can be felt as a form of defectiveness and inferiority from being explicitly exposed to a negative public perception (Smith, Webster, Parrott, & Eyre, 2002). According to Pinel (1999), when individuals feel shame they become stigma-conscious, as they actually expect to be targets of stereotypes and stigmatisation by others. Individuals who have feelings of shame can externalise blame (Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010), leading to feelings of anger (physical, verbal, symbolic), and rejection and exclusion towards others, as well as self-directed aggression (Hejdenberg & Andrews, 2011; Stuewig et al., 2010; Tangney et al., 1996). Other studies (e.g.;Andrews, Qian, & Valentine, 2002; De Rubeis & Hollenstein, 2009) have shown a relation between feelings of shame and depression.

Although shame has been studied in relation to externalising and internalising symptoms, it has not been specifically examined in institutionalised children. Chapter 2 outlines studies which have found that institutional children experience externalizing problems such as anger, ADHD, and conduct disorders (Reddy, 2012), and internalizing problems such as anxiety, depression (Kanbur, Tüzün, & Derman, 2011), where these findings are consistent across different age, gender and reporters (self and other).

The development of behavioural difficulties in children who are raised in institutions has been linked to several factors, including the impact of deprivation (Gunnar & van Dulmen, 2007; Kreppner, O'Connor, & Rutter, 2001; Kreppner et al., 2007; O'Connor, Bredenkamp, & Rutter, 1999), low quality of care (Groark, McCall, Fish, & The Whole Child International Evaluation Team, 2011), attachment difficulties or the existence of physical health or general learning difficulties (Johnson et al., 2006). Few studies (e.g.,Cluver et al., 2008; Cluver & Orkin, 2009) have, however, explored the possibility that symptoms of psychopathology in AIDS-orphaned children can reflect the degree of perceived stigmatisation or shame. The present study assessed feelings of shame in institutionalised children and its link to perceptions of stigma, as well as symptoms of internalizing (depression, anxiety, self-concept) and externalizing (anger, disruptive behaviour, aggression) disorders.

Previous research has shown that gender is a risk factor for the development of externalising and internalising disorders in children and adults (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999) and in clinical and typically developing samples of children and young people (Rosenfield, 2000). Therefore, the current study aimed to assess patterns of gender differences with respect to internalising and externalising symptoms within institutionalised children and their typical school peers.

7.2 Study Aims

The study had two aims: (1) to examine self-concept, shame, internalising and externalising symptoms (i.e., depression, anxiety, anger, disruptive behaviour, aggression, emotional and behavioural problems) , as well as strengths (i.e., pro-social behaviour) among institutionalised children and their non-institutional school peers and to examine the gender differences that may emerge within each group; (2) and to start to develop psychological models to explore relationships between perception of stigma, shame, and internalising and externalising symptoms in this population.

7.3 Methods

7.3.1 Participants
Institutional children and their non-institutional school peers

All children aged from 9 to 12 years in the three institutions of Orphanage Type B in Riyadh, Saudi Arabia (see Chapter 1) were invited to take part in the current study (n = 58), except for those with intellectual disabilities or medical conditions (n =7) . An inclusion policy in Saudi Arabia requires that institutionalised children are included in private and/or public schools located middle and upper-middle classes areas. The aged-matched school peer group (N=58) were a sample of children who lived permanently with their biological parents. These children were selected on the basis that they should be in the same education class as the institutionally reared child (i.e., the same age and learning environment), are of the same gender, and as far as possible have achieved similar levels in their school achievement tests. It was decided by the research team to exclude 11 children from the total sample (N=58) from each group as they were either older or younger by more than one year of age and either higher or lower in achievement by more than one score. After applying the exclusion criteria, a sample of 47 institutional children (36 boys, 11 girls) and their age-matched non-institutional school peers (N=47, 36 boys, 11 girls) participated in the present study.

7.3.2 Measures
Beck Youth Inventories –II (BYI-II, Beck et al., 2005).

The Beck Youth inventories, Second Edition, consist of five self-report scales: self-concept (BSCI-Y), anxiety (BAI-Y), depression (BDI-Y), anger (BANI-Y) and disruptive behaviour (BDBI-Y). They were developed to assess symptoms of self- concept, anxiety, depression, anger, and disruptive behaviours among children and adolescents aged between 7-18 years. The responses to each item in the scales are rated on a 4-point Likert scale ranging from 0 = never to 3 = always generating a minimum score of 0 and a maximum score of 60. In the present study, Arabic translated versions of all the BYI-II scales were administered to both institutionalised children and their non-institutional school peers. (For full details about the BYI-II, see Chapter 5).

The Other as Shamer Scale (OAS, Goss et al., 1994)

The OAS is self-report instrument consisting of 18 items that assesses external shame or how the individual thinks that others view him/her. The participants are required to complete the items based on a 5-point Likert scale

ranging from 0 = never to 4 = almost always generating a total score from 0 – 52. The scale has three subscale scores: inferiority, emptiness feelings, and how others behave when they see me make mistakes. The scale was translated and adapted into Arabic (see Chapter 5 for details).

The Aggression Scale (Orpinas & Frankowski, 2001).

This 11-item self-report scale measures different physical and verbal forms of aggressive behaviours in young adolescents. It asks the participants to report on whether these behaviours occurred in the previous week; providing some indicator of current aggressive behaviour. The response for each item is based upon the frequency of such aggressive behaviours, which range from 0 times through 6 or more times, generating a possible score between 0 and 66. This scale was translated into Arabic and it was tested for validity and reliability in Chapter 5.

The Stigma Scale (Austin et al., 2004)

This scale was originally developed for measuring the levels of stigma perceived by children with epilepsy and their parents. The child version of the scale has 8 items that measure the child's perception of others' views toward them in relation to their epilepsy condition. Each item of the scale is rated based on a 5-point Likert scale ranging from 0 =strongly disagree, to 4= strongly agree making a total score from 0-32. The validity and reliability were tested in previous study (see Chapter 5).

Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997) –Teacher version.

The SDQ a multi-informant screening questionnaire for assessing the behavioural and emotional problems in children aged 4 to 17 years. The questionnaire consists of five subscales: hyperactivity, emotional, conduct problems, peer problems, and pro-social behaviour subscale. Each subscale has five items rated on a 3-point Likert scale ranging from not true (0) to certainly true (2) generating one total score for difficulties (hyperactivity, emotional, conduct problems, peer problems) and another total score for strengths (pro-social behaviour) . In the present study, the Arabic teacher version of SDQ was used to assess the emotional and behavioural problems among both samples of institutionalised children and their non-institutional school peers. (see Appendix B5).

7.3.3 Procedures

Ethical approval for this study was obtained as part of the application for ethical approval outlined in Chapter 6 from the Psychology Ethics Committee and the University of Southampton Research Governance, and the Ministry of Education in Saudi Arabia. In addition, as the current study involved working with institutionally reared children in Saudi Arabia, ethical approval was also obtained from the Saudi Ministry of Social Affairs.

The sample consisted of the same children from the same three institutions that were described earlier (see chapter 6). The non-institutional school peers were recruited from 26 schools (17 schools for boys, 9 schools for girls). The purpose of the study and the instructions for applying the scales were explained verbally and in writing to the head of institutions (see Appendix E1), schools (see Appendix E2), and parents of non-institutional children (see Appendix E3). Details of the study were also explained to children verbally and written consent was obtained from each child (see Appendix E4). With regard to the institutional children, they were administered the scales individually in the psychologist's room within their orphanages. Half of the children in each institution were administered 4 study measures (i.e., self-concept, anger, anxiety, stigma) during a single session with at least 10 - minute break before the second session which included the other 4 scales (i.e., disruptive behaviour, depression, aggression, shame). During this break, sweets and juice were offered to children and they were given an opportunity to talk about a topic of interest (e.g., hobbies or favourite subjects). At the same time, the other half of the children in each institution completed the same two sets of scales in a counterbalanced design starting with the second set.

The researcher administered all the study scales (except for the stigma scale) to non-institutional schoolgirls. Four measures (i.e., self-concept, anger, anxiety, and disruptive behaviour) were completed in the first session; whereas the other three scales (depression, aggression, shame) were administered in the second session after a 10-minute break. For boys who attended separate schools for boys only, the instructions for completing the questionnaires were given to the head of each boy's school and were explained verbally and in writing to the school's social worker who administered the questionnaires. For

boys and girls questionnaires were completed in groups of two to five children. Class teachers who taught children more than one subject were asked to complete the SDQ scale for both the institutionally reared child and for his or her age-matched peer.

7.4 Results

7.4.1 Preliminary analysis

The assumption of normality for all questionnaires in the study samples: institution-reared children (N = 47), and their non-institutional age matched peers (N = 47), was tested by the One-Sample Shapiro-Wilk. This test showed that all study measures, within the institution group, were normally distributed except for the teacher-reported SDQ pro-social subscale where the distribution was slightly negatively skewed, even after being transformed by using several methods. Regarding the non-institutional sample, only two of the research variables (i.e. self-concept, teacher-reported pro-social subscale of the SDQ scale) were normally distributed; whereas the other scales were not. Therefore, several transformation methods (e.g. the square root, reciprocal transformation) were applied to normalise these data. Following transformation, the distribution of scores for depression, anger, aggression and shame were still significantly skewed.

Levels of Cronbach's Alpha of each scale were also tested for each group separately. For the institution sample alphas ranged from .52 (Shame Scale) to .92 (Disruptive behaviour Scale) (see Table 7.1). For the non-institutional sample alphas ranged from .65 (Shame Scale) to .91 (Aggression Scale).

Table 7.1
Cronbach's Alpha Values for BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour) Scales, the Aggression Scale, the Shame Scale, Total SDQ-Difficulties Teacher Version, and SDQ-Pro-social Teacher Version.

Scale	Alpha Institution (N=47)	Alpha Non-institutional (N=47)	Alpha Both groups (N=94)
Beck Youth Inventories –II(BYI-II)			
Self-concept	.70	.74	.86
Depression	.84	.80	.90
Anxiety	.80	.80	.86
Anger	.85	.85	.93
Disruptive behaviour	.92	.78	.95
Aggression	.83	.91	.91
Shame	.65	.52	.90
Stigma	.77	---	---
Strengths and Difficulties Questionnaire			
SDQ-Total Difficulties	.75	.70	.86
SDQ-Pro-Social	.70	.77	.78

Descriptive statistics are shown in Table 7.2 for each questionnaire scale by study group and gender. Furthermore, descriptive statistics for the two study groups and the non-institutional normative group (N=133) from Chapter 5 are shown in Table 7.3. (Data for the non-institutional normative sample are also separated between gender in Table 7.4).

Table 7.2

Descriptive Statistics of Institutional Children (N=47) and Non-institutional Children (N=47) of Achievement , BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale; the Shame Scale, Total SDQ- Difficulties teacher version, SDQ-Pro-social teacher version, and the Stigma Scale

Scales	All Institutional children (N=47)		All Non-institutional Children (N=47)		Institutional girls (N=11)		Institutional boys (N=36)		Non-institutional girls (N=11)		Non-institutional boys	
	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median
Achievement	1.96 (±.69)	2.00	2.34 (±.48)	2.00*	2.36 (±.67)	2.00	1.83 (±.65)	2.00	2.55 (±.52)	3.00	2.28 (±.45)	2.00
Beck Youth Inventories–II(BYI-II												
Self-concept [a]	39.92 (±7.11)	40.00	53.96** (±5.17)	54.00	36.00 (±7.60)	34.00	41.11* (±6.61)	42.00	56.91* (±3.56)	57.00	53.06 (±5.28)	53.00
Anxiety [a]	54.38** (±10.13)	55.00	41.32 (±5.17)	40.00	50.55 (±10.72)	51.00	55.56 (±9.80)	55.00	56.91 (±3.56)	38.00	42.08 (±5.29)	40.50
Depression [b]	53.13 (±10.70)	50.00**	39.62 (±4.38)	39.00	50.82 (±10.37)	49.00	53.83 (±10.84)	53.50	39.64 (±3.11)	39.00	39.61 (±4.73)	38.50
Anger [b]	55.13 (±10.56)	54.00**	36.53 (±4.87)	35.00	54.00 (±12.75)	56.00	55.47 (±9.98)	50.50	33.55 (±2.25)	33.00	37.44 (±5.11)	36.00*
Disruptive behaviour [a]	63.30** (±16.74)	61.00	40.91 (±4.92)	40.00	66.10 (±16.56)	67.00	62.44 (±16.93)	60.50	41.18 (±3.54)	41.00	40.83 (±5.31)	40.00

 Note: Group differences were analysed between institutionalised and non-institutional school peers; and analysis linked to gender differences were conducted within each group

*$p < 0.05$; **$p < 0.01$

[a] denotes that t-test was used for self-concept, anxiety, disruptive behaviour

[b] denotes that Mann-Whitney test was used for depression and anger

Table 7.2 (Continued)

Descriptive Statistics of Institutional Children (N=47) and Non-institutional Children (N=47) of Achievement, BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale; the Shame Scale , Total SDQ- Difficulties teacher version, Total SDQ-Pro-social teacher version, and the Stigma Scale

Scale	All Institutional children (N=47)		All Non-institutional Children (N=47)		Institutional girls (N=11)		Institutional boys (N=36)		Non-institutional girls (N=11)		Non-institutional boys (N=36)	
	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median
Aggression [b]	26.26 (±14.06)	25.00**	6.45 (±8.69)	5.00	23.55 (±11.23)	23.00	27.08 (±14.86)	27.00	2.73 (±3.04)	1.00	7.58 (±9.53)	5.50*
Shame [b]	16.64 (±4.98)	16.00**	2.60 (±2.53)	2.00	17.36 (±4.25)	18.00	16.42 (±5.21)	16.00	1.36 (±0.92)	1.00	2.97 (±2.74)	2.00*
Stigma	21.23 (±5.78)	23.00	----	----	22.55 (±6.02)	25.00	20.83 (±5.72)	22.50	----	----	----	----
Strengths and Difficulties Questionnaire (SDQ)												
SDQ Total Difficulties [a]	17.62** (±6.16)	18.00	7.45 (±4.00)	6.00	19.00 (±5.37)	20.00	17.19 (±6.40)	18.00	9.55 (±5.43)	7.00	6.81 (±3.29)	6.00
SDQ Pro-social [a]	4.49 (±1.91)	5.00	7.06** (±2.04)	7.00	4.73 (±2.57)	5.00	4.42 (±1.70)	5.00	6.73 (±2.15)	7.00	7.17 (±2.02)	7.00

Note: Group differences were analysed between institutionalised and non-institutional school peers; and analysis linked to gender differences were conducted within each group

 *p < 0.05; **p < 0.01

[a] denotes that t-test was used for Total SDQ –Difficulties and Total SDQ-Pro-social

[b] denotes that Mann-Whitney test was used for aggression and shame

Table 7.3

Descriptive Statistics for Institutional Children (N=47), Non-institutional Matched Peers (N=47), and Non-institutional Normative Group (N=133, see Chapter 5) for BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale; and the Shame Scale

Scales	Institutional children (N=47)		Non-institutional Matched Peers (N=47)		*Non-institutional Normative Group* (N=133)	
	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median
Beck Youth Inventories-II(BYI-II)						
1-Self-concept	39.80 (±7.33)	39.50	54.09 (±5.04)	54.50**	49.62 (±9.58)	51.00
2- Anxiety	55.05 (±10.10)	55.00*	41.25 (±5.10)	40.00	47.72 (±13.48)	45.00
3- Depression	53.06 (±11.04)	50.00**	39.66 (±4.84)	39.00	46.34 (±12.80)	41.00
4- Anger	55.68 (±10.67)	56.00**	36.68 (±4.98)	34.50	43.83 (±12.07)	41.00
5- Disruptive behaviour	63.86 (±17.08)	63.00**	40.95 (±5.04)	40.00	45.55 (±10.04)	42.00
Aggression	27.14 (±.78)	.91**	6.52 (±8.93)	4.50	10.14 (±12.83)	5.00
Shame [a]	16.82 (±4.10)	16.50**	2.64 (±2.60)	2.00	11.07 (±7.99)	9.00

Note 1: Using Mann Whitney test, institutional children scored significantly either higher or lower than non-institutional matching peers in all study variables.
Note 2: Using Mann Whitney test, non-institutional matching peers significantly scored either higher or lower than non-institutional normative group in all study variables except for the aggression scale.

[a] denotes that shame in normative sample was assessed in a sample of 89 children

* $p < 0.05$,** $p < 0.01$

Table 7.4

Descriptive Statistics for All Non-institutional Normative Group (N=133, see Chapter 5), Non-institutional Normative Females (N=53), and Non-institutional Normative Males (N=80) for BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour Scales and the Aggression Scale; and the Shame Scale

Scales	All Non-institutional Normative Group (N=133)		Non-institutional Normative Females (N=53)		Non-institutional Normative Males (N=80)	
	Mean (±SD)	Median	Mean (±SD)	Median	Mean (±SD)	Median
Beck Youth Inventories-II(BYI-II)						
1-Self-concept	49.62 (±9.58)	51.00	48.39 (±11.26)	51.00	50.44 (±8.25)	51.00
2- Anxiety	47.72 (±13.48)	45.00	50.34 (±13.25)	47.00	46.00 (±13.45)	44.00
3- Depression	46.34 (±12.80)	41.00	49.57 (±13.48)	46.00*	44.20 (±11.95)	40.00*
4- Anger	43.83 (±12.07)	41.00	43.51 (±10.40)	41.00	44.04 (±13.12)	40.00
5- Disruptive behaviour	45.55 (±10.04)	42.00	47.15 (±9.89)	45.00	44.48 (±10.00)	41.00
Aggression	10.14 (±12.83)	5.00	8.83 (±11.29)	4.00	11.00 (±13.76)	6.00
Shame [a]	11.07 (±7.99)	8.00	10.42 (±7.51)	8.00	11.89 (±8.60)	10.00

[a] denotes that shame in normative sample was assessed in a sample of 89 children
* $p < 0.05$,** $p < 0.01$

7.4.2 Main results

7.4.2.1 Group differences

To examine the group differences between the institutionalised children and their non-institutional school peers, t-tests and Mann Whitney U were used with study variables depending on whether data were normally distributed or not. Analyses using t-tests showed that the institutionalised children's mean scores were significantly higher for anxiety, disruptive behaviour, and SDQ total difficulties and significantly lower for self-concept (with large effect sizes in each case ranging from $r=.63$ to $r=-.75$). Since Levene's test for the equality of variances was significantly unequal for the anxiety scale ($F = 8.36$, p = .005), the disruptive behaviour scale ($F = 60.78$, $p = .000$), and the SDQ-total

difficulties (F = 9.12, p = .003), an unequal variance t-test was used for these variables. Moreover, analyses using non-parametric statistics (Mann Whitney U), also indicated that institutionalised children scores were significantly higher than their non-institutional peers' scores in scales of depression, anger, aggression, and shame (all with a large effect size ranging from r=-.65 to r= -.84). In addition, this group scored significantly lower than their non-institutional peers in pro-social behaviour (with a large effect size, r=-.56). Non-institutional peers scored significantly higher in school achievement, t (92) = -3.12, two- tailed p < .01, the effect size was medium (r = -0.31).

It is worth noting that the same pattern of group differences (significant high scores in depression, anxiety, anger, disruptive behaviour, aggression, and shame; and significant low scores in self-concept) for institutionalised children was also found when comparing them with non-institutional normative sample (N=133, see Table 7.3). Since the current study included a small-sized sample of participants (particularly the girls, N=11), the gender were not entered into the between group analysis. However, gender difference was examined within each group (institutional children and non-institutional matching peers) separately.

7.4.2.2 Gender differences

In the institutionally reared sample, the only differences between boys and girls were found in self-concept and school achievement. Boys scored higher on self-concept than girls (t (45) = 2.17, two-tailed p = 0.04, r = .33, whereas girls scored significantly higher in school achievement t (45) = 2.34, two- tailed p < .05, r = -0.37. (see Table 7.2)

Concerning the non-institutional sample, the mean scores of the self-concept scores of girls were higher than for boys, t (45) = 2.26, two tailed p = 0.03 r = .39. However, the boys scored higher on the anger scale compared with girls (*Mdns* = 36.00 and 33.00), U = 97.00, z = -2.55, p = 0.01, r = -.37. Non-institutional boys' scores on the aggression Scale (*Mdn* = 5.50) were significantly higher than the aggression scores of girls (*Mdn* = 1.00), U = 106.50, z = 2.31, p = 0.02, r = -.33. On the shame scale, boys' scores (Mdn = 2.00) were significantly higher than those of girls (*Mdn* = 1.00), U = 117.50, z = -2.05, p = 0.04, r = -.30. (see Table 7.2)

On the other hand, within the non-institutional normative group, the gender differences only existed on the depression scale. That is, the non-institutional normative females scored significantly higher than the males (*Mdns* = 46.00 and 40.00), U = 1434.00, z= -3.13, *p* < 0.05, *r* = -.27. (see Table 7.4)

7.4.2.3 Correlation analysis

Correlations between study variables were tested either by Pearson correlation coefficient or by Spearman correlation coefficient (see Table 7.5, Table 7.6) for each group based on the normality of data distribution. Correlations were similar within each group, particularly, in terms of the direction of the correlation. For example, the shame scale among institutionally reared children was only significantly correlated with depression, anger, aggression and stigma. Within the non-institutional sample, shame was significantly correlated with all self-reported measures which suggested a considerable validity of the scale construct. Another highlighted result was that teacher reported SDQ-Total Difficulties and SDQ-Total Pro-social were not correlated with any self-reported measures in institutional sample. However, in the typical sample SDQ-Total Difficulties was only significantly correlated with depression and disruptive behaviour.

Since the achievement scores were correlated with anxiety scores within each group, partial correlation was calculated again to control the achievement score. There were no changes in the correlation pattern among the institutional sample. However, within the non-institutional sample the correlation between disruptive behaviour and anger scale (*r* = .51, *p* < .01) and between aggression score and depression (*r* = .52, *p* < .01) changed and reached significance.

Table 7.5

Correlations of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour) Scales, the Aggression Scale the Shame Scale, SDQ-Total Difficulties teacher version, SDQ- Pro-social teacher version , and the Stigma Scale in Institutional Children (N=47).

Measures	1	2	3	4	5	6	7	8	9	10	11
1.Achievement [b]	1	.04	-.36*	-.14	-.10	-.18	-.16	.09	.01	-.11	.12
Beck Youth Inventories-II(BYI-II)											
2. Self-concept		1	-.13	-.38**	-.19	-.22	-.29*	-.27	-.35*	.11	-.12
3. Anxiety			1	.55**	.50**	.23	.45**	.23	.13	.09	.23
4. Depression				1	.65**	.46**	.55**	.48**	.29*	-.04	.14
5. Anger					1	.52**	.53**	.49**	.13	-.03	.27
6. Disruptive behaviour						1	-63**	.26	.02	.00	-.10
7. Aggression							1	.31*	.09	-.03	.03
8. Shame								1	.37*	.12	.12
9. Stigma									1	.12	.04
Strengths and Difficulties Questionnaire (SDQ)											
10. SDQ-Total Difficulties										1	-.50**
11. SDQ- Pro-social [b]											1

*p < 0.05; **p < 0.01, [a]Pearson correlation coefficients, [b] Spearman correlation coefficients

Table 7.6

Correlations of BYI-II (Self-concept, Anxiety, Depression, Anger and Disruptive Behaviour) Scales, the Aggression Scale, the Shame Scale, SDQ-Total Difficulties teacher version, and SDQ- Pro-social teacher version in Non-institutional Children (N=47).

Measures	1	2	3	4	5	6	7	8	9	10
1.Achievement [b]	1	-.01	-.32*	-.13	-.19	-.14	.01	-.20	.16	-.16
Beck Youth Inventories –II(BYI-II)										
2. Self-concept [a]		1	-.30*	-.04	-.18	-.10	-.42**	-.35*	.04	.09
3. Anxiety [a]			1	.38**	.36*	.06	.23	.49**	.15	-.09
4. Depression [b]				1	.43**	.46**	.23	.65**	.39**	-.14
5. Anger [b]					1	.23	.33*	.65**	.08	.12
6. Disruptive behaviour [a]						1	.34*	.42**	.38**	-.20
7. Aggression [b]							1	.44**	.12	-.09
8. Shame [b]								1	.28	-.11
Strengths and Difficulties Questionnaire (SDQ)										
9. SDQ-Total Difficulties [a]									1	-.40**
10. SDQ- Pro-social [a]										1

*$p < 0.05$; **$p < 0.01$; [a] *Pearson correlation*; [b] *Spearman correlation coefficients*

7.4.2.4 Mediation analysis

One of the current study aims was to examine the feelings of shame as a risk factor which might explain externalising and internalising symptoms across both groups of the study (i.e., institutional children, non-institutional matching peers). However, it was found that the data distribution for shame across the institutionalised and non-institutional samples subscale were bimodal (see Fig 7.1) indicating a lack of variability in shame scores across the two samples.

Fig 7.1

Shame score distribution across study sample
(Institutional and non-institutional peers)
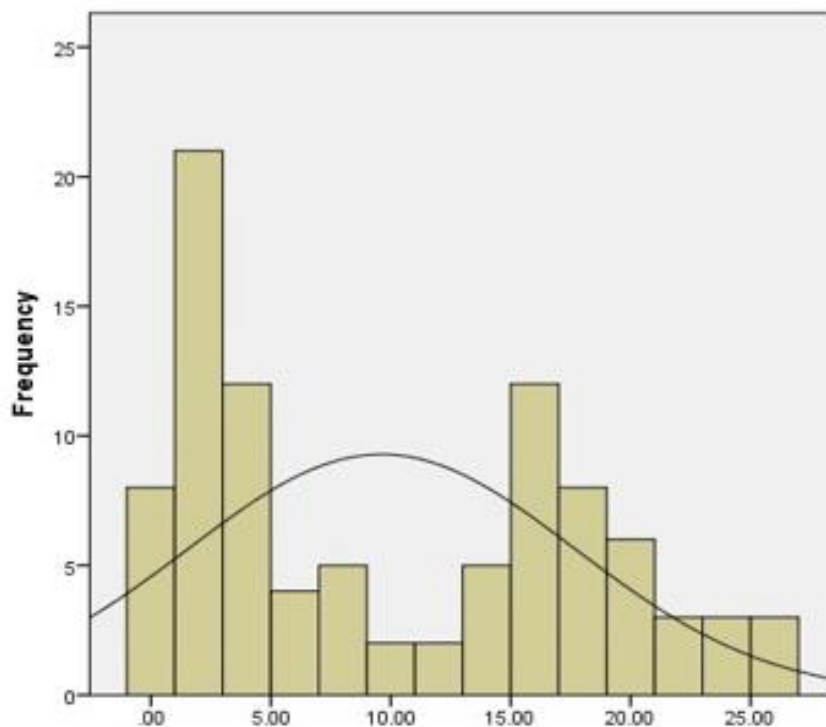
As a consequence of this lack of variability in data distributions of this key study variable (i.e., shame), it was not possible to test a mediation model that included group. The current model therefore focused on understanding the role shame in understanding the indirect associations between the perception of stigma (independent variable) and other dependent variables (self-concept, anxiety, depression, anger, disruptive behaviour, and aggression) in institutionalised children. Because teacher reports of SDQ difficulties and strengths were not linked to institutional children's reports of shame or behavioural symptoms more widely, these were not tested in the model.

Simple Mediation Procedure (SOBEL) is a SPSS macro provided by Preacher and Hayes (2004) as a bootstrapped sampling method to estimate the indirect effects of the mediator. This procedure is recommended for such a mediational analysis since it does not require the sampling distribution of the indirect effect to be normal in small samples; and therefore it does not require the assumption of a total effect. According to this method, there are two types of mediation:1) a complete mediation occurs when the effect of X on Y decreases to zero with the inclusion of M, and 2) a partial mediation exists when the effect of X on Y decreases by a nontrivial amount, but not to zero. This method is more suitable than the modified Sobel test suggested by Baron and Kenny (1986), in that it requires only the existence of a mediated effect $(c \neq 0)$ and an indirect effect, which is statistically significant in the expected direction. In other words, the interpretation of the data resulted from this bootstrapping procedure data are based upon the notion whether zero is within the 95% CIs indicating the lack of significance.

From the analysis of the data collected from institutionally-reared children, it was found that shame was positively correlated with perceptions of stigma. Though there was no direct association between the predictor variable (stigma) with most of the negative outcomes or symptoms (dependent variables), mediation can still be tested. Several authors (e.g.,MacKinnon, 2008; Preacher & Hayes, 2004; Preacher, Rucker, & Hayes, 2007; Rucker, Preacher, Tormala, & Petty, 2011) recommended that carrying out mediation analysis by bootstrapping methods does not require a significant correlation between the predictor (IVs) and outcome (DVs) variables.

The estimation of the indirect effect in the current study above relationship was based upon bias corrected and accelerated (BCa,Efron, 1987) confidence intervals which were set at 0.95 with 5000 resamples. All study variables were entered into a simple mediation procedure based upon Preacher and Hayes's method (2004). The results showed that shame was a significant mediator between stigma and outcome in two models that included depression and anger as outcomes.

For depression symptoms, there was a significant direct effect of stigma and depression via shame (see Figure 2a). When shame was entered as a mediator, the residual direct effect was no longer significant and its effect was much reduced (see Figure 2b). The indirect path was significant with point estimate of .29, S.E. = .15, $z = 1.95$, $p < .05$ and 95% BCa bootstrap CI of .01 to

.71. The direction of effects indicated that perceived stigma among the institutionalised children was associated with an increase in feelings of shame, which in turn was associated with elevated depression symptoms.

Fig.7.2a Direct effects of the perceived stigma on depression symptoms
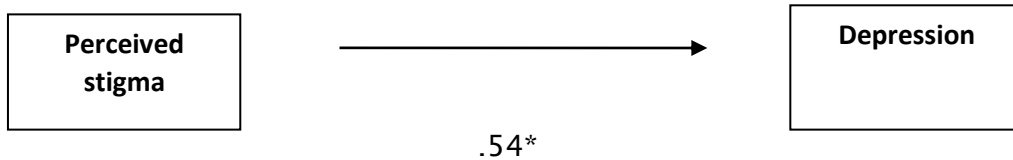
*p < .05

Fig.7.2b Indirect effects of perceived stigma on depression symptoms mediated by feelings of shame
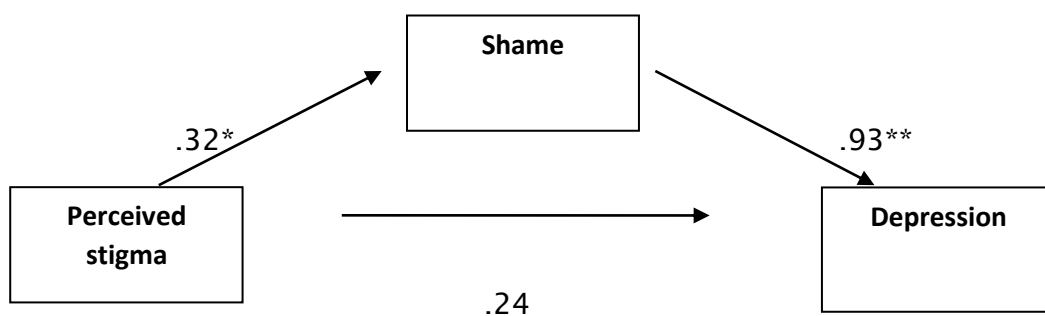
*p < .05, **p < .005

For the anger scale, although there was no significant direct effect between perception of stigma and the anger scale (see Figure 3a),as shame was entered as a mediator the indirect path was significant with point estimate of .34, S.E. = .16, z = 2.07, p < .05 and 95% BCa bootstrap CI of .02 to .78. The directions of effects suggested that perceived stigma among the institutionally reared children was associated with increased feelings of shame, which in turn is associated with an increase in anger (see Figure 3b).

Fig.7.3a Direct effects of perceived stigma on anger

| Perceived stigma | →.24→ | Anger |

*p < .05

Fig.7.3b Indirect effects of perceived stigma on anger mediated by feelings of shame
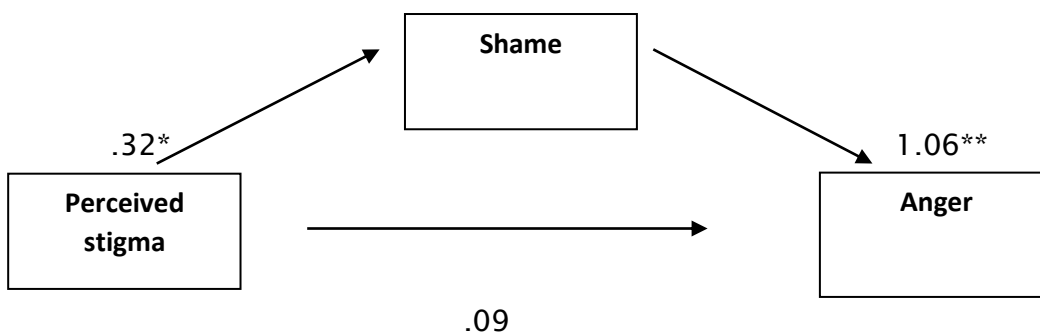
*p < .05, **p < .005

7.5 Discussion

The aim of this study was to test the hypothesis that institutionalised children would report higher rates of internalising (i.e., anxiety, depression) and externalising (i.e., disruptive behaviour, anger, aggression, emotional and behavioural problems) symptoms, and shame compared to their non-institutional school peers. Secondly, the study considered the lower levels of self-concept and pro-social behaviour among these children in comparison to their school peers. In addition, the study assessed whether perceived stigma in institutionalised children was associated with feelings of shame and if shame mediated associations between perceived stigma and symptoms of internalizing and externalizing symptoms, self-concept.

The results showed that internalising symptoms (i.e., anxiety, depression), were significantly higher for institutional children compared with their non-institutional school peers. This finding is consistent with children's self-ratings of internalising symptoms in other comparative epidemiological studies (e.g.,Erol et al., 2010; Kanbur et al., 2011; Simsek et al., 2008) that

have shown increased symptoms of negative affect in orphanage children aged 6 to 18 years compared to their community peers.

Several studies (e.g.,Ellis et al., 2004; Groark et al., 2011; Simsek et al., 2007; Zeanah et al., 2009) have also considered externalising symptoms in orphanage children. In the current study, institutionalised children reported increased symptoms of externalising behaviours compared with non-institutional school peers (anger, disruptive behaviour, aggression).These findings are consistent with self-reports in a recent study by Rahman et al. (2012), which found that Bengali children (aged 6 -18) in conventional and Save our Souls (SOS) orphanages (family-like charity orphanages) showed elevated levels of conduct disorders. A similar pattern of findings was found in a Turkish study (Simsek et al., 2007), which showed that orphanage children (aged 6 -12 years) exhibited more aggressive behaviours, rule-breaking behaviours, and conduct problems than their community school peers. Finally, the current findings are relatively similar (though the reason of placement in the Romanian institutions was totally different from the current study) to those of several other studies on preschool children (aged 2 -6 years) residing in Romanian orphanage settings, which reported that institutionalised children met the DSM-IV criteria for ADHD and conduct disorder (Zeanah et al., 2009).

The abovementioned findings of emotional and behavioural problems in institutional children and their non-institutional school peers were supported by teachers' ratings of children's strengths (pro-social behaviour) and total score of difficulties (emotional symptoms, conduct problems, hyperactivity problem, peer problems) (SDQ, Goodman, 1997).However, there was no significant correlation between the teachers' reports of SDQ total difficulties and SDQ total pro-social and any of the children's self-reported scores on internalising (i.e., depression, anxiety) and externalising (i.e., anger, aggression, disruptive behaviour) symptoms, particularly, within the institutional sample. The discrepancies (e.g., correlation, differences) of informants' ratings of child psychopathology have been commonly cited in several studies (e.g.,De Los Reyes & Kazdin, 2004, 2005; Youngstrom, Loeber, & Stouthamer-Loeber, 2000). Those informants may include the child himself/herself, the parents, and the teachers. These discrepancies can be lower or higher depending either on the characteristics of the child or the other informants. In particular, the type of the problem or symptom a child has can influence the discrepancies in informants' ratings. For example, it has been

found in various meta analyses (e.g.,Achenbach, McConaughy, & Howell, 1987) that the similarities in informants' ratings of externalising problems (e.g., conduct disorder, aggression) were higher than those in the ratings of internalising problems (e.g., anxiety, depression). However, these similarities can be attributed to the notion that externalising symptoms can be more observable than internalising problems. However, in the current study, the SDQ total Difficulties yielded a total score for broad items of both externalising and internalising problems; whereas the child-reported scales resulted in individual scores for each symptom. In addition, it is possible that teachers' ratings could be influenced by their comparison of the two samples of children rather than assessing the actual behaviours of each child based upon the scores of SDQ-total Difficulties and SDQ-total Pro-social.

According to their teachers' reports, institutionally reared children scored significantly higher than their non-institutional school peers on the total difficulties total score and teachers also reported less pro-social behaviour in this group. This finding is relatively consistent with other studies that have sought to measure the prevalence of emotional and behavioural problems among orphanage children by using teachers' or/and carers' reports. For example, Lassi, Mahmud, Syed, and Janjua (2011) found that teacher ratings of SDQ revealed that 39% of Pakistani children residing in conventional orphanages (aged 6-12) and their peers in SOS orphanages (aged ≥11) were within the clinical range regarding the composite total difficulties score from the SDQ. Similarly,Thabet et al. (2007) found that 49% of a Palestinian institutional children sample (aged 9-16) were rated by their teachers as being within the clinical range for behavioural difficulties and low pro-social behaviour subscale of SDQ. However, the Palestinian sample had different characteristics regarding the reason for being in an institution related to their experience of political conflict. There were high ratings of internalising symptoms reported by orphanage children on the Children's Post-traumatic Stress Reaction Index (CPTS-RI, Pynoos et al., 1987), Child Depression Inventory (CDI, Kovacs, 1985), and Revised Children's Manifest Anxiety Scale (RCMAS, Reynolds, 1980), and the externalising symptoms assessed by the SDQ total scores reported by their carers.

Since the self-concept of an individual is influenced significantly by the context in which he/she is raised and by the people with whom the person interacts with (Kimani, Cheboswony, Kodero, & Misigo, 2009), levels of self-

concept were compared between institutionalised children and their non-institutional peers. The findings showed that the institutionally raised children scored significantly lower than their non-institutional peers. Although the current study was carried out on a sample of children who were institutionalised because they were born out of wedlock, the results are consistent with other studies of institutional samples raised in different contexts and being orphaned for different reasons. For example, Gürsoy et al. (2012) reported that levels of self-concept in institutionalised adolescents (aged 13-18) was lower compared to those reported by their age-matched peers living with their biological families. Similarly, Kimani et al. (2009) reported low self-concept in AIDS-orphaned children (aged 10-15) compared to their non-institutionalised peers. In a recent comparative study carried out in Pakistan (Farooqi & Intezar, 2010), levels of self-esteem were lower in orphanage children aged 10 to 15 years compared with their peers living with their two-parent families.

Related research has found that an individual's experience of shame is related to perceptions of being criticized and put down by others for behaviours or attributes that others consider undesirable or unattractive (Gilbert, 1998; Tangney, 1996; Tangney et al., 2007). In addition, shame is related to the emotions and cognitions that an individual has about his/her own behaviours or attributes and the negative self-evaluations and self-emotions (e.g., self-disgust, self-blame) an individual has about himself/herself (Gilbert, 2000). Based on the above assumptions about shame and its association with the negative evaluation of the self, it was expected that institutionalised children would report elevated feelings of shame relevant to their social identity. The current findings were consistent with this hypothesis; shame was significantly higher in institutionalised children compared with non-institutional school peers. Moreover, feelings of shame were significantly correlated with perceptions of stigma within the institution reared sample.

Several longitudinal studies (e.g.,Lahey et al., 2006; Moffitt & Caspi, 2001) have shown that there is male predominance for externalising disorders (e.g., aggression, conduct disorders, antisocial behaviours) in early childhood. In addition, several studies (e.g.,Hankin, Mermelstein, & Roesch, 2007; Zahn-Waxler, Shirtcliff, & Marceau, 2008) have indicated that girls were dominant in internalising symptoms (e.g., anxiety, depression).In the present study, gender differences within each group were examined with regard to all variables, and

the findings showed that gender differences were present in the non-institutionally reared children. For example, non-institutional boys scored significantly higher than non-institutional girls on externalising symptoms (i.e., anger, aggression) and shame; whereas the non-institutional girls were higher in self-concept. In contrast, there was only one gender difference in the institutionally reared children. Scores on self-concept were significantly higher in institution-reared boys than girls. This is consistent with other studies that have found gender differences regarding externalising and internalising symptoms among the institutionalised children. For example, Lee, Seol, Sung, and Miller (2010) showed no gender differences in South Korean institutionalised children aged 4 to 8 years in both caregiver report internalising and externalising symptoms. For the levels of self-concept in orphanage children, the current finding is in agreement with the findings of Gürsoy et al. (2012) who reported that boys aged 13 to 18 reported higher levels of self-concept than girls of the same age who lived in the same orphanage. In contrast, a Turkish study (Caman & Ozkebe, 2011) on non-institutional adolescents aged 13 to 16 years showed increased levels of depression, anxiety, somatization, negative self , and hostility in girls compared to boys living in orphanages. The lack of gender differences may be attributed to the fact that institutionalised boys and girls in the current study have been exposed to the same experience of being born out of wedlock and raised in institution from birth. It is possible, that it is this context that results in an increase of feelings of shame and perceptions of stigma for both girls and boys, increasing the risk in both genders.

Another aim of the current study was to assess the possible mediators between perceived stigma and externalising and internalising symptoms among institutionalised children. Chapter 6 showed that children reported concealing their social identity and status when they were in public. This was an indication of feelings of shame among them and their awareness of being stigmatised. The current study extended previous research to highlight a mediational role of shame in understanding the association between stigma and these symptoms. Goss et al. (1994) raised the possibility that shame is a self-conscious emotion of being inferior or unattractive when compared to others. Thomaes et al. (2007) suggested that public exposure of the self that is characterised by some negative aspects or unwanted identity can be the situational trigger of shame. Relatedly, Gilbert (2000) has associated others'

shameful perceptions and attitudes towards an individual to the stigma consciousness (Pinel, 1999), which is argued to reflect the individual's expectation of being stigmatised and negatively evaluated by others.

To examine the mediational role of shame, a recent approach for testing the indirect effect of intervening variables was used in the current study. Specifically, this approach relies on quantifying the indirect effect through the use of product of coefficients strategy which does not require testing the significance of each path in the mediation model (Hayes, 2009). Preacher and Hayes (2004) state that there is a possibility to employ a mediation analysis by using this approach even when the significant relation between the independent and dependent variables does not exist.

Consistent with the abovementioned propositions, the current findings showed that shame mediated the relation between perceived stigma and reports of depression symptoms out of the internalising symptoms. This finding was consistent with other studies that considered that shame feelings can be predictors of internalising symptoms. For example, De Rubeis and Hollenstein (2009) found that shame proneness was a significant predictor of depressive symptoms. However, this study was carried out among early adolescents through avoidant coping as a mediator variable. Relatedly, Ferguson et al. (2000) have compared healthy children between 6 and 13 years to their clinically referred school peers of the same age range on self-report measures of internalising symptoms (i.e., depression, state and trait anxiety) and a scenario-based measure of shame. They concluded that there was a significant relationship between shame-proneness and an index of internalising symptoms.

Although aggression is suggested to be a relief of pain for those who are shamed, the tendency to exhibit aggressive behaviours when shamed has a serious impact (Thomaes, Bushman, Stegge, & Olthof, 2008). For example, children who usually deflect their painful feelings of shame associated with their mistakes/flaws may become less motivated to overcome them. As a result, they may become less adaptable to the demands of their social environment. The findings of the current study also showed that shame completely mediated the relationship between perceived stigma (independent variable) and anger. Although there was not a significant direct relation between perceived stigma and anger, the mediational role of shame was found in the association between perceived stigma and anger.

Most studies, however, considered the relationship between shame and externalising problems regardless of its mediational role in the development of such symptoms. For example, a large-scale study by Tangney et al. (1996) involving participants of different ages including children with an age range of 9 to 14 (*M*=10.6) , found that shame proneness was significantly correlated with anger arousal and intentions and other related maladaptive behaviours such as direct and indirect aggression (e.g., physical, verbal, and symbolic), and self-aggression. In a similar study (Ferguson et al., 1999), children with an age range of 5 to 12 years were asked to judge the emotional reactions they choose in a scenario-based measure of shame. In a second session, their parents were asked to report on the behavioural and emotional symptoms their children have experienced during the last 6 months. There was a significant correlation between children's responses toward the hypothetical situations involving shame and their parents' ratings of internalizing and externalizing symptoms.

7.6 Limitations of the study

There are some limitations to the current study. For example, although feelings of shame significantly mediated the association between perceived stigma and depression and anger symptoms, this mediation effect does not provide information as to whether feelings of shame were the cause for the development of these symptoms or one of the risk factors that might contribute to their emergence. Relatedly, testing the mediation model of shame using cross-sectional method did not allow for establishing the causal inference about whether stigma led to feelings of shame and other symptoms (e.g., anger, aggression).

In addition, a higher prevalence of emotional and behavioural symptoms were reported by institutionalised children compared with non-institutional school peers, the responses of the non-institutional sample children were skewed towards the low extremes in shame and aggression and the high extreme in self-concept. For example, the matching procedure for the institutionalised children with their non-institutional school peers, the researcher suggested selecting the non-institutionalised sample from the same schools and classrooms where institutionalised children receive their formal education. Since the institutions' policy (see Chapter 1) was to integrate children in areas of middle and upper-middle classes and the matching non-

institutional sample was from these areas; the latter was not representative of all areas within the city of Riyadh. This biased sampling might account for the extremely low scores in negative symptoms (e.g., shame, aggression). On the other hand, the pilot sample used in validating the translated and adapted scales; i.e., the Beck Youth Inventories-II (BYI-II;Beck et al., 2005), the aggression scale (Orpinas & Frankowski, 2001), and the Other as Shamer Scale (OAS;Goss et al., 1994) scored significantly higher than the non-institutional sample used in the current study.

7.7 Conclusion

In sum, the findings of the present study suggested that the level of shame experienced by institutionalised children was significantly higher in comparison to their non-institutional school peers. In addition, these increased levels of shame were significantly correlated with perceived stigma among the institutionalised children. The mediation analyses indicated that feelings of shame are important in understanding the association between perceived stigma and increased levels of depression and anger. However, the mediational role of shame was not significant in accounting for the relationship between perceived stigma and aggression.

The present study suggests future implications of the research on institutionalised children. While Western studies (e.g.,Rutter, Beckett, et al., 2009; Zeanah et al., 2003) mostly focused on the effects of early deprivation, the current study indicated that the increased symptoms of behavioural difficulties in its population are linked to perceptions of stigma and shame feelings. In addition, these findings have some implications for the development of intervention programmes for the treatment of psychiatric symptoms (e.g., anger, depression) among institutional children, indicating that these should work to reduce stigma and shame in this population. Moreover, the absence of shame effect on other externalising symptoms (e.g., aggression and disruptive behaviours) raises questions about what may influence the high level of externalising behaviours among institutionalised children who already had shame feelings.

8. Chapter 8: The role of social information processing in externalising problems

8.1 Introduction

Chapter 7 showed that institutionalised children, compared to their non-institutional school peers, reported elevated levels of externalising symptoms (e.g., anger, aggression, disruptive behaviour). In addition, teachers also reported low levels of strengths (i.e., pro-social behaviour) and elevated total difficulties (i.e., hyperactivity, emotional problems, conduct problems, peer problems) in this population. Institutionalised children also reported higher levels of internalising symptoms (e.g., anxiety, depression) and shame compared to their non-institutional peers. Moreover, they reported feelings of stigma. Chapter 7 also showed that feelings of shame are important in understanding some elevated symptoms of psychopathology in institutionalised children, highlighting that shame mediated the relationship between perceived stigma and symptoms of depression and anger.

While feelings of shame were found to play a role in understanding some of the increased negative outcomes in institutionalised children (e.g., depression, anger), they did not mediate symptoms related to other externalising behaviour (i.e., aggression and disruptive behaviour). This finding raises the possibility that other factors might be important in understanding externalising symptom. Several theoretical frameworks highlight the role of cognition in understanding risk for the development of psychopathology. Kendall (1985), for example, emphasized the role of cognition and its underlying structures (i.e., information representations in memory), content (i.e., actual information), processes (i.e., operative procedures in the cognitive system), and products (i.e., outcome of the interactions of all structures, content, and processes) in understanding the development of childhood psychopathology and the effects of related therapeutic interventions. Relatedly, Dodge and colleagues proposed a theoretical framework to highlight the role of social cognition in understanding psychopathology. This framework outlines the relationship between an individual's perception of social situations and interactions, their evaluation of others' motives and intents within these situations, and their decisions on how to respond to those situations (Crick & Dodge, 1994; Quiggle et al., 1992).

Crick and Dodge (1994) proposed a reformulated model of social information processing (SIP) to illustrate the cognitive mechanisms that children use to understand social situations and what is important in determining related behaviours. This model comprises six cyclical stages. The first two stages involve two interrelated processes: encoding and interpretation of social cues. During these two stages, individuals are proposed to observe and evaluate a social situation using external cues linked to others' behaviours and the context of the situation, as well as internal cues that are stored in their own memory database of previous experiences. At the interpretation stage, individuals are suggested to generate attribution of causes and intentions behind another's behaviour. This process of attribution is argued to influence decisions and responses in the later stages of the model.

According to Crick and Dodge (1994) , the third stage of the SIP model involves clarification of goals. At this stage, individuals decide what they want to do in a certain situation. The model suggests that as part of the memory database of previous experiences, individuals bring tendencies or attributions and goal preferences to situations they face. Having clarified goals, the next stage in the SIP model is response access or construction. This stage entails the creation of alternative responses to a situation based upon the database of memories for possible responses. In the fifth stage of the model, individuals are proposed to evaluate the responses they have previously constructed. This stage involves the behavioural performance of the evaluated responses in stage four. It is worth noting that even if enacting a response may end a social situation, the social information processing is still active as the entire social situation is recorded in an individual's database for use in stage one when there is a need for encoding cues in future social situations.

Any distortion in each of the six stages comprising the SIP model is argued to impact on subsequent stages, as well as the storage of the event in memory. For example, reactively aggressive children, compared to their non-aggressive peers, have been found to encode a smaller number of social cues and focus their attention on hostile and threatening social cues (Crick & Dodge, 1996). Studies (e.g.,Crick & Dodge, 1996; Dodge & Coie, 1987) have also found that in reactively aggressive children, attributions or interpretation of ambiguous social situations as hostile is characterised as a cognitive bias, that is linked to subsequent aggressive behaviour in this group of children.

Further research has demonstrated that externalizing and internalizing symptoms in children and young people are associated with maladaptive or ineffective social information processing (Adrian, Lyon, Oti, & Tininenko, 2010). With respect to externalizing problems, some studies found that maladaptive behaviours were related to a variety of distortions or deficits in the implementation of each stage in the SIP model. For example, some studies (e.g.,Lochman & Dodge, 1994; Matthys, Cuperus, & Engeland, 1999) have shown that children with externalizing symptoms (e.g., aggression, violence, ADHD, oppositional deviant disorder, conduct disorder), compared to their non-institutional peers, encoded a fewer number of social cues to allow them to select the appropriate responses or solutions to a number of hypothetical situations. Moreover, further research has shown that children with reactive aggression (i.e., a response to a perceived threat or provocation) were more likely to attribute hostile intent when interpreting peers' behaviour in hypothetical scenarios. In contrast, children with proactive aggression (i.e., aggressive behaviour that anticipates a reward) had less hostile attribution biases, compared to their reactively aggressive peers (e.g.,Crick & Dodge, 1996; Dodge & Coie, 1987) .

In addition to the role of cognitive mechanisms linked to hostile attributions in social situations, several studies have shown that children with externalising symptoms attributed more hostile intent to other peers with whom they interact, and that this reaction is most evident when they report being in a negative emotional state (e.g.,Lemerise & Arsenio, 2000; Orobio de Castro, Slot, Bosch, Koops, & Veerman, 2003). For example, Orobio de Castro et al. (2003) showed that aggressive boys (9-13 years) were more likely to attribute hostile intents to their peers in hypothetical vignettes after they had experienced an unfair loss in a computerised game compared to their non-aggressive peers. This indicates that the behavioural responses of children with high levels of externalising symptoms (e.g., aggression) would be most biased when they are experiencing negative affect.

As research has emphasised the role of previous experience (e.g., attachment disorders, histories of abuse, neglect, and rejection) in the interpretation stage of the SIP model, it is possible that institutional children may tend to attribute hostile biases towards others' intents in ambiguous social encounters leading to the behavioural enactment of aggressive responses. In order to understand the cognitive factors linked to increased

aggressive responses in institutionalised children, the current study explored hostile attribution bias and behavioural enactment of aggression in this group compared to non-institutional school peers. More specifically, it examined the mediating role of hostile attribution bias among institutionalised children who already showed elevated levels of externalising symptoms (i.e., anger, aggression, disruptive behaviour) in understanding the presence of reactive aggression in social ambiguous situations.

8.2 Methods

8.2.1 Participants

A total of 47 institutionalised children (36 boys, 11girls) with an age range of 9 to 12 years old and their age-matched school peers (N=47) were recruited to participate in the current study. They were the same children who participated in the previous study (see chapter 7). Three children from each group were excluded: two children (from the non-institutional peers) were moved to different school and another institutional child was adopted. The final sample included 44 children (34 boys, 10 girls) in each group.

8.2.2 Measures

The Home Interview with Child (HIWC;Dodge, Pettit, Bates, & Valente, 1995) was used in the present study to assess children's tendency to generate hostile attributions or intent towards others and their corresponding aggressive responses. It was originally used with children aged five to nine years of age. It consists of 8 stories accompanied by cartoon-like drawings that depict problematic peer interactions in which the peer's intentions are ambiguous (see Appendix B6). These interactions involve hypothetical ambiguous and minor conflicts (e.g., being bumped or pushed) and situations where the child cannot successfully access a hypothetical peer group (e.g., being ignored or rebuffed by peers). The child is required to interpret each situation as reflecting either hostile or non-hostile intent towards them from their peer(s).

Each of the 8 stories has two open-ended verbal responses. The researcher codes responses from the interpretation questions (e.g., "Why do you think xxx hit you in the back?") into one of 2 categories: hostile (1), non-hostile (2). The responses from the behavioural questions (e.g., "What would you do about xxx after he/she hit you?") are coded into one of six categories:

don't know (0), do nothing (1), ask why (2), command (3), threaten (4), or retaliate (5). The HIWC yields 3 overall scores: Hostile Attribution (HA), Aggressive Behaviour Score (ABS), and Aggressive and Threatening Behaviours (ATB). The HA is coded as non-hostile (1) or hostile attribution (2) and calculated by the frequency of each category count. A higher number of hostile attributions indicates an increased tendency to interpret peer interactions as hostile. The ABS is calculated by adding the codes for the eight-story behavioural response codes. The scores for the Aggressive Behaviour scale can range from 0 to 40 with higher scores indicating more aggressive responses. The ATB is obtained by summing the frequency of the aggressive or threatening scores (last two codes: 4, 5) across the eight stories. Higher scores frequencies of number 4 or 5 indicate that aggressive responses were linked to a threatening or retaliating solution (and the possible range is from 0-8).

The psychometric properties of HIWC are based on a sample of 100 children in the Fast Track project (Zelli, Dodge, Lochman, & Laird, 1999). They reported that Cronbach's alpha was high (α =.80) for the 8 items each of which contains dichotomous response coded either as hostile, non-hostile; and the Cronbach's alpha was above average (α =.74) for the ATB coded items. The inter-coder agreement reliability (k) was high for the hostile attribution (k= .94) and the behavioural responses (k=.92).

Externalising symptoms. Three scales were used from the previous study, including two scales (i.e., anger scale, disruptive behaviour scale) from Beck Youth Inventories-II (BYI-II; Beck et al., 2005) and the Aggression Scale (Orpinas & Frankowski, 2001). Full descriptions of the all scales are provided in Chapter 5.

8.2.3 Procedure
1- Ethical approval. Ethical approval for this study was obtained from the Psychology ethics committee at the University of Southampton, UK. Other approval letters were also obtained from the relevant Saudi authorities to conduct the study in both orphanages and schools.

2- Translation phase. The HIWC was initially translated into Arabic with permission granted by the Fast Track Project team. In fact, the relatively very simple and comprehensible content of the sentences and phrases used in the HIWC stories made it easy for them to be translated into Arabic without the need for a multi-step process of translation such as cross-cultural translation

used before in Chapter 5. However, the pictures were adapted so that they showed characters' clothes that reflected Saudi culture.

   3- **Administration phase.** The children in each group were assessed on an individual basis. The institutionalised children were interviewed by the researcher in their orphanages. Since the Saudi educational system is traditionally segregated, the male school peers were interviewed by a 3rd- year student from the Psychology Department in King Saud University in Riyadh (who had been instructed by the researcher on how to conduct the interview and audiotape the children's responses); and the school female peers were interviewed by the researcher. In general, the HIWC took about 10–15min. Each child was shown a series of eight cartoon-like drawings/ scenarios of two social situations adapted from the original version to fit the Saudi culture. The first situation consisted of ambiguous minor harm and the second situation is of an unsuccessful peer entry. After describing the situation, the researcher asked the child two questions. The first question asked the child to interpret the situation (i.e., "Why would xxx do that?"); and the second question measured the child's behavioural response to each provocation (i.e., "What would you do?"). The child's verbal responses to each question were audio recorded by the interviewers in both schools and the orphanages.

   4-**Transcribing the child's verbatim.** The researcher transcribed each child's verbatim answers into an answer sheet for coding and analysis.

   5- **Inter-rater reliability phase.** A translation procedure was made by the researcher into English for 20 randomly selected Arabic transcribed verbatim of the institutionalised children (N=10) and their non-institutional peers (N=10). The accuracy of the translation was tested by an expert bilingual translator. Based on the randomly selected English translated transcriptions from both institutionalized children (N=10) and their non-institutional school peers (N=10), the inter-rater agreement reliability was high for the HA responses (k =.90) and the ABS category (k= .89), respectively. With regard to Cronbach's alpha, it was relatively high for both HA (α = .80) and ABS (α = .88) based on a sample of 88 children.

8.3 Results

8.3.1 Preliminary analysis

   The assumption of normality was tested for the institutionalised children (N = 44), and their non-institutional age-matched peers (N = 44) using

the One-Sample Shapiro-Wilk (Field, 2005) . Regarding the institutional sample, data from all study variables were normally distributed except for the hostile attribution bias (HA), which was negatively skewed. On the other hand, all research measures were positively skewed among non-institutional sample even after several transformation methods were used. Furthermore, the data distribution for HA was bimodal across the two groups. Means, medians and standard deviations of each study group in all variables including HIWC subscales (i.e., HA, ABS), anger and disruptive behaviour, and aggression are shown in Table 8.1.

8.3.1.2 Gender differences

With regard to gender differences, the *t*-test results of anger, disruptive behaviour, aggression, and ABS have shown that there were no gender differences among the institutionalised children. In addition, the Mann-Whitney U test has found no gender difference among the institutionalised children for only HA. On the other hand, when using Mann-Whitney U test with all study variables, there were no gender differences for all variables in non-institutional children , that boys scored significantly higher than girls' score ($p < .05$) in the anger scale.

Table 8.1
Descriptive Statistics of Institutional Children (N=44) and Non-institutional Children (N=44) of Anger scale, Disruptive Behaviour Scale, the Aggression Scale, and Home Interview with the Children Subscales.

Scales	Institutional children (N=44)			Non-institutional children (N=44)		
	Mean (±SD)	Median	Range	Mean (±SD)	Median	Range
Beck Youth Inventory-II(BYI-II)						
Anger	55.68 (±10.67)	56.00**	34.00 – 78.00	36.68 (±4.98)	34.50	31.00 – 51.00
Disruptive behaviour	63.86 (±17.07)	63.00**	0.00 – 55.00	40.95 (±5.04)	40.00	0.00 – 19.00
Aggression Scale	27.14 (±14.07)	26.00**	0.00 – 64.00	6.52 (±8.93)	4.50	0.00 - 50.00
Home Interview with the Children (HIWC)						
Hostile Attribution(HA)	6.82 (±1.40)	7.00**	3.00 – 8.00	2.66 (±1.43)	2.00	0.00 - 6.00
Aggressive Behaviour Score(ABS)	25.61 (±7.42)	25.00**	11.00 – 40.00	11.68 (±2.75)	11.00	8.00 – 21.00

**$p < .001$

8.3.2 Main results
8.3.2.1 Group differences

Since the data distributions of study variable, especially for the non-institutional sample, were non-normally distributed, non-parametric tests were used to test the differences between the study groups. The institutional children attributed significantly more hostile attributions (HA) and suggested significantly more aggressive responses (ABS), $p < .001$, $r= .81$ for both subscales, compared with non-institutional peers. In addition, institutional children were significantly higher than their non-institutional school peers ($p < .001$) in anger and disruptive behaviour with a relatively large effect size above .90.

8.3.2.2 Correlational analysis

To examine whether HA was correlated with other study variables, correlation coefficients were calculated with each group separately (see Table 8.2, Table 8.3, respectively).

Table 8.2
Correlations of Anger, Disruptive Behaviour, Aggression Scale, and Home Interview with the Children, HA and ABS Subscales among Institutional Children (N=44)

Scale	1	2	3	4	5
Beck Youth Inventories-II(BYI-II)					
1- Anger	1				
2- Disruptive behaviour	.51**	1			
3- Aggression	.50**	.63**	1		
Home Interview with Children (HIWC)					
4- Hostile Attribution(HA)[b]	.20	.19	.30*	1	
5- Aggressive Behaviour Score (ABS)	.31*	.32*	.23	.56**	1

**. Correlation is significant at the 0.01 level (2-tailed), *. Correlation is significant at the 0.05 level (2-tailed).
[b] Spearman's correlation

Table 8.3

Spearman's Correlations of Anger, Disruptive Behaviour, Aggression Scale, and Home Interview with the Children, HA and ABS Subscales among Non-Institutional Children (N=44)

Scale	1	2	3	4	5
Beck Youth Inventories-II(BYI-II)					
1- **Anger**	1				
2- **Disruptive behaviour**	.25	1			
3- **Aggression**	.31*	.35*	1		
Home Interview with Children (HIWC)					
4- **Hostile Attribution(HA)**	-.21	.10	.11	1	
5- **Aggressive Behaviour Score (ABS)**	-.16	.10	.20	.29	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

For the institutional sample, the correlation between the study variables were tested by Pearson's correlation test, except for HA. However, for the non-institutional school peers all study variables were tested by Spearman correlation test. It was found that HA among the institutional sample had a positively significant correlation with scores in the Aggression scale (Orpinas & Frankowski, 2001) and reactive aggression measured by ABS. However, HA among non-institutional school peers showed very modest correlation with all study variables.

8.3.2.3 Mediation analysis

Regarding the lack of variability in data distribution of hostile attribution biases across study groups (see preliminary section), the mediation analysis to understand the relationship between key variables was only carried out for the institutionally reared children. In the present study, the bootstrapping method (see Chapter 7) proposed by Preacher and Hayes (2004) was adopted to clarify the relationship between the independent and dependent variables. To carry out the bootstrapping procedure, a recently developed SPSS macro (Hayes, 2013) entitled PROCESS - was used for estimating the indirect effects of hostile attribution (HA) as a mediator of the association between aggressive behaviour (Orpinas & Frankowski, 2001), and aggressive responses (ABS) in ambiguous situations, as the hostile attribution biases was only correlated with these two variables (see Table 8.2).

A simple mediation model (Model 4 in PROCESS) was established with aggressive behaviours as the predictor variable, hostile attribution (HA) as mediator and aggressive responses (ABS) as the outcome. There was a

significant indirect effect of aggressive behaviour on reacting aggressively in response to ambiguous situations through hostile attribution biases, $b = .09$, BCa bootstrap CI [.01, .22]. This represents a relatively small effect size (kappa squared), $k^2 = .19$, 95% BCa CI [.03, .40] indicating that hostile attribution (HA) completely/fully mediated the relation between the aggressive behaviour score among institutional reared children and the reactive aggression in ambiguous situation. The direction of the estimate in each pathway (Fig 1 *a/b*) indicated that increases in aggressive behaviour was associated with increased hostile attributions biases, which in turn led to an increase in aggressive reactions.

Fig.8.1a Direct effects of aggressive behaviour on aggressive behaviour score (ABS)

Aggressive Behaviour → $b = .12$, p > .05 → ABS
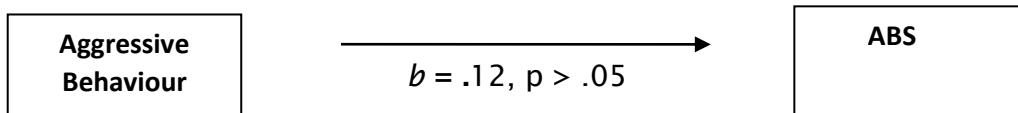
Fig.8.1b Indirect effects of aggressive behaviour on ABS as mediated by HA

HA

$a = .03*$

$b = 2.96**$

Aggressive Behaviours

$b = .09$, 95 % CI [0.01, 0.22]

ABS
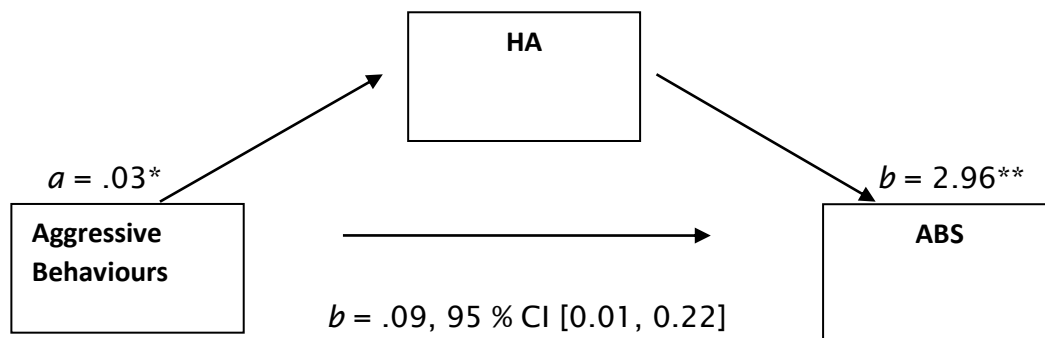
*$p < .05$, ***$p < .001$

A further simple mediation procedure that could be potentially useful for deciding whether HA was a mediator between other externalising symptoms (i.e., anger, disruptive behaviour) and aggressive responses (ABS). However, the scores of anger and disruptive behaviour were not significantly correlated with HA; and therefore the simple mediation test was only applied for the aggression scale (Orpinas & Frankowski, 2001).

8.4 Discussion

The aim of this study was to test the hypothesis that institutionalised children would attribute hostile biases towards others' intents in ambiguous social encounters leading to the behavioural enactment of aggressive responses compared to their non-institutional school peers. In addition, another aim was to understand externalising symptoms (e.g., anger, aggression, and disruptive behaviour) among institutionally reared children by examining the cognitive factor (i.e., hostile attribution biases) and its role in the presence of reactive aggression.

The findings of the present study showed that institutionalised children attributed more hostile intent in ambiguous social situations and they suggested more aggressive responses, than their non-institutional school peers. Institutionalised children also reported significantly more other externalising symptoms (e.g., anger, disruptive behaviour, and aggression). In addition, the hostile attribution bias significantly correlated with aggressive behaviour and reactive aggression; however, hostile attribution was not significantly correlated with other externalising symptoms (e.g., anger, and disruptive behaviour). These findings indicate that institutionalised children, who report elevated levels of aggressive behaviour, also report reacting aggressively in hypothetical/scenario-based social interactions and this association was mediated by social cognitive factors (i.e., hostile attributions).

The results from the current study are consistent with prior research which has found increased externalising symptoms in institutionalised children compared with their non-institutional peers (e.g,Ayaz et al., 2012; Ellis et al., 2004; Erol et al., 2010). These externalising symptoms might stem from some contingencies that have characterised the context in which the institutionalised children reside. For example, although the institution is based upon a family-like care system, evidence from the previous qualitative study (Study 1) that lack of training among carers could be an obstacle to deal with stubborn or angry/aggressive children as manifested by the use of unjustified punishment and confinement. It is possible that these factors might increase the likelihood of externalising symptoms (see Chapter 4). This suggestion is consistent with the notion that antisocial behaviour could develop from the family interactions or dynamics between the children and their parents or caregivers, where these interactions involve negative reinforcement for aversive responses from the

children, poor monitoring of the child behaviour, and harsh discipline (Patterson, DeBaryshe, & Ramsey, 1990).

In addition, institutionalised children were more likely to rate more hostile attributions of other children's intentions. This finding is consistent with the SIP model, which suggests that a biased or inaccurate interpretation (attribution) of others' intentions can lead to ineffective response selection and an evaluation of the situation that lead to a behavioural problem or maladaptive social adjustment (Crick & Dodge, 1994). Although there is a lack of studies that have addressed SIP in institutionalised children, it is possible that high hostile attributions (HA) in this group potentially reflect knowledge structures that already include histories of parental loss/deprivation, and unwanted identity. These responses, combined with high levels of shame, and stigma (see Chapter 7), might interact to add to the negative effect of the children's memory database of previous experiences on their interpretation of others' current intentions. The current finding fit with previous research, which has found difficulties in processing social information is impaired in children with maladaptive developmental histories (Dodge et al., 1995; Dwyer et al., 2010; Price & Landsverk, 1998).

The current study also showed that the hostile attribution bias was significantly correlated with responses on the aggression scale (Orpinas & Frankowski, 2001) and the reactive aggression subscale of HIWC measure (Dodge et al., 1995), but not with anger or disruptive behaviour more broadly. One explanation of this significant relation between hostile attribution and aggressive behaviour as measured by the aggression scale (Orpinas & Frankowski, 2001) was that the latter includes items conveying/reflecting aggressive actions towards peers which were closer to reactive aggression and not broad items included in anger and disruptive scales (Beck et al., 2005).

The mediating role of hostile attribution biases in understanding links between aggressive symptoms and reports of reactive aggression in this population extends current research. Several studies have found associations between hostile attribution (HA) bias and the endorsement of reactive aggression responses when trying to solve a problem or adapt to ambiguous situations. Consistent with the current study, Dodge and Coie (1987) concluded that the tendency to attribute hostile intent to peers was related to reactive aggression which reflected an angry retaliation or defensiveness. In a more recent study, Crick and Dodge (1996) compared the hostile attribution

bias between 3 groups of 9-12 year-old children divided into reactive - aggressive, proactive- aggressive, and non-aggressive. Similar to the research described here, they found that hostile attribution bias was a predictor only of reactive aggression, which reflected children's lack of consideration about the consequences of their behaviours, but not with proactive aggression which entailed their motivated desire to achieve a goal or receive a reward. These aggregate findings reveal that a hostile attribution bias is a significant cognitive characteristic for children who report reactive aggressive behaviours.

8.5 Limitations of the study

While the results highlight a role of social-cognitive factors in understanding aggression in institutionalised children, the study did have some limitations. The role of the knowledge structure is important in understanding how the content of the child's experience of deprivation might affect the cognitive processes within SIP model. However, the current study utilised a database that was limited to children's current experience of family-like system and it did not contain a broad sample of the same institutionalised children when they had experienced the previous institutional care of type A approach (see Chapter 1). Another limitation of the current study is that it was based upon cross-sectional assessments of externalising symptoms and SIP patterns; and therefore it was not methodologically sufficient to establish the causal inferences about whether living in institution lead to hostile attribution bias (HA) and behavioural enactment of aggressive responses.

Moreover, longitudinal studies are needed to fully understand the SIP stages/processes that can negatively or positively affect the development of behavioural problems in those children. Since the current study utilised a single scenario-based measure for SIP (i.e., HWIC), there is a need to adopt other SIP measures that integrate the role of emotion processes, cognition, and genetic factors in SIP.

8.6 Conclusion

The current findings suggested that institutionally reared children had more tendency to attribute other children's behaviours to hostile intent in ambiguous situations; and therefore they were more likely to endorse aggressive reactions towards the others. The results highlight a need for the development of prevention and intervention programmes to regulate/restructure the cognitive distortions/deficits in information

processing in this group of children to reduce aggressive behaviours. However, there is a further need for a follow-up research to extend the findings of this cross-sectional design into an investigation of a large-scale sample of institutionalised children and other comparable samples (e.g., adopted/post-institutional children).

9. Chapter 9: General discussion

The aim of this thesis was to explore symptoms of psychopathology in institutionalised children with unknown parenthood in Saudi Arabia. In addition, it aimed to examine the risk factors that could explain any increased internalising and externalising symptoms in this population. It focused on theoretical frameworks linked to stigma and shame, as well as those that have considered the role of social information processing in the development of psychopathology in children and adolescents. This chapter summarises the main findings of the thesis outlined in Chapter 4 to Chapter 8. It compares the current findings with the theoretical considerations outlined in Chapter 3 and the previous research reviewed in Chapter 2. In addition, it links the broader discussion with the challenges faced by this population of children in Saudi Arabia. The chapter will also address the limitations of the current study and it will outline recommendations for future study and implications for the development of prevention and intervention protocols.

9.1 Study 1

Study 1 (Chapter 4) used qualitative open-ended interview methodology to explore the thoughts, feelings, and behaviours of institutionalised children with unknown parenthood who have been raised in an orphanage setting from birth, and their carers in Saudi Arabia. It focused on several themes (satisfaction, feelings and behaviours, attachment, relationship, and self-perception) in order to understand children's behaviours, emotions, and any perceptions of difference between themselves with children in and outside the institution. The study showed that both similar and divergent responses to questions were raised by children and their carers. For example, reports from the children contained descriptions of negative feelings and behaviours (e.g., sadness, anger, aggression, identity hiding/closure), as well as positive attitudes about living in the institution and the quality of life they experienced. Carers' reports of children's behaviours were largely consistent with the children's reports and included descriptions of child negative behaviours (e.g., aggression, stubbornness), and feelings that reflecting being ashamed of their identity and efforts to hide it. In addition, carers noted that lay people from outside the orphanage held some negative attitudes towards orphaned children. Furthermore, caregivers, sometimes reported feeling sad about their

inability to help the children who they cared for when they were in trouble and specifically with respect to the children's own negative perceptions of being an orphan.

Children's and carer's perceptions of how children are viewed by people from outside the orphanage might to some extent reflect the negative attitudes of the Arabic culture towards children originating from unknown parents (Gibbons, 2005), including Saudi Arabia. Similarly, Simsek et al. (2008) highlighted that institutionalized children were exposed to negative and even discriminating attitudes about their status from others (e.g., school staff). Consistent with these findings, the reports of children showed that they were ashamed of disclosing their institutional status to school peers and they were afraid of making mistakes and being subject to criticism from others. However, children generally compared themselves positively with their peers within the orphanage. This finding is consistent with Crocker and Major (1989) who suggested that individuals, about whom others hold negative attitudes and stereotypes, often tend to maximize the positive perceptions and outcomes; where they compare positive outcomes with those of the in-group, rather than to individuals outside their group.

With respect to their own feelings about job satisfaction, all carers reported that they were satisfied/happy with helping and caring for the children. However, most carers also reported some dissatisfaction with their workload and expressed a desire to have fewer responsibilities and duties. It is possible that reported difficulties might be attributed to low levels of education or the lack of training related to child rearing within the institution, and related inconsistency or extremes in care as indicated in reports of punishment regimes, as well as meeting children's material needs.

In their reports, carers indicated that they sometimes felt angry and dissatisfied with respect to managing children's challenging behaviours (e.g., aggression and stubbornness) which led them to use punishment as way of controlling children's behaviour. Consistent with carers' reports about children's negative behaviours, most children conveyed dissatisfaction with aggressive behaviours; being punished by others and with fighting and name-calling by their peers in the orphanage. Children also reported similar behaviours in themselves and the presence of these behaviours is consistent with reports from other studies that have looked at the behaviour of institutionalised children reflecting aggression, rule breaking, inattention and

over-activity (e.g.,Ayaz et al., 2012; Erol et al., 2010; Rahman et al., 2012; Roy et al., 2004).

Regarding reports of relationships within the institution, children reported that their carers and older sisters within the institution were the main source of help for them. This reporting of reliable support and closeness to adult figures links to attachment theory (Bowlby, 1969, 1988) which proposed that an attachment behavioural system would be activated in children as they seek security and help from adult figures in stressful situations. On the other hand, children described negative relationships with school peers, as reflected by their verbal and physical aggressive behaviours towards these peers and their preference to make friends with institutionalised children. Similar evidence of lack of selectivity in building broader attachment relationships have been found in other studies which showed that institutionalised children tended to interact more with their orphanage peers than with school peers (Vorria et al., 2003).

The current study and previous research has highlighted the nature of and challenges associated with institutional rearing. It extended previous research to capture the thoughts and feelings of children and their carers who live and work in an institutional setting. The broad approach to childcare with these settings combined with the shift rotation and other caring responsibilities and duties born by the caregivers may make it difficult to eliminate all negative effects of maternal/ paternal deprivation and other aspects of early adversity within the orphanage environment (Dozier & Rutter, 2008). The findings of Study 1 highlighted a need for measuring the negative outcomes and symptoms (e.g., anger, aggression, depression, anxiety, feeling ashamed and embarrassed of being raised in institution, feeling different from others) that might be prevalent among institutionalised children compared to their non-institutional school peers.

One challenge for the current thesis was the lack of reliable and valid Arabic measures that have been originally built for assessing symptoms of psychopathology and outcomes. Therefore, Study 2 was carried out to translate and adapt some of the valid and reliable instruments originally written in English to develop relevant assessments.

9.2 Study 2

Study 2 (Chapter 5), used Vallerand's cross-cultural translation method to translate and adapt original versions of a set of instruments related to children's behaviours and feelings from English into Arabic. In particular, the Beck Youth Inventories-II (BYI-II, Beck et al., 2005) and the Aggression Scale (Orpinas & Frankowski, 2001) were all translated from English into Arabic. In addition, the Other as Shamer (OAS, Goss et al., 1994) was adapted and translated to measure the global evaluation of how children expect others to evaluate them, with a focus on two of its dimensions (i.e., inferiority, and how others behave when they see me make mistakes). The other adapted and translated instrument was the Stigma Scale (J. K. Austin et al., 2004).This scale was originally developed as a self-report measure of perceived stigma among children with epilepsy and their parents. Therefore, some changes were made to ensure that the phrasing of the original items were applicable to the institutionalised children.

The results of the translation process showed that all of translated and adapted scales were psychometrically adequate for use with the target sample in terms of the internal consistency, test re-test reliability, content and construct validity. In the current study, the Vallerand's method (Vallerand, 1989) proved to be an efficient approach to test the preliminary psychometric properties of the translated scales among bilingual individuals and the full psychometrics of the translated instruments or scales among Saudi children.

9.3 Study 3: An exploration of perceived stigma

The findings from Study 1 highlighted that carers reported that lay people outside the orphanage treated institutionalised children differently when they know that they are with unknown parenthood. Moreover, the children reported preferring to hide their identity, particularly from their school peers. Taken together, it was expected that there might be some negative or stigmatising attitudes from some persons (e.g., carers, teachers who experience working with institutionalised children, and other teachers who have no experience with this group of children) in the Saudi society. Study 3 (Chapter 6), therefore, explored the perceived self-stigma among institutionalised children and the public stigma towards them as measured among three samples of carers and teachers (carers, teachers who have

experience of working with institutionalised children and teachers who have no experience with these children). Furthermore, following previous research (e.g.,Angermeyer et al., 2004; J. Austin et al., 2002), it was anticipated that the level of public stigma would differ between these three exemplar groups based on their familiarity/closeness with institutionalised children. Finally, it was expected that institutionalised children themselves would report self-stigma about the experience of being raised in orphanages.

Study 3 also showed that there were no significant differences in scores on the teacher/carer version of the stigma scale or between carers, teachers who had some or no experience working with institutional children. Though there were no significant differences between the three groups of carers, teachers, and inexperienced teachers with institutionalised children did report more attitudes consistent with stigma than experienced teachers and caregivers. Regardless of the construct of the items of the public stigma scale used in the current study, this finding was consistent with the psychosocial model of stigma (Angermeyer et al., 2004) which states that the more familiar a person is with the stigmatized population, the less likely he/she is to have stigmatizing attitudes towards individuals of that population.

Although several studies found that there was a significant impact of public stigma on the development of internalised perceptions of stigma among individuals with stigmatising condition/status (e.g., mental illness) (e.g.,Bathje & Pryor 2011; Evans-Lacko et al., 2012; Mojtabai, 2010), the current study did not address directly the impact of public stigma on self-stigma among institutionalised children. Finally, though there were no clear-cut group differences between public and self-stigma in Study 3; public stigma toward children was expressed in both groups of teachers who had some or no experience working with institutional children.

9.4 Study 4: Internalising and externalising symptoms among institutionalised children and their school peers

Study 1 found evidence for reports of behaviours linked to internalising (e.g., sadness, embarrassment) and externalising (e.g., anger, stubbornness, aggression) symptoms in institutionalised children. Study 4, (Chapter 7) extended this finding to compare self-report symptoms of internalising (i.e., anxiety, depression), externalising (i.e., anger, disruptive behaviour, aggression) behaviours and self-concept and feelings of shame in

institutionalised children and their non-institutional school peers. In addition, stigma was also measured in the institutionalised children.

Study 4 showed that externalising and internalising symptoms were higher in institutionalised children compared with non-institutional school peers. This pattern of findings is consistent with several studies that have reported elevated symptoms of psychopathology in institutionalised children who have been placed in orphanages since their birth (e.g.,Elebiary et al., 2010; Erol et al., 2010; Groark et al., 2011; Reddy, 2012; Zeanah et al., 2009), as well as post-institutional children who have been adopted into foster families (e.g.,Gunnar & van Dulmen, 2007; Lee et al., 2010; Rutter, Beckett, et al., 2009). The current study extended previous work to consider a sample of institutionalised children who have never experienced severe deprivation in terms of care provided to them since their first placement at the orphanage and who are institutionalised because of abandonment and unknown parenthood. This findings suggests that the development of behavioural and emotional symptoms in institutionalised children in Saudi Arabia and more generally might be caused by risk factors related to their maternal/parental deprivation or other contextual factors (e.g., feelings of inferiority, discrimination) relevant to their placement within the institution.

Feelings of shame were also found to be higher among the institutionalised children in the current study compared to their non-institutional peers. Several authors suggest that shame is a key component of stigma (e.g.,Gilbert, 1998; Scheff, 1999), and symptoms of stigma were found in institutionalised children in Study 3. Therefore, Study 4 examined the possible link between feelings of shame and perceived stigma with other symptoms of psychopathology and low self-concept in the institutionalised sample. Mediation analysis was used to examine the indirect effect of perceived stigma in increasing the negative symptoms through feelings of shame. This analysis suggested that perceived stigma among the institutionally reared children was associated with increased feelings of shame, which in turn was associated with an increase in self-report internalising and related symptoms (i.e., anger and depression).

Previous research which has examined shame feelings among non-institutional children and adolescents has found positive associations between this construct with anger and depression (e.g.,Ferguson et al., 1999; Tangney et al., 1992; Tangney et al., 1996). This positive relationship between shame

and negative behaviours is argued to be linked to individual's awareness of others' negative evaluations towards them (Tangney & Salovey, 2010). As a result of this awareness, individuals can either evaluate their behaviours and internally bear the responsibility for them, or claim that they are not responsible for these behaviours and externally attribute their being negatively evaluated to others (Lewis 2008).

9.5 Study 5: Social information processing in institutionalised and non-institutional peers

Study 4 highlighted that feelings of shame did not explain the presence of externalising symptoms (i.e., aggression, and disruptive behaviours) among institutionalised children and their non-institutional school peers. In order to explore these symptoms more clearly, Study 5 used Dodge's social information processing (SIP) model (Crick & Dodge, 1994) to examine how institutionalised children process social information and cues during their interaction with peers and resulting behavioural outcomes. Based on this model, Study 5 used the Home Interview with the Children (HIWC, Dodge et al., 1995) to assess how children interpret others' intent in ambiguous situations where they were hypothetically faced with harm or provocation from peers and where increased evidence of interpreting these situations as hostile is argued to reflect a hostile attribution bias (HA).

The presence of a HA was investigated in the same previously assessed institutionalised children and their school peers. The results showed that institutionalised children scored significantly higher than their non-institutionalised school peers in HA when interpreting ambiguous (hostile/benign) situations and they reported that they would be more reactively aggressive than school peers. This finding was consistent with other studies which have shown that early adversity (e.g., attachment disorders, histories of abuse, neglect, and rejection) are risk factors linked to the development of the attribution of hostile biases towards others' intents in ambiguous social encounters, leading to aggressive responses towards the others (e.g.,Dodge et al., 1995; Dwyer et al., 2010; Price & Landsverk, 1998).

In order to further the understanding of risk/cognitive factors linked to the elevated externalising symptoms in institutionalised children, this study examined the mediating role of HA in understanding the elevated levels of anger, aggression, and disruptive behaviour.The results showed that the

increased levels of aggression in institutionalised children were associated with reported levels of HA which in turn led to an increase in reactive aggression. However, this model of HA role did not explain the increase of other externalising symptoms (e.g., anger, disruptive behaviour). This is consistent with the notion which indicated that any distortions in the second step of the SIP model (interpretation step) could lead to reactive aggression characterised by the tendency to retaliate in anger (Vitaro & Brendgen, 2005).

9.6 Research summary and implications of findings

This thesis represents a novel piece of research that explored the thoughts and feelings of a population of institutionalised children (i.e., children originating from unknown parents). The Saudi culture represents a relatively challenging context to study the risk factors that could have influenced the development of this population. In particular, the Saudi society typically rejects these children as they are born out of wedlock and there are societal perspectives that might affect different aspects of their lives (e.g., peer relations, marriage) when they grow up and live independently of institutions. Unlike frequently cited literature, this thesis sought to examine intraindividual variables (i.e., stigma, shame) that might be risk factors for the development of externalising and internalising symptoms in this group of children.

The studies in this thesis found evidence of increased levels of externalising and internalising symptoms and high levels of shame and self-stigma in institutionalised children. The results highlight a need for the development of specialised intervention programmes for the treatment or management of these symptoms that targets children and their carers, as well as members of society more generally that focus on the reduction of stigma and shame in these populations. The findings of Study 3 found increased scores on the child version of stigma and the carer/ teacher version of the stigma scale. As a result, the application of interventions to society more broadly would need to be developed along with further research which aims to examine more clearly the effect of societal attitudes and values on the development of perceptions of stigma in institutionalised children with unknown parenthood. This can be implemented by establishing culturally relevant measures that may assess the endorsement of these stigmatising attitudes and stereotypes in the Saudi society. Interventions could then be developed to introduce public initiatives and campaigns to raise people's

awareness about the challenges experienced by institutionalised children with the broader aim of developing positive attitudes towards these children. Moreover, the thesis raises the question of whether enhancing carers' abilities to care for institutionalised children could reduce the prevalence of behavioural and emotional symptoms and maximise positive outcomes and achievement.

The findings of Study 4 showed elevated levels of externalising and internalising symptoms in institutionalised children compared to their non-institutional school peers. These results should be extended to develop large-scale studies to examine behavioural and emotional problems of institutionalised children compared to their peers who reside with foster families and to assess whether the latter placement is efficient in their catch-up and recovery from any adverse effects of being reared in an orphanage. Relatedly, future research might be important to study the interaction between the characteristics of institutionalised children and the caregiving environment where they reside, taking into consideration the vulnerabilities at the genetic level and its interaction with the characteristics of institutional settings.

The findings of this study can inform further studies on the diagnosis and causes of psychological symptoms and disorders in institutionalised children. Future research will be helpful in planning preventive mental health programmes where the risk and protective factors determined by the findings of the current study can assist enhancing institutional care, training of institutional staff, to protecting the mental health and well-being of institutionalised children.

9.7 Limitations

While the results of this study were able to present an emerging picture of the challenges faced by institutionalised children in Saudi Arabia, there were several limitations related to the methodologies that reflect the nature and difficulties when collecting data in a collectivist culture. Study 2 found that the translated and adapted instruments showed acceptable levels of validity and reliability. However, the gender segregation in Saudi society did not permit the researcher to administer the scales in boys' schools.

Another limitation was related to the item content of the study instruments. For example, the adapted stigma scale yielded significant findings relevant to public and self-stigma; however they did not cover important other components of public stigma such as stereotypes, prejudice, and

discrimination suggested by models of stigma (Corrigan et al., 2005; Link & Phelan, 2001). There is a need for applying the scale on larger samples of people (e.g., parents of school peers) to develop a clearer view about the impact of public stigma on institutionalised children. Another example for the limitation of instrument content was the HWIC (Dodge et al., 1995). This instrument is a scenario-based measure for SIP that was originally designed to assess the second step of (i.e., interpretation) and the six step (i.e., behavioural enactment) in Dodge's SIP model. However, there is a need for using further measures to assess the role of emotion processes (e.g., emotion priming, emotion regulation) in SIP, since these processes empirically proved to be influential in SIP and could cause deficits in any of the SIP steps (Lemerise & Arsenio, 2000).

The cross-sectional assessments of externalising and internalising symptoms in institutionalised children did not allow the generalisation of findings, since it did not include pre-existing archives of information/data about early experience (e.g., medical history, neurodevelopmental and genetic potentials) of children since their first replacement within the orphanage. Though the aim was to reduce the sampling bias by finding comparable samples, this cross-sectional assessment did not include institutionalised children from the old traditional orphanages that did not follow the family-like system for placement and caring and those institutionalised children who are living with foster families. There is a need for longitudinal studies that contribute to further the understanding the risk factors and/or the protective factors that can negatively or positively affect the development of behavioural, emotional, and cognitive problems in these children.

In addition, carers play a large role in the upbringing of children in institutions that follow a family-like model. There is therefore a need for assessing the mental health of carer and other aspects related to their job to understand more clearly whether these factors influence the way carers interact with children and the subsequent development of the attachment relationships between carers and the children they care for.

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Appendix A: Interview guidelines

Appendix A1: Children's interview schedule

Theme	Questions	Prompts
Satisfaction	How do you find living here? If you could change something in your life, then what would you want to change?	What do you like/dislike about living here? What would you change about yourself? What would you change about the people around you? What would you change in the home/at school?
Feelings	What things make you feel happy? When you feel happy, what do you do? What things make you feel sad? When you feel sad, what do you do?	Can you tell me about a time when you felt happy/sad? What happened? What happened?
Attachment / seeking help	If you have a problem, who do you ask for help? Why?	Do you ask your mother, aunt, teacher or someone else? Can you tell me about a time when you had a problem? What happened? What did you do?
Relationships	Tell me about the people in your home. Tell me about the people in your school.	How do you get along with your mother, aunt, sisters and brothers? How do you get along with other people in the orphanage? How do you get along with your teachers, classmates, and friends?
Relationships	Which family do you think is a perfect family in the orphanage?	Why?
Self-perception	Tell me about yourself.	What things do you like about yourself? Why? What things do you dislike about yourself? Why?
Self-perception	Are you like other children in the home? Are you like children outside of the home?	Are you the same or different from other children in/outside the home? In what ways are you similar or different from the other children?
Positive Thinking	Name one person that you like to be? Why would you want to be them?	Friends, member of your family, or any other person in the world.

Appendix A2: Carers' interview schedule

Theme	Questions	Prompts
Satisfaction	How do you find working here? If you could change something in your life, then what would you change?	What do you like/dislike about working here? What would you change about yourself/people around you? What would you change in the home?
Feelings	What aspects of your job make you feel happy? What aspects of your job make you feel sad?	Can you tell me about time when you felt happy? What happened? Can you tell me about time when you felt sad? What happened?
Relationships	Tell me about children who you look after.	How do you get along with children who you look after? What things do you like about the children? What things do you find difficult?
Attachment /seeking help	If one of your children has a problem would they ask you for help? What would you do if a child asked for your help?	Can you tell me about time when one of children had a problem? What did you do?
Perceptions	How do you think children who live in the home compare to children outside the home? How do you think children in the home see themselves compared to children outside the home?	Do you think children in the home are the same as children from outside the home? In what way? Do you think children in the home are different from children from outside the home? In what way? Do you think children in the home see themselves as the same as children from outside the home? In what way? Do you think children in the home see themselves as different from children from outside the home? In what way?

| Perceptions | How do you think other people working in the home view children in the home compared with children from outside the home?

How do you think other people working outside the home view children in the home compared with children from outside the home? | Do you think other people working in the home see children in the home in the same way as children from outside the home? Can you give me some examples?

Do you think other people from outside the home view children in the home in the same way as children from outside the home? Can you give me some examples? |

Appendix A3: Coding scheme (Children)

Themes	Examples
1.1 Life Satisfaction in home	
1.1.1 Positive (General)	*"My life here is nice"* *"there is nothing I dislike about living here"*
1.1.2 Positive (siblings)	*"like to stay here forever with my brothers and sisters"*
1.1.3 Positive(Mothers)	*"My mother is the most I like in the home, second comes my middle sister "X"*
1.1.4 Positive (Home itself/ Activities: playing/ sports/ parties/ picnics/ travel/	*"I like playing and parties"* *"the orphanage itself is nice and the toys and my home"*
1.1.5 Negative (General: studying, cleaners…)	*"I dislike studying. Here teachers come every day to teach us and make us study all the time"*
1.1.6 Negative (Siblings/separation)	*"I don't want children to go away from each other"*
1.1.7 Negative (Mothers)	
1.1.8 Negative (punishment: beatings/ hitting/ name calling/ telling on each other/ confinement)	*"I dislike children beat me and call me by name of creeping animal"* *"Punishment. The people of the orphanage (e.g. social workers, psychologists, etc.) don't punish me, but people in the house do so*
1.2 Aspects of change	
1.2.1. Nothing	*"Nothing, everything is nice"*
1.2.2. Self (Skills)	*"I'd like to get better in handwriting because other children make fun of my handwriting"*
1.2.3. Self (Behaviour)	*"I wish that I don't cry a lot when someone beats me, or when someone embarrasses me or even call me names"*
1.2.4 Self (Feature)	*"like to change my skin colour and look"*
1.2.5 Situation of being orphan	*"When someone argues with me and my Sister, we wish we hadn't been in the home. We wish we were children of a real family"*
1.2.6 Others (Behaviour)	*"I want children to like me and stop arguing with me"*
1.2.7 Sibling (Replace)	*" I also want to get "Nasser out of our Home and replace him with somebody else (e.g. "X" or "X") because he is annoying and always*

	shouts aloud"
1.2.8 Family	*"I want to move to Villa No. 2 because my sister "X" who was with me at the previous home"*
1.2.9 Orphanage	*"I only want to leave the home and move to the Boys' Home"*
1.2.10 School Stigma (Identity)	*"I wish I could change my school because today one girl came to our home with some other visitors"*
1.2.11 School (change school/ change teacher/ change what school does – e.g., activities)	*"Studying at public schools is boring, but children at private schools go for trips and have programs"*
1.3.12 Having things (belonging)	*''I'd like to have a lot of clothes and shoes, so I could change it all the time"*
2. Feelings/Behaviours (Spontaneous Count)	
2.1 Happy/ Laugh/jump/joke/interest /play/staying with others/like/ well/good	*"Laugh and get more interested on playing"* *"when I feel happy- I keep staying with others"* *"When I feel happy- I laugh and play with other children I also tell them jokes"*
2.2 Sad/ cry/ helpless/ sorry/lonely/not like guilt (self -blame)	*"I'd like to see my mother and my father, I don't remember them".* *"I cried, even my Mother and my brothers and sisters cried....I cried a lot"* *"I got angry but I couldn't do anything"* *"I feel sorry for small children in the home because when they play football the older beat they and they''* *"I only remember what I have said before about the boy who cried. I was angry and told myself I shouldn't have done that''*
2.3 Embarrassed	*"If they know they would make me embarrassed in front of all and they would call me orphan"* *"I get embarrassed when I speak in front of students and teachers"*
2.4 Anger (Self/ Other)	*"I also get angry when someone calls me names such as fatty girl or other insults"*

2.5 Shame	*"but I don't want the girls at my new school to know I'm from the home"*
2.6 Boredom	*"Days never change (smiling quietly).I'm very bored, but its O.K"*
2.7 Aggressive (Self/ Other)	*"When someone insults me I only insult them back. I have the right to do so. If they call me names I insult them back, and if they beat me I beat them up"*
2.8 Disruptive (Self/ Other)	*"Once I was playing with a cat, a girl came and beat it and inserted a stick inside its ears"*
2.9 Annoying others/Stubborn/Troubles	*" I make myself a little devil to be kicked out school"*
2.10 Jealous	*"My Mother came and beat me because she not only likes him but also she take him to her family (as a foster family for him)"*
2.10 Fear	*"Also I feel afraid in the dark; my teddy bears look like ghosts in the dark and I become more afraid"*
2.11 Lie	*"I'm a liar and telling on other"*
3.Aspects of Feelings	
3.1 Happy	
3.1.1 Nothing	*"Nothing made me feel happy"*
3.1.2 Siblings/children (play/joking/ *to be with other*)	*"I also feel happy when I play with other children, but I don't like when we beat each other"*
3.1.3 Mother (happy)	(Feel happy), *when my mother isn't upset with me.*
3.1.4 Toys/riding the horse (play)	*"Playing "PlayStation" and small toys"* *"I spent all my money on riding the horse, I rode him very fast"*
3.1.5 Picnic/ Travel	*"When they tell me I'll get out of the orphanage for a picnic, I get happy"*
3.1.6 Passing exam	*"When I pass the exams, I feel happy because I can travel and have fun"*
3.1.7 Good news	*"There are things that make me happy and other things that don't. For example, if I hear good news…any good news"*
3.1.8 Foster Family (Visit during weekend)	*"when they told me I will go to a foster family (on weekend), and now I do go to them"*

3.1.9 Presents	*''When they tell me they will buy a present for me I feel happier''*
3.1.10 Ending of school day	*"When the classes end and the school bill rings"*
3.2 Sad	
3.2.1 Separation from siblings	*"I feel sad if I and my brothers split up"*
3.2.2 Separation from mother	*"became sad when my mother left the home"*
3.2.3 Confinement/ Punishment (Mother/ Sister)	*"When my Mother beats me. She only beats me if I make something wrong. She also punishes me a little bit. She makes me go upstairs"*
3.2.4 Fighting/ name calling/ when someone: hurts, hits ,ignored, accused, embarrassed me	*"When a girl came and called me Crazy! I didn't understand why she insulted me and I started to cry and go around the school."*
3.2.5 Others Anger (Mother/ Friends)	*"When my mother gets angry with me"* *"When my friends at school are angry with me, I ask them if they are really angry with me and they say, "Yes, we are." .I get upset and cry"*
3.2.6 Failed the Exam	*"I also felt sad when I failed in the exam, and I said to myself why I didn't study"*
3.2.7 Nothing	*" Nothing make me feel sad"*
3.2.8 Leave the orphanage	*" When I and other boys talks to each other about leaving this orphanage And how we will miss people here"*
3.2.9 Renege the promise	*" If I ask someone to do something for me and he gives me a promise but doesn't do it"*
4. Attachment/ Seeking help	
4.1 Sister	*"If I have a problem in the home I ask my older sister for help"*
4.2 Mother	*"If someone older than me beats me and I couldn't hit him back I go to my Mother for help"*
4.3 Social Worker	*"I tell the Social Workers about my problem. I don't tell my Mother or Brothers/Sisters, no need to tell them"*
4.4 Guard	*I know only ''Abu Abdul-Allah'' (the home's guard, he can help me.*

4.5 No-one	*"Nobody, I don't complain to anyone. When they call me names. I insult them back with the same names and they cry"*
5. Relationships	
5.1 People in the home	
5.1.1 Positive (General/others)	*"The Nurse and the Social Workers are good"*
5.1.2 Positive (Children)	*"I don't have any problems with my brothers and sisters"*
5.1.3 Positive (mother)	*"All is good with them. I like my Mother and she likes me"*
5.1.4 positive (Own family)	*"I think Villa 13(my family) is a perfect one, but sometimes Villa 14 is better"*
5.1.5 Positive (Other family)	
5.1.6 Negative (Children)	*My brothers aren't good*
5.1.7 Negative (Mother)	
5.1.8 Negative (Own family)	*"Sometimes they fight with me, so I would like to go to Villa No. 14, because all kids there are friendly"*
5.1.9 Negative (Other family)	*"All families have problems, but I think Villa No. 3 is a perfect one because they have a few problems"*
5.1.10 Negative (General)	
5.2 People outside the home	
5.2.1 Positive (Children)	*"I have friends from outside the Institution; I talk with only five of them"*
5.2.2 Positive (Teacher)	*"they are all good"*
5.2.3 Negative (Children)	*"My friends at school are the same friends in the orphanage. I don't like playing with kids from outside (kids of real families)"*
5.2.4 Negative (Teacher)	*"Once I had a problem with a teacher. I wasn't listening to her during the lesson and she beat me"*
6. Self-perception	

6.1 Positive (Identity)	*"this doesn't matter for me" –if they know that she is from orphanage-*
6.2 Positive (behaviour)	*"I don't find anything I hate about myself"*
6.3 Negative (Identity)	*"Nothing good about myself"*
6.4 Negative (behaviour)	*"I like everything about myself except for dirty words"*
6.5 Others in home (positive comparison)	*"No, I'm different; they beat each other and they tell lies. When I beat them, I just joking with them but they beat seriously"*
6.6 Others in home (negative comparison)	*"But, I'm not the best in studying my lessons. ''X'' is the best, but she always cries*
6.7 Others in home(neutral comparison)	*"I and my brothers are the same. Also I and other children in the orphanage e are same"*
6.8 Others outside home (Positive comparison)	*"I'm better than them because I admit making mistakes and they don't"*
6.9 Others outside home (Negative comparison)	*Yes, they are different. They have parents and I don''*
6.10 Others outside home (neutral Comparison)	*"In the school we are all the same. All of us are naughty. We take each other's stuff. I behaved like them, so that they don't know I'm from the home"*
7. Like to be	
7.1 Someone from the home	*"X" , I like to be like him because he's strong and knows everything"*
7.2 Someone from school	*" I like to be like Mr." X" who teaches us religion"*
7.3 Someone from the media	*" I want to be like Hannah Montana"*
7.4 Others: teacher/doctor	*" I like to be a doctor"*

Appendix A4: Coding scheme (Carers)

1.Satisfaction	
1.1Work satisfaction	**Examples**
1.1.1 Positive (General)	*"I'm happy with staying and working there"* *"I like working with these children for goodness sake"*
1.1.2 Positive (working with children)	*"I provide something useful for the children"* *"Children are the ones who make me like working here"*
1.1.3 Positive (working with women/secure/comfortable)	*"for me it's comfortable because I have no responsibilities"*
1.1.4 Negative (tasks: house work/joining children to go to school, hospital)	*"We accompany children to the hospital, and sometimes to the market or the bookshops. Tell me how I can find enough time to do the housework, raising children, taking care of their studying, and the cooking, that never end"*
1.1.5 Negative (how children were treated by older sister and others: hits/punishment/control them)	*"I and elder sisters have a few disagreements about things related to little children and their learning"* *"I'd want to change elder girls' attitudes towards their younger sisters. I can't tell you how these girls control the youngest"*
1.1.6 Negative (other worker blaming)	*"If a child didn't go to school, they would blame me although I tried to persuade him to go and he refused. Meanwhile, if I argue with a girl and make her go to school, they also blame me"*
1.1.7 Negative General (short holiday)	*"But the holiday is too short. I work as an Aunt who is responsible for three villas"*
1.2 Aspects of change	
1.2.1 Others view toward caregivers responsibilities/ judgments	*"I'd like them to understand Mother's status because she is the most stressed in the orphanage. She (Mother) has enough of housework stresses"*
1.2.2. Others way of treated children (punishment/strict rules/ provide them with every things)	*"Providing these children with whatever they want is a wrong idea"*

1.2.3. How children view themselves (as orphan/found)	*"want to change the child's idea about himself as being orphan and found in the street''*
1.2.4. Caregivers responsibilities	*"I'd want the Mother's and Aunt's jobs to be limited to caring for children and not doing other tasks that may distract them from their work with the children"*
1.2.5. Children behaviours (stubborn/ violence/selfish/lies)	*"I'd want to change this selfishness in both young and big children"*
2. Caregivers feelings/ behaviours(spontaneous count)	
2.1 Happy/ like/love/play/calm/relax/comfort/laugh/joy/ joke/ sympathy	*"I like their stories and jokes"*
2.2 sad/dislike/ tears/sorrow/distress/tired/depressed	*"If I tell a child that he or she will be punished, and he feels sad about hearing this I also feel sad. "*
2.3 Anger	*"When I'm angry about something outside the orphanage my face expressions change and my children say, "You know Aunt X is angry"*
2.4 Aggressive (punishment)	*"However, when they make mistakes I give them a chance to be forgiven if they admit their mistakes. I always tell my children I'll give them a first and a second chance, but if they make mistakes for a third time they will deserve punishment for it"*

3.Children feelings/ behaviours(spontaneous count)	
3.1 Happy /love/like/joke/play/satisfied/smile/stable/relax/	*"As I have mentioned before I feel happy when I can make my children relaxed and satisfied"*
3.2 Sad/tears/distressed/don't like/ upset	*"They don't like to see themselves different from other children outside the institution"*
3.3 Embarrassed	*"I'd want these children to be accustomed to the word "orphan" and not feel embarrassed about"*
3.4 Anger	*"On the other hand, they get angry if someone outside of the orphanage knows they are orphans."*
3.5 Boredom	*"They always repeat the word "boredom"*
3.6 Aggressive	*"Quarrels between them were so violent that I cannot reach a compromise between them."*
3.7 Disruptive	*"Once, they played with the fire extinguisher outside their home. Sometimes, they set fire to some paper in the backyard of the Villas."*
3.8 Stubborn/disobedient	*"They sometimes become stubborn and imitate adults' behaviours"*
3.9 Jealous/ selfishness	*"I notice that other children become jealous of her because they think that she took their place in my heart."*
3.10 Fear	*"They feel afraid of meeting someone for the first time"*
3.11 Lies	*"This girl began to tell lies such as "Mother doesn't provide me with lunch or wake me up for school. When older sister told me about those lies,*

Appendix B: Measures

Appendix B1: The Aggression Scale

Please answer the following questions thinking of what you actually did during the last 7 days. For each question, mark with a circle how many times you did that behaviour during the last 7 days.

	0 time	1 time	2 times	3 times	4 times	5 times	6 times
1. I teased students to make them angry	0	1	2	3	4	5	6
2. I got angry very easily with someone	0	1	2	3	4	5	6
3. I fought back when someone hit me first	0	1	2	3	4	5	6
4. I said things about other kids to make other students laugh	0	1	2	3	4	5	6
5. I encouraged other students to fight	0	1	2	3	4	5	6
6. I pushed or shoved other students	0	1	2	3	4	5	6
7. I was angry most of the day	0	1	2	3	4	5	6
8. I got into a physical fight because I was angry	0	1	2	3	4	5	6
9. I slapped or kicked someone	0	1	2	3	4	5	6
10. I called other students bad names	0	1	2	3	4	5	6
11. I threatened to hurt or to hit someone	0	1	2	3	4	5	6

Appendix B2:The Other As Shamer Scale (OAS)

Date: /   / 2010

Gender: Male ☐   Female ☐

Age: ----------------------------
------------------   **Name of School:**

Grade: -------   **Class No: ----------**

Here is a list of things that happen to people and that people think about or feel. Read each sentence carefully and put a √ under the word (Never, Not Often, Sometimes, Often, or Very Often) that tells about you best.

REMEBER THERE IS NO RIGHT OR WRONG ANSWER.

Items	Never	Not Often	Sometimes	Often	Very Often
1. Other people see me as unequal to them.					
2. I think other people despise me.					
3. I feel other people see me as bad person.					
4.Other people see me as small and they think I don't matter					
5. I feel unconfident (worry) about other opinion of me.					
6. Other people see me as unimportant compared to others					
7. Other people think there is something wrong with me.					
8. Others are critical or punishing when I make a mistake.					
9. Other people always remember my mistakes.					
10. Other people keep away from me when I make mistakes.					
11. Other people look for my faults.					
12. Other people try to make me look silly.					
13. I think others can see my faults.					

Appendix B3: Stigma Scale for carers

Here is a list of things that people think or feel toward institutionalized children. Read each sentence carefully and put a √ under the word (Strongly Disagree, Disagree, Neither, Agree, Strongly Agree) which describes what you think.

Try to be honest as you can in responding.

Items	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. When people know that the children are from the institution they treat them differently.					
2. It doesn't matter what I say to people about children reared in the institution, they have usually made up their mind.					
3. Institutionalised children always have to prove themselves to people outside the institution.					
4. Institutionalised children will not have problems in finding a husband or wife.					
5. In many people's minds, being in an institution comes with stigma or label.					
6. People generally think that children from institutions will behave badly.					
7. People would generally be happy if their children made friends from an institution.					

Appendix B4: Stigma Scale for children

Date: /   / 2010
Gender: Male ☐   Female ☐
Age: ----------------------------
Grade: ---------------------------
Name of School: ------------------
Class No: ---------
Here is a list of things that happen to people and that people think about or feel. Read each sentence carefully and circle the one word (Never, Not Often, Sometimes, Often, or very Often) that tells about you best.

REMEMBER THERE IS NO RIGHT OR WRONG ANSWER

Items	Never	Not Often	Sometimes	Often	Very Often
1. How often do you feel different from other children because you live in an institution?					
2. How often do you feel people may not like you if they know you are from an institution?					
3. How often do you feel other children are uncomfortable with you because you are from an					
4. How often do you feel people may not want to make friends with you if they know that you					
5. How often do you feel people would not want to ask you to parties if they know that you are					
6. How often do you feel embarrassed because you live in an institution?					
7. How often do you keep it a secret from other children that you live in an institution?					
8. How often do you try to avoid talking to other people about the institution that you live in?					

Appendix B5: Strengths and Difficulties Questionnaire (SDQ)

Gender: Male ☐   Female ☐
Age: ----------------------------
Grade: ---------------------------
Name of School: ------------------
Class No: ---------

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items set you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months or this school year.

Items		Not True	Somewhat True	Certainly True
1	Considerate of other people's feelings			
2	Restless, overactive, cannot stay still for long			
3	Often complains of headaches, stomach-aches or			
4	Shares readily with other children (treats, toys,			
5	Often has temper tantrums or hot tempers			
6	Rather solitary, tends to play alone			
7	Generally obedient, usually does what adults			
8	Many worries, often seems worried			
9	Helpful if someone is hurt, upset or feeling ill			
10	Constantly fidgeting or squirming			
11	Has at least one good friend			
12	Often fights with other children or bullies them			
13	Often unhappy, down-hearted or tearful			
14	Generally liked by other children			
15	Easily distracted, concentration wanders			
16	Nervous or clingy in new situations, easily loses			
17	Kind to younger children			
18	Often lies or cheats			
19	Picked on or bullied by other children			
20	Often volunteers to help others (parents, teachers,			
21	Thinks things out before acting			
22	Steals from home, school or elsewhere			
23	Gets on better with adults than with other children			
24	Many fears, easily scared			
25	Sees tasks through to the end, good attention span			

Appendix B6: Home Interview with the Children (HIWC)

Cohort:____ Site #:____ TCID: _____ Date:_____ Interviewer id:_____

Home Interview With Child

A. Pretend that you are standing on the playground playing catch with a kid named Todd/Jessica. You throw the ball to Todd/Jessica and he/she catches it. You turn around, and the next thing you realize is that Todd/Jessica has thrown the ball and hit you in the middle of your back. The ball hits you hard, and it hurts a lot.

1. Why do you think Todd/Jessica hit you in the back?

   _____

   _____ ____

1	2	3
NONHOSTILE	HOSTILE	DON'T KNOW

2. What would you do about Todd/Jessica after he/she hit you?

   _____

   _____ ____

0	1	2	3	4	5
DON'T KNOW	NOTHING	ASK WHY ASK AGAIN	COMMAND	ADULT PUNISH/ THREAT	RETALIATE

B. Pretend that you see some kids playing on the playground. You would really like to play with them, so you go over and ask one of them, a kid named Alan/Leah, if you can play. Alan/Leah says no.

3. Why do you think Alan/Leah said no?

   _____

   _____ ____

1	2	3
NONHOSTILE	HOSTILE	DON'T KNOW

4. What would you do about Alan/Leah after s/he said no?

   _____

   _____ ____

0	1	2	3	4	5
DON'T KNOW	NOTHING	ASK WHY ASK AGAIN	COMMAND	ADULT PUNISH/ THREAT	RETALIATE

1

C.   Pretend that you are walking to school and you're wearing brand new sneakers. You really like your new sneakers and this is the first day you have worn them. Suddenly, you are bumped from behind by a kid named John/Lisa. You stumble into a mud puddle and your new sneakers get muddy.

   5.   Why do you think John/Lisa bumped you?

   _____

   _____   _____

   1   2   3
   NONHOSTILE   HOSTILE   DON'T KNOW

   6.   What would you do about John/Lisa after he/she bumped you?

   _____

   _____   _____

   0   1   2   3   4   5
   DON'T   NOTHING   ASK WHY   COMMAND   ADULT   RETALIATE
   KNOW   ASK AGAIN   PUNISH/
                                                THREAT

D.   Pretend that you are a new kid in school and you would really like to make friends. At lunchtime, you see some kids you would like to sit with and you go over to their table. You ask if you can sit with them and a kid named Carl/Carolyn says no.

   7.   Why do you think Carl/Carolyn said no?

   _____

   _____   _____

   1   2   3
   NONHOSTILE   HOSTILE   DON'T KNOW

   8.   What would do about Carl/Carolyn after he/she said no?

   _____

   _____   _____

   0   1   2   3   4   5
   DON'T   NOTHING   ASK WHY   COMMAND   ADULT   RETALIATE
   KNOW   ASK AGAIN   PUNISH/
                                                THREAT

2

E. Pretend that you go to the first meeting of a club you want to join. You would like to make friends with the other kids in the club. You walk up to some of the of the other kids and say "Hi!", but they don't say anything back.

9. Why do you think the other kids didn't answer you?

_____

_____   _____

1	2	3
NONHOSTILE	HOSTILE	DON'T KNOW

10. What would you do about the other kids after they didn't answer you?

_____

_____   _____

0	1	2	3	4	5
DON'T KNOW	NOTHING	ASK WHY ASK AGAIN	COMMAND	ADULT PUNISH/ THREAT	RETALIATE

F. Pretend that you are walking down the hallway in school. You're carrying your books in your arm and talking to a friend. Suddenly a kid named Brett/Wendy bumps you from behind. You stumble and fall and your books go flying across the floor. The other kids in the hall start laughing.

11. Why do you thing Brett/Wendy bumped into you?

_____

_____   _____

1	2	3
NONHOSTILE	HOSTILE	DON'T KNOW

12. What would you do about Brett/Wendy after he/she bumped into you?

_____

_____   _____

0	1	2	3	4	5
DON'T KNOW	NOTHING	ASK WHY ASK AGAIN	COMMAND	ADULT PUNISH/ THREAT	RETALIATE

3

G.   Pretend that it is your first day at school. You don't know a lot of the other kids and you would like to make friends with them. You see some kids playing a rope game so you walk up and say "Hi! "but no one answers you.

13. Why do you think the other kids didn't answer you?

_____

_____ ____

     1   2   3
NONHOSTILE   HOSTILE   DON'T KNOW

14. What would you do about the other kids after they didn't answer you?

_____

_____ ____

| 0	1	2	3	4	5
DON'T KNOW	NOTHING	ASK WHY ASK AGAIN	COMMAND	ADULT PUNISH/ THREAT	RETALIATE

H.   Pretend that you and your class went on a field trip to the zoo. You stop to buy a coke. Suddenly, a kid named David/Allison bumps your arm and spills your coke all over your shirt. The coke is cold, and your shirt is all wet.
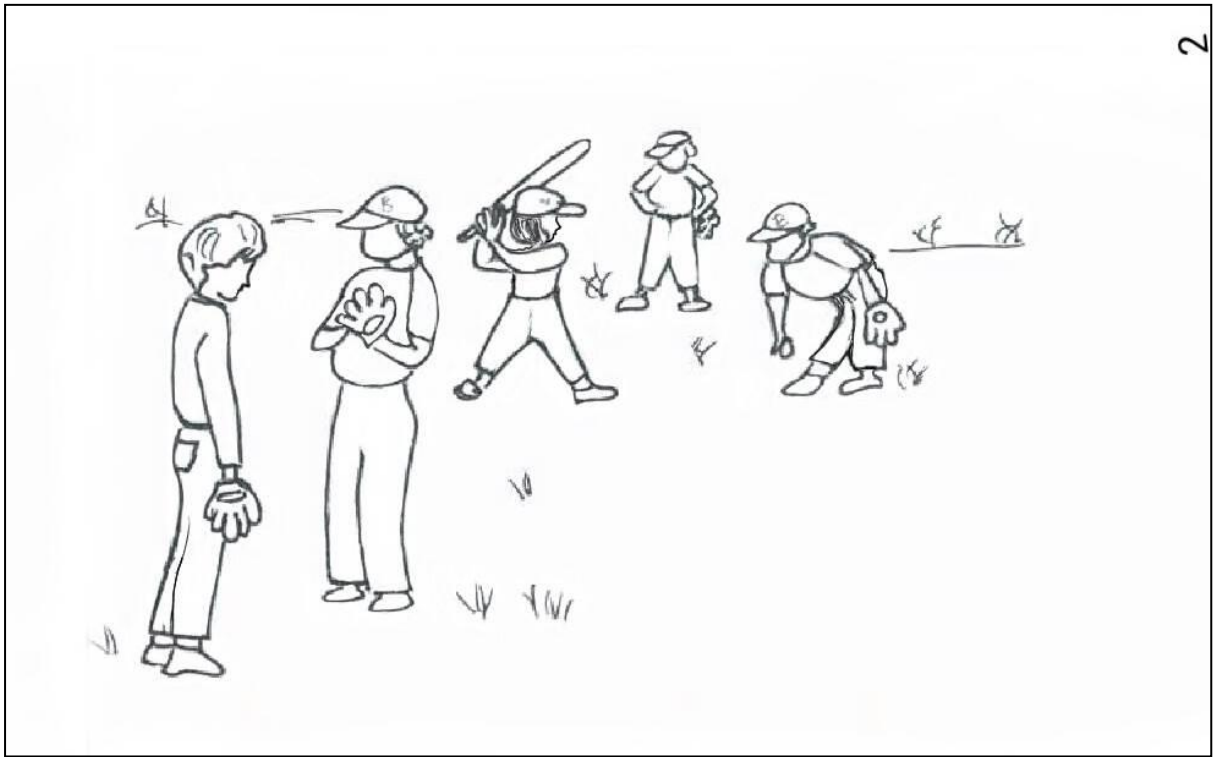
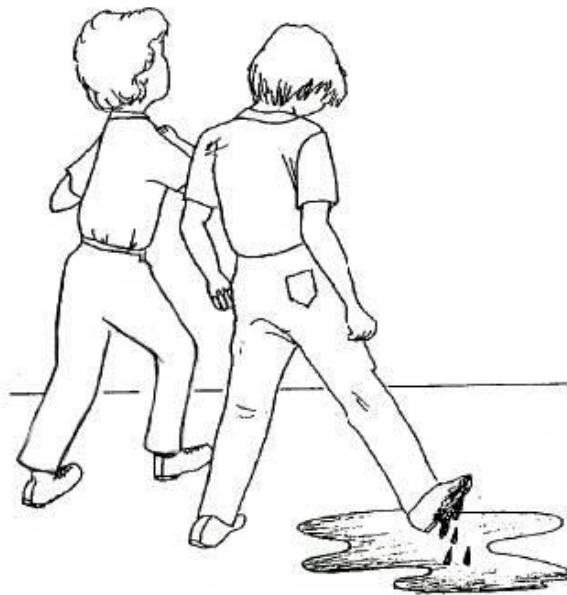15. Why do you think David/Allison bumped into you?

_____

_____ ____
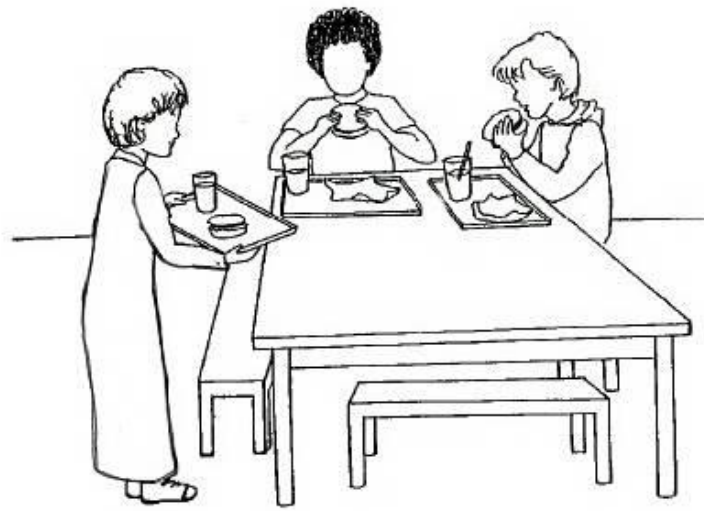
     1   2   3
NONHOSTILE   HOSTILE   DON'T KNOW

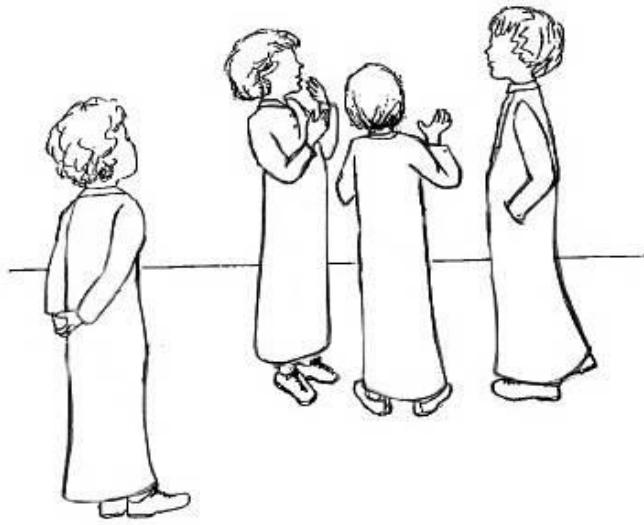16. What would you do about David/Allison after he/she bumped into you?

_____

_____ ____

0	1	2	3	4	5
DON'T KNOW	NOTHING	ASK WHY ASK AGAIN	COMMAND	ADULT PUNISH/	RETALIATE

4

بقالة
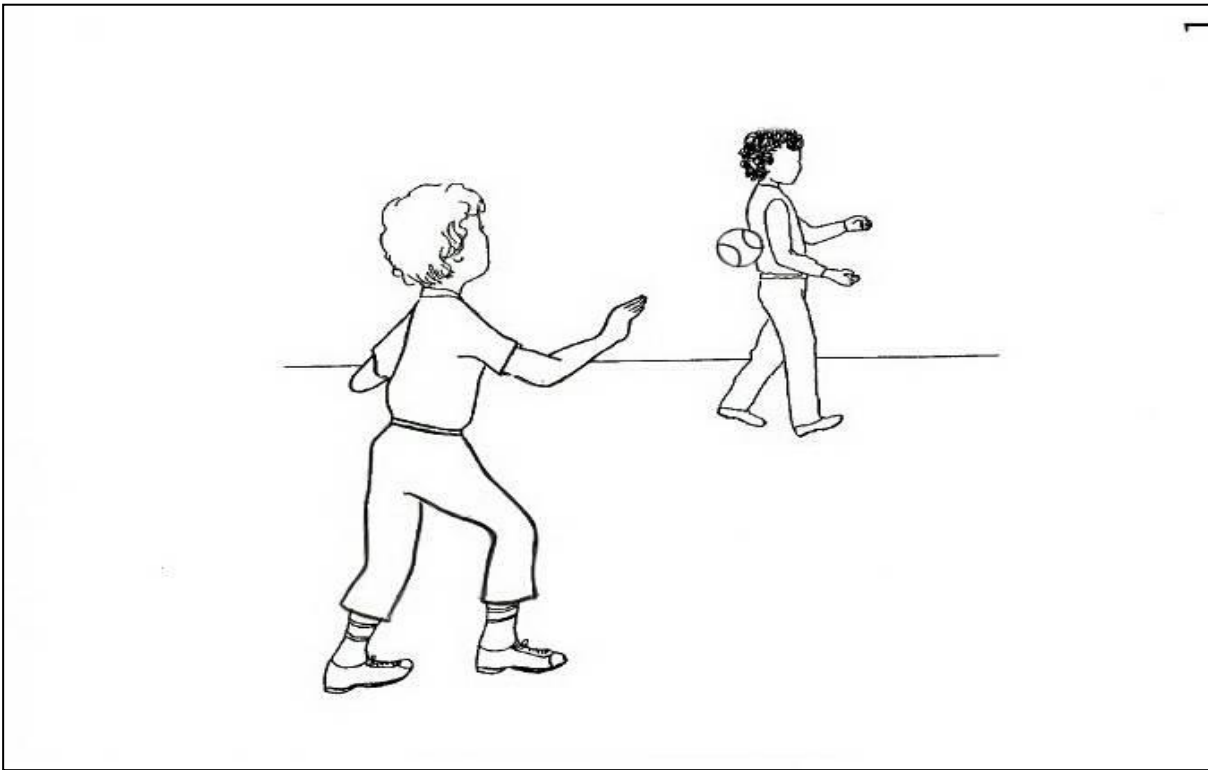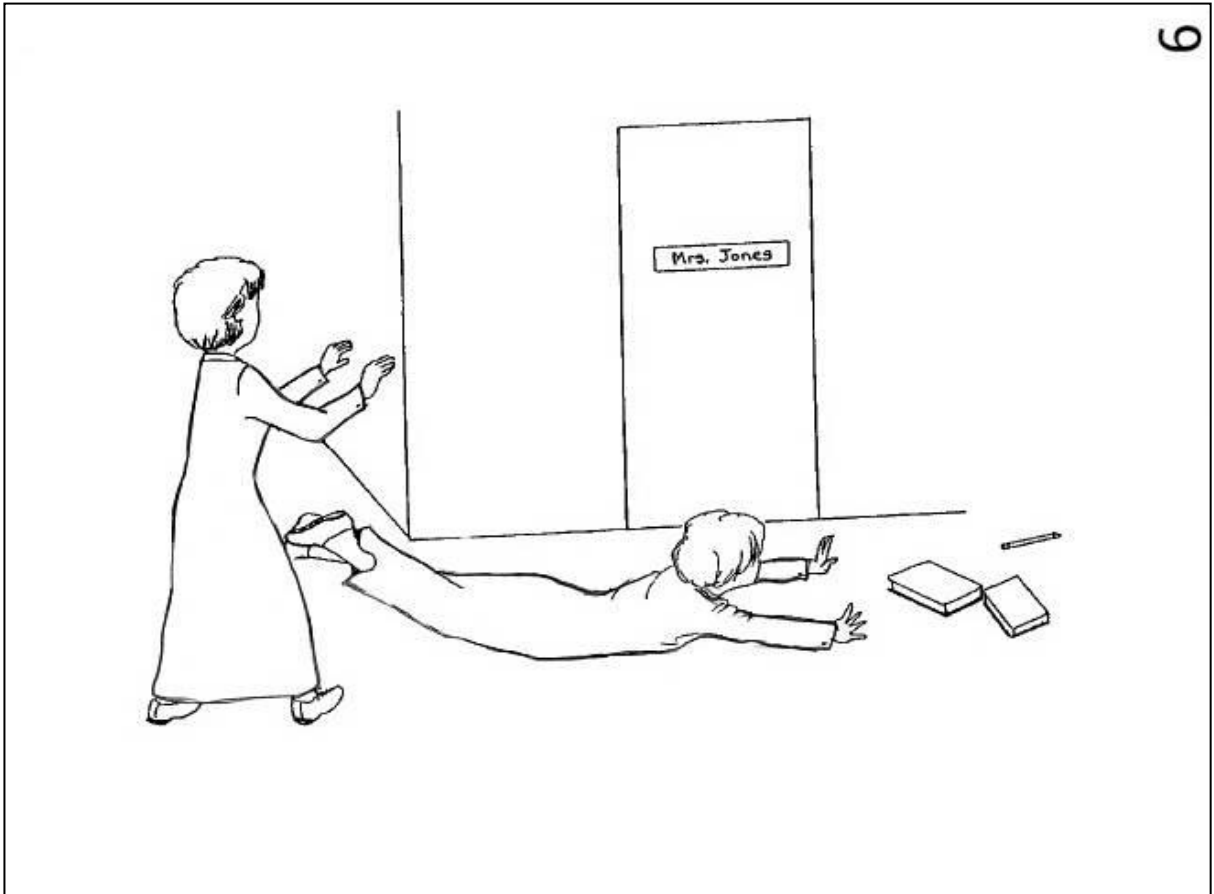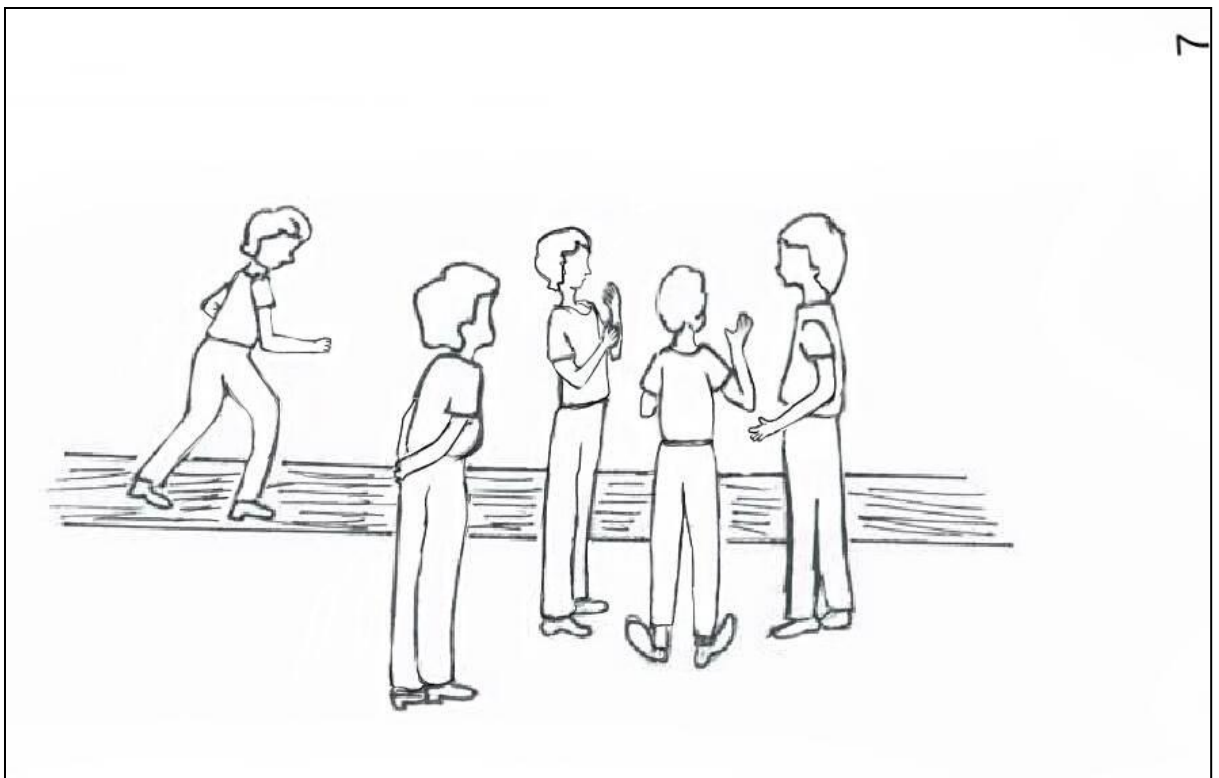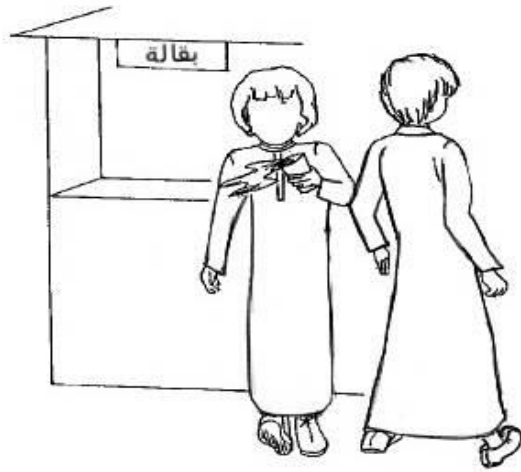
Appendix C: Self-evaluation test

Name (optional)…………………..

 Age …………..

Gender……………..

Please choose one answer from the following option

	Very little	**Little**	**Almost perfectly**	**Perfectly**
I understand English.	1	2	3	4
I read English.	1	2	3	4
I write English.	1	2	3	4
I speak English	1	2	3	4

Appendix D: Item loadings of the adapted Other As Shamer (OAS) Scale

Scale items	Inferiority	How others behave when see me making mistakes
1. Other people see me as unequal to them.	.669	.313
2. I think other people despise me.	.291	.695
3. I feel other people see me as bad person.	.642	.442
4.Other people see me as small and they think I don't matter	.751	.025
5. I feel unconfident (worry) about other opinion of me.	.608	.392
6. Other people see me as unimportant compared to others	.832	.035
7. Other people think there is something wrong with me.	.578	.485
8. Others are critical or punishing when I make a mistake.	.835	.141
9. Other people always remember my mistakes.	.494	.358
10. Other people keep away from me when I make mistakes.	.100	.806
11. Other people look for my faults.	.060	.792
12. Other people try to make me look silly.	.291	.695
13. I think others can see my faults.	.482	.465

Appendix E: Informed consent and debriefing statements

Appendix E1: Head of institution letter

Dear..................

My name is Afaf AL-Kathiry. I'm doing a study as a part of my PhD program in the School of Psychology at Southampton University, U K. The study involves working with children ranging from 7-12 years of age, and with their carers in your institution. The aim of the study is to explore the feelings, behaviours, and thoughts of children with unknown parenthood who have been raised in institutions and to compare them with children who do not live in an institution.

Children will be asked to answer a number of questionnaires that cover different aspects of their feelings (e.g., sadness, worry, and anger), behaviours (e.g., aggression, and disruptive behaviours) and thoughts (e.g., self-perception, shame, and stigma) .In addition, carers will be asked to complete a measure that covers questions related to how children are stigmatised by other people.

I am writing to you as the head of the orphanage to provide you with details of this study and ask your permission for working with children and carers. I also assure that the individual children's and carers' scores will not be disclosed to parents, head teachers, or heads of orphanages.

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

If you have any questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

Dr. Jana Kreppner: j.kreppner@soton.ac.uk

Dr. Lusia Stopa: l.stopa@soton.ac.uk

If you have a question about your or the participants rights please contact the Chair of the Ethics Committee, School of Psychology , University of Southampton , Southampton ,SO17 1BJ Phone: (023) 8059 5578.

Appendix E2: Head of school letter

Dear………………

My name is Afaf AL-Kathiry. I'm doing a study as a part of my PhD program in the School of Psychology at Southampton University, U K. The study involves working with children ranging from 7-12 years of age. The aim of the study is to explore the feelings, behaviours, and thoughts of children with unknown parenthood who have been raised in institutions and to compare them with children who do not live in an institution.

Typical children from your school will be asked to answer a number of questionnaires that cover different aspects of feelings (e.g., sadness, worry, and anger), behaviours (e.g., aggression, and disruptive behaviours) and thoughts (e.g., self-perception). In addition, teachers will be asked to complete the Strengths and Difficulties Questionnaire (SDQ) that includes questions related to strength and difficulties in children's behaviours. Teachers will be asked about others' attitudes toward illegitimate.

I am writing to you as the head of the school to provide you with details of this study and ask your permission for working with children and teachers. I also assure that the individual students' scores will not be disclosed to parents, head teachers, or heads of orphanages.

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

 If you have any questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

Dr. Jana Kreppner: j.kreppner@soton.ac.uk

Dr. Lusia Stopa: l.stopa@soton.ac.uk

If you have a question about your or the participants rights please contact the Chair of the Ethics Committee, School of Psychology , University of Southampton , Southampton SO17 1BJ . Phone: (023) 8059 5578.

Appendix E3: Parent consent form

Dear Parent

My name is Afaf AL-Kathiry. I'm doing a study as a part of my PhD program in the School of Psychology at Southampton University, U K. The study involves working with children ranging from 7-12 years of age. The aim of the study is to explore the feelings, behaviours, and thoughts of children with unknown parenthood who have been raised in institutions and to compare them with typical children who do not live in an institution.

I am writing to all parents of the children age 7-12 to ask your permission to work with your child.

The children who do take part in this study will be asked to answer a number of questionnaires that cover different aspects of feelings (e.g., sadness, worry, and anger), behaviours (e.g., aggression, and disruptive behaviours) and thoughts (e.g., self-perception). A copy of the questionnaires will be available in the school office if you want to see them.

I will work with each child for about 40 minutes, and the break time will be after 20 minutes from starting the session. Children will be asked if they are happy to take part and they are a free to leave at any time if they do not want to finish the task.

In order to get information about children behaviours in class I will ask teacher to assist the behaviours of every child involves in this study. In addition, I will ask for records of each child's school performance to get information about the children school achievement.

A summary of the results of this study will be sent to school once it has been completed and will be available for you to view if you wish. Nobody else, except me and other researchers involved with this study will see any of your child answers and no names will be mentioned in the write up of this study.

If you are happy for your child to take part in this study please sign below.

Please tick the box (es) if you agree with the statement(s):

I have read and understood the information sheet and have had the opportunity to ask questions about the study	☐
I give consent for my child to take part in this research project and agree for his or her data to be used for the purpose of this study	☐
I understand my child's participation is voluntary and that he/she may withdraw any time without his/her legal rights being affected	☐

Your child's name and date of birth ....

Signature
participant………………………………………………………………**Date**…………………

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

If you have a question about your or your child's rights please contact the
Chair of the Ethics Committee, School of Psychology, University of
Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.

Appendix E4: Children's consent form

I am trying to understand how children feel, behave, and think. I need your help to do this project. I will ask you some questions about your feelings, behaviours, and thoughts. No one, except me and other people involved with the research, will see your answer.

Later, we will talk about anything you like to talk about.

There are no right or wrong answers to these questions.

It is your decision whether you want to take a part or not. If you decide to stop answering the questionnaires at any time you can do so. You can also choose not to answer some questions if you don't want to. It is helpful for me, if you can answer all of them.

If you agree to help me, please sign your name if you are happy to help us, then answer the questions below and sign your name.

Please circle the answer you agree with:

Has somebody explained this project to you?   Yes   No

Do you understand what this project is about?   Yes   No

Have you asked all the questions you want?   Yes   No

Have someone answered your questioned in a way you
understand?   Yes   No

Do you understand it is okay to stop taking part at any time?

                                                                          Yes   No

If you have answered yes to all above questions,

Please sign your name to show you are happy to take part

Signature.............................

Thank you very much

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

If you have a question about your rights as a participant, or if you feel that you are at risk, please contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.

Appendix E.5: Carer's consent form

I am trying to understand children with unknown parenthood feelings, behaviours, and thoughts. I'd also like to know your thoughts on how other people view these children. Nobody else, except me and other researchers involved with this study, will see any of your answers. It is your decision whether you want to take part or not. If you decide to stop at any time you can do so. You can also choose not to answer some questions if you don't want to. Although it is helpful for me, if you can answer all of them, I wouldn't mind your decision to stop answering the questionnaire at any time. Nobody else, except me and other researchers involved with this study will see any of your (and the child you looked after) answers and no names will be mentioned in the write up of this study.

If you agree to help me please sign your name.

Tank you

Signature……………………

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

If you have a question about your rights as a participant, or if you feel that you are at risk, please contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ.

Phone: (023) 8059 5578.

Appendix E.6: Teacher's consent form

I am trying to understand children with unknown parenthood feelings, behaviours, and thoughts. I'd also like to know your evaluation of children's (institutional and typical) behaviours and what do you think about other people's attitudes toward institutional reared children.

Nobody else, except me and other researchers involved with this study will see any of your answers. Each questionnaire will take about 5 minutes. It is your decision whether you want to take part or not. If you decide to stop at any time you can do so. You can also choose not to answer some questions if you don't want to. Although it is helpful for me, if you can answer all of them, I wouldn't mind your decision to stop answering the questionnaire at any time. Nobody else, except me and other researchers involved with this study will see any of your student scores and no names will be mentioned in the write up of this study.

If you agree to help me please sign your name.

Tank you

Signature.....................

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

you have a question about your rights as a participant, or if you feel that you are at risk, please contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ. Phone: (023) 8059 5578.

Appendix E.7: Children's debriefing

Child's Debriefing

Why I asked you to help me with my work

Now I want to tell you why I asked you to answer those questions.

This study was done to find out how children feel, behave, and think.

There were no right or wrong answers.

I will not include your name in the study and no one will look at your answers.

Do you have any questions?

Thank you for helping me.

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

If you have a question about your rights as a participant, or if you feel that you are at risk, please contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ.

Phone: (023) 8059 5578.

Appendix E.8: Carers's debriefing

Now I want to tell you why I asked you to answer those questions.

I was doing this study to evaluate children with unknown parenthood feelings, behaviour and thoughts in comparison with other typical children who live with their biological family. To achieve such aim I used a number of questionnaires which were answered by children themselves and by the questionnaire that you had answered. There were no right or wrong answers. I will not include your name in the study and no one will look at your answers.

Do you have any questions?

<div align="center">

Thank you for helping me.

</div>

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

If you have a question about your rights as a participant, or if you feel that you are at risk, please contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ.

Phone: (023) 8059 557

Appendix E.9: Teachers' debriefing

Now I want to tell you why I asked you to answer those questions.

I was doing this study to evaluate children with unknown parenthood feelings, behaviour and thoughts in comparison with other typical children who live with their biological family. To achieve such aim I used a number of questionnaires which were answered by children themselves and by the questionnaire that you had answered. There were no right or wrong answers. I will not include your name in the study and no one will look at your answers.

Do you have any questions?

Thank you for helping me.

Yours faithfully

Afaf AL-Kathiry

aak2g08@ soton.ac.uk

For any additional questions please contact my supervisors.

Dr. Julie Hadwin: jah7@soton.ac.uk

If you have a question about your rights as a participant, or if you feel that you are at risk, please contact the Chair of the Ethics Committee, School of Psychology, University of Southampton, Southampton, SO17 1BJ.

Phone: (023) 8059 5578.