University of the Witwatersrand
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Representations of Attachment during Middle Childhood in a sample of Children in Care in South Africa as determined by two attachment measures.

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Masters in Psychology: Research Report

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Abstract

This study explored the attachment patterns in middle childhood of children in care in the context of South Africa. Two attachment based measures were used, namely: the kinetic family drawing and a story stem narrative task. The kinetic family drawing was scored using the Kaplan and Main (1986) scoring system and the Family Drawing Global Rating Scale (Fury, Carlson & Sroufe, 1997) whilst the narratives were scored using the Attachment Incomplete Story Task (Granot & Mayseless, 2001; Kerns, Abraham, Schlegelmilch & Morgan, 2007). Results found were that the combined attachment classification resulting from the Kaplan and Main (1986) scoring system and the Family Drawing Global Rating Scale (Fury et al., 1997) showed the highest concordance with the Attachment Story Completion Task (Granot & Mayseless, 2001; Kerns et al., 2007). Furthermore the use of the ASCT (Granot & Mayseless, 2001; Kerns et al., 2008) proved the most simple and effective attachment based measure for use in this population. Thus both projective measures provide insight into the children’s present emotional functioning. Overall findings suggested that 69.60% of the children were classified as having an insecure-avoidant attachment pattern, and 23.70% as ambivalent, and the mental health implications of such are important considerations for a developing country.
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Date: October 2011
I would like to dedicate this research to Thando, a little three year old girl from a children’s home in Johannesburg who has stolen my heart and made my life all the richer since our very first introduction in July of 2008. You were my inspiration for the project.

I would like to express my gratitude to the following people, whose support, advice and assistance were crucial in completing this study:

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<table>
<thead>
<tr>
<th>Attachment Subgroup</th>
<th>Original Identified Features (Pre Workshop)</th>
<th>Scorers Conceptualisation (Post Workshop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>Not all or no family members smiling; if smiles appear, they look genuine, lack ‘happy face’ quality</td>
<td>The smiles differ slightly on each family member; all the smiles are not the characteristic ‘U shape’. (see Appendix H:1)</td>
</tr>
<tr>
<td></td>
<td>Drawing is imaginative or includes fantasy elements or an unusual setting</td>
<td>Drawings that do not occur in the setting of the children’s home; or another home-type setting were included; school setting. (see Appendix H:2)</td>
</tr>
</tbody>
</table>
Insecure-Avoidant

Arms absent on one or all family members or portrayed in postures not suitable for holding

Sitting or lying posture/s or arms behind figures back or concealed in pockets (see Appendix H: 3)

Ambivalent

Overall impression: vulnerability

The figures on the page are small in stature in comparison to the page; the figures appear unhappy, sad, fearful or anxious etc; engaged in separate activities; parents unconcerned with children i.e.: child figure crying with no comfort; or child portrayed alone. (see Appendix H:4)

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CHAPTER 1
INTRODUCTION & LITERATURE REVIEW

1.1 Introduction

John Bowlby was a well known psychoanalyst from Britain who formulated a theory of attachment that changed the way people thought about the importance and purpose of close relationships (Katz, 2003). The theory of attachment has described four main patterns of attachment that occur as a result of a child’s early experiences with their attachment figures, such as their parents, based on a standardised procedure known as the Strange Situation (Ainsworth, Blehar, Waters & Wall, 1978; Bowlby, 1969; Senior, 2002). Voluminous data exists on infant attachment patterns and the associations they have with children’s early social, emotional, interpersonal and cognitive development (Ainsworth et al., 1978; for a review see Belksy & Cassidy, 1994 as cited in Granot & Mayseless, 2001).

In a study performed in a peri-urban settlement outside Cape Town, postpartum depression at 2 months and indices of poor parenting at both 2 and 18 months, were associated with insecure infant attachment (Tomlinson, Cooper, Murray, 2005). This study showed high levels of insecure attachment patterns in infants with their mothers, it is estimated that even higher levels of insecure attachment patterns might be found in children separated from their parents. Thus, the present study aims to investigate the prevalence of the attachment patterns that are represented in a sample of children in care during middle childhood in South Africa as seen in family drawings and attachment based narratives.

According to Kerns, Abraham, Schlegelmilch & Morgan (2007), despite attachment being one of the most investigated topics in the area of child development, certain developmental periods have currently still not received as much attention regardless of their potential significance towards the theory’s development. Therefore, much less is known about the associations that may exist between attachment patterns and the various realms of development during middle childhood (Granot & Mayseless, 2001; Urban, Carlson, Egeland & Sroufe, 1991). Hence this study will focus on children in middle childhood.
The investigation of the links between attachment patterns and child development has also been hampered by the lack of availability of one central conceptual or methodological procedure that can be used to assess attachment during middle childhood (Granot & Mayseless, 2001; Kerns, 2008).

According to Granot and Mayseless (2001), in middle childhood, attachment patterns may not be easily identified through direct measures, such as the observation of attachment behaviours, as one could during infancy. This is said to be attributed to the fact that attachment has moved to the level of representation (Kerns, 2008; Main, Kaplan & Cassidy, 1985).

The current situation has resulted in rather a wide range of attachment based techniques and measures being used. The utilization of projective techniques, which are designed to gain access to the child’s internal working models of attachment, are one of the representational methodologies often employed in middle childhood (Page, 2001). This methodology includes techniques such as projective drawings, story-telling and picture response tasks (Solomon & George, 2008). There are, however, relatively few published studies that have evaluated the comparability of these representational attachment-based projective measures (Kerns, 2008).

In this study, two projective measures will be employed to classify the attachment patterns of a sample of children in care, that are related to the level of representation, namely; drawings and story-telling/narrative tasks (Granot & Mayseless, 2001; Kerns et al., 2007; Madigan et al., 2003). Different protocols for the analysis and interpretation for each measure exist. In this study, both the Kaplan and Main (1986) system and the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997) will be used to classify the projective drawings, while the Attachment Story Completion Task (Granot & Mayseless, 2001) will be employed for the narratives.

This present study will examine the convergent validity of these two projective attachment based measures, in an effort to extend the research on measures of attachment during middle childhood. Evidence of validity will be examined by analysing the level of agreement between the classifications that result from the measures, as well as the level of agreement between the scorers’ classifications.

In the discussion that follows, the following concepts will be introduced and defined; attachment, attachment patterns, measures of attachment, the cross cultural applicability of attachment measures, and children in care.
1.2 Attachment

Attachment theory and research initially emerged as a result of the work and observations of psychoanalyst, John Bowlby (1969; 1973; 1988). It was Bowlby who identified the importance of children having a stable environment and the love and care of two parents for optimal development (Senior, 2002). Children need to form strong emotional bonds with their parents, and experience unconditional affection and appreciation from the people with whom they have attachment relationships. According to Bowley (1947), should children not receive this, due to any disruption or separation of the attachment relationship, the child may be vulnerable to the development of a range of emotional problems. Adequate emotional development is critical in order for children to feel both secure and worthy, as there is a growing body of empirical research to suggest that children who have inadequate emotional development feel unloved, rejected, unworthy and alone (Katz, 2003).

Katz (2003, p.22), defines attachment as the “enduring ties that children form with their primary caregivers; it includes a desire for proximity to an attachment figure, a sense of security derived from the person’s presence, and feelings of distress when the person is absent”. A further basic assumption of attachment theory is that the quality of one’s early experiences with their parents or care giving figures is critical in shaping the formation of mental representations or internal working models of close relationships (Hazan & Shaver, 1994).

Internal working models are cognitive structures that are based on the characteristics and behaviours of the parents/care giving figures, the self, and the-relationships (Pianta et al., 1999). The child’s internal working models reflect the nature and structure of these relationships and the kinds of care he/she has received in terms of the parents’ constant availability and emotional acceptance (Morgan, 1999). These internal models are then used by the child to evaluate and guide their behavior in novel situations and relationships with other people in their lives (Madigan et al., 2003; Pianta, Longmaid & Ferguson, 1999).

According to Senior (2002), internal working models comprise two dimensions: the self model and the other model. The self model contains all the perceptions of one’s own intrinsic worth and lovability, the second dimension is the other model which contains the expectations that one has regarding the goodness, trustworthiness, and the dependability of other people who have a significant role in their social world (Bretherton & Munholland, 2008; Senior, 2002). Senior (2002) further comments that children who experience their parents or care givers as both sensitive and
emotionally available, are able to develop a sense that other people are dependable and essentially supportive and caring. This interprets into a sense of oneself as a competent individual who is worthy of love and affection (Senior, 2002). According to Bowlby (1973, 1988) the internal models of attachment that are formed during early childhood, have a tendency to persist throughout the child’s life and serve as a basis for all the child’s subsequent close relationships with others.

1.3 Patterns of Attachment

Three primary patterns of attachment were described by Ainsworth et al. (1978) that were based on a standardised procedure known as the ‘Strange Situation’ (SS). It was used to investigate the quality of the child’s attachment relationship with their primary care giver. The SS involved eight short episodes that provide the opportunity to observe a variety of the 12 to 24 month old infant’s responses to the stress of entering a new environment and of being separated from their primary attachment figure. Ainsworth et al. (1978), were able to identify three distinct patterns of attachment that were reliably observed in children’s separations and reunions, namely, secure, avoidant/insecure and resistant/ambivalent attachment. In later research, Main and Solomon (1986, 1990 as cited in Senior, 2002), described a fourth insecure category, the disorganised/disoriented pattern of attachment.

**Secure attachment** was observed in an infant who separated easily from their primary care giver, and engaged in spontaneous exploration of the new environment (Main et al., 1985). Upon the care giver’s return, the infant sought comfort and quickly returned to play. These infants will develop the confidence in the fact that their care givers are dependable and supportive. These children are thus sure of themselves and feel confident and competent to explore the world safely on their own (Senior, 2002).

The **insecure/avoidant attachment** classification can be made when children show no signs of attachment due to not experiencing consistent availability and comfort from their primary care givers upon entering a novel environment. These children learn to associate their care givers with unreliability and often are unable to develop the confidence required to master a new environment. They also often have perceptions of the self as being weak and vulnerable (Main et al., 1985). Furthermore, these insecure attachment patterns foster the development of an inflated self concept, in which the child will only rely on themselves, often termed ‘compulsive self-reliance,’ and can become solely focused on satisfying their own individual needs over others (Katz, 2003).
The *ambivalent/resistant attachment* pattern is categorised by signs of marked distress by the infant during a period of separation from the primary care giver and clingy, tense behaviour upon the care giver’s return, according to Bowlby, (1988). These children often display separation anxiety and will be uncertain, anxious and distressed about approaching unfamiliar situations as they fear they will be left alone and the care giver will not return (Senior, 2002).

The *disorganised/disorientated attachment* classification occurs when children have had no mediation from their care givers that may provide them with strategies for dealing with separation. Thus upon the care giver’s return, the children appear confused and somewhat atypical, bizarre patterns of behaviour are seen, such as repetitive rocking movements of the hands and feet or frozen movement (Gomez, 1997, as cited in Katz, 2003). Gomez (1997, as cited in Katz, 2003), explains that this is how the child expresses their apparent disorientation and panic. According to Crittenden (1985, as cited in Senior, 2002), some of the instances of disorganised/disorientation attachment patterns have been seen in infants known to have been physically abused and/or grossly neglected by the parent.

According to Madigan et al. (2003) children develop a pattern of attachment, as well as associated expectations regarding their primary care givers and the subsequent attachment relationship. It is in part from these associated expectations, that the construction of the internal working model is thought to be based (Main et al., 1985; Kerns et al., 2007; Bretherton & Munholland, 2008). These internal working models are often referred to as representations of the attachment relationship (Bowlby, 1969; Madigan et al., 2003).

According to Bowlby (1969 as cited in Crowell, Fraley & Shaver, 2008 p.599), human attachments play a “vital role...from the cradle to the grave” and thus the pattern of attachment in infancy is similar in nature to later adult relationships. The Adult Attachment Interview (AAI) (George, Kaplan & Main, 1984, 1985, 1996 as cited in Crowell et al., 2008) was created to assess adults’ representations of attachment based on their discussions of childhood relationships with their parents, and of those experiences’ effects on their development as adults and parents. Individuals can be classified as having one of the three main attachment patterns, namely: secure-autonomous; insecure-dismissive, insecure-preoccupied and an unresolved classification.

The *secure-autonomous* maintains a balanced view of early relationships, values attachment relationships and views attachment based experiences as pivotal in their development (Crowell et
al., 2008). The two major insecure classifications are the dismissive and preoccupied patterns of attachment. Adults classified as dismissing often idealise recalled events from childhood and deny and reject the importance of attachment relationships on their development whereas preoccupied adults display confusion and oscillation about past experiences, and provide descriptions of their relationships with their parents as marked by anger or passivity (Crowell et al., 2008). Individuals classified as unresolved often report attachment related traumas of loss and/or abuse and often exhibit incoherence and disorganisation around the discussion of the topic (Crowell et al., 2008).

Despite the literature available regarding attachment patterns in infancy, early childhood, adolescence and adulthood, the period of middle childhood has been relatively neglected in the literature (Mayseless, 2005). In order to expand current research the present study aims to explore the attachment patterns that exist in a sample of children within the developmental period of middle childhood.

1.4 Measures of Attachment in Middle Childhood

The observational measures employed during infancy and early childhood, aimed at describing the child’s pattern of attachment either in the context of the laboratory (i.e.: Strange Situation) or at home (i.e.: Attachment Q-sort) (Kerns et al., 2007) are both common and well validated measures, and in the mid 1980’s were almost exclusively employed (Kerns et al., 2007). Due to the fact that both these measures rely on observation of the infant’s behaviour, according to Bretherton and Munholland (2008) this resulted in Bowlby’s (1969; 1973; 1988) propositions about internal working models being almost largely ignored in research.

This resultant lack of available research relevant to internal working models of attachment also hampered the research of attachment during middle childhood, as early childhood measures of attachment (i.e.: Strange Situation & Attachment Q-Sort) were found to be inappropriate for this particular developmental period (Bretherton & Munholland, 2008; Granot & Mayseless, 2001; Kerns, 2008). Researchers attempting to examine attachment during middle childhood noted that attachment patterns were not easily identifiable through direct observation, as the frequency and intensity of these attachment related behaviours begin to decrease (Kerns, 2008; Solomon & George, 2008).

Bowlby’s (1969, 1973; 1988) notions about internal working models were revived when Main et al. (1985) stated that over time attachment moves to the level of representation, and thus measures
that were aimed at the assessment of attachment at the representational level were subsequently introduced. Therefore, in middle childhood, these measures may provide an easier means with which to assess attachment (Bowlby, 1969; Granot & Mayseless, 2001; Madigan et al., 2003; Page, 2001).

Currently however, there is no dominant conceptual and methodological approach available for the measurement of attachment in middle childhood (Kerns, 2008). This has resulted in a wide range of measures being used to gain access to children’s attachment representations (see Kerns in Cassidy & Shaver, 2008). One such measure is the utilization of projective techniques (Page, 2001). This measurement approach can include the interpretation of; picture responses, doll/puppet play, story-telling as well as children’s drawings (Kerns, 2008; Solomon & George, 2008).

1.4.1 Projective Techniques

According to Bretherton (2005) children begin to use various forms of mental representation to organize information and concepts in their early preschool years. These mental structures continue to develop with age and the child becomes ‘ripe’ for assessments that tap into their internal working model of attachment (Bretherton, 2005). The literature illustrates that over the past decade, researchers have been focused on attempting to elicit the various patterns of attachment through the use of projective techniques that are related to the level of representation (Kerns, 2008; Page, 2001; Pianta et al., 1999; Solomon & George, 2008).

The term projective technique originates from Sigmund Freud’s (1900, as cited in Meyer, Moore & Viljoen, 1989) conception of the term ‘projection’, which he defined as a defence mechanism whereby an individual is thought to ‘project’ their inner feelings onto the outside world. Projective techniques are seen to be focused on the unconscious, covert aspects of one’s personality such as; one’s sense of self, as well as sense of self with others in the environment (Hammond, 1997). Furthermore, according to Hammond (1997) the more ambiguous and creative the technique, the more likely the child is to express their inner feelings. Projective techniques also encourage a wide variety of unusually rich responses from the child, usually with a minimal awareness on the part of the child of the test’s purpose (Rabin, 1960; McPhee & Wegner, 1976). The focus in this study is on two specific projective techniques, namely; drawings and story-telling/narrative tasks.
Following from Bowlby’s (1973) original notion that internal working models of attachment are rooted in the child’s real life attachment related experiences, the assumption made by many researchers is that children will likely draw on various aspects of these models when responding to the projective techniques (Bretherton & Munholland, 2008). Projective techniques may serve to contribute to the internal working model perspective of attachment (Bretherton & Munholland, 2008). Many argue that the measures, however, should have associations with behavioural measures of attachment (Strange Situation & Attachment Q-Sort) (Bretherton & Munholland, 2008; Solomon & George, 2008). This has resulted in the support and recognition of the representational measures that have been successfully validated with earlier measures of classification (Bretherton & Munholland, 2008; Solomon & George, 2008).

These early measures of attachment (Strange Situation & Attachment Q-Sort) have thus become the ‘gold standard’ against which other measures are compared. Not only have these measures been well validated, but the associated observations of attachment related behaviour has been linked with later features of socio-emotional and personality functioning (Raikes & Thompson, 2005). This link with later functioning has been subsequently understood as being reflective of underlying internal working models (Raikes & Thompson, 2005). It is this connection between attachment behaviour and internal working models that has resulted in the expected concordance between earlier measures of attachment and those employed during the period of middle childhood (Raikes & Thompson, 2005).

The validation of middle childhood measures of attachment by showing evidence of concordance has been criticised, as some researchers argue that consistency in attachment classifications can be variable (Kerns, Abraham, Schlegelmilch & Morgan, 2005; Raike & Thompson, 2005). Despite this criticism, studies have illustrated concordance between measures of attachment behaviour and measures of attachment during adulthood (Adult Attachment Interview) thereby providing credence to the expectation of concordance with earlier measures of attachment and those employed in middle childhood (Raikes & Thompson, 2005; Van Ijzendoorn, 1995).

### 1.4.1.1 Projective Drawings

Projective drawings can be seen as symbolic representations of the child’s inner world (Furth, 1988; Koppitz, 1960; McPhee & Wegner 1976). According to Hammond (1997), children can communicate nonverbally through their drawings, that which is bothering them, as well as what is important to
them. Although projective drawings can reveal a range of unconscious conflicts (Hammond, 1997; Handler & Habenicht, 1994), it was Kaplan and Main (1986) (Fury et al., 1997; Madigan et al., 2003; Pianta et al., 1999), who were the first to suggest that children’s drawings of their family may in fact be a feasible and fruitful way of capturing their attachment representations.

**Kinetic Family Drawings**

According to Burns and Kaufman (1970, as cited in Burns, 1982) children’s drawings of their self and family purport to reveal the self concept of the child and the perceptions that the child may have of their interpersonal relationships within their families. In other words, the family drawing is a projective drawing technique that provides one with a glimpse into the child’s view of the family dynamic (Fihrer & McMahon, 2009; Handler & Habenicht, 1994). Bowlby (1973, as cited in Fury et al., 1997, p.1154) asserts that “it seems completely plausible that representations of attachment experiences would be revealed in drawings, and, specifically, that the child’s inner working models of the self, caregivers, and self with caregivers would manifest”.

In 1970, Burns and Kaufman devised the Kinetic Family Drawing (KFD), a projective drawing technique which is frequently employed by many psychologists today (Fihrer & McMahon, 2009; Handler & Habenicht, 1994; Knoff & Prout, 1985). The KFD introduces the dynamic of movement because children are given the instruction to ‘draw everyone in your family, including you, doing something’ (Burns, 1982). Compared to other projective drawing techniques such as the Draw-A-Person Test (DAP) or the House-Tree-Person Test, the KFD enables the child to depict their family as an active functioning unit (Handler & Habenicht, 1994; Wordon, 1985). According to Burns (1982) this is what allows one to gain a sense of the child’s perception of these family interactions and whether any conflict or difficulties exist between family members.

The original scoring method by Burns (1982) makes use of four distinct categories (see Burns, 1982; Handler & Habenicht, 1994). However, many researchers have included their own modified scoring criteria for the interpretation of the drawings made by children (Handler & Habenicht, 1994). A more recent approach to the interpretation of the KFD utilises the theory of attachment to examine associations between family drawings and attachment relationships (Fihrer & McMahon, 2009; Fury et al., 1997; Kaplan & Main, 1986; Madigan et al., 2003; Pianta et al., 1999). Two classification systems for the attachment based interpretation of children’s kinetic family drawings will be used in
the present study. They are: the Kaplan and Main (1986) system and the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997) system.

i. Kaplan and Main’s Classification System for Children’s Kinetic Family Drawings
Kaplan and Main (1986) describe how the four attachment patterns can be reflected in how the children represent their family relationships in the drawings. Thus, one can use the scoring system devised by Kaplan and Main (1986) to classify the children’s drawings as being representative as one of the four major attachment patterns.

Kaplan and Main (1986) suggest that the pattern of attachment can be identified through the analysis of the relationships between the family members represented in the drawing, through eight dimensions or scoring categories. Each of these eight categories (e.g. size of figures) is related to a number of discrete drawing features (e.g. extremely tiny or huge figures). In order to make the overall drawing classification (i.e.: secure), the scorers of the drawings investigate the presence or absence of the various features associated with each of the categories (Kaplan & Main, 1986). The features are then clustered into patterns and the drawing is classified according to the best fitting category according to Kaplan and Main’s (1986) instructions of how the patterned features can reflect one of the four main attachment groups (Kaplan & Main, 1986; Pianta et al., 1999).

ii. The Family Drawing Global Rating Scale (FDGRS)
A second more recent approach that has been used to analyze attachment representations in the family drawings of children utilizes a global rating scale designed by Fury et al. (1997) that assigns a numerical rating to the overall pattern of the drawing features that are present (Leon, Wallace & Rudy, 2007). The scales can be used to rate the overall emotional tone and quality of the attachment relationships.

According to Fury et al. (1997) the scales were developed as a means of scoring the drawings in a manner which is considered to be more integrative. In comparison to the Kaplan and Main (1986) system, which relies heavily on the presence and/or absence of various features, the FDGRS (Fury et al., 1997) pays attention to the context of the drawing and the patterning of the features in an effort to interpret the drawing meaningfully as a whole (Clarke, Ungerer, Johnson & Stiefel, 2002; Fury et al., 1997; Leon et al., 2007).
1.4.1.1 Reliability and Validity Research on Kaplan and Main’s (1986) System and the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997) for the Classification of the KFD

Although objective scoring guides have been devised (Cecil, 1978; Meyers, 1978; Mostkoff & Lazarus, 1983), the validity of the KFD is still uncertain due to a lack of a sound empirical foundation in any particular theory (Pianta et al., 1999; Sobel & Sobel, 1976). However, the interpretation of the KFD using the Kaplan and Main (1986) system and/or the FDGRS (Fury et al., 1997) differs from previous assessment attempts to analyze children’s KFDs due to a foundation in a widely acknowledged theory (Pianta et al., 1999), namely attachment theory. Thus providing psychologists and researchers with an “alternative theory driven framework” for the analysis and interpretation of children’s KFDs (Pianta et al., 1999, p.245).

Despite the potential promise that these measures may hold, a lack of reliability and validity data still exists, resulting in only preliminary support for their use (Fury et al., 1997; Kerns, 2008; Madigan et al., 2003; Pianta et al., 1999; Solomon & George, 2008). To date, very few published studies have used either of the classification systems for the attachment based interpretation of children’s drawings (Fury et al., 1997; Kerns et al., 2005; Madigan et al., 2003; Pianta et al., 1999).

i. Kaplan and Main (1986) System

Few published studies exist that have included the Kaplan and Main (1986) system for the analysis of the KFD as a measure of attachment representations (Clarke et al., 2002; Fury et al., 1997; Madigan et al., 2003). Another study performed by Pianta et al. (1999) did not undertake to measure attachment, rather, they examined the properties of the Kaplan and Main (1986) system with 200 children’s drawings.

In terms of the reliability of the system, studies (published and unpublished) have shown inter rater agreement to be adequate, albeit modest, for both the overall drawing classifications, as well as for the discrete drawing features (Douglas, 2009; Fury et al., 1997; Madigan et al., 2003; Pianta et al., 1999). Furthermore, the results from the Pianta et al. (1999) study showed that the features designated by Kaplan and Main (1986) could be reliably linked to the drawing classification. Therefore, these results indicated that the scorers overall classification decision was consistent with
both the features that were present in the drawings and Kaplan and Main’s (1986) descriptions of the different represented attachment patterns (Pianta et al., 1999).

Available validity data suggests that certain features (adapted from Kaplan and Main, 1986 in Fury et al., 1997) in drawings are purported to be indicators of early attachment history; however this finding has yet to be replicated in other studies (see Madigan et al., 2003; Solomon & George, 2008). There have also been reported links of concordance between the classifications of the Kaplan and Main (1986) system and Separation Anxiety Test (SAT) classifications in an exploratory study conducted on a sample of boys presenting with ADHD (Clarke et al., 2002). Furthermore, both Pianta et al. (1999) and Madigan et al. (2003) report links between assigned attachment classifications and concurrent socio-emotional and behavioural functioning.

ii. Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997)

Similarly to the Kaplan and Main (1986) system, the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997) has also received limited investigation. Due to the limited validation evidence that exists, both Fury et al. (1997) and Pianta et al. (1999) assert that caution is warranted when relying on discrete drawing features (Kaplan & Main, 1986) as distinguishing markers of the various attachment classifications. Therefore, Fury et al. (1997) suggest that drawings should be analyzed and interpreted with a more global approach such as the FDGRS.

Reliability data reveals that of the studies that have employed this measure, high levels of inter rater agreement on both global classifications and the individual scales have been found (Clarke et al., 2002; Fährer & McMahon, 2009; Leon et al., 2007; Madigan et al., 2003). In terms of validity data, there is evidence of discriminant validity in that the classifications made are not related to child IQ (Fury et al., 1997; Kerns et al., 2005). There have also been reports of significant correlations between the individual scales of the FDGRS (Fury et al., 1997) thus reflecting their theoretical interdependence (Fury et al., 1997; Madigan et al., 2003). Furthermore, findings suggest that the utilization of the global approach (FDGRS, Fury et al., 1997) is more successful in distinguishing between attachment groups (Madigan et al., 2003). The resultant classifications are reported to possess stronger predictive power in terms of their relation to infant attachment history (Fury et al., 1997). Thus there is tentative evidence to suggest concordance between the FDGRS (Fury et al., 1997) classifications and those derived from the Strange Situation (SS) procedure at 12 and 18 months (Madigan et al., 2003).
Another study, however, reported low concordance between the FDGRS (Fury et al., 1997) and the SS procedure (Fihrer & McMahon, 2009). Although they do acknowledge the limitation of their small sample size in terms of generalisability, they explain that attachment during middle childhood attachment is based upon multiple experiences of several different relationships and not one primary relationship as in infancy (Fihrer & McMahon, 2009). The researchers purport that because the attachment system becomes so diversified, the classification measure may only partially capture the child’s attachment representation (Fihrer & McMahon, 2009). Additionally, in the study performed by Leon et al. (2007), only modest correlations were found between the FDGRS (Fury et al., 1997) and the newly developed Parent Child Alliance scale (PCA).

Thus, Fihrer and McMahon (2009) suggest that because the FDGRS (Fury et al., 1997) focuses on the parent-child relationship, it is thus not effectively activating the current attachment system that exists during middle childhood. However, according to Kerns et al. (2005) although secondary attachment figures may be present in middle childhood, children still tend to rely heavily on their primary caregivers. Thus, Kerns et al. (2005) argue that measures of attachment in middle childhood should be focused on the parent-child relationship. Therefore, although concordance to early childhood measures such as the SS procedure may be difficult to assess, the assumption is not considered to be unreasonable as there is evidence to suggest that possible links do exist, however limited the evidence may be (Fury et al., 1997; Madigan et al., 2003).

In sum, it seems plausible to assume that the attachment based classification systems (Bowlby, 1973; FDGRS, Fury et al., 1997; Kaplan & Main, 1986) for children’s drawings may successfully capture attachment representations in middle childhood. However, the limited available evidence requires that a degree of caution be warranted with the interpretation of these scoring systems.

Potential covariates

Methodological concerns that can potentially compromise the validity of the drawing are the potential confounds between the drawing variables, cognitive ability and age of the child (Pianta et al., 1999). According to Madigan et al. (2003; Fury et al., 1997; Pianta et al., 1999) some features of children’s drawings are known to be related to cognitive ability as subsequent drawing performance is affected. Hence, it is advisable to administer an IQ assessment as a potential control for cognitive status. The Draw-A-Person (DAP) Test can be used to this end. The DAP has the added advantage of serving as a warm up task prior to the administration of the KFD (Pianta et al., 1999). The DAP can be
scored with the Goodenough-Harris scoring criteria which will provide a good nonverbal measure of intellectual development (Goodenough-Harris, 1950).

A further concern to consider in terms of the children’s drawing performance is age. According to Fury et al. (1997), the development of the child’s fine motor skills is still inadequate under seven years of age. However, this variable is not deemed significant in this particular study as the sample involves children within the middle childhood developmental period and are thus between the ages of 8 and 12 years and it assumed that their fine motor skills would have reached a developmental plateau (Fury et al., 1997). An inadequate drawing performance that is related to either cognitive ability or age may serve to cloud the identification of specific drawing features and the outcomes to which they are purported to predict, thereby influencing the overall aims of this study (Pianta et al., 1999). The confound of IQ was considered during the process of data collection through the use of the DAP Test.

1.4.1.2 Projective Story-Telling/Narrative Techniques

Another projective technique that is used in middle childhood is one which attempts to get children to ‘project’ themselves into a story into which there are attachment relevant themes (Katz, 2003; Solomon & George, 2008). The stories may be facilitated by the use of dolls and/or pictures (Howe, Brandon, Hinings & Schofield, 1999). The stories reflect a variety of parent-child interactions that also include events of mild stress that a child is likely to encounter in their everyday lives (Howe et al., 1999; Page, 2001; Solomon & George, 2008). There are many different approaches or protocols that have been developed that attempt to classify and rate children’s representations of attachment as interpreted from the story telling. However this study will focus on the Attachment Story Completion Task (Granot & Mayseless, 2001).

i. The Attachment Story Completion Task

The Attachment Story Completion Task (Granot & Mayseless, 2001) was initially developed to assess the attachment representations of preschoolers as young as 3 years old, and early school age children (Bretherton, Ridgeway & Cassidy, 1990; Page, 2001). It was employed in several studies and subsequently validated for use with this younger age group (Bretherton et al., 1990; Solomon, George & De Jong, 1995 as cited in Granot & Mayseless, 2001). More recently, however, this particular projective measure was adapted for its use in middle childhood by Granot and Mayseless
(2001). This tool provides a projective assessment of the child’s representation of attachment by using stories to elicit both a cognitive as well as an emotional response (Kerns et al., 2007).

The Attachment Story Completion Task (Granot & Mayseless, 2001) requires the researcher to introduce a story related to an attachment theme with a short script facilitated through the use of various dolls and simple props (Granot & Mayseless, 2001; Kerns et al., 2007). The child is encouraged to complete the story, and their narrative is then analysed in terms of their portrayal of their attachment figures (e.g.: in terms of their attachment figures’ response to their concerns) as well as the story’s narrative style (e.g.: the story’s coherence/overall structure) (Bretherton et al., 1990; Granot & Mayseless, 2001; Kerns et al., 2007). This will then result in the child being assigned one of the four main attachment patterns, deemed to be his or her dominant attachment classification (Bretherton et al., 1990; Granot & Mayseless, 2001; Kerns et al., 2007). In general narratives are taken to be indicators of security when the story is resolved both constructively and coherently (Bretherton & Munholland, 2008). According to Bretherton and Munholland (2008), the Attachment Completion Story Task (Granot & Mayseless, 2001) may be an effective indicator of a child’s internal working model because the measure elicits descriptions of attachment relationships and interactions.

1.4.1.2.1 Reliability and Validity Research on the Attachment Story Completion Task (ASCT)

The original attachment classification system employed with the projective story telling technique was devised by Bretherton et al. (1999). However, it only included criteria for the classification of secure and insecure attachment patterns. Cassidy (1988 as cited in Granot & Mayseless, 2001) used a similar system on a sample of 6 year olds and defined three classification groups (secure/confident, avoidant, and hostile/negative). Solomon, George and De Jong (1995 as cited in Granot & Mayseless, 2001) revised the Cassidy (1988 as cited in Granot & Mayseless, 2001) system to include the ambivalent group. Significant concordance was found between all of these classification systems and the Strange Situation procedure (Granot & Mayseless, 2001).

Previous use of the Attachment Story Completion Task has shown it to be both a reliable and valid measure that can be employed with younger children (Cassidy, 1988 as cited in Granot & Mayseless, 2001; Solomon et al., 1995 as cited in Granot & Mayseless, 2001). More recently, however, an adapted version of the Attachment Story Completion Task has been devised by Granot and Mayseless (2001) for use with children in middle childhood. The modifications include minor
alterations in the procedure and criteria for the secure attachment pattern. Furthermore, classification descriptions have been expanded to include four attachment classifications (secure, insecure-avoidant, ambivalent and disorganised) that are based on the integration of the three previously validated classifications systems (Granot & Mayseless, 2001).

The adapted Attachment Story Completion Task (Granot and Mayseless, 2001) was initially validated through use on an Israeli sample of children. The measure reported good scorer agreement as well as high test-retest reliability over a 3 month period. The measure was also associated with another concurrent measure of security perception known as the Security Scale, which has also been validated and used in several studies in the United States (Granot & Mayseless, 2001; Kerns et al., 2005). Significant correlations were also reported between the Attachment Story Completion Task and school adjustment during middle childhood (Granot & Mayseless, 2001). Furthermore, the measure showed evidence of discriminant validity in that the classifications were found not to be related to the child’s logical reasoning and linguistic skill (Granot & Mayseless, 2001).

Kerns et al. (2005) extended the work of Granot and Mayseless (2001) by examining the level of stability (test-retest reliability) of the Attachment Story Completion Task over a 3 month period in a sample of US children. They reported significant levels of stability of the attachment classifications. In an additional study performed by Kerns et al. (2007), good scorer agreement as well as the aforementioned discriminant validity was observed. Furthermore, the study was able to illustrate convergence between the Granot and Mayseless (2001) approach and the Waters, Rodrigues and Ridgeway (1998 as cited in Kerns., 2007) approach for the scoring of children’s narratives (Kerns., 2007). Both of the scoring approaches’ resultant attachment classifications were related to measures of children’s mood and/or emotion regulation (Kerns et al., 2007). Thus providing evidence of construct validity for the Attachment Story Completion Task (Granot & Mayseless, 2001) (Kerns et al., 2007).

The overall findings on the Attachment Story Completion Task (Granot & Mayseless, 2001) suggest that it may be one of the more reliable and valid measures with which representations of attachment in middle childhood can be assessed (Granot & Mayseless, 2001; Kerns et al., 2005; Kerns et al., 2007). Therefore, in the present study, both the Kaplan and Main (1986) and the FDGRS (Fury et al., 1997) classification systems will be compared against the Attachment Story Completion Task (Granot & Mayseless, 2001) classification system in an attempt to examine the convergent
validity of the measures. Any associations will serve to further enhance the construct validity of the measures (Granot & Mayseless, 2001).

**Potential covariate**
A concern with narrative tasks is that they may be influenced by the child’s degree of verbal skill. However, the Attachment Story Completion Task (Granot & Mayseless, 2001) has shown evidence of significant discriminant validity in that it has been found to be unrelated to linguistic skill (Granot & Mayseless, 2001; Kerns et al., 2005). In the study performed by Kerns et al. (2005) it was illustrated that the narratives that possessed a high level of verbal sophistication did not necessarily correlate with a resultant classification of secure attachment. Similarly the narratives of children who received insecure attachment classifications were not necessarily brief and less descriptive. Therefore, the verbal expression of the content of the child’s narrative is considered to be of less relevance when compared to the significance of the implicit content and the emergent attachment related themes in the classification of the child’s attachment pattern (Granot & Mayseless, 2001; Kerns et al., 2005).

### 1.5 Cross-Cultural Applicability of Attachment Measures
The present study allowed for the testing of various representational attachment-based measures within a different cultural and ethnic context, namely; on a sample of black* South African children. It has been argued that attachment theory is based upon Western views, and thus has limited universal conceptual applicability across diverse cultures and social contexts (Rothbaum, Weisz, Pott, Miyake & Morelli, 2000). This would suggest that that the theory of attachment is therefore not considered as being relevant to non Western cultures. In this present study, the implication of the argument by Rothbaum et al. (2000) would bring the issue of sampling into question, which may serve to effectively compromise the study’s overall aims. However, Rothbaum et al.’s (2000) findings have been contradicted by a growing body of notable evidence for the cross cultural validity of the theory of attachment that have to date not (yet) been refuted (Van Ijzendoorn & Sagi-Schwartz, 2008).

The first empirical study within a cross cultural context was performed by Mary Ainsworth in Uganda in 1955-1965, which was further replicated in the United States (Minde, Minde & Vogel, 2006). The

*It is acknowledged that the use of racial categories can be linked to the discriminatory practices that occurred in South Africa during apartheid; however this is not the intention in the present study.
findings of her studies, as well as those performed by others in more than 20 countries in North and South America, Europe, Asia, Australia, and Africa have confirmed that the concept of attachment across diverging cultures is interpreted in a similar manner, despite various contextual specific influences; and furthermore, similar patterns of attachment behaviour (secure, insecure-avoidant, ambivalent and disorganised) as initially described by Ainsworth et al. (1978) and Main and Solomon (1986; 1990 as cited in Senior, 2002) can be reliably observed in different cultural contexts (Minde et al., 2006; Van Ijzendoorn & Sagi-Schwartz, 2008). Therefore, according to Van Ijzendoorn and Sagi-Schwartz (2008), the studies illustrate that the theory of attachment may indeed be universal and thus claim cross cultural validity.

In sum, the research regarding attachment that has been performed in African countries has continued to provide consistent support for the basic tenets of the theory (for review see Van Ijzendoorn & Sagi-Schwartz in Cassidy & Shaver, 2008). Specifically in the context of South Africa, validity data for the use of the Strange Situation (SS) procedure as well the Attachment Q-Sort within samples of black and coloured children during early childhood (see Minde et al., 2006; Tomlinson, Cooper & Murray, 2005) has been reported. However, according to Van Ijzendoorn, Bakermans-Kranenber and Sagi-Schwartz (2006) further studies remain necessary, as the studies performed within the African continent remain too few and many are limited to the infancy and early childhood developmental period.

The present study aims to extend the cross cultural research on attachment, and the associated measures employed during middle childhood, by including black South African children between the ages of 8 and 12 years old. Heterogeneity within the black South African population is not considered a potential confounding factor due to the universal nature of the theory of attachment (Minde et al., 2006; Tomlinson, Cooper & Murray, 2005; Van Ijzendoorn & Sagi-Schwartz, 2008).

1.6 Attachment and Children in Care

In the late 1940’s Bowlby (1969; 1973; 1988) extended his initial work regarding the parent-child relationship, by examining the effects of institutionalization on children. Bowlby’s (1951 as cited in Kobak & Madsen, 2008) findings highlighted the importance that the parent-child bond has on the child’s optimal development. Bowlby asserts that the magnitude of the parent-child bond is often taken for granted, and that substitute child care by care workers or related professional’s is not as effective (Karen, 1994).
Unfortunately however, many children experience disruptions in their attachment bond for many reasons, such as parental illness, death or their placement in a children’s home (Kobak & Madsen, 2008). According to Katz (2003) children who are placed in care facilities are often those who have been mistreated and/or have experienced various forms of abuse. Roberts (as cited in Mudaly, 1985) explains that the placement of the child can thus often be related to a family’s inability to adequately provide for the child’s physical and emotional needs. The children are required to be removed from the care of their parents/care givers and introduced into the environment of the children’s home.

There are roughly two hundred children’s homes that are registered with the Department of Welfare and Justice in South Africa (Katz, 2003). It has been observed that when children are reared in care facilities, such as children’s homes, that the child can become vulnerable to the development of an array of emotional difficulties (Weston, 1999). According to Bowlby (1951 as cited in Karen, 1994) this may be due to the fact that many children’s homes, often out of necessity and numerous other factors, tend to primarily promote the physical needs of the child, which can result in the child’s emotional needs being overlooked. It is also generally assumed that a lack of sufficient attachment is a further contributing factor, as a significant attachment relationship such as the parent-child bond, provides the context for the child’s subsequent emotional development (Bowley, 1947; Katz, 2003; Van Staden & Nieuwoudt, 2001). Children who live in children’s homes often miss the opportunity to develop a strong positive attachment relationship as a result of inconsistent care giving due to high staff turnover and staffing shortages (Dozier & Rutter, 2008).

All children need to have early attachment experiences that are positively associated with affection, appreciation and recognition from the significant people in their lives, such as their parents (Bowley, 1947). According to Bowley (1947) a child’s inner fears of unworthiness, feelings of being bad and unlovable can potentially be offset by assurances from those with which the child has an attachment relationship. Therefore, these early attachment experiences of care giving cannot be negated as they subsequently provide the irreplaceable foundation upon which emotional development and associated attachment security are built (Bowlby, 1973; Kobak & Madsen, 2008).

Other possible factors that may have an effect on the emotional development of the child and subsequent attachment pattern are namely; amount of parental contact/lack of, the child’s age at the time of placement, length of stay in the children’s home as well as the reason for the child’s
placement (Katz, 2003). These factors have been related to the possible development of insecure-avoidant, ambivalent and disorganised attachment patterns (Batchelor, 1998; Bowley, 1947; Douglas, 2009; Katz, 2003). The present study aims to explore the representations of attachment that are evident in a sample of children in care.

1.7 Attachment, Psychopathology and the South African context

Central to Bowlby’s theory of attachment is the notion of process or the manner in which early experience of care giving might contribute to later psychological well being or pathology (Egeland & Carlson, 2004). He postulated that it is these early experiences that lay the foundation for later development, but which can be transformed by subsequent experiences. Bowlby wrote that “development turns at each stage of the journey on an interaction between the organism as it has developed up to that moment and the environment in which it then finds itself” (1969/1982, pp. 364 as cited in Egeland & Carlson, 2004, pp. 27). Psychopathology and normal development are thus conceived according to Bowlby, dynamic processes that are based on the interactions of various constituents over the child’s course of development (Egeland & Carlson, 2004).

The idea that social relationships can affect the development of psychopathology in childhood can be fundamental in terms of understanding children’s mental health. It must be noted however, that although problematic attachment patterns alone cannot be responsible for the etiology of psychopathology, it may increase the likelihood of occurrence (Deklyen & Greenberg, 2008). The insecure-avoidant child is likely to express their anger at the care giver’s lack of responsiveness through rage and hostility (Deklyen & Greenberg, 2008). The underlying anger may be then manifested in lying, bullying, blaming, and being insensitive to others. In contrast the ambivalently attached child is anxious and concerned that his/her needs will not be met in other environments and may exhibit impulsivity, a short attention span and low frustration tolerance as a result (Deklyen & Greenberg, 2008).

According to a study by Cassidy and Marvin (1992 as cited in Deklyen & Greenberg, 2008) children who spend a considerable amount of time in care have a higher risk of the development of an insecure attachment pattern compared to children who have been adopted within their first 6 months of life. Insecure attachment patterns (avoidant and ambivalent) have further been linked to the development of conduct disorder, oppositional defiant disorder, anxiety disorders, depression and pervasive developmental disorders (Deklyen & Greenberg, 2008).
The link between attachment and children’s mental health may be a cause for concern in the context of South Africa where an increasing number of children are being orphaned and placed in care due to the HIV/Aids pandemic (Freeman, 2004). Dorrington, Bourne, Bradshaw, Laubscher and Timaeus (2001 as cited in Freeman, 2004) estimated that in the current year, 2010, that there could be as many as 5 to 7 million deaths in South Africa as a result of HIV/Aids. There are also on average 800,000 children in South Africa under the age of 18 years who have lost a mother to HIV/Aids, and by 2015 this number will rise to as many as 3 million children (Freeman, 2004).

The affects of HIV/Aids on children’s mental health seems pertinent to consider in light of the fact that many children will be orphaned as result of the pandemic. Many of these children will require placement in children’s homes in which their basic needs will be provided for but where their opportunity to bond with a consistent and stable care giver is often unlikely, given the high staff turnover that can often take place in these homes. Freeman (2004) poses the question “what will the likely mental health status of these children be and how might they manifest this status?” (p. 152).

Positive and reliable care giving experiences lead to secure patterns of attachment and are known to promote positive adaptive responses, resilience during times of stress and emotional stability in children (Straker, Moosa, Becker & Nkwale, 1992). Freeman’s question thus becomes pertinent to consider in light of the fact that as a result of the loss of a significant parent due to HIV/Aids and the subsequent placement in a children’s home where all too often inconsistent care giving is provided, the likelihood that the children develop an insecure attachment pattern is highly probable (Mattingly, 1981).

Insecure attachment patterns have been identified as a potential risk factor in the development of psychopathology (Dozier, Stovall-McClough & Albus, 2008). This is likely to affect these children’s scholastic performance and their ability to develop caring relationships with partners, friends and their own children when they are adults (Freeman, 2004). According to Freeman (2004) a large number of these children may suffer from depression and/or a personality disorder and are more likely to engage in risky behaviour, including risky sexual behaviour, substance abuse and violence. Freeman (2004) goes on to add that many of these orphan children may turn to crimes and social violations that affect society as a whole.
1.8 Conclusion

Much literature exists regarding attachment in young children, as well as attachment in adolescence and adulthood. However, despite growth in the development realm of middle childhood, it is still considered to be one of the lesser researched attachment periods (Kerns et al., 2007). A potential contributing factor is the resultant lack of a central measurement approach (Solomon & George, 2008). However, techniques have been modified and adapted for use during middle childhood, although many have yet to be validated extensively (Kerns, 2008).

The Attachment Story Completion Task modified by Granot and Mayseless (2001) is one of the measures of attachment that has gained increased support as a valid and reliable tool to employ within middle childhood (Bretherton & Munholland, 2008; Granot & Mayseless, 2001; Kerns et al., 2007; Solomon & George, 2008). Limited validity data is available surrounding the use of family drawings and associated classification systems (Fury et al., 1997; Kaplan & Main, 1985) as a potential measure of attachment and thus the present study aims to examine the convergent validity between the Attachment Story Completion Task (Granot & Mayseless, 2001) and both the Kaplan and Main (1985) and the FDGRS (Fury et al., 1997) system for classifying children’s drawings.

All these measures have yet to be used and/or effectively validated on an African sample and thus a sample of black South African children currently residing in care will be employed. Therefore this study will not only serve to contribute to research on the convergent validity of two projective attachment measures in middle childhood, but it will also further cross cultural research on attachment and provide insight into the current emotional functioning of children who have experienced disruptions to their attachment relationship/s. The prevalence of attachment patterns found in this study may also have implications in terms of the development and perpetuation of insecure attachment patterns in children’s homes and the link to children’s mental health in the context of South Africa.
CHAPTER 2

METHODOLOGY

2.1 Rationale

According to Bowlby (1969), the founder of attachment theory, children need a stable environment as well as a strong attachment relationship with their parents/care giver for optimal development. It has been estimated that by the end of 2010, approximately 3.1 million children in South Africa, due to various circumstances will be orphaned (Simbayi, Kleintjies, Ngomane, Tabane, Mfecane & Davids, 2006). The investigation of the subgroups of attachment (secure, insecure-avoidant and ambivalent attachment) that are evident in a sample of children in care can provide insight into the current emotional functioning of the children.

Attachment remains one of the most investigated topics in the area of child development but certain developmental periods have not received much attention, despite the significance of these periods in theories of further development (Kerns et al., 2007). Numerous literatures exist regarding attachment in infancy and early childhood, as well as adolescence and adulthood; however the developmental realm of middle childhood remains relatively neglected in comparison (Kerns et al., 2005). As a result much less is known about the associations that may exist between attachment and various facets of development in middle childhood (Granot & Mayseless, 2001; Urban, Carlson, Egeland & Sroufe, 1991).

The knowledge gap that exists about attachment in the period of middle childhood has been attributed to a lack of a dominant methodological approach to measurement (Kerns et al., 2005; Solomon & George, 2008). Hampering the development of an appropriate measure, according to Granot and Mayseless (2001), in middle childhood, is that attachment patterns are not easily identified through direct assessment measures (i.e.: observation of attachment behaviours) as during infancy and early childhood. This is attributed to the fact that attachment has moved to the level of representation (Kerns, 2008; Main, Kaplan & Cassidy, 1985).

The representational level of attachment is also often referred to as the internal working model of attachment (Bowlby, 1969). A basic assumption of attachment theory is that the quality of a child’s early experiences with their parents or primary care giving figures is critical in shaping the formation of mental representations or internal working models (Bowlby, 1969, 1973, 1988; Senior, 2002).
Internal working models are cognitive structures which are based on the characteristics and behaviours of the parents/care giving figures, the self, and their relationship (Bretherton & Munholland, 2008).

A strong focus on observational measures resulted in the notion of internal working models being relatively ignored during the 1940’s, however it was subsequently revived when attachment measures aimed at the representational level were introduced (Main et al., 1985). Therefore, in middle childhood, measures of attachment related to the representational, such as projective measures level may provide an appropriate means with which to assess attachment in this period (Bowlby, 1969; Granot & Mayseless, 2001; Madigan, Ladd & Goldberg, 2003; Page, 2001). This measurement approach includes techniques such as family drawings (Fury et al., 1997; Kaplan and Main, 1985) and story-telling/narrative tasks (Granot & Mayseless, 2001) (Solomon & George, 2008). However, data regarding the measures’ reliability, validity and associations with other attachment measures is limited (Kerns et al., 2005).

This study aimed to extend the current research on the measurement of attachment during middle childhood. The Attachment Story Completion Task modified by Granot and Mayseless (2001) is one of the measures of attachment that has gained increased support as a valid and reliable story telling/narrative technique to employ within middle childhood (Bretherton & Munholland, 2008; Granot & Mayseless, 2001; Kerns et al., 2007; Solomon & George, 2008). However, limited validity data is available surrounding the use of family drawings and associated classification systems (Fury et al., 1997; Kaplan & Main, 1985). Thus the present study examined the convergent validity between the Attachment Story Completion Task (Granot & Mayseless, 2001) with both the Kaplan and Main (1985) and the FDGRS (Fury et al., 1997) system for classifying children’s drawings.

In the study performed by Fury et al. (1997) many of the features designed by Kaplan and Main were difficult to operationalise. For example, the drawing feature, ‘arms in a position not suitable for holding’ was described as vague and thus modification or replacement was required. The ambiguity of some of the drawing features has also resulted in low inter rater reliability of the separate drawing features versus agreement on the overall pattern of attachment in the study performed by Pianta et al. (1999). In an effort to improve reliability, the present study employed the use of a workshop of the Kaplan and Main scoring system. The workshop involved identifying the various discrepancies that resulted from any of the drawing features which were then resolved by
conferencing. When the drawings were scored for the second time using the Kaplan and Main scoring system the final conferenced drawing features were used.

All the aforementioned measures have yet to be used and/or effectively validated on an African sample and thus a sample of black* South African children currently residing in care was employed. Therefore this study will not only serve to further cross cultural research on attachment, but to provide insight into the current emotional functioning of children who have experienced disruptions to their attachment relationship/s within a South African context.

*It is acknowledged that the use of racial categories can be linked to the discriminatory practices that occurred in South Africa during apartheid; however this is not the intention in the present study.

2.2 Aims of the study

The general aim of this study was to explore the attachment representations of a sample of children in care that are between the ages of 8 and 12 years old in South Africa. More specifically, the subgroups of attachment (secure, insecure-avoidant and ambivalent attachment) evident in the sample of children in care will be investigated. Two attachment-based projective measures were used in this study, namely; the kinetic family drawing and the story telling/narrative task. The present study also aimed to examine the convergent validity between these attachment-based projective measures and their associated scoring systems: the kinetic family drawing was scored using both the Kaplan and Main (1986) system and the Family Drawing Global Rating Scale (FDGRS) (Fury, Carlson & Sroufe, 1997); and the story telling/narrative task was scored using the Attachment Story Completion Task (ASCT) modified by Granot & Maseles (2001), in an effort to extend the research on measures of attachment employed during middle childhood. Information regarding inter rater reliability on these measures was also be examined. The study also aimed to further existing cross cultural research on attachment within a South African context.
2.3 Research Questions

1. Patterns of attachment
   a. What subgroups of attachment are evident in the attachment representations of a sample of South African children in care?

2. Reliability
   a. What is the inter rater reliability for the Kaplan and Main classification system prior to the conferenced workshop session?
   b. What are the points of disagreement between the scorers on the Kaplan and Main classification system that require clarification during the conferenced workshop session?
   c. What is the inter rater reliability for the Kaplan and Main classification system after the conferenced workshop session?
   d. What is the inter rater reliability for the Family Drawing Global Rating Scale (FDGRS)?
   e. What is the inter rater reliability for the Attachment Story Completion Task?

3. Convergent Validity
   a. What is the convergent validity between the Attachment Story Completion Task and the Kaplan and Main classification system prior to the conferenced workshop session?
   b. What is the convergent validity between the Attachment Story Completion Task and the Kaplan and Main classification system after the conferenced workshop session?
   c. What is the convergent validity between the Attachment Story Completion Task and the Family Drawing Global Rating Scale (FDGRS)?
   d. What is the convergent validity between the Attachment Story Completion Task and the combined classifications from the Kaplan and Main system after the conferenced workshop session with the Family Drawing Global Rating Scale (FDGRS)?

4. Themes present in the attachment based narratives
   a. What is the nature of the narratives present in each attachment subgroup (secure, insecure-avoidant and ambivalent attachment)?
2.4 Sampling

A purposive sample of 60 children that reside in a children’s home in Johannesburg that is acting in locus parentis was employed. This is an adequate sample size for an exploratory study and will yield meaningful data at this point. The children’s home included in the present study was selected on the basis that the size of the pool from which the sample will be chosen is not limited.

2.4.1 Accessing the participants

Accessing the participants for the study involved a number of different steps. A children’s home in the West Rand of Johannesburg was the first choice for the site for the research as the researcher was familiar with this particular children’s home and accessibility would not be limited. Contact was then made with the deputy director of the children’s home. The aims and the nature of the research were explained and outlined to her. The director then provided her permission via an informed consent form for the children’s home to be used as a site for the research to be conducted. A further consent form was signed by the director for each child giving consent for their participation in the study. A meeting was then held with the administrative volunteer of the children’s home to discuss the proposed selection criteria and to obtain a possible list of children. The care workers of the children’s home were also contacted and the process was explained to them. The care workers then provided their permission to make arrangements for the data to be collected. The participants, who are the children, were then met with and were invited to take part in the study after the nature and objectives of the study have been discussed and the assent letter read to them. Their permission was obtained through the signing of the assent form. The completion of the drawings and the narratives took place in a cottage designated as an art room at the children’s home.

2.4.2 Selection Criteria

Participant selection was guided by the following criteria:

i. The children were between the ages of 8-12 years old. This is due to the fact that the children must be able to draw representationally, and their fine motor control should be reaching a developmental plateau (Pianta et al., 1999).

ii. Sample selection occurred on the basis of the results of the Draw-A-Person Test (DAP) in which the children’s nonverbal IQ will be assessed to ensure that the variable of IQ is not a confounding variable in this particular study (Fury et al., 1997).
iii. The sample was of a mixed gender, as differences in how the children represent attachment in terms of gender were not expected (Fury et al., 1997).

iv. The children included in the sample had been at the care facility for one year or more. This ensured that the children would have had sufficient experience of being in a children’s home in order for it to have had some influence on their development (Katz, 2003).

It is acknowledged that the sample may not be generalisable because of the limited sample size (n=60). However, a larger sample size would have compromised the feasibility of the study.

2.4.3 Profile of the participants

60 participants were purposively sampled from the children’s home in the West Rand. The participants met all four of the selection criteria. 25 of the participants were female and 35 were male. The characteristics of the sample in terms of age distribution are presented in Table 2.4.1.

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Gender (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male n=35</td>
</tr>
<tr>
<td>8</td>
<td>12 %</td>
</tr>
<tr>
<td>9</td>
<td>10 %</td>
</tr>
<tr>
<td>10</td>
<td>10 %</td>
</tr>
<tr>
<td>11</td>
<td>15 %</td>
</tr>
<tr>
<td>12</td>
<td>12 %</td>
</tr>
</tbody>
</table>

Table 2.4.1 Characteristics of the participants

2.4.3.1 Consideration of Context

The researcher’s experience of the children’s home elicited feelings of hopelessness and despair. Throughout the duration of the data collection process the children were noticed to be playing with little to no supervision. The care givers on duty also appeared to have forgotten between data collection sessions who the researchers were and what they were attempting to achieve at the children’s home. The general atmosphere of the children’s home was one of disorganization and general disinterest. Children’s homes, although not ideal, are however a practical reality in a country like South Africa where the devastating consequences of the HIV/AIDS epidemic has resulted in an
estimated 15% of all children under the age of 15 being orphaned (Simbayi et al., 2006). According to Simbayi et al. (2006) the current number of orphans in South Africa represents the tip of the iceberg as the HIV/AIDS epidemic enters its mature stage.

According to Bowley (1947), in order to minimise the potential development of a problematic attachment pattern, the children in the children’s homes should have the opportunity to form a close personal relationship with some adequate adult who will in some measure take the place of his/her mother. However, this means that the staff should not be consistently changing, and unfortunately this is often the reality of the children’s home included in the study as well as many of the children’s homes in the country and abroad where staff turnover is generally high (Bowley, 1947; Simbayi et al., 2006). Without a sense that the children have a consistent care giver, the likelihood that they may either retain or develop an insecure attachment pattern is high (Bowley, 1947). Their experience of the world and those in it as unreliable and undependable has significant repercussions in childhood as learning and behavioural difficulties are common (Pianta et al., 1999). Furthermore, the role of insecure attachment patterns in the development of psychopathology, such as mood, personality and anxiety disorders, in adulthood have also been implicated in the literature (Dozier, Stovall-McClough & Albus, 2008). Thus it is important to consider the context of the children in terms of understanding the development and potential consequences of insecure attachment patterns.

2.5 Measures or Instruments

Projective techniques were used in the collection of the data because these allow for unconscious thoughts and feelings to be projected (Katz, 2003). Furthermore, it was assumed that the projective technique would tap into the children’s internal working models of attachment (Bretherton & Munholland, 2008). The projective techniques employed in this study were the Kinetic Family Drawing (KFD) and the story-telling/narrative task known as the Attachment Story Completion Task (Granot & Mayseless, 2001).

2.5.1 The Kinetic Family Drawing

The KFD was originally devised by Burns and Kaufman (1970, as cited in Burns, 1982). Children’s projective drawings of their self and family purport to examine and reveal the self concept of the
child as well as the perceptions that the child has of their interpersonal relationships within their families (Burns & Kaufman, 1970 as cited in Burns, 1982).

2.5.1.1 Reliability and Validity of the KFD
Unlike many of the scoring guides that have been devised, the interpretation of the KFD using the Kaplan and Main (1986) system and/or the FDGRS (Fury et al., 1997) has a foundation in a widely acknowledged theory, namely attachment theory (Pianta et al., 1999).

However, despite the potential promise that these measures may hold, a lack of reliability and validity data still exists, resulting in only preliminary support for their use (Fury et al., 1997; Kerns, 2008; Madigan et al., 2003; Pianta et al., 1999; Solomon & George, 2008). To date, very few published studies have used either of the aforementioned classification systems for the attachment based interpretation of children’s drawings (Fury et al., 1997; Kerns et al., 2005; Madigan et al., 2003; Pianta et al., 1999).

2.5.2 The Attachment Story Completion Task
The Attachment Story Completion Task (Granot & Mayseless, 2001) was initially developed to assess the attachment representations of young children (Bretherton et al., 1990; Page, 2001). More recently, it was adapted for its use in middle childhood by Granot and Mayseless (2001). This tool provides a projective assessment of the child’s representation of attachment by using stories to elicit both a cognitive as well as an emotional response (Kerns et al., 2007).

2.5.2.1 Reliability and Validity of the Attachment Story Completion Task
The previous use of the Attachment Story Completion Task has shown it to be both a reliable and valid measure that can be employed with younger children (Bretherton et al., 1990; Cassidy, 1988 as cited in Granot & Mayseless, 2001). The adapted version was used in this present study as it has been modified for its use with the middle childhood age group. The adapted Attachment Story Completion Task (Granot and Mayseless, 2001) has been validated on both an Israeli and a US sample of children (Granot & Mayseless, 2001; Kerns et al., 2005; Kerns et al., 2007). It has reported good scorer agreement as well as high test-retest reliability over a 3 month period. The measure has shown evidence of discriminant validity and has been associated with both early and concurrent measure/s of attachment (Granot & Mayseless, 2001; Kerns et al., 2005; Kerns et al., 2007).
2.6  **Research Design**
This study made use of a mixed methods approach. The study can be placed into the non experimental research design category (Rosenthal & Rosnow, 1991).

2.7  **Procedure**
The testing took place at a children’s home in Johannesburg. Permission was obtained from both the deputy director of the home and the children’s respective care workers. All the data collection methods were conducted in English. Despite the fact that some of the children in the sample may not have English as their first language, all the children were attending English medium schools. The participants displayed an adequate level of English competence and had no problem understanding the researcher/research assistant’s instructions and were able to provide responses to the incomplete narratives.

The participants were included in the sample based on the fulfillment of the required selection criteria, thus they would have been residing in the present children’s home for a minimum of 1 year with the dominant language medium of the children’s home being English. In addition the children attended schools in which the language of instruction was English. It must be noted, however that although the children demonstrated an adequate level of English competence, language proficiency was not considered to be relevant in the outcome of the projective drawings; furthermore, validity of the narratives is independent of linguistic skill and verbal sophistication (Granot & Mayseless, 2001; Kerns et al., 2005). Thus the children were still able to complete the tasks required.

1.  **Tasks**

   **The Draw-a-Person Test (DAP)**
   Children were provided with a piece of white A4 paper and a pencil. They were asked to complete a drawing of a person (DAP) prior to the family drawing. This task was conducted in a group.

   **Kinetic Family Drawing (KFD)**
   Following the DAP, in a separate individual session, each child was given their second piece of white A4 paper and asked to draw a picture of their family, including themselves, doing something. After completion of the KFD, the children were asked to explain who each figure
was in the drawing, as well as identify any unexplained objects and a give general
description of the setting of the drawing. The researcher and research assistant took notes
of the children’s responses.

Attachment Story Completion Task
Following the completion of the KFD, the children took part in an individual semi structured
doll-play procedure. The researcher/research assistant introduced a story related to an
attachment theme with a short script facilitated through the use of various dolls and simple
props (Granot & Mayseless, 2001; Kerns et al., 2007). The child was encouraged to complete
the story, and to act it out using the dolls, by the researcher/research assistant saying,
“Show me what happened next”. Prompts were given as necessary to encourage the child to
use the dolls. The narratives were recorded on a dictaphone and the researcher/research
assistant took notes. The attachment story stems were as follows:

(1) *Spilled juice*: while the family is seated at dinner table, the child accidently spills juice
on the floor...

(2) *Hurt knee*: the child falls off a high rock and hurts his/her knee...

(3) *Monster in the bedroom*: the child is sent to bed and cries out that there is a
monster in his/her bedroom...

(4) *Departure story*: the mother and father leave for a day trip and a babysitter stays
with the children...

(5) *Reunion story*: the babysitter sees the parents as they return the following morning
and announces their return to the children...

2. *Scoring*

The Draw-a-Person Test (DAP)
The DAP was scored by the researcher using the Goodenough-Harris (1950) scoring criteria
to determine an estimate of the child’s nonverbal IQ as a criteria for inclusion into the
sample group. A standard score of 85 and above is required to ensure an adequate drawing
ability. It has been noted in previous studies that South African children, particularly black
South African children often score below the mean on standardized intelligence measures
(Jansen & Greenop, 2008). To accommodate for this, the cut off point for the DAP score was
therefore one standard deviation below the mean. After the DAPs were scored, a list was made of the children that fulfilled the required nonverbal IQ criterion. It is acknowledged that additional IQ related factors exist that can influence the study, however should have additional confounds emerge during the course of the data analysis an attempt would of been made to address this significantly.

To ensure that no child felt excluded every child was provided with the opportunity to complete the KFD even if their results of the DAP excluded them from the sample. However, during these individual sessions, after completion of the KFD, only those children with average IQs on the list completed the additional Attachment Story Completion Task, resulting in a slightly longer session compared to others.

**The Kinetic Family Drawing (KFD)**

The KFD drawings were scored using two classification systems: the Kaplan and Main (1986) system and the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997).

*Kaplan and Main (1986) system:* Drawings were examined using a checklist noting the presence or absence of discrete drawing features. The features are clustered together and the drawing is classified according to the best fitting category (secure, insecure-avoidant, and ambivalent). Fury et al. (1997) did not include the disorganised classification in their study as there was evidence that is difficult to distinguish between the ambivalent and disorganised categories (also see Douglas, 2009; Pianta et al., 1999) thus the present study omitted the disorganised classification in an effort to further cross validate their work.

*The Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997):* Drawings were coded again utilising an 8-point rating scale, intended to differentiate between secure, insecure-avoidant and ambivalent attachment patterns. The original scheme included a rating for ‘bizarreness’ predicted to identify the disorganised pattern (Madigan et al., 2003). However, the present study only examined the three primary attachment groups, thus this scale was omitted from analysis.

**The Story-Telling/Narrative Task**

*Attachment Story Completion Task (Granot & Mayseless, 2001):* the narratives are classified as secure or insecure based on four criteria. The narratives are then rated and assigned to
one of the three main attachment classifications (secure, insecure-avoidant and ambivalent) based on how closely their entire narrative resembled the prototypes of each attachment category.

**Scorers:**
- To obtain a level of reliability, the researcher trained the research assistant as well as an additional peer to assist with the scoring of the KFDs. The scorers all possessed an Honours degree in Psychology and all data analysis was performed under supervision of the researcher.
- All the drawings were double coded.
- Kaplan and Main (1986) (prior to a conference workshop session): The scorers received generic training on the Kaplan and Main (1986) system prior to the classification of the drawings. The areas of discrepancy were noted by the researcher and will be discussed in Chapter 3.
- Kaplan and Main (1986) (after a conference workshop session): The drawings were classified again once the discrepancies were discussed and clarified during a workshop session.
- **FDGRS**: The scorers received standard training on the rating scales in order to score the drawings.
- **Attachment Story Completion Task**: The researcher was assisted by the trained research assistant to transcribe and score the narratives. They were double coded.

## 2.8 Ethical Considerations

Ethical concerns were addressed throughout the duration of this study. The participants of this research were minor children who are in the care of a children’s home and are a highly vulnerable sample. The deputy director of the children’s home was approached to discuss the nature and objectives of the study, and invited to allow their site to be used in the study for research purposes. The director provided her informed consent in this regard.

In addition signed consent was obtained from the children’s care workers’ regarding their possible role as translator in the study and signed assent forms were required from the participating children. Prior to the study’s commencement, individual permission forms for each of the willing children
were also signed by the director regarding the child’s participation and subsequent audio taping of their stories. It is acknowledged that a separate signed participation permission form and an audio tape permission form was required per child. However, due to the number of children that participated in the study, it was felt necessary to reduce the number of forms that required the director’s signature. Thus for her convenience, she needed only sign one permission form per child. Parental consent was not required as the children’s home is acting in locus parentis.

The researcher and research assistant approached all the children in the required age group in their cottages to invite them to participate in the study. The nature and purpose of the study was discussed and explained to the children, and an assent form was read with them with the help of the care worker in case translation was required in order to facilitate understanding. If the children decided to participate, their informed assent was required as they are still minors, and thus they wrote their names on the assent form. This ensured that they were aware of the purpose of the research and that they understood that they may have withdrawn from the study at any time should they have chosen, without any negative consequences. The children were made aware that their participation was on a completely voluntary basis, and no person was either advantaged or disadvantaged in any way by choosing to participate or not participate in the study. The participants were part of a vulnerable group and thus they needed to be respected at all times. They were assessed at the children’s home, as it was an environment with which they were familiar and comfortable. All the children were included in the administration of the KFD despite the results of the DAP to ensure that no child felt excluded.

The deputy director, staff and children were assured that all information (drawings, responses and transcriptions) would remain confidential. The participants’ identity was protected through the use of numerical codes. Feedback in the form of a short presentation that reports on the overall findings of the study was offered to both the deputy director and the care workers.

There was no indication that any of the participants were adversely affected, however should there have been any indication a referral would have been made by the researcher/research assistant to the social worker who works at the home for support. Furthermore the results did not indicate that a particular child was currently suffering from any psychiatric illness requiring urgent intervention; however should the results have indicated otherwise, under guidance from the research supervisor, the deputy director of the children’s home and the social worker would have been contacted so that an appropriate intervention could have been made.
2.9 Data Analysis

This study made use of a mixed method approach.

Quantitative Analysis:
Attachment distributions: Descriptive information regarding the distribution of the attachment classifications that resulted from each measure is presented: Kaplan and Main (1986) (prior to and after a conference workshop session); FDGRS (Fury et al., 1997); combined classifications from the Kaplan and Main (1986) (after the conference workshop session) and FDGRS (Fury et al., 1997); and the Attachment Story Completion Task (Granot & Mayseless, 2001). Furthermore, the overall distribution of the attachment classifications that was found in the sample of children in care is presented.

Concordance between attachment measures: The convergent validities between the Attachment Story Completion Task (Granot & Mayseless, 2001) and classifications from the other measures were computed using Chi Square. Chi Square provides an index of agreement or overlap between the measures (Hammond, 2007). In cases in which the basic assumptions of the Chi Square were not met, the Fishers Exact Test was used (Hammond, 2007).

The following convergent validities were examined:
- Attachment classifications from the Kaplan and Main (1986) system prior to the conference workshop session and the Attachment Story Completion Task.
- Attachment classifications from the Kaplan and Main (1986) system after the conference workshop session and the Attachment Story Completion Task.
- Attachment classifications from the Family Drawing Global Rating Scale and the Attachment Story Completion Task.
- Attachment classifications resulting from the combined classification from the Kaplan and Main (1986) system after the conference workshop session and the Family Drawing Global Rating Scale and the Attachment Story Completion Task.

Reliability checks: The level of agreement between the scorers regarding the classifications of the children into the three attachment categories was assessed by calculating the percentage of agreement. However, in cases of disagreement between scorers in terms of the overall attachment classification when using the combined classification with the Kaplan and Main (1986) scoring
system and the FDGRS (Fury et al., 1997), a resolution was met through a discussion of the areas of discrepancy and a resultant joint attachment classification was then made.

The following reliability checks were conducted:

- The level of agreement between the attachment classifications of the scorers when using the Kaplan and Main (1986) system prior to the conference workshop session.
- The level of agreement between the attachment classifications of the scorers when using the Kaplan and Main (1986) system after the conference workshop session.
- The level of agreement between the attachment classifications of the scorers when using the Family Drawing Global Rating Scale.
- The level of agreement between the attachment classifications of the scorers when combining the Kaplan and Main (1986) system after the conference workshop session and the Family Drawing Global Rating Scale.
- The level of agreement between the attachment classifications of the scorers when using the Attachment Story Completion Task

**Qualitative Analysis:**

The narratives were scored using the Attachment Story Completion Task. The narratives in each attachment subgroup (secure, insecure-avoidant and ambivalent) were also subjected to a brief thematic content analysis. It must be acknowledged that the qualitative findings that resulted from the qualitative analysis are not considered as the main thrust of the present research. Thus the analysis of the narratives’ content merely serves to support the quantitative findings by briefly describing the nature of the themes that emerged in each attachment subgroup (secure, insecure-avoidant and ambivalent) of this sample of children in care. In order to obtain a level of reliability, the researcher and research assistant conducted separate content analyses. Only the agreed upon themes were included in the results of the study. The thematic content analysis of the narratives proved fairly simple to complete as the narratives given that the themes generated clustered clearly.

A thematic content analysis is a means with which one can organize narrative material in relation to specific research questions (Katz, 2003). Qualitative analysis thus provided the researcher with an opportunity to make sense of feelings and experiences and to work with data in context (Kelly, 2006). An inductive approach such as a thematic content analysis allowed the researcher to draw inferences about inner states, intentions and cognitions, for example, from the words and actions the children produced (Terre Blanche, Durrheim & Kelly, 2006). The steps that were followed in the
inductive approach in the present study were: familiarisation and immersion – the narrative data was read several times and notes were made; inducing themes – organizing the data into themes that seemed meaningful; interpretation – inferences were made regarding the themes generated; elaboration and checking – the themes are expanded upon to ensure that the findings illuminated the aims of the study (Terre Blanche et al., 2006).
Chapter Three

RESULTS

Introduction

This chapter will present the results obtained in this study. The distribution of the drawing attachment classifications are presented first, followed by the second set of analyses in which associations amongst the different attachment-based measures were measured. Finally attachment related themes that were generated from the Attachment Story Completion Task will be provided, as they may provide insight into the current attachment patterns of these children. In the discussion of the themes found in this story telling based projective test, the researcher will use verbatim words of the participants in order to highlight how a specific attachment related theme may be represented.

It is important to note that this study was not an investigation of the relation between attachment-based projective measures of attachment and observed attachment; therefore there is no inclusion of a separate independent assessment of attachment at the behavioural level. Rather this study focuses on the representations of family relationships that are present in the children’s narratives and family drawings that are assumed to be derived from attachment based experiences.

3.1 Distribution of the Drawing Attachment Classifications: Kaplan and Main (pre workshop)

<table>
<thead>
<tr>
<th>Totals for the Kaplan and Main (pre workshop) drawing classifications</th>
<th>Secure</th>
<th>Insecure-Avoidant</th>
<th>Ambivalent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>40.00%</td>
<td>20.00%</td>
<td>40.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Table 3.1:** Distribution of the Drawing Attachment Classifications: Kaplan and Main system (pre workshop)
Table 3.1 and Graph A. present the results of the classifications for the children’s kinetic family drawings as examined using the Kaplan and Main (1986) system prior to the conference workshop session. A total of 15 of the children’s drawings were randomly selected and independently scored during the workshop session. Due to the time constraints imposed on the present study only 15 drawings were included in the workshop session, however after the negotiation of the various discrepant features, all 60 drawings were scored. Pre workshop reliability was 67%. All discrepancies on the checklist items were resolved through conferencing, with only conferenced scores used in subsequent analyses. When the three group classification scheme was applied to the 15 children’s drawings, 40% (n=6) were classified as secure with 20% classified as insecure-avoidant (n=3) and 40% (n=6) classified as ambivalent.
3.2 Distribution of the Drawing Attachment Classifications: Kaplan and Main system (post workshop)

<table>
<thead>
<tr>
<th></th>
<th>Secure</th>
<th>Insecure-Avoidant</th>
<th>Ambivalent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>7</td>
<td>42</td>
<td>11</td>
<td>60</td>
</tr>
<tr>
<td>%</td>
<td>11.67%</td>
<td>70.00%</td>
<td>18.33%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 3.2: Distribution of the Drawing Attachment Classifications: Kaplan and Main system (post workshop)

Graph B. Distribution of the Drawing Attachment Classifications: Kaplan and Main system (post workshop)

Table 3.2 and Graph B present the results of the classifications for the children in care’s kinetic family drawings as examined using the Kaplan and Main (1986) system post a conference workshop session. Inter rater agreement post workshop increased by 8% from 67% to 75%. When the three group classification scheme was applied to the 60 children’s drawings, 11.67% (n=7) were classified...
as secure with 70.00% classified as insecure-avoidant (n=42) and 18.33% (n=11) classified as ambivalent.

### 3.3 Distribution of the Drawing Attachment Classifications: Family Drawing Global Rating Scale

<table>
<thead>
<tr>
<th>Totals for the Family Drawing Global Rating Scale (FDGRS) drawing classifications</th>
<th>Secure</th>
<th>Insecure-Avoidant</th>
<th>Ambivalent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>5</td>
<td>43</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>%</td>
<td>8.33%</td>
<td>71.67%</td>
<td>20.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Table 3.3:** Distribution of the Drawing Attachment Classifications: Family Drawing Global Rating Scale

**Graph C.** Distribution of the Drawing Attachment Classifications: Family Drawing Global Rating Scale

Table 3.3 and Graph C present the results of the classifications for the children in care’s kinesthetic family drawings as examined using the Family Drawing Global Rating Scale (Fury et al., 1997). Reliability was scored at 70%. When the three group classification scheme was applied to the 60
children’s drawings, 8.33% (n=5) were classified as secure with 71.67% classified as insecure-avoidant (n=43) and 20.00% (n=12) classified as ambivalent.

### 3.4 Distribution of the Drawing Attachment Classifications: The combined classification of the Kaplan and Main (post workshop) and the Family Drawing Global Rating Scale.

<table>
<thead>
<tr>
<th></th>
<th>Secure</th>
<th>Insecure-Avoidant</th>
<th>Ambivalent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>4</td>
<td>40</td>
<td>16</td>
<td>60</td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>6.67%</td>
<td>66.67%</td>
<td>26.66%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Table 3.4:** Distribution of the Drawing Attachment Classifications: The combined classification of the Kaplan and Main (post workshop) and the Family Drawing Global Rating Scale.

![Graph D](Graph.png) Distribution of the Drawing Attachment Classifications: The combined classification of the Kaplan and Main (post workshop) and the Family Drawing Global Rating Scale
Table 3.4 and Graph D present the results of the combined classifications for children in care’s kinetic family drawings as examined using the Kaplan and Main system (post workshop) and the Family Drawing Global Rating Scale. When the three group classification scheme was applied to the 60 children’s drawings, 6.67% (n=4) were classified as secure with 66.67% classified as insecure-avoidant (n=40) and 26.66% (n=16) classified as ambivalent. Inter rater reliability was calculated at 78%.

### 3.5 Distribution of the Attachment Classifications: The Attachment Story Completion Task

<table>
<thead>
<tr>
<th>Totals for the Attachment Story Completion classifications</th>
<th>Secure</th>
<th>Insecure-Avoidant</th>
<th>Ambivalent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>0</td>
<td>42</td>
<td>18</td>
<td>60</td>
</tr>
<tr>
<td>%</td>
<td>0.00%</td>
<td>70.00%</td>
<td>30.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**Table 3.5:** Distribution of the Attachment Classifications: The Attachment Story Completion Task

**Graph E:** Distribution of the Attachment Classifications: The Attachment Story Completion Task
Table 3.5 and Graph E present the results of the classifications for children in care’s story telling projective test as examined using the Attachment Story Completion Task (Granot & Mayseless, 2001). When the three group classification scheme was applied to the 60 children’s narratives, 0.00% (n=0) were classified as secure with 70.00% classified as insecure-avoidant (n=42) and 30.00% (n=18) classified as ambivalent. Inter rater agreement for the scoring of the attachment based narratives was 80%.

3.6 Associations among Attachment Measures

A Chi-Squared Test was used to examine the association between the attachment classifications that resulted from the various attachment-based measures; however, in cases in which the basic assumptions of the Chi-Squared were not met, a Fisher’s Exact Test was used. Since Kaplan and Main (1986) and Fury et al. (1997) assigned secure, insecure-avoidant and ambivalent classifications regardless of the presence of signs of disorganization, this study did likewise in an effort to cross validate their work (Madigan et al., 2003).

i. Kaplan and Main scoring system (pre workshop) and the Attachment Story Completion Task

In the first set of analyses, the kinetic family drawings were scored using the Kaplan and Main system prior to a workshop and the resultant attachment classifications were correlated with the classifications from the Attachment Story Completion Task. The resulting Chi Square was not significant ($\chi^2 = 0.4167$. $p=0.8119$) $p \geq 0.05$. This seems to indicate that the use of the Kaplan and Main scoring system; prior to a workshop in which various discrepancies regarding the features were conferenced; did not yield resultant attachment classifications that were significantly correlated with those yielded from the Attachment Story Completion Task.

ii. Kaplan and Main scoring system (post workshop) and the Attachment Story Completion Task

The kinetic family drawings were then scored a second time using the Kaplan and Main scoring system after discrepancies regarding the ambiguity of various features were conferenced and agreed upon. The resultant attachment classifications were found to be significant with those yielded from the Attachment Story Completion Task ($\chi^2 = 0.0451$. $p=0.0451$) $p \leq 0.05$. The results of the Chi
Square indicate that there is evidence of concordance between these attachment-based scoring systems.

### iii. Family Drawing Global Rating Scale and the Attachment Story Completion Task

The kinetic family drawings were scored a third time using the Family Drawing Global Rating Scale; the resultant attachment classifications were found to have no significant relationship with those yielded from the Attachment Story Completion Task ($\chi^2 = 3.4551, p=0.1777$) as the basic assumptions of the Chi Squared Test were not met. However, the Phi Coefficient (Phi = 0.2400) indicated the presence of a weak concordance between the attachment-based measures and thus a Fisher’s Exact Test was run to confirm the hypothesis, the findings contradicted the findings of the Chi Square and illustrated a significant degree of concordance between the attachment classifications that resulted from the Family Drawing Global Scale and the Attachment Story Completion Task ($p=0.0192$).

### iv. Combined classifications from the Kaplan and Main scoring system (post workshop) and the Family Drawing Global Rating Scale with the Attachment Story Completion Task

The attachment classifications that resulted from the combined classification from the Kaplan and Main scoring system and the Family Drawing Global Rating Scale were shown to be highly significant to those yielded from the Attachment Story Completion Task when using the Fisher’s Exact Test ($p \leq 0.0001$). Due to the low frequency of the secure attachment classification ($n=6.67$) the significance test of the Chi Square distribution was rendered inaccurate (Field, 2009). The sampling distribution of the test statistic is thus considered too deviant from a Chi Square distribution to be of any value and thus when frequencies are low the Fishers Exact Test can be used (Field, 2009). These results indicated that the strongest concordance between the attachment-based measures was achieved when the classifications from the projective drawing measures were combined thereby increasing the validity of the resultant attachment classifications.

### 3.7 Outcomes of the Kaplan and Main Workshop

The kinetic family drawings were first scored using a checklist of features designed by Kaplan and Main (1986) with no form of pre conference discussion between the scorers. A total of 15 drawings were initially scored using the generic Kaplan and Main scoring system that is with no form of
conferencing between the scorers. The researcher noted which features the scorers experienced significant difficulty conceptualizing under each attachment subgroup (see Table 3.6). All 60 drawings were then scored using the Kaplan and Main scoring system including the newly agreed upon standardised drawing features (see Table 3.7).

**Table 3.7.1  Kaplan and Main scoring system drawing features identified as requiring further conceptualization**

<table>
<thead>
<tr>
<th>Attachment Subgroup</th>
<th>Identified Features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secure</strong></td>
<td>Firm open-armed embracing stance</td>
</tr>
<tr>
<td></td>
<td>Not all or no family members smiling; if smiles appear, they look genuine, lack ‘happy face’ quality</td>
</tr>
<tr>
<td></td>
<td>Impression that interaction with others is welcome</td>
</tr>
<tr>
<td></td>
<td>Drawing is imaginative or includes fantasy elements or an unusual setting</td>
</tr>
<tr>
<td></td>
<td>Figures suggest movement, not rigid, restricted or stiff</td>
</tr>
<tr>
<td></td>
<td>Round bodies</td>
</tr>
<tr>
<td><strong>Insecure-Avoidant</strong></td>
<td>Overall impression: ‘happiness’ or invulnerability</td>
</tr>
<tr>
<td></td>
<td>Arms absent on one or all family members or portrayed in postures not suitable for holding</td>
</tr>
<tr>
<td></td>
<td>Although a ground and a sky are present, family floats in the air</td>
</tr>
<tr>
<td><strong>Ambivalent</strong></td>
<td>Overall impression: vulnerability</td>
</tr>
<tr>
<td></td>
<td>Large, round bellies; belly buttons; figures which become large from the waist down</td>
</tr>
</tbody>
</table>
Table 3.7.2  Scorers standardized conceptualisation of the identified Kaplan and Main scoring system drawing features

<table>
<thead>
<tr>
<th>Attachment Subgroup</th>
<th>Identified Features</th>
<th>Scorers Conceptualisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>Firm open-armed embracing stance</td>
<td>Figures arms are slightly bent at the joint; not in a loose hanging position at the sides or behind the figure’s back; not holding an object.</td>
</tr>
<tr>
<td></td>
<td>Not all or no family members smiling; if smiles appear, they look genuine, lack ‘happy face’ quality</td>
<td>The smiles differ slightly on each family member; all the smiles are not the characteristic ‘U shape’. (see Appendix H:1)</td>
</tr>
<tr>
<td></td>
<td>Impression that interaction with others is welcome</td>
<td>Figures are not engaged in separate individual activity.</td>
</tr>
<tr>
<td></td>
<td>Drawing is imaginative or includes fantasy elements or an unusual setting</td>
<td>Drawings that do not occur in the setting of the children’s home; or another home-type setting were included; school setting. (see Appendix H:2)</td>
</tr>
<tr>
<td></td>
<td>Figures suggest movement, not rigid, restricted or stiff</td>
<td>Figures that do not have even subtle elbow or knee joint; straight limbs.</td>
</tr>
<tr>
<td></td>
<td>Round bodies</td>
<td>Circular faces and torso</td>
</tr>
<tr>
<td>Insecure-Avoidant</td>
<td>Overall impression: ‘happiness’ or invulnerability</td>
<td>Figures are of a moderate size, no family members are unhappy; portrayed without smiles. All engaged in pleasurable activities.</td>
</tr>
<tr>
<td></td>
<td>Arms absent on one or all family members or portrayed in postures not suitable for holding</td>
<td>Sitting or lying posture/s or arms behind figures back or concealed in pockets (see Appendix H: 3)</td>
</tr>
<tr>
<td></td>
<td>Although a ground and a sky are present, family floats in the air</td>
<td>Family floats in the air even if a sky or ground is not present; no clear degree of firm footing on a level surface</td>
</tr>
</tbody>
</table>
Ambivalent Overall impression: vulnerability The figures on the page are small in stature in comparison to the page; the figures appear unhappy, sad, fearful or anxious etc; engaged in separate activities; parents unconcerned with children i.e.: child figure crying with no comfort; or child portrayed alone. (see Appendix H:4)

Large, round bellies; belly buttons; figures which become large from the waist down

Face is characteristic oval shape but the torso is rounded and circular

Table 3.7.2  Scorers standardized conceptualisation of the identified Kaplan and Main scoring system drawing features

Examples of Drawings

According to Kaplan and Main (1986), one of the features that indicate a possible insecure-avoidant attachment pattern is; ‘if smiles appear on the figures in the drawings they should look genuine and lack the ‘happy face quality’’. This feature was found by the scorers to be difficult to conceptualise in terms of its subjectivity and thus was reformulated to ‘figures’ smiles differ slightly on each family member; all the smiles not the characteristic ‘U shape’ (see Appendix H:1). Kaplan and Main’s (1986) feature regarding an ‘imaginative, unusual setting or the inclusion of fantasy elements’ in terms of the present sample’s current context was reconceptualised to include drawings that did not occur in the setting of the children’s home; if another home-type setting was included or a school setting (see Appendix H:2). In terms of the feature, ‘arms absent on one or all family members or portrayed in postures not suitable for holding’, it was unclear as to what was defined as ‘a position for holding’ and thus any position other than sitting or lying posture/s or arms behind figures’ back or concealed in pockets were accepted as ‘holding positions’ (see Appendix H: 3). The feature of an overall impression of ‘vulnerability’ as a potential feature of an ambivalent attachment pattern according to the scorers was vague and the ‘vulnerability’ was not clearly defined. This was thus made more explicit by the following reconceptualisation, ‘the figures on the page are small in stature in comparison to the page; the figures appear unhappy, sad, fearful or anxious etc; engaged in separate activities; parents unconcerned with children i.e.: child figure crying with no comfort; or child portrayed alone’ (see Appendix H:4).
3.8. The Nature of the Narratives present in each Attachment Subgroup (Secure, Insecure-Avoidant and Ambivalent)

The Attachment Story Completion Task (Granot & Mayseless, 2001) was administered to the sample of children in care; the narratives were then scored and assigned to the best fitting attachment subgroup (secure, insecure-avoidant and ambivalent). No narratives were found to be secure (n=0). The scored narratives were then subjected to a brief thematic content analysis of which the findings are presented in the table below.

Table 3.8.1  Attachment related themes generated within each Attachment Subgroup (Secure, Insecure-Avoidant and Ambivalent)

<table>
<thead>
<tr>
<th>Attachment Subgroup</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insecure-Avoidant (n = 42)</td>
<td>Abandonment; Isolation; No Expectation of Comfort; Lack of Social Interaction and Disinterest.</td>
</tr>
<tr>
<td>Ambivalent (n = 18)</td>
<td>Anger and Conflict</td>
</tr>
</tbody>
</table>

Within the insecure-avoidant attachment subgroup (n=42) the narratives indicated that the participants may feel a sense of abandonment and isolation. Individuals are perceived as unreliable and thus feelings of having to comfort oneself are predominant. There is a lack of social interaction in the narratives in terms of parent-child cooperation, and emotional disconnectedness and disinterest. Of the narratives that were assigned to the ambivalent attachment subgroup (n=18) the emergent themes were those of anger and conflict. A feeling of a desire to escape a current situation/s was also present in many of these narratives. No positive themes were found to be present during the analysis of the narratives.
A. Insecure-Avoidant Themes

i. Abandonment

As a result of various factors many children are placed in children’s homes; there is an indication from the narratives that the participants may feel abandoned and rejected by their parents and as a result have unmet dependency needs. The attachment story fragment, to which responses appeared to depict strong feelings of abandonment is the one in which the participants are asked to complete the story of the parents departure (Granot & Mayseless, 2001). Responses which depicted the theme of abandonment within the children’s stories included:

“*The children are left all alone with no one to care for them.*”

“*The children are left behind.*”

“*No one feeds the children when they are hungry.*”

“*The children are alone lots of times.*”

“*The parents don’t take the children with them.*”

The participants’ descriptions of the events that take place during the separation also had a focus on non social activities such as sitting and playing by oneself.

“*When the children are alone they just sit.*”

“*The children play on their own.*”

The narratives also revealed that the participants do not appear to understand why they have been separated from their parents, as the parents leave without providing any form of explanation.

“*The car just drives away.*”

“*The children say ‘why are you going’ and the mommy and the daddy say ‘because’.***”

“*The mommy and the daddy wave goodbye and just leave all the time.*”
The narratives also illustrate repeated episodes of abandonment in which the parents are described to frequently leave the children on their own or with a substitute care giver.

“They (the children) always have to stay with the babysitter. They don’t like it.”

“The children are alone lots of times.”

“They (the children) always go on holiday and leave the children.”

“Too many holidays.”

ii. **Isolation**

Feelings of isolation appeared in the narratives of abandonment related by many of the children who were interviewed and thus were similarly evident in the departure attachment story (Granot & Mayseless, 2001):

“They (the children) will watch TV on their own.”

“She will play by herself.”

“The sister will play with the ball by herself.”

The children tend to relate stories depicting limited contact with the parent figures and thus children were engaging in solitary activities coupled with a sense of self reliance as illustrated in the departure story, hurt knee and spilled juice attachment stories (Granot & Mayseless, 2001). Examples of these responses included:

“The children just cook their own food.”

“The girl cleans the house and no one helps her.”

“When her knee is bleeding she just wipes it with her clothes.”

“She will just put a plaster on herself (the girl) and get a tissue to blow her nose.”

“She will just take a cloth and clean it (spilled juice).”
iii. **No expectation of comfort**

In many of the stories it appeared that the child’s perspective was not validated in terms of the parent actively seeking to successfully address the child’s concerns; instead there seemed to be an emotional distancing between the mother and child. The responses to the attachment story regarding the monster in the bedroom (Granot & Mayseless, 2001) seemed to evoke stories that depicted little expectation of comfort from the children who were interviewed:

“*Even though the monster is under the bed the girl must go to sleep and be quiet.*”

“*She (the girl) calls her mother, but nothing happens after that.*”

“*She goes to her mom, but her mom just says ‘shush’.*”

“*The boy calls someone to come and help him but no one comes.*”

“*Mother is says ‘don’t be silly’ and the boy is scared.*”

iv. **Lack of social interaction**

In many of these children’s responses, there seemed to be a lack of social interaction between the family members. This could be seen clearly in the spilled juice attachment story in which the participants’ responses depicted a situation in which minimal engagement between family members takes place. In some stories there was recognition and acknowledgement of the situation i.e. that the juice had spilled, however, there was a sense that the event needed to be ignored or denied:

“*No one will do anything.*”

“*They must eat the food. Leave the juice to dry.*”

In the stories above, although there is an acknowledgement that the juice was spilled, there is no reference to the juice being cleaned up (by child or mother). This could indicate a sense that reparation does not occur and that there is little interaction between the children and any
caregivers. In certain more extreme cases, there appeared to be a wish/need to deny the event of the spilled juice altogether and the responses seemed to avoid engaging with the story fragment:

“They eat bread and nothing happens.”

“Just sit down and eat.”

“No talking at the table.”

If recognition of the spilled juice did occur, the responses showed minimal interaction between the parent and child, or either the parent or the child solved the problem but they do not collaboratively solve it together.

“The girl tries to wipe the juice but mommy says ‘No leave it. Go to your room’.”

“She (the mother) gives the girl a cloth and then eats her food.”

“She will clean the juice by herself.”

In the departure story the participants’ responses seemed to illustrate that there is no consideration of the other in terms of basic social interactions, such as, saying goodbye when leaving, between parent and child and the children’s presence often seemed to be essentially negated.

“The parents forget to say goodbye.”

“They don’t wave goodbye.”

“They just go.”

v. Emotional distancing

When the parents leave during the departure attachment story the participants’ responses had a minimizing or ‘no big deal’ type of quality to them, as if it did not bother them to be left alone and they seemed to experience/acknowledge very little emotion regarding the separation. Examples of these types of responses included:
“When the parents leave the children will just play.”

“They (the children) will become busy and just read.”

“They (the children) will carry on playing.”

“The girl likes to play when the parents leave. She doesn’t care if they go. It’s fun.”

“He (the boy) will just sit in his room when the mommy and daddy go on holiday. He won’t be sad. It doesn’t matter.”

Similarly during the reunion story, the children often did not appear affected by the parents return and continued with their previous activity or participated in non social activities such as sleeping.

“When they return they will just go to bed.”

“The children don’t care that the parents are home. They just play and play.”

“The children are just busy.”

B. Ambivalent Themes

i. Anger and Aggression

Within the ambivalently attached children’s stories, strong feelings of anger were dominant in the spilled juice, hurt knee and monster in my bedroom attachment stories. Within the stories the children were portrayed as somewhat of a nuisance and too demanding of the mother’s attention. Feelings of anger subsequently seemed to be projected onto all the family members involved in the story. Examples of responses that depict anger were:

“When the juice is spilled the mother just throws all the food away and is cross that it’s been ruined.”

“The mother screams at the boy for waking her up.”
“Mommy say’s don’t bleed on the floor.”

“Mommy is mad like fire.”

“Everyone is cross and mad.”

These children also expressed feelings of anger around the separation from the parents as illustrated in the departure story:

“When the parents leave the children are angry.”

“The sister falls on the floor when the mom leaves and kicks the mother and says ‘don’t go’.”

“When mommy and daddy leave the children bite them on the arm.”

**ii. Conflict**

These narratives revealed high levels of conflict, more often between the siblings during the separation from the parents, and even if the parents are present (spilled juice attachment story) no parental mediation or involvement seemed to occur despite sibling conflict. Examples of these stories were:

“The brother pinches the girl when the parents leave.”

“Trouble trouble [points to the children].”

“Too much fighting [holds the children props]”

“The brother pushes the girl off her chair and that’s why she spilled the juice.”

“The brother pushes her face in the carpet and say’s ‘smell the juice’.”

These children’s responses also seemed to illustrate high negative emotional reactivity and/or distress in terms of the interaction between parent and child:

“There will be lots of fighting when the mommy sees the juice.”
“The girl cleans and cleans but she can’t get all the juice. She is worried worried.”

“The boy will run away when the juice is spilled.”

“The mommy fights with the daughter.”

“When the parents come back they will hit him (the boy) for making a mess in the house.”

“They (the children) will eat lots of sweets when the parents are away and then vomit when the parents come home.”
Chapter Four

DISCUSSION

Introduction

In this chapter the results of the study are discussed. The study had two main objectives: to explore the attachment patterns of a sample of children in care, and examine the validity of the use of representational measures of attachment in the context of South Africa. The results will be contextualized within the theoretical literature presented in Chapter 2.

4.1 The Descriptive Results

4.1.1 Attachment patterns found in this South African sample of children in care

This study aimed to explore the attachment patterns that are evident in a sample of children in care in South Africa. In order to investigate this, the children’s family drawings and their responses to various attachment based story stems were collected. The KFD’s of the children in care were analysed using the Kaplan and Main (1986) scoring manual and the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997), the story stem narratives were scored using the Attachment Story Completion Task (ASCT) (Granot & Mayseless, 2001).

For the purposes of this discussion, reference to Table 3.1 and Graph A will not be made as only conferenced drawing features are included in the final results regarding the distribution of the attachment classifications. Table 3.1 and Graph A are pertinent to the discussion regarding reliability and validity of the Kaplan and Main scoring system, alone, as an attachment based measure. Table 3.2 and Graph B illustrates the distribution of the drawing attachment classifications that resulted from the Kaplan and Main scoring system post a conference workshop session in which all discrepancies were discussed and resolved (see Table 3.7) The results revealed that 11.67% (n=7) were classified as secure with 70.33% (n=42) as insecure-avoidant and 18.00% (n=11) classified as ambivalent. Table 3.3 and Graph C illustrate the results of the FDGRS, with 8.33% (n=5) as secure, 71.67% (n=43) as insecure-avoidant and 20.00% (n=12) as ambivalent. When the classifications from the work-shopped Kaplan and Main system were combined with those from the FDGRS, the resultant classifications (see Table 3.4 and Graph D) were 6.67% (n=4) as secure, 66.67% (n=40) insecure avoidant and 26.67% (n=16) as ambivalent. Finally the attachment classification
distributions that resulted from the ASCT (see Table 3.5 and Graph E) were 0.00% (n=0) as secure, 70.00% (n=42), and 30.00% (n=18) as ambivalent.

On average these results reveal that only 6.70% of the total number of children (n=60) in the sample are classified as having a secure attachment representation, whereas 69.60% of the sample was classified as having an insecure-avoidant, and 23.70% as ambivalent attachment patterns respectively. The dominance of the insecure (avoidant and ambivalent) pattern of attachment was hypothesized due to the likely disturbed attachment during early development, the subsequent attachment disruption coupled with the current inconsistent nature of the care giving they receive at the children’s home, which can place children at risk for the development of a problematic attachment patterns (Bowley, 1947; Kobak & Madsen, 2008). The resultant findings as illustrated by the dominant insecure-avoidant attachment category thus suggests support for the universal applicability of the concept of attachment and the resultant validity of these representational measures of attachment in a South African sample of children (Van Ijzendoorn & Sagi-Schwartz, 2008).

Although background information regarding the reasons for the children’s placement in the children’s home was not collected, various possible factors can result in a child’s placement in care. These include inter alia maternal and other forms of deprivation, neglect, separation and/or abuse (Bowley, 1947; Katz, 2003). Negative early experiences of care giving with attachment figures such as those that have been neglectful, physically abusive, sexually abusive, rejecting, inconsistent or repeatedly interrupted (multiple care givers) will greatly increase the risk of children developing an insecure (insecure-avoidant or ambivalent) attachment pattern (Howe et al., 1999).

The possibility of good early attachment experiences cannot be overlooked and the fact that 6.67% (n=4) of the sample were classified as securely attached as a result of the joint classification with the Kaplan and Main (1986) scoring system and the FDGRS (Fury et al., 1997) may be reflective of good enough early attachment before the loss of parents to HIV/AIDS. However, the disruption in attachment caused by the illness and loss of the parents, together with the nature of the current care giving in the children’s homes suggests that even a percentage of 6.67 of securely attached children may be optimistic. This may suggest that the ASCT (Granot & Maysel, 2001; Kerns, 2008) may be the more valid attachment based measure as 0% of the children were classified as securely attached compared to the results of the representational drawings.

The children whose narratives were classified as having an insecure-avoidant attachment pattern illustrated feelings of abandonment of which the child does not have an understanding pertaining to
the reasons behind their parent’s absence and the resultant isolation that is experienced. The children’s responses further reveal a sense of feeling an emotionally disconnectedness coupled with no expectation of comfort during times of strife. Bowlby described this emotional distance as a form of hopelessness and despair upon which the child detaches himself by disinvesting in the relationship as well as subsequent attachment relationships by becoming compulsively self reliant, and untrustworthy of others (Gomez, 1997).

The narratives that resulted in an ambivalent attachment classification depicted strong feelings of anger and conflict, as well as difficulties with affect regulation. According to Shore (2001), the quality of the attachment relationship is an important contributor in efficient right brain functioning which in turn has been linked to the development of resilience in terms of affect regulation in children. Children who have had experiences of mothering in which experiences of high intensity affect is offset and modulated by the mother successfully synchronizing her system of arousal with her infant’s (Shore, 2001). The ‘good enough’ mother will ensure that she is attuned to her infant’s positive and negative affective states, as frequent misattunement and a failure to repair the infants negative affective states can rupture the attachment bond (Shore, 2001). The ruptured attachment bond can result in the infant, and later the child finding it difficult to tolerate and endure negative affective states such as anger and conflict and is an important factor for the predisposition of psychopathology (Shore, 2001). This is likely to affect these children’s scholastic performance and their ability to develop caring relationships with partners, friends and their own children when they are adults (Freeman, 2004). According to Freeman (2004) a large number of these children may suffer from depression and/or a personality disorder and are more likely to engage in risky behaviour, including risky sexual behaviour, substance abuse and violence. Freeman (2004) goes on to add that many of these orphan children may turn to crimes and social violations that affect society as a whole.

4.1.2 Children’s homes and attachment

The purpose of the children’s home is essentially to offset the impact of the children’s past experiences and provide an alternative environment in which the child’s needs will be met. According to Katz (2003; Senior, 2002) an inconsistent quality of care giving in the children’s home can serve to further reinforce existing patterns of attachment. Even though the children in this study’s placement in the home came about possibly after infancy or early childhood, and even though they would at present not be considered to maternally deprived in the sense that Bowlby
(1952 as cited in Katz, 2003) originally used the term, they essentially have spent a significant portion of their development in an institutional type of environment where the care giving remains inconsistent due to high staff turnover. Furthermore the seemingly diminished interaction that was observed by the researcher at the children’s home between the care givers and children may fail to ameliorate the children’s previous negative experiences of care giving.

It follows then that the children continue to display insecure attachment patterns in the children’s home. The results that pertain to the research question regarding the nature of the narratives of each attachment subgroup of a sample of children in care found that the insecure-avoidant pattern of attachment entails feelings of abandonment, isolation, no expectation of comfort, a lack of social interaction and emotional distancing as illustrated in their ASCT responses. The insecure-avoidant children appear to feel a pervasive sense of abandonment and isolation. The children may feel deserted and forsaken by their families and as such have learned that individuals are unreliable and undependable which is reinforced in their current environment in which care givers appear inconsistently available. This can result in the formation of a ‘compulsive self reliance’ in terms of the child satisfying his/her own needs with little regard for those of others (Katz, 2003). In an effort to minimize the feeling of needing the other as a source of comfort, coupled with their anticipation of rejection, the insecure-avoidant child tends to prefer to avoid social interaction as a means of coping independently (Katz, 2003). In the present children’s home however, interactions between the care givers and children appeared to be minimal and may serve to entrench the child’s feeling of being unwanted. However this avoidant form of coping can interfere with the development of feelings of emotional connectedness, such as empathy, affection and dependency, and can result in the child appearing withdrawn, cold and detached (Finnegan, Hodges & Perry, 1996).

The responses that resulted from the ASCT that were classified as being of an ambivalent pattern of attachment illustrated strong feelings of anger and conflict. The responses revealed the children appeared to feel anger and rage at being separated from the care giver, and anticipate that the when the care giver is called upon it may evoke tension and anxiety (Bowlby, 1988; Senior, 2002; Katz, 2003). This pattern of attachment tends to be promoted by inconsistent care giving, i.e.: a care giver being available and responsive on some occasions, but not on others. The children may have experienced this in the past as well as currently in the children’s home. Inconsistent care giving may be as a result of the occupational stress that the care givers often experience working in children’s homes and thus the prevalence of the insecure attachment patterns may be reflective of this (Mattingly, 1981).
Working in a children’s home requires intense interpersonal involvement with the children that may at times be experienced as painful, demanding and challenging and may result in the care workers high staff turnover (Mattingly, 1981). As a result of the inconsistency of the both the care givers presence and response to them during a time of need, the children generally do not feel that they can successfully master their environment on their own, and project feelings of anger at the care givers for not supporting them. According to Finnegan et al. (1996) the resultant inhibition of the infant’s exploration of the environment can interfere with the development of age appropriate strategies for the regulation of affect during even what would be considered a minor stressor. The child is thus rendered vulnerable to fearful type responses as a result of feeling a sense of helplessness and may externalize these feelings with anger and conflict (Finnegan et al., 1996).

The devastating consequences of the HIV/Aids epidemic has resulted in an estimated 15% of all children under the age of 15 being orphaned in South Africa (Simbayi et al., 2006). It has been estimated that by the end of 2010, approximately 3.1 million children in South Africa, due to various circumstances will be orphaned (Simbayi et al., 2006). Thus although children’s homes may not be the ideal environment in terms of fostering secure attachment patterns they have become a practical and necessary reality for many children.

Children’s homes often experience high staff turnover which has been linked to the occupational stress staff experience as a result of their emotionally challenging work and thus the children do not have an opportunity to bond with a consistent care giver (Mattingly, 1981). The children’s resultant experience of the world is one that is perceived as unreliable and undependable and the likelihood that they may either retain or develop an insecure attachment pattern is high (Bowley, 1947). The interaction that was observed at the children’s home between the children and the care givers was one of general disinterest and this may serve to facilitate the development of problematic attachment patterns. The development of insecure attachment patterns can have significant repercussions such as learning and behavioural difficulties (Pianta et al., 1999). Furthermore, the role of insecure pattern of attachment and the development of psychopathology, such as mood, personality and anxiety disorders, in adulthood have also been implicated in the literature (Dozier, Stovall-McClough & Albus, 2008). Thus it is important to consider the context of the children in terms of understanding the development and potential consequences of insecure attachment patterns.

Children who form insecure (avoidant and ambivalent) patterns of attachment also tend to experience more negative peer interactions (Russell, Jarvis, Roberts, Dwyer & Putwain, 2003). Thus it is important to consider in the current sample of children due to the small number of securely
attached children it can be construed that the likelihood of insecurely attached children forming friendships with other insecurely attached children is high. According to Richardson (2005) children who are classified with an insecure-avoidant attachment pattern are more likely to be viewed by their peers as perpetrators of bullying. Among the boys, the bullying predominantly takes the form of physical aggression, whereas girls tend to adopt methods of relational aggression such as gossiping, teasing, spreading rumours and social ostracism. These behaviours tend to emphasize the child’s ‘power’ and independence (Berlin, Cassidy & Appleyard, 2008). In the current sample of children, of the children classified as having an insecure-avoidant attachment pattern there was a tendency to draw themselves omitting family members altogether seemingly emphasizing the need to refute social interaction with others. The children who are classified as possessing an ambivalent attachment pattern have been shown to appear tentative, inhibited and anxiously seeking positive interactions and thus can be perceived as needy and demanding of extra attention which in turn often elicits peer rejection or neglect (Berlin et al., 2008). Of the children in this study who were characterized as having an ambivalent attachment pattern, the tendency to draw themselves with peers was common highlighting the need for a sense of social closeness and dependency on others.

4.2 Reliability and Validity Results

The development period of middle childhood has been relatively ignored in comparison to the study of attachment during infancy and adulthood (Kerns, 2008). Researchers attempting to examine attachment during middle childhood noted that attachment patterns were not easily identifiable through direct observation, as the frequency and intensity of these attachment related behaviours’ begin to decrease (Kerns, 2008; Solomon & George, 2008). Thus measures during middle childhood were aimed at the representational level and may provide an easier means with which to assess attachment (Bowlby, 1969; Granot & Mayseless, 2001; Madigan et al., 2003; Page, 2001).

Currently however, there is no dominant conceptual and methodological approach available for the measurement of attachment in middle childhood (Kerns, 2008). This has resulted in a wide range of measures being used to gain access to children’s attachment representations (see Kerns in Cassidy & Shaver, 2008). One such measure is the utilization of projective techniques (Page, 2001). This measurement approach can include the interpretation of; picture responses, doll/puppet play, storytelling as well as children’s drawings (Kerns, 2008; Solomon & George, 2008). However the lack of sufficient reliability and validity data regarding these measures has resulted in their somewhat limited use. Thus the secondary aim of this study was to examine the validity and applicability of the
use of representational measures of attachment, namely, children’s family drawings and attachment based story stem narratives, in the context of South Africa.

The children’s family drawings were collected and scored using the Kaplan and Main (1986) scoring system and the Family Drawing Global Rating Scale (FDGRS) (Fury et al., 1997) whilst the story stem narratives were scored using the Attachment Story Completion Task (ASCT) (Granot & Mayseless, 2001).

The second and third research questions pertain to reliability and validity of the measures. The Kaplan and Main (1986) scoring system has been criticized by Fury et al. (1997), as well as Pianta et al. (1999), as findings suggest that some of the individual scoring features did not fare well during cross validation. This was due to the fact that some of the individual features are not clarified in enough detail by Kaplan and Main (1986) and thus coders were experiencing difficulty in distinguishing and conceptualizing between the features that appeared ambiguous in nature (Douglas, 2009). To investigate this further the present study employed the use of a pre and post workshop design in which drawings were scored without any form of conferencing and various discrepancies regarding various drawing features were then noted (see Table 3.6) and discussed during the workshop. The drawings were scored a second time using the standard and agreed upon conceptualisations of the identified scoring system drawing features (see Table 3.7).

The results of the present study replicated the findings of Fury et al. (1997) in which a workshop of the Kaplan and Main scoring system was deemed necessary, as the present study illustrated that the inter rater agreement increased from 67% prior to the workshop to a modest 75% post workshop. In addition there was a finding of low concordance ($\chi^2 = 0.4167$. $p=0.8119$ $p \geq 0.05$) between the attachment classifications yielded from the Kaplan and Main (1986) scoring system prior to a workshop and those from the ASCT which is reported to be one of the more validated measures for this developmental period. Significant concordance ($\chi^2 = 0.0451$. $p=0.0451$ $p \leq 0.05$) was found between the attachment based classifications of the Kaplan and Main (1986) scoring system post workshop and the ASCT and this further substantiates the need for revision and further clarification of the Kaplan and Main (1986) scoring system if it is to be considered an appropriate attachment based measure.

A second more recent approach that was employed in the present study that was the used to analyze attachment representations in the family drawings of children was the global rating scale designed by Fury et al. (1997) which assigns a numerical rating to the overall pattern of the drawing
features that are present (Leon et al., 2007). The scales can be used to rate the overall emotional
tone and quality of the attachment relationships. According to Fury et al. (1997) the scales were
developed as a means of scoring the drawings in a manner which is considered to be more
integrative. In comparison to the Kaplan and Main (1986) system which relies heavily on the
presence and/or absence of various features, the FDGRS (Fury et al., 1997) pays attention to the
context of the drawing and the patterning of the features in an effort to interpret the drawing
meaningfully as a whole (Clarke, Ungerer, Johnson & Stiefel, 2002; Fury et al., 1997; Leon et al.,
2007).

In the first phase of analysis, namely the Chi Squared Test, the resultant attachment classifications
resulting from the FDGRS (Fury et al., 1997) were found to have no significant relationship with
those yielded from the ASCT as the basic assumptions of the Chi Squared Test were not met. Due to
the low frequency of the secure attachment classification/s in the analysis of the FDGRS, and the
combined attachment classifications of the Kaplan and Main system with the FDGRS, the significance
test of the chi square distribution is rendered inaccurate as the basic assumption of the test are not
met (Field, 2009). The sampling distribution of the test statistic is thus considered too deviant from a
chi square distribution to be of any value and thus when frequencies are low the Fishers Exact Test
can be used (Field, 2009).

As the Phi Coefficient (Phi = 0.2400) revealed the presence of a weak concordance, the Fishers Exact
Test was thus deemed the most appropriate test to determine whether relative concordance
between the measures did exist (Field, 2009). Thus in the second phase of analysis, the Fishers Exact
Test was run to confirm the hypothesis and the findings illustrated a significant degree of
concordance between the attachment classifications yielded from the FDGRS and the ASCT
(p=0.0192) p ≤ 0.05.

The results of the combined classifications that resulted from the Kaplan and Main (1986) scoring
system and the FDGRS (Fury et al., 1997) proved to highly concordant with the Fishers Exact Test
statistic of p ≤ 0.0001 with the ASCT (Granot & Mayseless, 2001) with a moderately high inter rater
agreement of 77%. The results illustrate that an in depth analysis of the family drawings with a dual
focus on individual drawing features as well as a global evaluation can successfully identify the
attachment representations present in a South African sample of children in care. This is in
agreement with the study performed by Fury et al. (1997) whose findings suggested that the need
for an integrative assessment of the family drawings versus a reliance on individual drawing features
however well conceived is still required. The aggregation of the drawings features and the use of the
rating scales proved to be increasingly powerful and resulted in a more robust pattern of results that were significantly related to the results obtained from the attachment based narratives (Fury et al., 1997).

In the present study, the Attachment Story Completion Task (ASCT) (Granot & Mayseless, 2001; Kerns, 2008) proved to be a useful and increasingly valid assessment tool that can be used during middle childhood. The scoring of the children’s responses was considered to be a simple method of analysis in comparison to the scoring of the children’s family drawings, as the ASCT had the highest inter rater agreement of 80%. It must be noted however that the complexity of the scoring may have been reduced as a result of the children’s often brief responses with many children choosing to respond with ‘I don’t know’ type responses although this is considered significant in terms of the overall attachment classification it is still however acknowledged to have reduced the difficulty in terms of the story stem coding.

The concordance between the Kaplan and Main scoring system post workshop, FDGRS and the combined attachment classifications with the ASCT further illustrates the validity of the use of the ASCT in a South African context. There has been much debate regarding the use of attachment based measures cross culturally, however, the ASCT has been validated both an Israeli and US sample of children and coupled with the notion that the theory of attachment has cross cultural validity the use of the measure as a basis for comparison appears justified (Van Ijzendoorn & Sagi-Schwartz, 2008). Although the validity of the narratives was independent from language proficiency, provision was made for an interpreter to further ensure validity of the measure. Further validity data was provided by the themes generated from the children's responses to the attachment based story stems as they were related to the descriptions in the literature of attachment classifications (Mattingly, 1981; Finnegan et al., 1996; Howe et al., 1999; Senior, 2002; Katz, 2003).

4.3 Conclusion

This study illustrated that the KFD can be a useful tool in the classification of children’s attachment patterns when analysed using a combination of the Kaplan and Main (1986) and FDGRS (Fury et al., 1997). The use of the ASCT (Granot & Mayseless, 2001; Kerns, 2008) proved the most simple and effective attachment based measure and thus both projective measures provide insight into the children’s present emotional functioning. The attachment classification findings of this study further demonstrate how important it is for children in care to have consistent and reliable care givers throughout the duration of their placement in the children’s home in order to ameliorate the effects
of the development of an insecure attachment pattern. However, if this is not possible, the children should be given the opportunity to bond with another significant person/s that can provide the child with the support, affection and appreciation they need to feel a sense of belonging and connectedness. Further research is encouraged in this area which can expand on the findings within this study.
CHAPTER 5

5.1 Introduction

In this chapter, a brief synopsis of the findings of the study is presented, the limitations of the study are acknowledged, recommendations for future research are made and finally the clinical implications of the findings are discussed as well as the concluding comments.

5.2 Findings of the study

- Children in care are vulnerable to the development and perpetuation of insecure attachment patterns, namely, insecure-avoidant and ambivalent.
- The Kaplan and Main (1986) scoring system requires a workshop and/or revision to improve inter rater reliability and validity of the attachment based measure.
- Improved inter rater reliability and validity can be achieved through the combined use of the Kaplan and Main (1986) scoring system and the Family Drawing Global Rating System (Fury et al., 1997) to assess children’s family drawings.
- The Attachment Story Completion Task is an increasingly reliable, valid and simple tool for the assessment of attachment in story stem narratives.

5.3 Limitations of the study

- Although the study allowed for the testing of measures of attachment that have to date been relatively under researched further research is required to further assess the validity of the measures. In addition, although the measures were tested in a different cultural context, the sample can be considered small and homogenous in nature and thus future research should aim to test the measures further in more diverse samples. The sample size also did not test the differences between attachment security of children in care as it relates to gender and this may be an interesting area of research. The study also did not assess whether the attachment classification resulting from individual children were consistent across the measures as the study was directed at exploring the overall reliability and validity of the attachment based measures versus concordance as it pertains to separate participants.
Furthermore the Kaplan and Main (1986) system and the FDGRS for classifying children’s drawings were both designed and formulated in the USA and therefore adopt a Western understanding of attachment patterns. The extent to which these instruments are accessible across all cultures is not fully known and thus its applicability to the participants in this particular sample who are all of an African ethnicity may remain questionable. Studies which show support for its universal applicability were limited. In addition the amount of studies that have specifically used this instrument with a sample of children in care is also limited.

Fury et al. (1997; Madigan et al., 2003) did not include the disorganised classification in their study as there was evidence that is difficult to distinguish between the ambivalent and disorganised categories (also see Douglas, 2009; Pianta et al., 1999) thus the present study omitted the disorganised classification in an effort to further cross validate their work. However it acknowledged that a certain proportion of the drawings classified as insecure may have in fact been classified as having a disorganised attachment pattern.

Accessing the participants also proved challenging as they were only available on the weekends and were not all present at the same time. The care workers at the home were not particularly helpful in terms of assisting the researcher to find the children and much time was wasted on this aspect. The children were also involved in various play activities and thus some may have been somewhat disinterested during the administration of the drawings and story stems. There were also some disruptions during the data collection process as finding a quiet area in which to complete the drawings and story stem interviews proved challenging at times. This may have made it difficult for the participants to solely attend to the tasks, and may have affected the overall quality of the drawings and responses.

It proved challenging attempting to locate measures of attachment for the period of middle childhood and even more difficult to organise the scoring criteria of both the FDGRS and the ASCT as various well known authors had to be contacted several times for assistance in this regard. Many hours were spent studying the scoring systems and conversing with the authors via email so as to ensure a degree of reliability, however it is acknowledged that the reliability data in terms of the lack of sufficient detailed training of the researcher and research assistant may have compromised the results of the study.
5.4 Recommendations for future research

- The finding that the agreement on the use of a combined approach to the classification of children’s family drawings was higher than the separate use of the Kaplan and Main (1986) and the FDGRS (Fury et al., 1997) reveals the need for a more integrated approach versus a reliance on either measure independently for classification. Furthermore Fury et al. (1997) support the view that a future study should include the use of an additional rating scale to increase the validity of the findings. Due to the fact that studies have shown that drawing attachment classifications have been linked to both previous as well as concurrent social and behavioural functioning, future studies could include a scale such as the Teacher-Child Rating Scale (Pianta et al, 1999). A scale of this nature would provide information of the child’s social, behavioural and academic competencies and difficulties and could be related to the assigned attachment classification for further increased validity.

- A further recommendation in terms of the Kaplan and Main scoring system would be to attempt to modify the existing scoring criteria if further clarification is unavailable. Fury et al. (1997) created their own coding system that was essentially based on the original Kaplan and Main (1986) system but was more refined and less vague. For example, they replaced the feature of ‘automatically drawn smiles’ to ‘neutral/negative affect’ (Fury et al, 1997). The FDGRS also requires a degree of refinement in terms of providing clarity as it pertains to the scales as the scorers appeared to experience difficulty in conceptualizing the scoring criteria as the patterns of features that are present in the drawings are rated on a continuum like scale with no definitive cut off points discriminating between the numerical ratings.

- Additionally due to the fact that the ASCT (Granot & Mayseless, 2001; Kerns, 2008) has not been previously used in an African sample, one may question the true validity of the measure despite its concordance with the family drawing attachment based measures. Further exploration of the measure in differing cultural contexts is thus required which would serve to increase the validity of the measure’s use in future studies.

5.5 Clinical implications

- Children in care are at risk for the development or perpetuation of a problematic attachment pattern and subsequent mental health difficulties when compared to the general population. The prevalence of insecure attachment patterns in this study supports
the study by Clausen et al. (1998). Thus interventions should be aimed at increasing the children’s adaptive abilities and social competence such as; group psychotherapy, recreational interventions and social skills building are considered necessary.

- The importance of consistent care giving in the children’s home cannot be overlooked in terms of ameliorating the potential negative effects of the development or perpetuation of insecure attachment patterns in children in care and should be implemented in both policy making and contracts.

- The KFD and the use of attachment based story telling tasks are relatively easy to administer and analyse. They have also shown evidence of reliability and validity and would be considered tools with which mental health professionals can investigate the attachment patterns of children as a means of assessing their mental health development in an effort to reduce the risk of psychopathology through interventions aimed at improving attachment. The researcher’s recommendation would be regarding use of the ASCT in clinical and educational settings. The ASCT appears to be the most accurate attachment based measure in the present study given that no secure classifications were found within the sample of children in care. The literature suggests that it is unlikely that the children who needed to be removed from their parents would have secure attachments and due to the fact that the children continue to experience inconsistent care giving in the children’s home, it is reasonable to assume that the children would present with insecure (avoidant and ambivalent) attachment patterns. Although the drawings did present with some secure attachment classifications the frequency of these was low enough to indicate validity of this attachment based measure.

5.6 Concluding comments

The children’s family drawings are a useful measure with which one can capture a child’s attachment based representation, however modifications to the associated scoring systems, Kaplan and Main (1986) and the FDGRS (Fury et al., 1997) are required to increase reliability and validity. The ASCT (Granot & Mayseless, 2001; Kerns et al., 2007) was found to be the most effective attachment based measure that can be used by mental health professionals in clinical practice. Children in care appear to be at risk for the development of insecure attachment patterns and this is problematic in the sense that insecure attachment patterns have been linked to the development of psychopathology. In the context of South Africa where an estimated 3.1 million children will become orphans by the end of 2010 due to HIV/Aids, it becomes important to consider children’s mental health in an
attempt to ameliorate the negative effects that the development of psychopathology can have on society as a whole (Freeman, 2004; Simbayi et al., 2006)
REFERENCES


UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE NON MEDICAL

R14/49 Douglas

CLEARANCE CERTIFICATE

PROJECT

Representations of attachment in a sample of children in care during middle childhood in South Africa as determined by two attachment measures

INVESTIGATORS

Ms D Douglas

DEPARTMENT

psychology

DATE CONSIDERED

12.03.2010

DECISION OF THE COMMITTEE*

Approved Unconditionally

NOTE:

Unless otherwise specified this ethical clearance is valid for 2 years and may be renewed upon application

DATE

26.03.2010

CHAIRPERSON

(Professor R Thornton)

cc: Supervisor: Dr K Bain

DECLARATION OF INVESTIGATORS

To be completed in duplicate and ONE COPY returned to the Secretary at Room 10005, 10ft Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. I agree to a completion of a yearly progress report

Signature

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES
Appendix B:   Deputy Director Information Letter
Dear Madam,

My name is Danielle Douglas, and together with my supervisor, Dr. Katherine Bain, I am conducting research for the purposes of obtaining my Masters Degree in Educational Psychology at the University of the Witwatersrand. My area of focus is that of the validity of measures of attachment employed in middle childhood. Therefore, this research is aimed at examining the comparison between the attachment patterns that are reflected in two different attachment measures; namely, children’s family drawing and story completion tasks. This study will extend the current research that is available on attachment during this developmental period, and additionally provide insight into how the children are coping emotionally. Attachment can be described as the enduring ties that children have with their parent/s. We would like to invite you to participate in this study.

Participation in this research will involve a group of children in your children’s home that are between the ages of 8 and 12 years old. The children will be asked to draw both a picture of a person, a picture of their family and to briefly explain their family drawing. They will also be asked to complete a set of 5 stories which will be recorded on a Dictaphone for transcription purposes. Each session will take approximately thirty minutes to complete, and the sessions will take place over two consecutive weekends by myself and a trained assistant. The children’s participation is completely voluntary, and no person will be advantaged or disadvantaged in any way for choosing to participate or not participate in the study. There are thus no benefits to the children who participate. The children may refuse to answer any questions and/or complete any stories that they would prefer not to, and they may also choose to withdraw from the study at any point without any negative consequences.

Should there be any indication that any child may be adversely affected by their participation, the situation will be immediately contained and a referral to the social worker who works at your home for support will be made. If the situation is deemed more serious, a referral to a trained psychologist at the Rahima Moosa Mother and Child Hospital at no cost to you will be made. All the children’s drawings and responses will be kept confidential, and no information that could identify the children will be included in the research report. No names will appear on the drawings and transcriptions; alternatively a code name will be used. The drawings will be analyzed by four trained peers and myself; however the child’s drawing responses and completed stories will only be processed by the trained assistant and myself. The drawings, responses and transcriptions will be kept in a locked up area and will be destroyed upon completion of the degree. The results might be published in a scientific journal. The results of the study can be made available to you upon request in the form of a short presentation after the research report is finalized.

My research will be conducted under the supervision of the WITS Ethics Committee, in order to ensure that the rights of the participants are protected. If you choose to participate in the study please fill in your details on the form below. I can
be contacted telephonically at 082 699 4833 or via email at danielled7@gmail.com. My supervisor can be contacted on (011) 717 4558 or via email at katherine.bain@wits.ac.za.

Kind Regards
Danielle Douglas
Appendix C: Deputy Director Permission Form
I __________________________ hereby grant permission for Miss Danielle Douglas and assistant Mrs. Andrea Pereira to:

- Make use of __________________________ (name of children’s home) as the site for the study.
- Ask each child to draw a picture of a person and their family.
- Ask each child to complete 5 stories which will be recorded using a Dictaphone.

Signed: __________________________

Date: __________________________
Appendix D: (1) Deputy Director Consent Form (Guardian)

(2) Director Audio Tape Consent Form (Guardian)
(1) Director Consent Form (Guardian)

Psychology

School of Human & Community Development

I, ________________________________ , consent for ________________________________ to be involved in the study in which drawings and stories will be collected by Miss Danielle Douglas and assistant Mrs. Andrea Pereira for the exploration of the validity of the measures of attachment that can be used during the period of middle childhood. I understand that:

- The nature and purpose of the study has been explained to me
- Participation is completely voluntary
- That the participant may choose not to take part in the drawing or story-telling sessions should he/she prefer not to
- That the participant may choose not to respond to any questions or complete any stories should he/she prefer not to
- No negative consequences will result if the participant decides to withdraw or if any participant chooses to decline their participation
- The identity of the participants will remain confidential
- What participants say during the story telling may be directly quoted but no identifying information will be used
- There are no direct benefits to participating in this study
- That if the participants experience any distress in response to the drawing or story telling session, the situation will be contained and will be referred for further support

Signed: ____________________________________________
Date: ____________________________________________

(2) Director Audio Tape Consent Form (Guardian)

I, ________________________________, consent for the above child’s story telling task with either Miss Danielle Douglas or assistant Mrs. Andrea Pereira to be tape recorded for the exploration of the validity of measures of attachment that can be used during the period of middle childhood. I understand that:

- Only Danielle Douglas and assistant Andrea Pereira will have access to the tapes
- The tapes will be transcribed by Danielle Douglas and assistant Andrea Pereira
- No identifying information will be included in the transcripts or the research report
- Transcripts will only be accessible to the researcher, Danielle Douglas, assistant, Andrea Pereira and the research supervisor, Dr. Katherine Bain.
- The participant’s responses in the story telling task may be directly quoted in the research report, but no identifying information will be included.
- All tape recordings and transcripts will be kept in a locked cupboard for two years if any publications arise from the study and for six years if no publications arise from the study. After that, they will be destroyed.

Signed: ____________________________________________
Date: ____________________________________________
Dear Care Worker

My name is Danielle Douglas, and together with my supervisor, Dr. Katherine Bain, I am conducting research for the purposes of obtaining my Masters degree. The research will take place at the children’s home where you work and I am inviting you to take part. The project looks at children’s drawings of themselves, and their family and their story-telling. It is completely up to you whether you would like to participate or not. Whether you choose to take part or not, you will not be disadvantaged in any way. There are also no benefits from taking part in the study. You may choose to withdraw your participation from the study at any time with no negative consequences.

Together with an assistant, Andrea Pereira, I will be coming to the home over two consecutive weekends between 8h00 and 17h00. I will be working with some of the children at the home, and asking them to draw pictures of a person, their family and tell me some stories. The stories will be tape recorded with permission and transcribed by myself and my assistant. Each session should take about thirty minutes. The children’s names will not be used, and no one will know who the drawings or stories belong to. If any of the children do not understand my instructions in English, I may need your help to interpret.

Please note that every care will be taken to ensure that no child is distressed by the process. However should there be any indication that they were adversely affected by their participation, they will be referred to the social worker at the children’s home or alternatively to a trained psychologist at the Rahima Moosa Mother and Child Hospital for support.
Appendix F: Care Worker Consent Form
I ___________________________ (name) hereby consent to my participation in the study

with Miss Danielle Douglas and assistant Mrs. Andrea Pereira.

I understand that:

- My role in this study is to interpret the instructions to the children if they do not understand English
- I understand that my participation is voluntary and that I can withdraw at any time.
- I understand that if I do not participate I will not be disadvantaged in any way.
- I understand that all information will be kept confidential.

Sign: _____________________________

Date: _____________________________
Appendix G: Informed Assent Form
Dear Child

My name is Danielle. I am from Wits University. I am doing a project at your children’s home so that I may complete my degree, and I am inviting you to take part. It is up to you whether you would like to take part in my project or not. It doesn’t matter if you don’t want to.

If you decide that you would like to take part then I will visit your home on two weekends. A lady called Andrea will be helping me, and we will ask you to draw some pictures and tell some stories. We will also need to ask you a few questions about your drawings. Your stories will be tape recorded and then written into words by myself or Andrea. If you do not want to answer some of the questions, or tell a story, you do not have to and it is ok. We will not use your real name, so no one will know what you have drawn or the stories you have told. Even if your words from the story are used in the project no one will know it was you.

If you are upset during the drawings or stories you can tell me, or Andrea or Rose. If you decide during the drawings or stories that you do not want to do this anymore, it is ok and you can leave the room.

Please write your name on the line if you would like to take part in the project:

Name: ____________________________

Date: ____________________________
**Appendix H:** Examples of drawings which illustrate the scorers’ conceptualisations as a result of the Kaplan and Main (1986) scoring system work shop

<table>
<thead>
<tr>
<th>Attachment Subgroup</th>
<th>Original Identified Features (Pre Workshop)</th>
<th>Scorers Conceptualisation (Post Workshop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>Not all or no family members smiling; if smiles appear, they look genuine, lack ‘happy face’ quality</td>
<td>The smiles differ slightly on each family member; all the smiles are not the characteristic ‘U shape’. <em>(see Appendix H:1)</em></td>
</tr>
<tr>
<td></td>
<td>Drawing is imaginative or includes fantasy elements or an unusual setting</td>
<td>Drawings that do not occur in the setting of the children’s home; or another home-type setting were included; school setting. <em>(see Appendix H:2)</em></td>
</tr>
<tr>
<td>Insecure-Avoidant</td>
<td>Arms absent on one or all family members or portrayed in postures not suitable for holding</td>
<td>Sitting or lying posture/s or arms behind figures back or concealed in pockets <em>(see Appendix H: 3)</em></td>
</tr>
<tr>
<td>Ambivalent</td>
<td>Overall impression: vulnerability</td>
<td>The figures on the page are small in stature in comparison to the page; the figures appear unhappy, sad, fearful or anxious etc; engaged in separate activities; parents unconcerned with children i.e.: child figure crying with no comfort; or child portrayed alone. <em>(see Appendix H:4)</em></td>
</tr>
</tbody>
</table>
Appendix H:3

Family

Mother

Father

Brother

Sister

Photo
Example of drawing classified as secure
Appendix J:   Examples of drawings classified as insecure-avoidant

Mummy - Telling me to cook my own food
Appendix K: Examples of drawings classified as ambivalent