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By

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The Influence of Adult Attachment Strategies on Parenting and Behavior Difficulties in Middle Childhood

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Abstract

The aim of this research was to identify possible risk factors for internalising and externalising behaviour problems in middle childhood using an attachment theory framework. The mother-child relationship was explored from the mother’s perspective and considered the possible influence of parenting attitudes and behaviours and mother’s experience of romantic attachment relationships on her child’s adjustment.

The findings indicated that mothers in the clinical group differed significantly from mothers in the control group in reports of their adult attachment strategies, parenting behaviours and attitudes and their child’s behaviour. In the clinical group mothers’ high avoidance in romantic relationships was predictive of high reports of their child’s externalising behaviours. Parenting behaviours and attitudes did not appear to influence this relationship. In the control group a different pattern of relationships were identified as significant. Mothers’ parenting behaviours and attitudes were shown to be predictive of their child’s behaviour. In addition low levels of mothers’ attachment anxiety were predictive of low reports of behaviour problems in the control group.

It was concluded that the current study found some evidence that adult romantic attachment was able to predict parenting attitudes, behaviours and childhood adjustment with reference to internalising and externalising behaviours in middle childhood. The study supports the possibility that conceptually analogous relationships exist between parent-child and romantic relationships. Different significant relationships existed in the clinical and control group. Further examination of these differences when researching potential risk/protective factors for maladjustment in childhood is essential.
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Chapter 1
Literature Review

1.0 Introduction

Previous research has identified domains of risk associated with maladaptive behaviour in childhood to include child characteristics, quality of early attachment relations, parental management and socialisation strategies and family ecology (Greenberg et al., 1993). It is likely that this risk factor model has generality and that these general domains of risk are also likely to contribute to the development of early internalising disorders in childhood, such as anxiety disorders, childhood depression, somatisation and dissociative states and different aspects of these risk factors may predict different disorders and contribute to the development of externalising disorders in childhood.

The relations among these factors and maladaptive behaviour are expected to be transactional; significant variations may occur across time and it is likely that some domains are more important to certain disorders. For example ineffective parenting may be found to contribute more to externalising than internalising disorders (Patterson et al., 1989). Individual differences in the nature of parenting are largely viewed as emerging through learning. Bowlby’s ethological perspective and his interest in attachment related processes across the life span lend themselves readily to an elaboration of the parental side of what Bowlby (1969 and 1982) termed the ‘attachment caregiving social bond’.

Attachment processes have shown both predictive and concurrent associations with maladaptive childhood behaviours (Sroufe, 1983; Rubin et al., 1991; Lyons-Ruth, 1996). Although it is unlikely that an insecure attachment per se is either a necessary or sufficient cause of later disorder, attachment is a critical dimension. As the study of attachment in childhood has developed there has been increasing interest in its study in systems larger than the dyad (Marvin and Stewart, 1990; Cowan et al., 1996). This has been especially important in clinical settings given the important role of family systems models in the treatment of childhood disorders (Colapinto, 1991; Madanes, 1991; Estrada and Pinsof, 1995).
The elaboration of attachment theory and research into the domains of adult representations of relationships has generated considerable interest amongst mental health practitioners. The clinical implications include the potential to understand better how representations of relationships are transmitted from one generation to the next and how these are translated into parenting practices.

The present research study aims to encourage the appreciation and understanding of the depth of attachment related issues that are diverse and extremely relevant in understanding childhood behaviour difficulties. Current interest in attachment is on the increase as more and more mental health and child welfare professionals become aware of the significance of this issue regarding the way children and families function.

Further studies of representative normative populations, high risk populations and samples in which there are specific forms of maladaptive behaviour are needed to provide a fuller picture of the role of attachment in the risk for psychopathology in childhood and how different combinations of risk factors may lead to different disorders and consequently require different treatments.

1.1 Family Context of Maladaptive Behaviour in Childhood

Families are unique social systems that are based on combinations of ties that may be biological, affectional, geographical and historical in nature. It is likely that family members fulfil certain roles, however it is the relationships within families that are primary. While single parenthood, divorce, separation and remarriage are common events a narrow and traditional definition of the family is rarely useful in clinical practice. It is more expedient to regard a child’s family as a network of people in the child’s immediate psychosocial field.

Studies of the family antecedents and correlations of children’s maladaptive behaviour are emerging from a number of research paradigms. Studies based on attachment theory find consistent links among adults’ working models of their early attachment histories, their behaviour as parents and their children’s attachment status (van Ijzendoorn, 1992). Studies with a family systems approach find correlations among parents’ marital
conflict, parenting styles and their children’s internalising and externalising behaviour difficulty (Cowan et al., 1994).

From an ecological perspective the psychological attributions of the mother, her relations with her partner and the degree to which she has access to other social agents who provide instrumental emotional support should in theory be associated with the security of the infant mother relationship and consequently the child’s behaviour (Belsky, 1984, 1990). Research evidence supports the conclusion that parents’ attachment status and marital quality function as correlations and possibly as antecedents, of their own parenting style and their children’s adaptation (Burman and Erel, 1995; Cowan et al., 1996).

With respect to addressing the differences in attachment relationships with mothers and fathers it is important to note that most studies of child attachment and adjustment have focused on mother–child rather than father–child relationships. This focus is likely to have occurred because the primary caregiver in infancy is typically the mother and because childhood attachment security is more predictable from infant attachment to mother than attachment to father (Cassidy, 1988; Main, Kaplan and Cassidy, 1985; van Ijzendoorn and DeWolff, 1997). The present study aims to consider the effects of mothers’ adult attachment within a romantic relationship on parenting style and behaviour in middle childhood.

1.2 Internalising and Externalising Behaviour Problems in Childhood

1.2.1 Definitions

Achenbach’s (1991) dimensional approach to conceptualising children’s problems is drawn from a tradition that reflects the work of Eysenck (1967) in the UK and Quay (1983) in the US. Achenbach’s standardisation data for the Child Behaviour Checklist has shown that many of the behavioural difficulties which lead to referrals in child mental health settings are conceptualised as reflecting extreme scores on two major behavioural dimensions.
The first of these dimensions contains items that ask about emotional behaviours such as crying, worrying and withdrawal. Items on this dimension have been labelled as internalising behaviour problems and are thought to be most problematic for the child rather than parents or teachers despite adult concern for a child's level of internal distress. Given that anxiety can be the fundamental condition underlying insecure attachments (Bowlby, 1973) it is surprising to note that little attention has been given to researching childhood anxiety disorders in the context of attachment.

The second of these dimensions contains items that focus on aggressive and delinquent conduct problems. Items on this dimension have been labelled as externalising behaviour problems and include difficulties such as fighting and non-compliance. Externalising or conduct problems in childhood have received considerable attention from attachment researchers perhaps because of the frequent early appearance of such behaviours and the fact that research has demonstrated that insecure attachments pose significant risk factors for externalising behaviours (Greenberg et al., 1993).

Dimensional conceptualisations of Internalising and Externalising behaviours offer a useful framework within research methods, however this approach does entail the assumption that childhood behavioural problems are inherent characteristics of the child. It is important to remember that childhood maladaptive behaviours are typically part of patterns of interactions that involve family members and wider social networks.

1.2.2 Incidence

Internalising and externalising behaviours are normally distributed within the general population and therefore most children show some difficulties associated with both dimensions and a significant minority of youngsters score extremely highly on both (McConaughy and Achenbach, 1994)). Across a normative sample of each sex and age group the mean correlation between Internalising and Externalising was .52, computed by Fisher's z transformation. This suggests that children who have very high problem scores in one of the two dimensions also tend to have at least above average problem scores in other areas.
Links established between mothers' attachment histories and children's internalising behaviours are a function of external, interpersonal and internal factors (Cowan et al., 1996). Internalising, self-blaming, non-aggressive behaviour styles are more characteristic of female personality and roles in Western society and the overall prevalence of emotional problems is higher in girls than boys (Cohen et al., 1993). Daughters are more likely to identify with their mother's orientation therefore internalising behaviours may be transmitted more directly across the mother-daughter generational line (Chodorow, 1978; Lowinsky, 1992).

Cohen et al., (1993) also suggest that conduct or externalising problems are more prevalent than emotional problems and the prevalence of conduct problems is higher for boys than for girls. A third to a half of all clinic referrals constitute conduct problems and these problem behaviours are more than twice as common as emotional disorders (Farrington, 1995; Kazdin, 1995; Patterson et al., 1992). Quality of parenting and the nature of the home environment have been strongly implicated as risk factors for externalising problem behaviours in childhood (Patterson, 1986; Farrington, 1987; Loeber and Dishion, 1983) as well as insecure attachments with significant others in the early years of development (Sroufe et al., 1990; Cowan et al., 1996).

1.2.3 Summary
Despite positive association between Internalising and Externalising scores some children's problems are primarily Internalising whereas other children's problems are primarily Externalising. Children who have significantly higher Internalising scores than Externalising scores or vice versa may differ in other important ways. Research has shown significant differences between children classified as having predominantly Internalising versus predominantly Externalising problems (Weintraub, 1973. McConaughy, Achenbach and Gent, 1988).
1.3 Parent–Child Factors in early Life

1.3.1 Bonding

All infants need to become attached to a parent or parent substitute in order to survive. The beginning of babies’ separate or independent existence takes place at birth where they cease to receive all sustenance through the umbilical cord. They are genetically programmed to respond in certain ways to the world around them.

Bonding theory is concerned with the contact between the new-born infant and its mother and the long-term influence of this on the mother-to-infant attachment. Klaus and Kennel (1976) argued that for close mother-child relationships to develop the mother and child must have skin-to-skin contact in a critical period immediately following the birth of the child. They suggested that in the critical hours following birth, tactile, visual and olfactory stimulation of the mother by her baby was significant in order for the mother to become emotionally tied to her baby. If this process is disrupted, for example by separation, there is a possible risk it is thought of long term adverse consequences for the mother-child relationship. These ideas have significantly influenced the practice in maternity hospitals, homes, nurseries and law courts.

Bonding theory has not been supported by results of well-controlled research studies (Slukin et al., 1983) and has sometimes been seen as incompatible with attachment theory. It has been shown that secure infant–mother attachments can develop in the absence of post-natal skin-to-skin contact (Gaines et al., 1978) and no single period of development is critical for the formation of the attachment relationship. It is important to distinguish between bonding and attachment even though the two concepts are often referred to interchangeably as though they had similar implications. They have quite distinctive meanings. Bonding refers to the parents tie to the infant and is thought to occur in the first hours or days of life. Attachment in contrast refers to the relationship between infant and primary caregiver that develops gradually, building on the history of interaction. While immediate post natal contact may not be critical for later adjustment the quality of attachment that develops between the child and primary care givers during the first two years of life is particularly significant for a child’s healthy psychological development (Bowlby, 1969/1982).
1.3.2 Attachment

Developing an attachment relationship with a caregiver in infancy is a normative phenomenon. Attachment is defined as a “lasting psychological connectedness between human beings” (Bowlby, 1969, p194). Almost every infant will develop an affective tie with a caregiver and will endeavour to use the caregiver as a source of comfort and reassurance in the face of real or perceived threats or challenges from the environment. According to Bowlby an infant will form an attachment with a caregiver as long as someone is there to interact with the infant and serve as an attachment figure. Infants or children will be unattached only if there is no stable interactive presence, as in some cases of institutional child rearing.

Individual differences in attachment relationships do not arise suddenly, nor are they attributable solely to the traits of the infant or the caregiver (Sroufe and Waters, 1977). The patterns of interaction within a dyad develop through a series of bids and responses and it is thought that these patterns of interactions reveal the underlying character of the relationship.

Through repeated interactions over time with consistent caregivers infants begin to recognise their caregivers and to anticipate their behaviour. Bowlby and Ainsworth were the first to elaborate on these early relationships in terms of both survival and psychological processes. They describe the infant as being predisposed to the caregiver, usually the mother as a “secure base” while exploring the environment (Ainsworth et al., 1978; Bowlby, 1982). When the infant feels threatened s/he will turn to the caregiver for protection and comfort. Individual differences are most easily seen in the delicate balance between exploration and proximity seeking.

Ainsworth et al. (1978) described three patterns of infant mother interaction using her experimental procedure of contrived separation and reunion, known as the Strange Situation. Securely attached children sought proximity during reunions and explored actively during their mother’s presence. That is they treated their mother as secure base from which to explore a new environment. Anxiously attached infants alternated in an unpredictable manner between seeking and maintaining proximity with their mothers and resisting or avoiding proximity. Such children sought contact from their mother but were unable to derive comfort from it and their mothers were unresponsive to their
child’s cues and were unable to provide their child with a secure base experience. Children whose attachment patterns that were characterised as anxious avoidant resisted proximity with their mothers after separation. They did not seek comfort from their mothers following the stress of separation and appeared not to be distressed when separated.

Anxiously attached and anxiously avoidant children have been found to be at risk of developing psychological difficulties for numerous reasons. The anxiety and low frustration tolerance of some individuals with resistant histories and the alienation, lack of empathy and hostile anger of those with avoidant histories, may make the former vulnerable to anxiety disorders and the latter vulnerable to conduct problems (Main and Hesse, 1990). Although anxious attachment is considered a risk factor for pathology not all or even most anxiously attached infants will develop psychopathology. Psychopathology or maladaptive behaviour is a construct involving a myriad of influences interacting over time (Sroufe, 1997 cited in Handbook of Attachment).

Secure attachment to a caregiver is said to be a protective factor that provides the child with an immediate source of security and a model for developing later supportive relationships (Belsky and Nezworski, 1988). However attachment is one of several dimensions of the mother–child relationship, other important influences such as feeding and play extend far beyond the security they provide in difficult or stressful contexts.

1.3.3 Parenting styles
The assessment of parenting is a complex process and has long been the focus of research. Many variables have been identified in the attempt to define the critical dimensions of parenting. Two general constructs that consistently appear in the parenting literature are parental support and control. Several variables have been studied that fall under the parental support category including acceptance, warmth, affection, nurturance and a non-restrictive attitude. As with parental support control attempts used by parents have been variously labelled and operationalised. These have included authoritarian, authoritative, coercion, discipline, dominance and punishment (Rollins and Thomas, 1979).
The type of control strategy and the amount of control chosen by a parent can be said to be critical variables. Flexible methods of control employed by parents are positively related to children's competence and compliance (Baumrind, 1979). Rigid coercive methods of control are negatively related to children's adjustment and development (Patterson, 1982). The relationship between the amount of control used by parents is related to children's adjustment, however this relationship is complex and appears to depend on other parenting variables (Maccoby and Martin, 1983).

Recent findings indicate that similar to the way in which parental sensitivity and responsiveness contribute to secure attachment in infancy, parental warmth, involvement, psychological autonomy and behavioural control are associated with security of attachment in later childhood and early adolescence (Karavasilis, Doyle, and Margolese, 1999). In this study low warmth and low control were particularly significant for the dismissing/avoidant attachment styles.

Children who experience harsh discipline and corporal punishment learn that the use of aggression is an appropriate way to resolve conflicts and tend to use this aggression in their management of conflicts with peers. Such children who have been physically punished are at risk for developing conduct problems and becoming involved in bullying (Olweus, 1993).

Reviews of the extensive literature on parenting suggest that various parenting styles can be identified with particular developmental outcomes for the child (Darling and Steinberg, 1993). Baumrind (1979) identified three parenting styles and found a cluster of behavioural traits associated with each parenting style. Maccoby and Martin (1983) modified the scheme and added a fourth parenting style. The four styles included Authoritative parenting, this demonstrates a warm child-centred approach and includes a moderate degree of control. This allows children to develop age appropriate responsibility and autonomy and become confident individuals. Authoritarian parents demonstrate warmth but are over-controlling in their parenting style and tend to have shy adults who are reluctant to take initiative. Authoritarian parenting promotes unquestioning obedience. Permissive parenting is described as warm but lacking in discipline. Children who experience permissive parenting tend to lack competence in later life to follow through on plans and show poor impulse control. Finally the
parenting pattern described as *neglecting* describes little warmth, harsh disciplinary practices and little or inconsistent supervision. Children who experience this style of parenting are thought to be at risk of developing adjustment problems.

The link between parenting styles and the child's developmental outcome parallels correlations between childhood attachments and adult attachment styles. Although we cannot purely derive a child's pattern of behaviour from one particular parental or attachment style the possibility remains that some connection exists.

Of all parental characteristics the sequelae of poor early attachment experiences are perhaps the most important to consider, particularly in clinical cases of emotional abuse or neglect where children go on to develop attachment problems. Fonagy et al. (1994) explain disorders of attachment from a psychoanalytic perspective. According to Fonagy's theory responsive parenting is characterised primarily by the capacity of the parent to infer the mental state of the child and then to communicate with the child and meet the child's needs in relation to their mental state. The coherence of the child's psychological self therefore depends on the accuracy with which the caregiver infers and responds to the child's mental state. Parents who have a poorly developed psychological self or reflective self are at risk of transmitting this on to their own children by inaccurately inferring their own child's mental state and responding inappropriately.

A study by Cohn et al. (1992) demonstrated that adult attachment classifications on the Adult Attachment Interview (George et al., 1984, AAI), were related to parenting behaviours. Results showed that parents classified as insecure were less warm and provided less structure in interactions with their children compared to parents who were classified as secure on the AAI. The study considered the influence of both parents' working models of attachment relationships on parenting and child behaviour. Analyses were carried out to consider if the parenting styles of mothers were more positive if they were married to secure men. Results revealed a predicted pattern of findings for maternal warmth and structure but were not significant. However the sample used was of moderate size with a greater proportion of men classified as secure than women and the significance of the results were greater for the fathers in the study than the mothers. Nevertheless the study provides evidence that insecure working models of childhood
attachment relationships constitute risk factors for difficulties in the parent-child relationship.

1.3.4 Summary
A broad body of research has explored the cross-generational transmission of ineffective parenting in both clinical and normative populations with the primary impetus to identify adults who are vulnerable to repeating an ineffective parenting cycle as well as individuals who prove to be resilient. Attachment theory and research would predict qualitative differences in parenting behaviours and attitudes between insecure and secure parent-child dyads. Evidence suggests that the direction of influence goes from parents' models of attachment relationships to parent and child behaviours (Main et al., 1985). There is reason to believe that adults' working models of attachment relationships predate the presence of a child. Mothers' adult attachment classification assessed pre-natally is associated with later infant mother attachment relationships (Fonagy et al., 1991).

1.4 The Role of Attachment Theory in Explaining Adult Attachment Strategies, Parenting Styles and Childhood Behaviour Problems.
The entire field of adult attachment research has been constructed on the premise that romantic or pair bonds are attachments in the technical sense, persistent not transitory, not interchangeable (Ainsworth, 1989). Bowlby made repeated reference to attachment as a life span phenomenon that does not apply exclusively to the relationship between infants and their caregivers. He hypothesised that attachment is an integral part of human behaviour "from the cradle to the grave" (Bowlby, 1979).

Research evidence supports the premise that pair-bond relationships or romantic relationships are characterised by some of the same features as infant caregiver attachments and develop according to the same process (Waters et al., 1995; Fraley and Davis, 1997). Therefore if the attachment system were operative in pair bonds the effects would be expected to be pervasive and conspicuous in other aspects of relationship functioning. These might include the nature of physical contact that distinguishes attachment bonds, reactions to separations and loss and the selection of attachment figures.
Successive investigations have indicated that secure adults are likely to have secure children (Benoit and Parker, 1994; Fonagy, Steele and Steele, 1991; Main et al; 1985) and are more likely to be warm and supportive parents compared to insecure adults (Cohn, Cowan and Pearson, 1992; Haft and Slade, 1989; Ward and Carlson, 1995). The association between adult security, positive parenting and child outcomes has been validated in both high risk (Ward and Carlson, 1995) and normative populations (Main et al., 1985).

Recent research on adult attachment has begun to look at the associations among adult romantic attachment styles and parenting behaviour. Rholes et al., (1995) found that adult romantic attachment styles corresponded with different expectations about children and parenting, even before individuals had children of their own. They found that, relative to securely attached individuals, avoidant and ambivalent individuals expect to be easily aggravated by young children, advocate stricter disciplinary practices, expect to convey less warmth to their future child and are less confident about their ability to relate well with their children. Avoidant individuals anticipated less satisfaction for caring for young children and expressed less interest in having them. The relationship between avoidance and the desire to have children was the same for both men and women. However the study, which took its sample of 97 students from an introductory psychology course, does not refer to the possible influence of age on the desire to have children and their anticipated satisfaction of rearing a child.

In addition the study by Rholes et al., (1995) examined the relationship between adult attachment styles and mothers' feeling of closeness to their children and mothers' interaction styles in a teaching situation. Results revealed that mothers that scored more highly on the measure of avoidance did not report feeling as close to their preschool children as did more secure mothers. More avoidant mothers behaved less supportively toward their children during a laboratory teaching task. This result suggests that attachment styles may have a fairly direct impact on maternal behaviour and mother-child relationships.

The results of the hierarchical regression analysis indicated a strong effect size between avoidant attachment styles and reported feelings of emotional closeness accounting for 37% of the variance. However avoidance was not associated with general reports of
difficult behaviour on the part of their children. This perhaps suggests that lower levels of closeness perceived by more avoidant mothers and their observed levels of reduced support do not stem from behavioural difficulties presented by children. This study involved a non-clinical sample of relatively young children aged between 24–48 months and does not consider the possible relationship between mothers’ avoidance and childhood behaviour in a clinical population in later stages of childhood.

Children who experience harsh, rejecting or insensitive styles of parenting are likely to generate insecure working models of the self and significant others and demonstrate insecure patterns of attachment (Main, Kaplan and Cassidy, 1985). These models in turn accentuate and confirm the tenuous and unpredictable nature of close relationships, leading to an interpersonal orientation characterised by internalising or externalising behavioural disorders. Environments in which children experience parenting as warm and sensitive are more likely to generate secure working models and patterns of attachment. Secure models should highlight and reaffirm beliefs that close relationships and partners are trustworthy and dependable, producing a reciprocally rewarding interpersonal orientation in which interactions with others are harmonious and mutually beneficial.

1.4.1 Summary
Attachment theory has a number of important implications for the area of parent-child relationships and parental behaviour, particularly in explaining how attachment styles are transmitted intergenerationally. Further research is needed to examine how adult attachment styles influence parent-child relationships and parental behaviour. In addition, to explore the possibility that the avoidant style may affect different kinds of relationships in conceptually analogous ways, regardless of how it is assessed.

1.5 An Overview of Attachment Theory
Bowlby developed attachment theory out of the object-relations tradition in psychoanalysis drawing on fields of evolutionary theory, ethology, control systems theory, developmental and cognitive psychology. He drew upon all of these fields to formulate that the mechanisms underlying the infant’s tie to the mother originally emerged as a result of evolutionary pressures, the biologically based desire for proximity that arose through the process of natural selection. Bowlby’s work challenged
the prevailing view of child care that a child required more than the basic needs of food to thrive, a consistent caregiver that could be relied upon to maintain security and with whom the infant could form an emotional bond.

1.5.1 An Evolutionary Perspective

One of the main reasons why attachment theory is so prominent in psychology and the behavioural sciences is because of its deep foundation and allegiance to principles of evolution. It can be said that attachment theory is an evolutionary theory. Bowlby believed that the attachment system was genetically “wired” into our species through intense directional selection during evolutionary history. Although the theory’s initial ties to evolution focused on how the normative and individual-difference components of attachment promoted infant survival, the focus exclusively on survival rather than on reproduction was perhaps a shortfall of Bowlby’s theory. Recent work has begun to highlight how attachment patterns across the lifespan, which includes adult romantic attachment styles, may have evolved to increase reproductive fitness within certain environments. Considerable debate currently exists about what evolutionary functions adult attachment styles may serve. Kirkpatrick, 1998 and Zeifman and Hazen, 1997 demonstrate contrasting views.

A hierarchy of evolutionary theories exist (Buss, 1995) of which only a subset of the middle level evolutionary theories is relevant to attachment theory. Sexual-selection theory, for example, comprises two major principles concerning mate selection. It proposes that the search for mates or partners is driven by the degree to which prospective mates are likely to be good investors in, and providers for, future offspring and that prospective mates have desirable attributes that could be passed on to offspring. Similarly, attachment theory comprises of the normative component of attachment (typical patterns of behaviour and stages of development applicable to the general population) which proposes that predictions can be made about the way individuals might respond to distressing situations or situations when they feel ill or fatigued. The individual–difference component (which refers to systematic deviations from the model behavioural patterns and stages) offers predictions about the ontogenic origins of different patterns or styles of attachment, including why each pattern may be adaptive or functional in different environments.
More recently life history theory has emerged as a major perspective in evolutionary thinking (Stearns, 1992; Lessels, 1991). It suggests that the attachment system in young children evolved to facilitate survival and development through the most vulnerable periods of early childhood. In adulthood the attachment system serves the evolutionary function of increasing inclusive fitness, or likelihood of survival and perpetuation of genes, through the adoption of environmentally contingent reproductive strategies. To produce biological descendents individuals must solve problems of survival, growth, development and reproduction across the life span. In this context each partner is thought to be attached to one another in order to enhance pair-bonding in adulthood which in turn promotes the safety and health of adults and increases the likelihood of effective parenting. This is considered to be, like child–parent attachment, the outcome of evolution (Simpson, 1999; Fraley and Shaver, 2000).

Although recent theoretical advances are important because they suggest that patterns of attachment in adulthood may not be superfluous to the attachment system of infants and children, these arguments however appear to be insufficient to account for the evolution of attachment behaviour in adulthood. If many parallels exist, as Mohr and Fassinger (1997) indicate, between the role of attachment and same sex and opposite sex romantic relationships, much remains to be learned about the evolutionary underpinnings of adult attachment. A revised theory needs to offer testable explanations for the evolution of attachment in romantic relationships. It may be useful to consider the evolutionary function of adult attachment and its impact on the parenting process.

1.5.2 The Attachment Behavioural System

The most fundamental aspect of attachment theory is the predicable outcome of maintaining or increasing the proximity of the child to the attachment figure (Bowlby, 1969). A number of behavioural systems include those related to feeding, reproduction, caregiving, exploration, fear and sociability. Bowlby proposed that the behaviour patterns associated with each of these systems have been selected through evolution because they fulfil a biological function and help to ensure the survival and reproductive success of the individual. Some attachment behaviours are signalling behaviours, such as smiling and vocalising, which alert the mother to the child's interest
in the interaction and therefore gain the mother's attention. Other behaviours, such as crying, are aversive and attempt to bring the mother to the child to terminate them.

Central to the concept of the attachment behavioural system is the organisation of a variety of attachment behaviours in response to internal and external cues is of paramount importance. Sroufe and Waters (1997, p. 1185) emphasised the "functional equivalence" of behaviours that suggests the behaviours chosen in a specific context are the ones that the infant finds most useful at that moment. With development the child gains access to a greater variety of ways of achieving proximity to the attachment figure.

The emphasis on the organisation of the attachment behavioural system also helps to explain its operation as a goal corrected system. Bowlby (1969) suggested that the organisation of the attachment behaviour system involves a control systems perspective. He used the analogy of a thermostat to describe how children maintain a certain proximity to their attachment figure depending on the circumstances. A thermostat activates a heater when a room is too cold, when the desired temperature is reached the thermostat turns the heater off. Similarly when a separation becomes too great in distance or time the attachment system becomes activated, proximity is sought and when achieved is terminated. Bowlby (1982) later described the attachment system as being continually activated but to varying degrees.

Use of the attachment behavioural system in adult romantic relationships can be described as promoting the safety and health of adults and increases the likelihood of effective parenting. This is considered to be an outcome of evolution as in parent–child attachments. (Hazen and Zeifman, 1999; Simpson, 1999).

1.5.3 The Caregiving System
According to attachment theory the most important factor in a child’s psychological development is the child’s experience with caregivers. The term caregiving system has been used to describe a subset of parental behaviours referring to those behaviours designed to promote proximity and comfort when the parent perceives the child to be in potential danger. However, as George and Solomon rightly state (Chapter 28,
Handbook of Attachment), it is difficult to delineate precisely which aspects of parenting behaviour should be considered part of the caregiving system.

Caregiving is conceptualised in attachment theory as stemming from a separate behavioural system (George and Solomon, 1999). Neither attachment nor caregiving is believed to represent the entirety of the parent-child relationship (Bowlby, 1982). This may be because infant survival and successful child rearing are two distinct life tasks that occur at different points across the developmental life span.

Research has not clarified how the functions and objectives of caregiving, directed to vulnerable infants, are similar to or different from more reciprocal forms of caregiving that occur between equal status adults in adult romantic relationships. Clearly there are associations between patterns of parenting and qualities of attachment security (Belsky and Nezworski, 1988; Rutter, 1995). However, most of the associations to date have been of only moderate strength. We have still to gain a fuller understanding of how parenting qualities and patterns interact with other variables in the development of attachment relationships. The caregiving system provides clinicians with a powerful tool to investigate a mother’s behaviour and perceptions of her child in terms of protection.

1.5.4 Internal Working Models
The working models construct was rooted in the literature on infant attachment and is the cognitive representation of early attachment relationships. In Bowlby’s view, non-verbal and verbal communication patterns are the processes through which internal working models of secure and insecure attachment relations are generated and maintained. Bowlby suggested an extension of the parental role of the secure base to the psychological realm whereby parents serve as secure bases for their children’s exploration of the inner world by engaging in verbal dialogue about working models. Children develop beliefs about themselves, relationships and life in general based on their experiences of early attachment patterns with primary caregivers (see Bretherton and Munholland, 1999, for a review). According to attachment theory, the degree of security an infant experiences during the early months of life depends on the availability and responsiveness of the primary caregiver. Over repeated interactions in their relationship with the primary attachment figure children are theorised to develop a set
of knowledge structures, or *internal working models*, that represent those interactions and contribute to the endogenous regulation of the attachment behavioural system.

Crowell and Treboux (1995) described working models as cognitive/affective constructs which develop in the course of behavioural interactions between a child and the attachment figure. They suggested that a model contains information regarding how close relationships operate and how they are used in daily life and in stressful circumstances. Working models can be described as the basis for action in many situations and are in principle open to revision as a result of significant attachment related experiences.

Whitaker et al., (1999) argued that multiple models existed, however the most assessable model dominated and this gave rise to the appearance of an attachment style. A study by van Ijzendoorn and DeWolff (1997) examined the connection between fathers’ adult attachment classification and father – infant attachment classifications. They found that connections were weaker than those reported for mothers.

Hazen and Shaver (1987) suggest that working models of attachment continue to guide and shape the behaviour of individuals in close relationships throughout life. Individuals rely partly on previous expectations about how others are likely to behave and feel towards them and they use these models to interpret the goals or intentions of their partners.

Working models are believed to be highly resistant to change and can remain affectively stable as they become developmentally more complex (Bretherton, 1985), ultimately influencing the nature of adolescent and adult relationships. A securely attached infant does not always become a secure child or adult. Affective change in working models can be triggered if a previously supportive parent becomes extremely stressed or depressed leading the child to reconstruct his or her working model of parent and self. Conversely this may be reversed if circumstances change.

There are many gaps in the literature with regard to long-term stability of attachment patterns and the continuity of attachment patterns from childhood to adulthood. Also many questions remain about why and when attachment classifications change, the
direction and process of transmission of working models and the characteristics and experiences of those individuals whose attachment styles change. Perhaps the most important proposition of the theory is that the attachment system continues to influence behaviour thought and feeling in adulthood (Hazen and Zeifman, 1999).

In light of this information theory suggests that early caregiving experiences influence, at least in part, how people behave in their adult romantic relationships and parental relationships. The attraction of internal working models lies in its recognition of the role of active thought processes in the mediation of the effects of experiences that provides a mechanism for both continuity and change.

1.5.5 Intergeneration Links

Intergenerational transmission of attachment refers to the process through which parents’ mental representation of their past attachment experiences influences their parenting behaviour and the quality of their attachment relationship with their children (Bowlby, 1973; Main, Kaplan and Cassidy, 1985).

Bowlby’s view that nonverbal and verbal communication patterns are the process through which internal working models of insecure and secure attachment relationships are generated and maintained are also the way in which they are in turn transmitted to the next generation. The pattern in which a parent habitually responds to an infant communicates that the infant is or is not worth responding to (Stern, 1985).

The study of the intergenerational transmission of attachment has been facilitated by the development of the Adult Attachment Interview (AAI), an instrument that measures adult attachment representations (George, Kaplan and Main, 1985). High correlations in a large study, concordance rate of about 75%, have been found between the security of the parents’ mental representations of attachment and the security of the parent child attachment relationship (van Ijzendoorn, 1995). Pre-natally predictive values of the AAI with security of parent–child attachments at one year of age have also shown strong evidence for the intergenerational transmission of attachment (Fonagy, Steele and Steele, 1991). However the AAI was derived by interviewing parents of infants who
had been classified in the Strange Situation and by identifying the parental states of mind associated with each infant pattern. The AAI is used to derive inferences about the defences associated with an adult’s current state of mind with regard to child–parent relationships. Therefore the instrument clearly achieves what it was designed to do but the question is the AAI truly a measure of adult attachment remains. Despite these questions the AAI is perhaps one of the most respected measures of adult attachment available.

The transmission hypothesis also takes into consideration discontinuities that are not attributed to errors of measurement, such that parents who have been raised under adverse circumstances may work through their anxious attachment experiences and reach a balanced and secure view of their past experiences and present attachment relationships (Main et al., 1985).

The occurrence of non-transmissions has been investigated by van Ijzendoorn et al., (1997) who looked at the possibility that ecological factors might mediate the transmission of attachment across generations. An Israeli Kibbutzim, where infants are exposed to multiple caregiving, provided the opportunity to test the hypothesis that the transmission of attachment across generations would be mitigated by the ecological context of the communal sleeping system. Two groups were compared, a home based sample of infant mother dyads and a sample of infant mother dyads that lived in a communal sleeping arrangement. Mothers in the latter group were not accessible to their infants at night. Their results confirmed the correspondence between mother–infant attachment and the context of the sleeping arrangement. In the home based sample 76% of mother attachment and infant attachment classifications matched compared to 40% in the communal setting.

However, it should be noted that the kibbutz is a unique child rearing system and therefore results may not be generalisable to the majority of child rearing environments in Western or other cultures. In addition small sample sizes restricted the possible explanations for their findings. Further data on the lack of transmission will facilitate the study of this intriguing phenomenon.
1.5.6 Summary
Attachment theory and research has greatly informed the relations between attachment and psychopathology in childhood. Attachment theory contributes to the understanding and treatment of childhood difficulties, modes of transmission and differential pathways of influence. It has been remarkably slow in influencing clinical practice with children and adults. However clinical practice has been profoundly influenced by the concepts of internal working models of the self and of attachments with others (Main, 1991).

1.6 Attachment in Adulthood
A standard assumption of adult attachment is that the attachment system, as described by Bowlby (1969) in terms of systems control theory, continues to operate across the life span into adulthood. It is generally recognised that important differences exist between infant and adult attachment, however the system is thought to operate according to the same general dynamics as in infancy (Zeifman and Hazen, 1997).

1.6.1 Presence of Attachment in Adults
Brennan and Shaver (1995) defined adult attachment as an orientation to relationships that were determined by childhood relationships with parents and subsequent experiences with later attachment figures. Contemporary theory and research on adult attachment assumes that adult attachment patterns are partial reflections of early attachment experiences. However it is unclear how much continuity exists in attachment from early childhood to adulthood and the mechanisms promoting continuity and change are only vaguely specified. Currently there have been conflicting findings and these issues remain unresolved (Waters et al., 2000; Lewis et al., 2000).

Evidence for the existence of the attachment system in adulthood was reviewed by Hazen and Zeifman (1999) and they concluded that attachment is an integral part of pair bond relationships. They described four defining features: proximity maintenance, separation distress, safe haven and secure base. These features were almost exclusively found in two kinds of adult relationships, with parents and romantic partners. The functions of these features were also clearly identifiable in infant – caregiver interactions and could be linked to the function of protection. However the function of attachment in relation to adult survival is less clearly defined.
Oatley (2000) emphasised the emotion of anxiety in the attachment relationship in relation to its protective function and suggested that despite increasing capacities for self-reliance and self-protection adults still benefit from having someone who is deeply committed to and invested in their welfare and is readily available to them in times of need. Hazen and Zeifman (1999) reported that attachment in pair bonds facilitates reproductive advantages. Ideally they are responsible for the survival of their offspring and enable them to become well equipped to attract and maintain mates of their own.

1.6.2 Transition from Child Attachment to Adult Attachment
A number of studies have suggested that the attachment system in adults is a development of that in children (Hazen and Shaver 1994; Hazen and Zeifman 1999) Certain relationships maintained by adults appear to possess the same properties of childhood attachment. Attachment bonds have four defining features according to Bowlby: Proximity maintenance, separation distress, safe haven and secure base. These are readily observable in the overt behaviour of an infant in relation to a primary caregiver. Pair bonds of adults also display these properties of childhood attachment.

In attachment theory this dynamic balance between attachment and exploration is an integral part of behaviour during all phases of development. However changes as a function of maturation across the life span are expected. One change that would be expected is the time and distance from the attachment figure that can be comfortably tolerated. A 12-month-old child is likely to exhibit greater distress and more disrupted exploration as a result of brief separations from a caregiver compared to the average 36 month old. By late childhood and early adolescence longer separations are usually tolerated without significant distress. Reactions to separations seem to vary according to relationship length and stage (Weiss, 1988). In adult pair-bond attachment relationships as well as infant caregiver relationships, the presence or absence of attachment components (proximity maintenance, separation distress, safe haven and secure base) may depend on the stage of relationship development (Hazen and Shaver, 1994).

By middle childhood individuals are capable of developing more intimate relationships with their peers (Buhrmester and Furman, 1992; Hartup, 1983). The relinquishing of parents as attachment figures seems to proceed in fits and starts beginning in early adolescence. There is evidence that by late adolescence peers are preferred over parents
as sources of emotional support (Steinberg and Silverberg, 1986). The confiding and support seeking aspects of peer relationships appear to be functionally similar to the parent directed safe haven behaviour of infancy and early childhood. Hazen and Zeifman (1994) observed several age related changes in the target of attachment behaviours, such that some get redirected toward peers in childhood and adolescence. They developed an interview to measure the four components of attachment previously identified and administered it to 100 children and adolescents from 6–17 years of age. The consistency of responses to items within each component of attachment was generally high but consistency across components was not. Therefore the transfer of attachment from parents to peers could be better understood in the analysis of attachment at the component level.

Perhaps the predominant change in attachment relationships concerns their mutuality. The asymmetrical attachment of early life, in which infants seek and derive security from caregivers but do not provide security in return, is hypothesised to be replaced by more symmetrical or reciprocal attachments. Bowlby suggests that the pair–bond relationship, in which sexual partners mutually derive and provide security, is the prototype of attachment in adulthood. Therefore across the life span of normative development the sexual mating, caregiving or parenting attachment systems become integrated (Hazen and Shaver, 1994; Shaver, Hazen and Bradshaw, 1988).

1.6.3 Two Traditions of Adult Attachment

Over the past 10–15 years attachment theory has generated two largely independent lines of research based on different conceptualisations and assessments of adult attachment. Both research traditions from which virtually all research on adult attachment stems have their foundations in Bowlby’s attachment theory and in Ainsworth’s Strange Situation, however from different angles. One research tradition has focused on the work of Main and colleagues, the other has been led by Hazen and Shaver (1987) and focused on how adults with different attachment histories might think, feel and behave in close relationships.

The first line of research was begun by developmental psychologists (Ainsworth et al., 1978) who used observational techniques to study child–parent relationships. This approach was extended to study parents’ state of mind with regards to attachment. The
principal measure that was developed to assess an adult’s state of mind was the Adult Attachment Interview (AAI: George, Kaplan and Main, 1985). This measure was originally designed to predict a child’s quality of attachment to his or her parent based on the parent’s state of mind. The parents, state of mind, or current representations of their own childhood experiences, was thought to affect parenting behaviours, particularly maternal sensitivity, which in turn influenced the parent-child attachment relationship. Kobak (1999) argued that the focus on the mental processes might provide an account of how attachment strategies in infancy may become internalised and stable aspects of the individual’s personality.

The second line of research on adult attachment was initiated by Hazen and Shaver (1987) who are social psychologists interested in normal subject populations and have studied relatively large samples focusing on adult social relationships. They applied Bowlby’s and Ainsworth’s ideas to the study of romantic relationships having noticed parallels between Ainsworth’s three infant quality of attachment types; secure, avoidant and anxious ambivalent and patterns of behaviours and feelings in adolescent and adult romantic relationships. Hazen and Shaver suggested that secure romantic partners, like secure infants, feel comfortable depending on romantic partners. Avoidant romantic partners, like avoidant infants, seem to be excessively self-reliant and uncomfortable with closeness. Anxious/ambivalent romantic partners, like anxious/ambivalent infants, appear clingy and emotionally labile.

Hazen and Shaver (1987, 1990) developed self-report measures, based on the patterns of childhood attachment proposed by Ainsworth, suitable for easy use in research experiments and surveys which have been improved and developed in various ways by other researchers (Collins and Read, 1990; Simpson, 1990; Bartholomew and Horowitz, 1991 and Brennan, Clark and Shaver, 1998; 2000). In line with the infant attachment literature a forth attachment category has been added, labelled disorganised attachment (Main and Solomon, 1990).

Given that the constructs measured by the AAI and self-report measures are distinct and the assessment procedures are different it would not seem appropriate to expect that the two kinds of measures would be highly related. However both kinds of measures yield typological classifications that are thought to be psychodynamically similar to
those identified by Ainsworth et al. (1978). The few direct comparisons between the AAI and self-report measures, either qualitative or quantitative, have not yielded statistically significant associations at the level of typological categories (Crowell, Treboux and Waters, 1999; Borman and Cole, 1993). However the association almost reached significance (p < .07) in a study by Crowell et al. (1999). Bartholomew and Shaver (1998) reviewed many of the studies that had previously reported non-significant comparisons between the AAI and self report measures and found that most of them relied on insufficient sample sizes, therefore lacking statistical power to reject the null hypothesis, involved inappropriate comparisons and did not include analyses at the level of underlying dimensions which might have yielded more precise information than categorical analyses. Fraley and Waller (1998) indicated that categorical models are inappropriate for studying variation in romantic attachment.

Despite the general failure to find associations between AAI categories and self-reported romantic attachment categories a few published studies have shown either that self-report romantic attachment measures predict attitudes and behaviours related to parenting (Rholes et al., 1997 and Goodman et al., 1997) or that the AAI predicts behaviours and feelings in romantic or marital relationships (Crowell and Waters, 1997).

Shaver, Belsky and Brennan (2000) explored these issues in detail and examined associations between AAI categories and coding scales and adult romantic style as measured by Collins and Read’s (1990) Adult Attachment Scale (AAS). Overlap occurred mainly in the areas of comfort depending on attachment figures and comfort serving as an attachment figure for others and the two instruments were in fact related at the scale level with moderate sized associations. Data was collected within a two month interval between the administration of the two measures which may have reduced the association between the measures. The fact that the AAI and the AAS were related does not mean that they measure the same thing or that they can be substituted for each other, they share certain underlying constructs.

A study by Bartholomew and Shaver (1998) attempted to bridge the gap between the two adult attachment sub cultures that reflected different conceptualisations and domains, one retrospective, the other more recent experiences. The convergence of
different approaches in the assessment of adult attachment was tested for each combination of measures; a brief self-report measure reflecting four attachment types, an interview focusing on close friendships and past and present romantic relationships and an interview focusing on representations of childhood experiences in the family. The findings indicated a moderate degree of convergence across the three approaches. The correlational results were weakest when both the method (interview vs. self-report) and the content domain (family history vs. current close relationships) differed.

Bartholomew and Horowitz (1991) attempted to build on both traditions and proposed an expanded four category model that included the Hazen and Shaver styles and added a second kind of avoidance based on a similar category in the AAI. The four prototypical attachment patterns were defined in terms of two dimensions, positivity of individual’s model of self and positivity of individual’s model of other. The self-model indicated the degree to which a person has internalised a sense of his/her self-worth and is therefore linked to the level of anxiety regarding others’ approval. The other model indicates the degree to which others are generally expected to be emotionally available and supportive. Yirmiya (1998) highlight criticisms of the model of self and other; they suggest that infants do not have the capacity to reflect on themselves and the minds of others in complex ways during the first years of life. Others have favoured alternative interpretations of the two dimensions such as an emotional and behavioural regulation interpretation (Fraley and Shaver, 1998; Shaver et al., 1988).

Many researchers have created their own measures to attempt to tap the two linear dimensions of anxiety and avoidance. Fraley, Waller and Brennan (2000) have revised their 36 item self-report questionnaire, Experiences in Close Relationships – Revised, that utilises the two dimensional structure of the Bartholomew and Horowitz (1991) model. Fraley and Waller (1998) have shown that there is no evidence for a true attachment typology and precision is lost when typological measures are used instead of the continuous scales.

1.6.4 Features of Infant Caregiver Relationships and Adult Romantic Relationships
Attachment theory has not been well integrated with caregiving probably because infant survival and childrearing are two distinct life tasks that occur at different points across the life span and can have independent effects on reproductive fitness (Simpson, 1999).
Bell and Richard (2000) acknowledge that attachment theory focuses on two major goal states, the need for proximity and the need for felt security. These have different implications for how the nature and functions of attachment styles are represented in infants versus adults. Research has not clarified how the functions and objectives of caregiving directed at vulnerable infants are similar or different from more reciprocal forms of caregiving that occur between equal adults in romantic relationships.

Kunce and Shaver (1994) provide support for the link between attachment and caregiving. They developed self-report items to assess the quality of caregiving in intimate adult dyads based on the infant caregiver literature. Four scales of caregiving were produced from a factor analysis: Proximity, sensitivity, co-operation and compulsive caregiving. Secure subjects reported high proximity and sensitive caregiving. Dismissing subjects reported low proximity and sensitivity. Consistent with their need for approval from others, preoccupied and fearful subjects reported high compulsive caregiving but low sensitivity. Feeney (1996) using Kunce and Shaver’s (1994) caregiving measure showed that secure attachment was associated with beneficial caregiving to the spouse. In addition marital satisfaction was higher for securely attached spouses and for those whose partners reported more responsive caregiving. However the results linking partners’ caregiving style and their own marital satisfaction was restricted to shorter-term marriages.

Hazen and Shaver (1987) and Shaver et al. (1988) have argued that adult romantic relationships reflect the operation and intergration of the caregiving system but do not involve the caregiving system per se. Many aspects of adult romantic relationships resemble aspects of mother-infant relationships, what is not clear is whether the observed phenomenon more closely parallels the attachment components of mother–infant relationships or components of the caregiving system.

1.6.5 Relationship Between Parenting Styles and Adult Romantic Relationships
A few published studies have shown that self report romantic attachment measures predict attitudes and behaviours related to parenting. A study by Rholes et al. (1995) demonstrated that adult romantic styles corresponded with different expectations about children and parenting even before individuals have children as previously described in
This introduction. This supports the hypothesis that certain aspects of ‘state of mind’ or internal working models are related to certain aspects of romantic attachment styles.

Additional studies have examined the relation between attachment concerns of mothers and other close relationships, based on the assumption that these relationships may all be of similar quality because of an individual’s predisposition to an internal core of characteristics that are manifest in different relationships. A previous study by Feeney and Noller (1990) found that the coldness and interpersonal distance characteristic of avoidant adults who report a fear of closeness and dependency in their adult relationships resemble the distant and rejecting parenting style characteristic of mothers of avoidant infants.

Mayseless, Sharabany and Sagi (1997) examined associations between mothers’ internal working models, operationalised via a core of attachment concerns and three of their close relationships; with their husband, best female friend and quality of their infants’ attachment. Mothers’ attachment concerns were thought to be manifest in their parenting which consequently contributes to their infants’ attachment patterns.

To examine the convergence of these domains observational and self-report methods were employed. T-tests were computed comparing mothers of secure and ambivalently attached infants on levels of intimacy with their husbands and best friends. The results did not approach significance, which suggests a level of independence between mothers’ level of intimacy with their husband and best friend and the quality of their infants’ attachment to them. Maternal attachment concerns over abandonment, however, were related to parental and spousal relationships thus implying that different concerns may be implicated in different relationships.

However caution is required in the interpretation of these results as the sample of mother-infant attachments was not representative, there was an absence of avoidant infants due to the rare occurrence of avoidant infants in Israel from which the sample population was taken. Therefore the results are not generalisable and need to be replicated in populations that include the whole spectrum of attachment patterns.
Shaver, Belsky and Brennan (2000) provide support for the theoretical notion that both ‘state of mind’ with regards to serving as a parental attachment figure, as measured by the AAI and an individual’s orientation towards romantic or pair bond relationships, grow out of partially overlapping histories of relationships with attachment figures.

1.6.6 Summary
Although romantic and child rearing relationships are hypothesised to be particularly susceptible to the influences of early attachments the links between early attachments and later romantic and child rearing relationships are unclear (Ziefman and Hazen, 1997). Continuing to examine the connections and lack of connections between relationships with romantic partners and children should help to illuminate the contributions of attachment experiences to parent–child and adult relationships. Consequently this may have clinical implications for understanding how and when change is possible.

1.7 Rationale and Clinical Implications of the Research
The current research was carried out in the context of an NHS Trust within the framework of Child and Adolescent Mental Health services. Constraints as a result of context and ethical considerations impacted on the method of data collection and resulted in unavoidable differences in the control and the clinical group. The rationale for the research is based on relevant literature reviews and the researcher’s experiences in clinical practice. The main aims were to explore the relationship between mothers’ adult attachment style, parenting attitudes and childhood behaviour difficulties in order to identify possible risk factors for internalising and externalising behaviours in childhood.

Attachment qualities have been shown to be important features of social relationships across the entire lifespan and play an important role in the risk and protective mechanisms for a wide range of psychopathology (Rutter, 1995; Belsky and Nezworski, 1988). Insecure attachment of varying types has been associated with a range of psychopathology including anxiety (Cassidy and Berlin, 1994) and conduct disorder (Lyons–Ruth, 1996).
According to attachment theory, individual differences in the organisation of the attachment system emerge from caregiving interactions with attachment figures (Bowlby, 1973; Ainsworth et al., 1978) and subsequently have numerous influences on relationship dynamics, including partner selection and parenting (Cunningham et al., 1997). The two traditions of adult attachment research have resulted in a diversity of measures to assess different domains of attachment relationships (Bartholomew and Shaver, 1998; Cassidy and Shaver, 1999). Studying the areas of overlap and non-overlap between current orientation toward being a parent and towards romantic relationships will help to clarify the content and origins of these attachment related orientations and the processes of transmission.

Understanding the role of attachment difficulties in childhood psychopathology has implications for therapeutic interventions. However, it is still unclear how attachment concepts can shape treatment programmes and influence clinical practice. Studies of representative normative and clinical populations and samples in which there are specific forms of maladaptation are needed to provide further information about the role of attachment in the risk for psychopathology in childhood and the transmission of ineffective parenting.

1.8 Research Hypotheses

Hypothesis one:
Parent-child attachment research provides strong evidence for the link between adult attachment styles and child behaviour. Parallels and differences have been identified between parent-child attachment and adult romantic attachment. Shaver et al. view romantic attachment as a continuation of the attachment process. Results from their empirical studies generally support the notion that characteristics of parent child relationships identified as probable causes of differences in infant attachment styles are also among the determinants of adult romantic attachment styles (Shaver, Hazen and Bradshaw, 1988).

Scores on the Child Behaviour Checklist (CBC) will correlate positively with those from the Experiences in Close Relationships Questionnaire-Revised (ECR – R).
Hypothesis two:
Internalising symptomology is more likely in children where affectional gratification is contingent upon enmeshed relational patterns with primary caregivers. The absence of autonomy promotion and parental restrictiveness may predict internalising difficulties (Allen, Hauser and Borman-Spurell, 1996). The child is subtly dissuaded from expressing ambivalence, anger or other forms of negativity.

Internalising scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of nurturance, sensitivity, non-restrictive attitude, consistency and control on the PDI and correlate positively with scores on the anxiety dimension of the Experiences in Close Relationships Questionnaire-Revised (ECR – R).

Hypothesis three:
Externalising symptomology is more likely in children where parental punitiveness and under-involvement are evident. Parents who have few positive interactions with their children and punish them frequently and inconsistently are more likely to have children who demonstrate externalising behaviours difficulties (Patterson et al. 1992). High rates of aggression have been related to avoidant attachment styles and may serve not only as an expression of distress but also as a function of seeking a response for help and intervention from the parent or caregiver (Allen, Hauser and Borman-Spurell, 1996).

Externalising scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of non-restrictive attitude, parental involvement, organisation and consistency on the Parenting Dimensions Inventory (PDI) and correlate positively with scores on the avoidance dimension of the Experiences in Close Relationships Questionnaire-Revised (ECR – R).

Hypothesis four:
A few published studies have shown that self-report romantic attachment measures predict attitudes and behaviours related to parenting (Rholes et al., 1997) and support the notion of an individual’s predisposition to an internal core of characteristics that manifest themselves differently in different relationships. Adult romantic relationships
are often defined by emotional responsiveness when needs for closeness and support are either met or not. Parents’ patterns of attachments in romantic relationships may resemble the patterns of attachments between parent and child. Mothers who experience high levels of anxiety or avoidance in their romantic relationships may also find it difficult to meet their children’s needs for closeness and support.

Total scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of the Parenting Dimensions Inventory (PDI) and correlate positively with scores on the avoidance and anxiety dimensions of the Experiences in Close Relationships Questionnaire-Revised (ECR-R).

The above hypotheses will be applied to the clinical and control group to investigate if the same predictions can be verified in both groups despite their different properties.
Chapter 2
Method

2.1 Design
A stepwise multiple regression analysis will examine the possibility that it is possible to predict the values of internalising and externalising variables estimated from scores on the parenting questionnaire and adult attachment questionnaire. Two groups were established, a clinical group and a control group. The clinical group was manipulated to represent approximately 50% of mothers who experience their child as having predominately externalising behaviour problems and 50% of mothers who experience their child as having predominately internalising behaviour problems.

2.2 Ethical Approval
Ethical approval for the study was sought from the appropriate regional ethics committee and the researcher presented the protocol and parent information sheets (See appendices A and B) to members of the panel at a committee meeting. The study was reviewed and ethical approval was agreed. Suggestions from the committee regarding enhancement of participant confidentiality and anonymity in the parent information sheets and contacting an additional local regional ethics committee were adopted.

Ethical approval was then sought from an additional research ethics committee in relation to recruiting control group participants from this region. Approval was received without reservation from the chairperson. In addition approval was sought from the appropriate LEA and ACPC and again the research project was approved. With this level of approval the head teacher at a local school was approached to request access to mothers of children attending his school. The head teacher, after consulting with the board of governors, agreed for parents in his school to be approached to take part in the study.
2.3 Participants
The total sample comprised 50 participants aged between aged 27-46 years across the two groups. The first group was a clinical sample of mothers (n=20), experiencing significant difficulties in the behaviour management of their child. They remained on the waiting list with their child for a treatment programme from child and adolescent mental health services. The second group of mothers was a non-problem sample (n=30) from the general population who were not experiencing significant behaviour management difficulties with their child.

2.4 Procedure
2.4.1 Clinical Sample
Recruitment of clinical group participants
Mothers in the clinical group were identified via their child's patient records held at a specialist child and adolescent mental health day resource centre to which they had been referred. Specialist services are provided by a multidisciplinary team of mental health professionals including clinical psychologists, psychiatrists and specialist nurses, to meet the needs of children and their families who present with complex and severe difficulties.

Child Behaviour Checklists are routinely completed by mothers and fathers of referred children as part of the standard assessment procedure at the day resource centre. Completed CBCs that are returned at the point of initial assessment are scored and held as part of patient records. The researcher screened all of the CBCs completed by mothers of children on the current waiting list at the day resource centre amounting to approximately 60. Mothers were selected if they had reported their child as having predominately internalising or externalising behaviour problems, that is a ten point difference or more in the T scores of these two sub categories on the CBC. New referrals were also included in the screening process during the months of data collection and the recruitment of participants was extended to the local child psychology department within the same service to access a greater number of participants.

Selected mothers were contacted by telephone by the researcher, if a number was available, to ask if they were happy to receive some information about the research project to read through. If mothers said no, no further action was taken, if mothers said yes relevant information (See appendix A) about the study was posted to them and mothers were told
that they would be contacted again in 7–14 days to ask if they would like to participate in
the research. Follow up calls were made to selected mothers within the appropriate time
scale. If they did not wish to participate no further action was taken. If mothers were happy
to participate the researcher arranged a time to do a home visit for mothers to complete 2
questionnaires, the PDI and the ECR–R.

At the home visit mothers were strongly encouraged to ask any questions or raise any
concerns they had about the research. If they were happy to participate they were asked to
complete a consent form on the understanding that they were free to withdraw or change
their mind at any point during the process.

Recruitment criteria for mothers in the clinical group:
Mothers were approached if they were the main carers for their child who was aged
between 6 and 11 years at the point of assessment and had attended their assessment
appointment and completed the Child Behaviour Checklist Questionnaire about their
child’s behaviour. Mothers were only approached if their Child Behaviour Checklist had
indicated a 10 point difference or more between the internalising and externalising T
scores. All mothers who were approached had been assessed by a member of the day
resource team with their child to establish the appropriate intervention to be offered and
remained on the waiting list for help to manage their child’s behaviour.

2.4.2 Control Sample
Recruitment of control group participants
Mothers in the control group received a letter and relevant information (See appendix B)
informing them about the research project from their child who would have been given the
information to take home from school by their class teacher approximately 7 days before
their child’s class assembly. Mothers were asked to come forward to participate if their
child was aged between 6 and 11 years, was attending mainstream school full time and had
not received any help from psychology or psychiatry services in relation to managing their
child’s behaviour in the past 5 years.

The researcher attended relevant class assemblies when letters had been sent out to mothers
approximately one week in advance. At the close of the class assembly the head master
formally introduced the researcher to parents who had come to watch their child participate.
The researcher then invited any mothers who were interested to take part in the research project or perhaps had further questions about the research to come forward into a quiet private room.

Mothers who came forward to participate were asked to complete the three questionnaires at school in a quiet room or, if absolutely necessary, at home to be returned by post in a stamped addressed envelope to the researcher or via the school reception desk. Mothers who remained at school to complete the questionnaires were strongly encouraged to voice any queries regarding anything about which they were unsure or with which they needed help.

Mothers were firstly asked to complete a consent form if they were happy with participating on the understanding that they were entirely within their rights to change their mind at any point during the process. Participants were then asked to complete brief questions about demographic information. The three questionnaires were then introduced in order; Child Behaviour Checklist (CBC), Parenting Dimensions Inventory (PDI) and the Experiences in Close Relationships-Revised questionnaire (ECR-R). Participants completed the questionnaires with the researcher present at all times to answer any questions or queries.

Participants in the control group were recruited via a local primary school. The school has 394 pupils to date, 42 of these pupils have special educational needs (SEN) 11 of which have statements. Parents are regularly invited to attend their child’s class assembly and there are generally between 10–20 parents who attend on each occasion. Letters and information sheets were sent out (See appendix B) to mothers of children who were due to perform in a class assembly informing them about the study, what participating would involve and that the researcher would be present after their child’s assembly should they wish to participate.

**Recruitment criteria for the control group participants:**

Mothers were asked to come forward if they were the main carer for their child, if their child was aged between 6 and 11 years, attended school full time and if they had not...
received any help in the last five years from psychology or psychiatric services in relation to managing their child’s behaviour.

2.4.3 Differences in data collection
It should be acknowledged that although mothers in the control group and clinical group completed the same 3 questionnaires this occurred in different settings within a different time structure. The clinical group mothers completed the Child Behaviour Checklist prior to their assessment appointment at the day resource centre after which there was a delay of up to 2 months before being seen at home by the researcher to complete 2 further questionnaires. Therefore clinical group participants completed the Child Behaviour Checklist on a separate occasion from the remaining 2 questionnaires for the purpose of providing information for their assessment appointment. The control group participants completed the 3 questionnaires in the same order as the clinical group participants, without the time lag between the first and remaining questionnaires. Control group participants were often in small groups in a quiet room in their child’s school in contrast to the individual home visits that the researcher carried out to collect data from clinical group participants. This information needs to be considered when interpreting the results.

2.5 Measures

2.5.1 Demographic information (See appendix C)
Background information was collected from each participant relating to information about the mother, father if applicable, target child and the number of siblings living in the family home.

2.5.2 Experiences in close relationships Questionnaire-Revised (ECR-R; See appendix E)
The construct of attachment has been extremely difficult to assess and has attracted great interest to the study of adult relationships (Crowell et al., 1999). It appears that attachment theory is increasingly being used as a framework for investigating the dynamics of adult and family relationships (Cook, 2000).

The Experiences of Close Relationships Questionnaire – Revised, Fraley, Waller and Brennan (2000), is a 36 item self-report measure that assesses attachment style in close relationships. A seven-point response scale was used for each item, ranging from total agreement to total disagreement. The measure yields two scale scores: one for Anxiety and
one for Avoidance along with an attachment category located in a two dimensional space defined by Anxiety and Avoidance. The categories are based on the Bartholomew and Horowitz (1991) system to include secure, preoccupied, dismissing and fearful. However in this study the continuous rating scales will be used in preference to the four category model.

This recently updated attachment measure was derived from an item response theory analysis of most of the existing self-report measures of adult romantic attachment (Brennan et al., 1998). The chosen items were the ones that had the highest absolute valuation correlation with either Anxiety (alpha = 0.91) or Avoidance (0.94). The two scales were reported to be almost uncorrelated. The two 18 item scales have demonstrated high internal consistency and may be more precise than previous scales (Fraley and Waller, 1998). The two dimensions remained analogous to the ones first reported by Ainsworth et al. (1978) and it can be said that they are the foundations of all attachment research. Despite some criticisms, Crowell et al. (1999) reported that self-report measures are appropriate for investigating individual differences in adult attachment. They believed that adults are able to report valuable information about their emotional experiences and behaviours.

The Experiences in Close Relationships Questionnaire-Revised was chosen as a measure of adult romantic attachment from a variety others because it was reported to be psychometrically superior to other measures and is regarded as a valid measure of adult romantic attachment (Brennan et al. 1998). This measure provides an appropriate way of assessing individual differences in attachment strategies and the dimensions of avoidance and anxiety provide a mechanism for understanding variations in peoples’ thoughts, behaviours and feelings in close relationships (Fraley and Waller, 1998).

2.5.3 Child Behaviour Checklist
The parent report version of the Child Behaviour Checklist, Achenbach (1991) was used to conceptualise children’s behaviour difficulties into internalising and externalising categories, with an overall problem score. The questionnaire consists of 20 social competence and 118 behaviour problem items. Each checklist yields an overall behaviour problems score and broadband internalising and externalising behaviour problem subscale scores. Scores on eight narrow band subscales are also provided, however they were not used in this study. T scores for total problem score and internalising and externalising
behaviour difficulties were used as measures of child adjustment. Age appropriate questionnaires were used for children aged between 4-18 years. This instrument is well standardised and was scored up on a computer programme with age and sex based normative data.

Validation work on the Child Behaviour Checklist has been carried out to demonstrate its quality and excellent psychometric properties as a measure of children’s psychosocial behavioural adjustment (Edelbrock and Achenbach, 1980). Achenbach (1991) identified some variability in the degree to which parents, teachers and young people agreed about the severity of internalising and externalising behavioural problems in the standardisation sample of the Child Behaviour Checklist. Mothers’ and fathers’ scores showed high correlation ($r = 0.77$); scores of parents and teachers showed a moderate correlation ($r = 0.44$), scores of parents and young people also indicated a moderate correlation ($r = 0.41$). The lowest correlation was between teachers and young people ($r = 0.31$). Other studies have indicated strong agreement between parents and clinicians (Achenbach and Edelbrock, 1983).

Empirically based scores on the Child Behaviour Checklist have been shown to accurately reflect DSM diagnostic categories (Kasius et al., 1997) which may reflect one of the many reasons why the CBC is currently used so widely in clinical practice. Recent research has provided further details of development and applications of the empirically based and DSM orientated scales with greater national normative data in the USA (Achenbach and Rescorla, 2001) and cross-cultural research (Crijen, Achenbach and Verhulst, 1997). However less is known about the characteristics of the CBC in the UK and currently no UK norms are available.

The Child Behaviour Checklist was chosen as an appropriate measure of childhood behaviour difficulties due to its excellent psychometric properties and it’s ability to accurately distinguish between reports of externalising and internalising behaviour difficulties (Edelbrock and Achenbach, 1980). This measure provided information about a child’s behaviour from the mothers’ perspective and was applicable to children in middle childhood.
2.5.4 Parenting Dimensions Inventory (PDI; See appendix D)

The Parenting Dimensions Inventory, Slater et al. (1987) consists of 54 items that assess nine parenting dimensions; nurturance, sensitivity, non-restrictive attitude, type of control, amount of control, maturity demands, parental involvement, consistency and organisation. This multidimensional self-report inventory of parenting attitudes and behaviours was derived from previous studies of parent-child relations, (Maccoby and Martin, 1983; Rollins and Thomas, 1979). Previous studies have shown that these dimensions have been associated with individual differences in childhood social adjustment.

The PDI was developed and revised to its present form on a sample of 112 parents of 6–11 year old children in the USA. It was then cross-validated on an independent sample of 140 parents. The validity of the PDI was examined in comparison with scores of children’s behaviour problems and social competence as measured by the Child Behaviour Checklist. The PDI was found to have reliable unidimensional scales that were predictive of children’s behaviour problems and social competence. Cronbach’s alpha for the nine subscales is reported to range from .54 to .79 (Slater and Power, 1987). Less is known about the validity and reliability of the PDI in UK populations.

In general parents who have warm, supportive relationships with their children, who set rules and who enforce them consistently have been found to be most likely to have children who are competent, self-reliant and compliant with adult authority (Baumrind, 1967; Manire and Power, 1983; Darling and Steinberg, 1993).

Approximately half of the PDI items were drawn from existing standardised instruments which included the Parenting Attitude Research Instrument (Schaefer and Bell, 1958), the Block Childrearing Practices Report (Block, 1965), the Parent Attitude Inquiry (Baumrind, 1971), the Childrearing Practices Questionnaire (Dielman and Barton, 1981) and the Questionnaire on Parental Attitudes (Easterbrooks and Goldberg, 1984).

The PDI has seven major sections. The first section includes preliminary information about the age and sex of the index child and siblings. Section two, which represents the dimensions of nurturance, sensitivity, non-restrictive attitude and consistency, consist of statements from which parents choose the appropriate response on a six point Likert scale. Section three represents amount of control and contains pairs of statements from which
parents choose the statement that best reflects their attitude. Section four attempts to measure parental involvement and contains items for which parents indicate the frequency that they or their child had engaged in specific activities during the past month. Section five assesses level of organisation on a six point Likert scale. Section six assesses maturity demands on a four point scale and lastly section seven presents brief descriptions of hypothetical misbehaviour by the child. Parents are asked to rate how likely they are to engage in various discipline strategies that reflects the type of control they may use, internalising or externalising control strategies, a combination of the two or neither. This self-report questionnaire takes approximately 15–20 minutes to administer.

The Parenting Dimensions Inventory was chosen as an appropriate measure because of its development from well validated, standardised measures of parenting and again has good psychometric properties. This measure can be appropriately used to investigate individual differences in parenting attitudes and behaviours and provides a multidimensional model of parenting. The instrument was designed to assess parenting attitudes and behaviours of parents with children in middle childhood. In addition the Parenting Dimensions Inventory has previously been examined in comparison with the Child Behaviour Checklist, also used in this study, and accounted for a significant amount of the variation in children's adjustment (Slater and Power, 1987).

2.6 Data Analysis

Prior to the study referral rates to the Child and Adolescent Mental Health service indicated that a reasonable number of participants to expect in the available time scale would be approximately 30 in the clinical group and 30 in the control group. However the involvement of the participants in the clinical sample proved to be more difficult than anticipated to recruit. Data collection from this group had to be terminated when a total of 20 participants had completed the questionnaires due to time constraints. The process of making contact with and recruiting mothers in the clinical group was slower than anticipated. In addition the number of completed questionnaires, that came available for follow up during the months of recruitment and demonstrated a 10 point difference between internalising and externalising behaviour difficulties were also less than anticipated based on previous referrals.
Scoring of the PDI and ECR-R were completed by hand and duplication of the scoring of approximately 20% of these questionnaires was completed for accuracy. Scoring of the CBC was completed by a standardised computer package and data input was duplicated for every participant. The final data set was examined for data input errors. The data produced by the described measures was entered into the statistical package for Windows version 10. No data was missing from the completed questionnaires.

Following this initial process each of the variables was explored in order to establish if the data set met the assumptions for parametrical statistical analysis (Howell, 1992). When it was not appropriate to use parametric statistics for demographic data nonparametric statistics were used.

The following tests were used in the analysis of the data set:

- Mann-Whitney to analyse nonparametric demographic data from the two samples.
- Chi-square was used to analyse frequencies of nominal demographic data.
- The independent t-test to compare the performance of the participants in the clinical and control groups.
- Pearson’s R Correlation (one-tailed) to measure the degree of relationships between variables on the 3 questionnaires.
- Stepwise multiple regression analysis to predict the scores on the CBC (dependent variable) from scores on the PDI and ECR-R (independent variables). Stepwise analysis looks at which independent variables are the best predictors of the dependent variable. All combinations are included until the best combination is found. Variables that are not significant predictors are not included in the model.

The significance value was set at $p < 0.05$ throughout the analysis.
Chapter 3
Results

3.1 Preliminary Analysis

Data were analysed using S.P.S.S. 10.0 statistical package. The analysis was completed in three main stages. In stage one demographic characteristics of the participants were explored. Stage two involved preliminary analyses of the descriptive and frequency statistics obtained from the three questionnaires (Child Behaviour Checklist; CBC: Parenting Dimensions Inventory; PDI: Experiences in Close Relationships-Revised; ECR-R) with a comparison of the two groups. Stage three included testing of the four main hypotheses.

3.2 Stage one: Demographic characteristics

Completed questionnaires and demographic information sheets were completed by a total of 50 mothers, 20 in the clinical group and 30 in the control group. The mean age of mothers in the clinical group was 36.7 years, (s.d: 4.62, range: 27–44). The mean age of mothers in the control group was 34.9 years, (s.d: 4.74, range: 27–46). There was no significant difference between the groups.

In the clinical group 50% of the mothers were married, 30% were single 10% were co-habiting with a partner and 10% were divorced at the time the questionnaires were completed compared to 93% of married mothers and 6.7% of single mothers in the control group. No mothers in the control group reported themselves to be divorced or co-habiting.

The mean age of the children in the clinical group was 9.1 years, (s.d: 1.80, range 6–11 years). The mean age of children in the control group was 8.1 years, (s.d: 1.33, range 6–10 years).

In the clinical group 75% of the children were male and 25% were female compared to 60% of males and 40% females in the control group.
Further demographic information is provided in Table 1.

Table 1: Participants’ demographic information, total n=50

<table>
<thead>
<tr>
<th>Clinical Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data</td>
<td>n</td>
</tr>
<tr>
<td>Birth order of child</td>
<td>Birth order of child</td>
</tr>
<tr>
<td>1st child</td>
<td>7</td>
</tr>
<tr>
<td>2nd child</td>
<td>6</td>
</tr>
<tr>
<td>3rd child</td>
<td>4</td>
</tr>
<tr>
<td>4th child</td>
<td>2</td>
</tr>
<tr>
<td>5th child</td>
<td>1</td>
</tr>
<tr>
<td>Number of siblings</td>
<td>Number of siblings</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Mother's occupation</td>
<td>Mother's occupation</td>
</tr>
<tr>
<td>Housewife/unemployed</td>
<td>11</td>
</tr>
<tr>
<td>Unskilled/manual work</td>
<td>6</td>
</tr>
<tr>
<td>Skilled/managerial</td>
<td>3</td>
</tr>
<tr>
<td>Professional</td>
<td>0</td>
</tr>
<tr>
<td>Father's occupation</td>
<td>Father's occupation</td>
</tr>
<tr>
<td>Househusb/unemployed</td>
<td>0</td>
</tr>
<tr>
<td>Unskilled/manual</td>
<td>9</td>
</tr>
<tr>
<td>Skilled/managerial</td>
<td>1</td>
</tr>
<tr>
<td>Professional</td>
<td>2</td>
</tr>
<tr>
<td>Father absent</td>
<td>8</td>
</tr>
</tbody>
</table>

Further analysis of the demographic variables using Mann-Whitney and Chi square tests revealed that the two groups differed significantly on two main variables. Firstly mothers’ marital status ($\chi^2 = 13.048, \text{df} = 3, p = 0.005$) and number of siblings ($U = 175.000, p = 0.003$). A significantly greater number of mothers in the control group were married in comparison to the clinical group. Children in the clinical group had significantly more siblings than children in the control group.
The demographic variables highlighted as being significantly different across the clinical and control group were assessed in relation to performance on each of the measures used: Child Behaviour Checklist, Parenting Dimensions Inventory and Experiences in Close Relationships Questionnaire. The median values based on child gender, marital status and number of siblings are outlined in the tables below.

Table 2: Median values for child gender on each of the measures, CBC, ECR and PDI

<table>
<thead>
<tr>
<th>Measure</th>
<th>Male No.</th>
<th>Median</th>
<th>Female No.</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBC Total</td>
<td>33</td>
<td>60.0</td>
<td>17</td>
<td>54.0</td>
</tr>
<tr>
<td>CBC Intern</td>
<td>33</td>
<td>51.0</td>
<td>17</td>
<td>54.0</td>
</tr>
<tr>
<td>CBC Ext</td>
<td>33</td>
<td>55.0</td>
<td>17</td>
<td>55.0</td>
</tr>
<tr>
<td>ECR Anxiety</td>
<td>33</td>
<td>2.4</td>
<td>17</td>
<td>2.5</td>
</tr>
<tr>
<td>ECR Avoidance</td>
<td>33</td>
<td>2.3</td>
<td>17</td>
<td>2.8</td>
</tr>
<tr>
<td>PDI Sensitivity</td>
<td>33</td>
<td>4.8</td>
<td>17</td>
<td>4.8</td>
</tr>
<tr>
<td>PDI Nurturance</td>
<td>33</td>
<td>4.6</td>
<td>17</td>
<td>4.5</td>
</tr>
<tr>
<td>PDI Non-Rest Att</td>
<td>33</td>
<td>4.3</td>
<td>17</td>
<td>4.3</td>
</tr>
<tr>
<td>PDI Am of Control</td>
<td>33</td>
<td>4.0</td>
<td>17</td>
<td>4.0</td>
</tr>
<tr>
<td>PDI Organisation</td>
<td>33</td>
<td>4.3</td>
<td>17</td>
<td>4.3</td>
</tr>
<tr>
<td>PDI Parental Invol</td>
<td>33</td>
<td>4.2</td>
<td>17</td>
<td>4.2</td>
</tr>
<tr>
<td>PDI Maturity Demand</td>
<td>33</td>
<td>0.7</td>
<td>17</td>
<td>0.8</td>
</tr>
<tr>
<td>PDI Consistency</td>
<td>33</td>
<td>3.8</td>
<td>17</td>
<td>4.0</td>
</tr>
<tr>
<td>PDI Type Control</td>
<td>33</td>
<td>1.0</td>
<td>17</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Table 3: Median values for marital status on each of the measures, CBC, ECR and PDI

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Married</th>
<th>Single</th>
<th>Co-hab</th>
<th>Divorced</th>
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<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Median</td>
<td>No.</td>
<td>Median</td>
</tr>
<tr>
<td>CBC Total</td>
<td>38</td>
<td>51.5</td>
<td>8</td>
<td>68.5</td>
</tr>
<tr>
<td>CBC Intern</td>
<td>38</td>
<td>52.0</td>
<td>8</td>
<td>53.0</td>
</tr>
<tr>
<td>CBC Ext</td>
<td>38</td>
<td>50.5</td>
<td>8</td>
<td>69.5</td>
</tr>
<tr>
<td>ECR Anxiety</td>
<td>38</td>
<td>1.7</td>
<td>8</td>
<td>3.2</td>
</tr>
<tr>
<td>ECR Avoidance</td>
<td>38</td>
<td>2.1</td>
<td>8</td>
<td>3.7</td>
</tr>
<tr>
<td>PDI Sensitivity</td>
<td>38</td>
<td>5.1</td>
<td>8</td>
<td>4.0</td>
</tr>
<tr>
<td>PDI Nurturance</td>
<td>38</td>
<td>5.3</td>
<td>8</td>
<td>4.2</td>
</tr>
<tr>
<td>PDI Non-Rest Att</td>
<td>38</td>
<td>4.6</td>
<td>8</td>
<td>3.8</td>
</tr>
<tr>
<td>PDI Am of Control</td>
<td>38</td>
<td>4.0</td>
<td>8</td>
<td>3.5</td>
</tr>
<tr>
<td>PDI Organisation</td>
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<td>8</td>
<td>4.0</td>
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<tr>
<td>PDI Parental Invol</td>
<td>38</td>
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<td>3.1</td>
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<td>PDI Type Control</td>
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<td>1.0</td>
<td>8</td>
<td>1.0</td>
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</table>
Table 4: Median values for number of siblings on each of the measures, CBC, ECR and PDI

<table>
<thead>
<tr>
<th>No. of Siblings</th>
<th>Measure</th>
<th>No.</th>
<th>Median</th>
<th>No.</th>
<th>Median</th>
<th>No.</th>
<th>Median</th>
<th>No.</th>
<th>Median</th>
<th>No.</th>
<th>Median</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>CBC Total</td>
<td>2</td>
<td>52.5</td>
<td>33</td>
<td>51.0</td>
<td>9</td>
<td>64.0</td>
<td>2</td>
<td>72.0</td>
<td>1</td>
<td>73.0</td>
</tr>
<tr>
<td></td>
<td>CBC Intern</td>
<td>2</td>
<td>53.5</td>
<td>33</td>
<td>52.0</td>
<td>9</td>
<td>51.0</td>
<td>2</td>
<td>63.0</td>
<td>1</td>
<td>51.0</td>
</tr>
<tr>
<td></td>
<td>CBC Ext</td>
<td>2</td>
<td>54.0</td>
<td>33</td>
<td>50.0</td>
<td>9</td>
<td>63.0</td>
<td>2</td>
<td>73.0</td>
<td>1</td>
<td>80.0</td>
</tr>
<tr>
<td></td>
<td>ECR Anxiety</td>
<td>2</td>
<td>2.38</td>
<td>33</td>
<td>1.89</td>
<td>9</td>
<td>3.06</td>
<td>2</td>
<td>3.80</td>
<td>1</td>
<td>6.55</td>
</tr>
<tr>
<td></td>
<td>ECR Avoidance</td>
<td>2</td>
<td>1.99</td>
<td>33</td>
<td>2.33</td>
<td>9</td>
<td>2.50</td>
<td>2</td>
<td>4.33</td>
<td>1</td>
<td>7.0</td>
</tr>
<tr>
<td></td>
<td>PDI Sensitivity</td>
<td>2</td>
<td>5.55</td>
<td>33</td>
<td>5.10</td>
<td>9</td>
<td>4.50</td>
<td>2</td>
<td>4.30</td>
<td>1</td>
<td>4.75</td>
</tr>
<tr>
<td></td>
<td>PDI Nurturance</td>
<td>2</td>
<td>4.60</td>
<td>33</td>
<td>5.10</td>
<td>9</td>
<td>4.70</td>
<td>2</td>
<td>4.60</td>
<td>1</td>
<td>4.60</td>
</tr>
<tr>
<td></td>
<td>PDI Non-Rest Att</td>
<td>2</td>
<td>5.05</td>
<td>33</td>
<td>4.30</td>
<td>9</td>
<td>4.00</td>
<td>2</td>
<td>3.90</td>
<td>1</td>
<td>3.40</td>
</tr>
<tr>
<td></td>
<td>PDI Am of Control</td>
<td>2</td>
<td>4.00</td>
<td>33</td>
<td>4.00</td>
<td>9</td>
<td>4.00</td>
<td>2</td>
<td>3.00</td>
<td>1</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>PDI Organisation</td>
<td>2</td>
<td>4.65</td>
<td>33</td>
<td>4.30</td>
<td>9</td>
<td>3.90</td>
<td>2</td>
<td>3.60</td>
<td>1</td>
<td>4.80</td>
</tr>
<tr>
<td></td>
<td>PDI Parental Invol</td>
<td>2</td>
<td>3.50</td>
<td>33</td>
<td>4.00</td>
<td>9</td>
<td>4.40</td>
<td>2</td>
<td>4.20</td>
<td>1</td>
<td>4.60</td>
</tr>
<tr>
<td></td>
<td>PDI Maturity Dem</td>
<td>2</td>
<td>0.75</td>
<td>33</td>
<td>0.70</td>
<td>9</td>
<td>1.00</td>
<td>2</td>
<td>1.20</td>
<td>1</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>PDI Consistency</td>
<td>2</td>
<td>4.25</td>
<td>33</td>
<td>4.20</td>
<td>9</td>
<td>3.50</td>
<td>2</td>
<td>2.80</td>
<td>1</td>
<td>3.10</td>
</tr>
<tr>
<td></td>
<td>PDI Type Control</td>
<td>2</td>
<td>1.00</td>
<td>33</td>
<td>1.00</td>
<td>9</td>
<td>1.00</td>
<td>2</td>
<td>1.00</td>
<td>1</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Differences between the clinical and control group were assessed using the Mann-Whitney test with reference to the demographic variables of gender of the index child, marital status (mothers in a relationship versus mothers not in a relationship) and number of siblings (One or no siblings versus 2 or more siblings) to establish if they were possible confounding variables.

The results of the Mann-Whitney test in relation to gender of the index child showed no significant difference between the clinical and control group on the measures of the Child Behaviour Checklist, Parenting Dimensions and The Experiences in Close Relationships Questionnaire-Revised.
The results of the Mann-Whitney test in relation to marital status, whereby mothers were classified into two groups; currently in a relationship or currently not in a relationship, showed no significant difference in the clinical group between mothers who were in a current relationship and those who were not on the measures of the Child Behaviour Checklist, Parenting Dimensions Questionnaire and the Experiences in Close Relationships Questionnaire -Revised. It was not appropriate to assess the control group in this particular analysis due to little variance of scores.

The results of the Mann-Whitney test in relation to the number of siblings living in the family home, whereby the number of siblings were classified into two groups; none or 1 sibling versus 2 or more siblings, showed no significant difference in relation to scores on the Child Behaviour Checklist and the Experiences in Close Relationships Questionnaire-Revised in the clinical group. Again it was not appropriate to assess the control group in this particular analysis due to little variance of scores. However there was a significant difference between children who had none or 1 sibling compared to 2 or more siblings on the subscale of consistency on the Parenting Dimensions Inventory (U =17.00, N1 = 10, N2 =10, p=0.011). Therefore if consistency is to be included in further analysis the number of siblings has to be considered as a likely confounding variable. Other non-significant findings in the above analyses suggests that the control and clinical groups are more comparable than they might first appear.

3.2 Stage two: Between group analysis of questionnaires

The independent samples t-test was used to compare the results of participants’ scores on the three questionnaires in the clinical group and the control group.

Adult attachment.

The Experiences in Close Relationships questionnaire-revised (ECR-R) provides scores on the dimensions of anxiety and avoidance. Table 2 demonstrates that there was a significant difference between the two groups on both the avoidance and anxiety scales.
Table 5: Between group comparison of avoidance and anxiety scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance</td>
<td>Clinical</td>
<td>3.82</td>
<td>1.68</td>
<td>3.926</td>
<td>48</td>
<td>p &lt; 0.001*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.28</td>
<td>1.10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td>Clinical</td>
<td>3.81</td>
<td>1.65</td>
<td>4.326</td>
<td>48</td>
<td>p &lt; 0.001*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>2.11</td>
<td>1.13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at P <0.05

Mothers in the clinical group were more likely to demonstrate avoidant and anxious attachment strategies in their close relationships in comparison with the control group.

Parenting Dimensions Inventory:

The PDI provides nine subscale scores. Table 5 demonstrates that the results of an independent t-test indicate significant differences between the clinical and control group on six of the nine parenting dimensions: nurturance, sensitivity, non-restrictive attitude, amount of control, organisation and maturity demands. Scores on the subscales of consistency, parental involvement and type of control did not represent significant differences between groups. Equality of variance was not demonstrated on the variables of maturity of demands and type of control.

Table 6: Between group comparison of the subscales of the PDI

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurturance</td>
<td>Clinical</td>
<td>4.56</td>
<td>.554</td>
<td>3.320</td>
<td>48</td>
<td>p = 0.002*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.07</td>
<td>.523</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td>Clinical</td>
<td>4.48</td>
<td>.717</td>
<td>3.196</td>
<td>48</td>
<td>p = 0.002*</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>5.13</td>
<td>.690</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>Clinical</td>
<td>3.49</td>
<td>.769</td>
<td>1.925</td>
<td>48</td>
<td>p = 0.06</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>3.94</td>
<td>.849</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table six indicates that mothers in the clinical group demonstrated significantly lower levels of nurturance, sensitivity, non-restrictive attitude, amount of control and organisation in comparison to the control group. Differences between groups in levels of consistency were almost significant, showing a similar trend to the above. No significant differences were indicated between the two groups on the subscales of parental involvement and type of control.

**Child Behaviour Checklist:**

The Child Behaviour Checklist provided three scores; a total T score, an externalising T score and an internalising T score. Table 4 demonstrates that the results of an independent t-test indicate a highly significant difference between the clinical and control groups on all three scores of the CBC.
The results from table seven indicate that the clinical group mothers reported their children as having significantly higher behavioural difficulties on overall Total scores and both the subscales of externalising and internalising behaviours in comparison to mothers in the control group.

### 3.3 Stage three; Testing of the four main hypotheses

The research hypotheses were explored using parametric statistics, as appropriate for the data, which were normally distributed and the assumptions for using parametric tests were satisfied. The spread of each of the scores showed no excessive kurtosis or skewness. A correlation matrix is provided for all of the measures in the clinical and control group.

### Table 8: Correlation values for ECR-R and CBC

Table 8 illustrates the correlation values between the independent variables of the Experiences in close Relationships Questionnaire-Revised and the dependent variables of the Child behaviour Checklist using Pearson's R Correlation (one tailed).
CBC Total scores were positively correlated at the p<0.01 level with both anxiety and avoidance variables of the ECR-R. CBC Internalising and Externalising scores were also positively correlated with both the Anxiety and Avoidance variables of the ECR-R. Significant correlations between the independent and dependent variables suggests that it is appropriate to continue with the regression analysis.

Table 9: Correlation values for CBC and PDI

Table 9 illustrates the correlation values between the dependent variables of the Child Behaviour Checklist and the independent variables of the Parenting Dimensions Inventory using Pearson’s R Correlation (one tailed).
Table 9 continued;

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PDI Amount of Control</td>
<td>-.398**</td>
<td>-.195</td>
<td>-.396**</td>
</tr>
<tr>
<td>PDI Parental Involvement</td>
<td>.271*</td>
<td>.184</td>
<td>.231</td>
</tr>
<tr>
<td>PDI Organisation</td>
<td>-.291*</td>
<td>-.207</td>
<td>-.264*</td>
</tr>
<tr>
<td>PDI Maturity demands</td>
<td>.375**</td>
<td>.426**</td>
<td>.224</td>
</tr>
<tr>
<td>Type of Control</td>
<td>.030</td>
<td>.009</td>
<td>.150</td>
</tr>
</tbody>
</table>

* significant at p<0.05
** significant at p<0.01

CBC Total scores were negatively correlated at the p<0.01 level with nurturance, sensitivity, non-restrictive attitude and amount of control and at the p<0.05 level with consistency and organisation. CBC Total scores were positively correlated at the p<0.01 level with maturity demands and parental involvement at the p<0.05 level. CBC Internalising scores were negatively correlated at the p<0.01 level with nurturance, sensitivity and non-restrictive attitude. Internalising scores were also positively correlated at the p<0.01 level with maturity demands. CBC Externalising scores were negatively correlated at the p<0.01 level with nurturance, sensitivity, non-restrictive attitude, amount of control and consistency. Externalising scores were negatively correlated at the p<0.05 level with organisation.

Significant correlations between the independent and dependent variables suggests that it is appropriate to continue with the regression analysis.
Table 10: Correlation values for ECR and PDI

Table 10 illustrates the correlation values between the independent variables of the Experiences in Close Relationships Questionnaire-Revised and the Parenting Dimensions Inventory using Pearson's R Correlation (one tailed).

<table>
<thead>
<tr>
<th></th>
<th>ECR-R Anxiety</th>
<th>ECR-R Avoidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDI Nurturance</td>
<td>-.270*</td>
<td>-.416**</td>
</tr>
<tr>
<td>PDI Sensitivity</td>
<td>-.339**</td>
<td>-.423*</td>
</tr>
<tr>
<td>PDI Non-restrictive attitude</td>
<td>-.223*</td>
<td>-.233*</td>
</tr>
<tr>
<td>PDI Consistency</td>
<td>-.105</td>
<td>-.131</td>
</tr>
<tr>
<td>PDI Amount of Control</td>
<td>-.036</td>
<td>-.152</td>
</tr>
<tr>
<td>PDI Parental Involvement</td>
<td>.147</td>
<td>.193</td>
</tr>
<tr>
<td>PDI Organisation</td>
<td>-.243*</td>
<td>-.173</td>
</tr>
<tr>
<td>PDI Maturity demands</td>
<td>.140</td>
<td>-.007</td>
</tr>
<tr>
<td>Type of Control</td>
<td>-.158</td>
<td>.085</td>
</tr>
</tbody>
</table>

* significant at p<0.05  
** significant at p<0.01

ECR-R anxiety scores were negatively correlated with the variables of nurturance, non-restrictive attitude and organisation at the p<0.05 level and sensitivity at the p<0.01 level. ECR-R avoidance scores were negatively correlated with sensitivity and non-restrictive attitude at the p<0.05 level and with nurturance at the p<0.01 level.

The correlation matrix above demonstrates that although numerous independent variables are correlated it is only to a low - moderate degree and therefore they do not possess the properties of multicollinearity. However due to recruitment difficulties and time constraints...
a sample size or 30 in the control group and 20 in the clinical group was attained which is rather small for regression analysis and may limit the statistical power of the study.

Hypothesis one:

Scores on the Child Behaviour Checklist (CBC) will correlated positively with those on the Experiences in Close Relationships Questionnaire-Revised (ECR-R) in the clinical group and the control group.

A multiple regression analysis was performed using the stepwise method between the Total T score on the CBC as the dependent variable and ECR–R scores of anxiety and avoidance as independent variables for the clinical and control group. In the clinical group scores on the independent variables anxiety and avoidance of the ECR–R were unable to predict scores on the total T score of the CBC. However in the control group the model to emerge from the stepwise analysis contained one predictor variable, ECR–R Anxiety. (Adjusted R square = 0.168; F = 6.844, p = 0.014). The predictor variable ECR–R Avoidance was entered in to the analysis but was not shown to be contributing to the scores on the CBC and was therefore removed. The significant variable is shown in the table 5 below.

Table 11: Results of a stepwise regression analysis of CBC and ECR scores in the control group

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR – Anxiety</td>
<td>.443</td>
<td>p &lt; 0.014*</td>
</tr>
</tbody>
</table>

*Significant at p<0.05

Mothers’ anxiety in the control group accounted for almost 17% of the variance of the Total score on the CBC.

Hypothesis two:

Internalising scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of nurturance, sensitivity, non-restrictive attitude, consistency and control on the Parenting Dimensions Inventory (PDI) and correlate
positively with scores on the anxiety dimension of the Experiences in Close Relationships Questionnaire-Revised (ECR-R).

A multiple regression analysis using the stepwise analysis was performed between the internalising scores on the CBC as the dependent variable and nurturance, sensitivity, non-restrictive attitude and consistency subscales of the PDI and the anxiety dimension of the ECR-R as independent variables in the clinical and control group. In the clinical group scores on the anxiety dimension of the ECR - R and relevant subscale scores on the PDI were unable to predict scores on the internalising dimension of the CBC. However in the control group the model to emerge from the stepwise analysis contained two predictor variables from the PDI, non-restrictive attitude and nurturance. (Adjusted R square = 0.288; f = 6.872, p < 0.004). The anxiety dimension of the ECR - R was removed from the analysis. The significant variables are shown in table 12 below.

Table 12: Results of a stepwise regression analysis of the CBC internalising T score and subscale scores on the PDI in the control group

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDI non-restrictive attitude</td>
<td>-.424</td>
<td>p &lt; 0.012*</td>
</tr>
<tr>
<td>PDI nurturance</td>
<td>-.382</td>
<td>p &lt; 0.022*</td>
</tr>
</tbody>
</table>

* Significant at p<0.05

In the control group maternal non-restrictive attitude and nurturance together accounted for almost 29% of the variance of the internalising scores on the CBC.

Hypothesis three:
Externalising scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of non-restrictive attitude, parental involvement, organisation and consistency on the parenting Dimensions Inventory (PDI) and correlate positively with scores on the avoidance dimension of the Experiences in Close Relationships Questionnaire-Revised (ECR-R).
A multiple regression analysis using the stepwise method was performed between the externalising scores on the CBC as the dependent variable and the consistency, non-restrictive attitude, parental involvement and organisation subscales of the PDI and the avoidant dimension of the ECR-R as independent variables. In the clinical group only scores on the avoidant dimension of the ECR-R could predict externalising scores on the CBC. (Adjusted R square = .253; \( f^2 = 7.427 \), \( p < 0.014 \)). All relevant subscales of the PDI were removed from the analysis in the clinical group.

Table 13: Results of a stepwise regression analysis of the CBC externalising T score and the avoidance dimension of the ECR-R in the clinical group

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR-R Avoidance</td>
<td>.540</td>
<td>( p &lt; 0.014^* )</td>
</tr>
</tbody>
</table>

* Significant at \( p < 0.05 \)

In the clinical group mothers' avoidance scores on the ECR-R accounted for 25% of the variance of maternal reports of their children’s externalising behaviours measured by the CBC.

In the control group scores on the avoidant dimension of the ECR-R and the sub scale score consistency of the PDI could predict the externalising T scores of the CBC. (Adjusted R square = .260; \( f^2 = 6.105 \), \( p < 0.006 \)). All other relevant subscale scores on the PDI were removed from the analysis. See table 14 below.

Table 14: Results of a stepwise regression analysis of the CBC externalising T score, relevant PDI subscales and the avoidance dimension of the ECR in the control group

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECR-R Avoidance</td>
<td>.403</td>
<td>( p &lt; 0.018^* )</td>
</tr>
<tr>
<td>PDI consistency</td>
<td>-.342</td>
<td>( p &lt; 0.043^* )</td>
</tr>
</tbody>
</table>

* Significant at \( p < 0.05 \)
In the control group mothers’ avoidance scores on the ECR-R and consistency scores on the PDI together accounted for 26% of the variance of maternal reports of their children’s externalising behaviours measured by the CBC.

Hypothesis four:

Total scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of the Parenting Dimensions Inventory (PDI) and correlate positively with scores on the avoidance and anxiety dimensions of the Experiences in Close Relationships Questionnaire (ECR-R).

A multiple regression analysis using the stepwise method was performed between the Total T scores on the CBC as the dependent variable and the nine subscales of the PDI and the avoidant and anxiety dimensions of the ECR–R as independent variables. It was expected that higher scores on the ECR–R combined with lower/less effective scores on the PDI would reflect higher scores on the CBC. In the clinical group scores on the ECR–R and PDI were unable to predict scores on the CBC and the analysis demonstrated that adult attachment and parenting attitudes were unable to predict scores on the CBC.

In the control group the final model to emerge from the stepwise analysis contained only two predictor variables; nurturance and non–restrictive attitude from the subscales of the PDI. (Adjusted R square = .440; F = 12.401, p < 0.000). The analysis demonstrated that low scores on the PDI subscales of nurturance and non–restrictive attitude were able to predict high Total T scores on the CBC. ECR–R scores did not indicate a significant effect in this study. See table 15 below for regression coefficients for the predictor variables.

Table 15: Results of a regression analysis between Total T score on the CBC and subscales of the PDI in the control group.

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>Beta</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDI nurturance</td>
<td>-.490</td>
<td>p &lt; 0.002*</td>
</tr>
<tr>
<td>PDI non–restrictive attitude</td>
<td>-.472</td>
<td>p &lt; 0.002*</td>
</tr>
</tbody>
</table>

* Significant at p<0.05

58
In the control group mothers’ scores on the subscales of nurturance and non-restrictive attitude on the PDI accounted for 44% of the variance of maternal reports of their children’s behaviour on the total scores of the CBC.

3.5 Summary of Results
The clinical group did not differ significantly from the control group on the demographic variables of mother’s age, age of child, gender of child, mother’s occupation and father’s occupation. However the groups were significantly different on the demographic variables of mother’s marital status and number of siblings. The number of siblings was identified as a possible confounding variable influencing the subscale scores of consistency on the PDI.

Highly significant differences were indicated between the clinical and control group on the scores of the three questionnaires used (ECR-R, PDI and CBC). As expected higher scores were obtained on both the anxiety and avoidance scales of the ECR – R in the clinical group compared to the control group.

Reports of maternal sensitivity, nurturance, non-restrictive attitude, amount of control, organisation and maturity demands were significantly lower in the clinical group compared to the control group. No significant differences were identified between the subscales of parental involvement and type of control on the PDI.

As expected scores on the CBC were significantly higher on the Total T score, externalising T score and internalising score in the clinical group compared with the control group.

Multiple regression analyses revealed that high scores on the anxiety dimension of the ECR-R were able to predict high scores on the Total T score of the CBC in the control group but not in the clinical group. Avoidant scores on the ECR–R appeared to have a non-significant effect.

Multiple regression analyses that were conducted on the relationships specifically between the anxiety scores on the ECR – R, relevant subscales of the PDI and internalising T scores
on the CBC did not support research hypothesis two. In the clinical group no relationship was identified between these variables, however lower scores on the subscales of non-restrictive attitude and nurturance on the PDI were predictive of higher scores on the internalising dimension of the CBC.

Multiple regression analyses that were conducted on the relationships specifically between the avoidant scores on the ECR-R, relevant subscales of the PDI and externalising T scores on the CBC partly supported research hypothesis three. High avoidant scores on the ECR-R were predictive of high externalising scores on the CBC in the clinical group however scores on the subscales of the PDI did not contribute significantly to this relationship. A similar relationship existed in the control group with the addition of the predictive power of the consistency subscale scores on the PDI.

A multiple regression analysis of the combined scores of the anxiety and avoidance dimensions of the ECR-R and all subscales of the PDI demonstrated that they were unable to predict scores on the Total T dimension of the CBC. In the control group nurturance and non-restrictive attitude on the PDI were the only variables predictive of Total T scores on the CBC.

The analysis demonstrated that dimensions of attachment were only significantly related to the CBC when looking at specific components of the two questionnaires. Non-restrictive attitude, nurturance and consistency were the only variables that appeared to influence the predictive power of scores on the CBC. Extreme caution needs to be taken when comparing the clinical and control group due to their differences and the fact that the clinical group was manipulated to represent approximately 50% of predominantly externalising T scores and 50% predominantly internalising T scores.
Table 16: Summary of the results of the 4 hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Clinical Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis One</td>
<td>Not Confirmed</td>
<td>Partially Confirmed</td>
</tr>
<tr>
<td>Hypothesis Two</td>
<td>Not Confirmed</td>
<td>Partially Confirmed</td>
</tr>
<tr>
<td>Hypothesis Three</td>
<td>Partially Confirmed</td>
<td>Partially Confirmed</td>
</tr>
<tr>
<td>Hypothesis Four</td>
<td>Not Confirmed</td>
<td>Partially Confirmed</td>
</tr>
</tbody>
</table>
Chapter 4
Discussion

4.1 Preliminary Analysis
Overall the main aim of this study was to understand more fully the influence of adult attachment styles on parenting attitudes and internalising and externalising behaviour difficulties in middle childhood. The research drew upon the principles of attachment theory as a framework for understanding the complexities of the parent-child relationship. The findings will be discussed below.

4.1.1 Demographics
Various demographic information was collected from each participant based on factors that were thought to be important contextual characteristics of the parent-child relationship, identified in previous research (Garmezy and Masten, 1994; Rutter, 1991; Jacob, 1987). The results indicated that the clinical and control group differed in two important ways, family structure and size.

Marital status was revealed as a significant difference between the clinical and control group. In the clinical group only 50% of mothers were married compared to 93% in the control group. Several studies indicate that children of divorce, marital distress and/or single parent families may be at greater risk for psychopathology than those from relatively stable, intact two parent families (Emery, 1982; Hetherington, Cox and Cox 1982; Hetherington et al. 1993). Therefore the greater representation of mothers who are single or divorced in the clinical group supports the literature.

A study by Slater and Power (1987), using the Parenting Dimensions Inventory as a measure of parenting attitudes and behaviours, found that parenting was more strongly predictive of children’s adjustment than family structure. The relationship between parenting and children’s adjustment was stronger in the single parent families than in the two parent families, consistent with the notion that parenting is even more critical in “at risk” systems, such as single parent families.

Single parent families may be particularly vulnerable to disruptions in parenting, consequently increasing the potential risk for childhood maladaptive behaviour. In families
in the transitional process from two parents to one parent family structures, the stress of discord, separation and/or divorce may detract from optimal parenting and increase the likelihood of emotional distress in the family (Hetherington, Cox and Cox 1978,1982; Amato, 1993). Amato and Keith (1991) report that for the two-year period immediately following divorce, most children show some adjustment problems. Boys tend to display conduct or externalising behaviour problems and girls tend to experience emotional or internalising behaviour problems. The difference in family structure between the clinical and control group appears to reflect the contextual risk factors for maladaptive childhood behaviour identified above.

The difference in family structure identified between the two groups also reflects greater absence of the child’s father in the clinical group compared to the control group. In 40% of cases in the clinical group father was absent from the family home, compared to 6.7% of cases in the control group.

Father absence and poor identification with the father in boys is associated in particular with conduct disorders (Kazdin, 1995). Perhaps this is because there are fewer parenting resources in families in which the father is absent and the potential difficulties of triangulation patterns where a coalition may exist between one parent and the child, the other parent being peripheral to the alliance. The greater the quality and quantity of time that the father spends with the child, the better the overall adjustment and self-esteem of the child in the long-term (Lamb et al, 1987).

Family size was the other demographic variable that was found to be significantly different between the clinical and the control group. 30% of the target children in the clinical group had three or four siblings living in the family home. None of the target children in the control group had three or four siblings; the maximum number of siblings living in the family home in the control group was two. None of the target children in the clinical group was an only children, in comparison to 6.7% of only children in the control group.

Research suggests that family size impacts on a child’s social-emotional, personality and intellectual development (Robinson et al. 1998). It could be hypothesised that family size would influence adult thinking including parenting attitudes. However, it appears that no
published studies have shown a direct relationship between family size and parenting attitudes and behaviours of mothers (Rapinz, 1996).

Larger families identified in the clinical group compared to the control group may suggest increased pressure on parenting and coping resources and contribute to the increased risk factors of childhood maladjustment (Goodyer, 1990). This is also related to the findings that number of siblings was a likely confounding variable and may significantly influence levels of parental consistency.

In light of the two main differences between the clinical and control group extreme caution is required in the interpretation of the results. The contextual factors of family size and structure may play an important role in the parent-child relationship and may contribute to the relationships that were identified in later analyses.

4.1.2 Between group analyses of questionnaires
All three questionnaires used in the current study indicated significant differences between the clinical and control group.

The Experiences in Close Relationships questionnaire-revised, (ECR-R), indicated significant differences on both the dimensions of anxiety and avoidance, with higher scores obtained on the dimensions of anxiety and avoidance in the clinical group compared to the control group. Lower scores on both dimensions are indicative of secure attachment. The findings in this study support previous research that demonstrates that secure attachment is dominant in non-clinical samples while insecure attachment, reflected in higher scores on the dimensions of anxiety and avoidance, is dominant in clinical samples (van-Ijzendoorn and Bakermans-Kranenburg, 1996).

The Parenting Dimensions Inventory, (PDI), demonstrated significant differences on six of the nine parenting dimensions; nurturance, sensitivity, non-restrictive attitude, amount of control, organisation and maturity demands, between the clinical and control group. This reflects substantial differences in the parenting attitudes and behaviours of mothers in the clinical group and control group. Mothers in the clinical group reported lower levels of sensitivity, nurturance, non-restrictive attitude and amount of control, organisation and maturity demands compared to the control group. The results are as expected and are in line
with previous research findings (Kazdin, 1995; Darling and Steinberg, 1993, Slater, 1987). The scores on the three remaining subgroups of consistency, parental involvement and type of control were not found to be significantly different in the clinical and control group. These results were unexpected and do not reflect previous research in this area. However, the subgroup of consistency was a significant predictor of higher scores on the externalising scale of the Child Behaviour Checklist (CBC) in later analyses. These unexpected results may be the consequence of small sample sizes.

Highly significant differences between groups were indicated on all three scales of the Child Behaviour Checklist, Total T score, externalising and internalising T scores. Again these results were anticipated and are in line with a study by Cohen et al. (1993) which reports the prevalence of internalising and externalising behaviour problems and other similar epidemiological investigations.

4.2 Hypothesis One:

Scores on the Child Behaviour Checklist (CBC) will correlated positively with those on the Experiences in Close Relationships Questionnaire-Revised (ECR-R) in the clinical group and the control group.

The results of a multiple regression analysis were not as expected. It was not possible to predict scores on the CBC from scores on the ECR-R in global terms. A significant relationship was not found in the clinical group and only the anxiety dimension of the ECR-R was able to predict Total T scores on the CBC in the control group.

Previous research suggests that the relationship between attachment and adjustment is stronger among children in high risk, clinical populations than low risk, normative populations (Lyons-Ruth et al. 1991), suggesting that the relationship between attachment and adjustment appears to be moderated by exposure to adversity. The opposite findings occurred in the current study, predictive scores on the CBC were only significantly related to anxiety scores on the ECR-R. Again non-significant findings may have been the result of the small sample size, the number of clinical participants (n=20) being smaller than the control group (n=30).
In the control group the predictive relationships between lower scores on the ECR-R, anxiety scale, and lower scores on the Total T score of the CBC suggests that mothers who feel less anxious in adult relationships perceive their child’s behaviour as less demanding or stressful.

In previous studies wives’ style of attachment toward their romantic partners had an impact on the mother-child relationship (Simpson, 1990; Simpson et al. 1992). The above findings in the current research project support this relationship identified in normative populations and support the notion that the attachment measures used, ECR-R, assess global, core features of attachment styles, features that may affect functioning in different kinds of relationships. It is interesting that a similar relationship between mother’s attachment style towards her romantic partner and mother-child relationship in the clinical group was not shown to be significant. Is there a different process occurring in the mother-child relationship in different groups or are the results related to the significant differences between scores on the questionnaires and demographic differences?

A study by Rholes et al. (1995), indicated a complex relationship between mothers’ anxious ambivalent attachment style with a romantic partner and maternal reports of their child’s difficult behaviours. Among less anxious ambivalent mothers who reported high levels of distress, measured by a depression scale and revised daily hassles scale, higher levels of their toddler’s difficult behaviours were reported in a normative population. In contrast, among higher anxious ambivalent women, greater distress was related to fewer problem behaviours.

Rholes et al., (1995) suggest that although their findings may appear counter-intuitive, studies have found that women in mildly distressed marriages sometimes behave in more positive ways towards their children (Brody, Pillegrini, and Sigel, 1986). In the current study distress levels were not accounted for.

The results in response to hypothesis one provide some support for previous research and confirm the complex relationship between adult attachment styles and maternal reports of their child’s difficult behaviours.
4.3 Hypothesis two:

**Internalising scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of nurturance, sensitivity, non-restrictive attitude, consistency and control on the Parenting Dimensions Inventory (PDI) and correlate positively with scores on the anxiety dimension of the Experiences in Close Relationships Questionnaire-Revised (ECR-R).**

A more specific analysis of the parent-child relationship, focusing on the role of anxiety, was investigated. Again in the clinical group scores on the anxiety dimension of the ECR-R and relevant subscales of the PDI were unable to predict scores on the internalising dimension of the CBC.

This finding that there is no direct correlation between attachment categories of mothers, parenting and measures of behaviour in their children does not align with previous research by Rholes et al. (1995). However their research was with a non-clinical population. The current research is one of the first to look at these particular relationships within a clinical population. Despite a lack of significant results in this study it should not be taken as a definitive statement about the lack of relationship between parents’ adult attachments with a partner and reported behaviour in their children. Small sample size and the fewer number of predominantly higher internalising reports compared to externalising reports on the CBC in the clinical population may have affected the results.

In the control group the model to emerge from the stepwise analysis contained two predictor variables from the PDI, non-restrictive attitude and nurturance. The anxiety dimension of the ECR-R was removed from the analysis due to the lack of significant predictive power.

Research literature is reasonably unclear about what patterns of parent-child interactions may contribute to different manifestations of anxiety disorders in childhood, although there is evidence that modelling and parenting style play an important role in the transmission of anxiety patterns from parent to child in at least some cases (Silverman et al. 1988; McFarlane, 1987). A number of studies examining parenting behaviour have identified lack

The findings in the current research in the control group are in line with previous research examining the influence of parental behaviour on childhood anxiety with the assumption that the higher levels of nurturance and non-restrictive attitude act as protective factors in a normative population with low reports of internalising behaviours in childhood. Both of these variables can be said to be related to parental support.

The non-significant relationships between adult attachment status and child behaviour in both the clinical and control group do not appear to suggest that mothers’ attachment status in romantic relationships contribute to reports of their children’s behaviour as either a risk or protective factor. It is perhaps doubtful that adult attachment insecurity alone will lead to a disorder (Stroufe, 1990) although it may increase the likelihood. In this analysis parenting factors alone appear to contribute to the relationship. Different combinations of risk factors may lead to the same behavioural difficulties (Cicchetti and Rogosh, 1997).

4.4 Hypothesis three:
Externalising scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of non-restrictive attitude, parental involvement, organisation and consistency on the parenting Dimensions Inventory (PDI) and correlate positively with scores on the avoidance dimension of the Experiences in Close Relationships Questionnaire-Revised (ECR-R).

In contrast to the previous findings in this study, scores on the avoidant dimension of the ECR-R predicted scores on the externalising subscale of the CBC in both the clinical and control group. In the clinical group the avoidant scale of the ECR-R was the independent predictor of scores on the externalising subscale of the CBC. None of the parenting variables were found to significantly influence the relationship in this group, as was expected and outlined in hypothesis three.

In the study by Rholes et al. (1995) that examined the relationship between adult attachment styles and mothers’ relationships with their young children avoidance did not
demonstrate an association between attachment styles and mothers’ general reports of
difficult behaviour in a non-clinical population. Mothers with more avoidant attachment
styles reported feeling less emotionally close to their pre school children and the effect was
a strong one. It is surprising in some ways that feelings of emotional closeness were
unrelated to reports of child behaviour.

The current findings can be said to add to the literature that has previously indicated that
parents’ current working models of their experiences of growing up can function as risk
factors with both direct and indirect links to their child’s adaptation, in particular
externalising behaviours (Cowan et al. 1996). As an overview these finding suggest that
the avoidant style affects different kinds of relationships, e.g., parent–child, romantic, in
conceptually analogous ways, regardless of how it is assessed, self-report or interview.

It was expected that the parenting variables identified in hypothesis three would function as
a possible mediator, adding strength to the relationship between adult attachment scores on
the avoidant dimensions of the ECR-R and externalising scores on the CBC. Research has
suggested that ineffective parenting contributes more to externalising than to internalising
disorders in children (Patterson et al., 1989). Parenting practices have previously been
highly correlated with child maladjustment and conduct disorder (Olweus, 1993; Darling
and Steinberg, 1993; Kazdin, 1995). A possible reversal of this argument is that parenting
may be just one of the risk factors associated with externalising behaviours in childhood. It
is interesting that the current study identifies mothers attachment with her partner as the
predominant, independent predictor of externalising behaviours exhibited by her children,
however it may not be the only risk factor and it is counter intuitive to accept that parenting
does not have a significant effect on childhood adjustment.

In the control group the findings, once again, differed from the clinical group, however only
to a small degree. The avoidance scale of the ECR-R was again predictive of scores on the
externalising scale of the CBC. Predictive power was increased with the addition of the
consistency variable from the PDI. Lower scores on the ECR-R and higher scores of
parental consistency were predictive of low scores on the externalising subscale of the
CBC.
Lower levels of consistency in parental management have been a strong predictor of externalising behaviours in childhood (Cardamone, 1999; Frick et al. 1999). Inconsistent discipline allows children to learn that on some occasions it is possible to get away with anti-social behaviour, encouraging the child to test out in every situation if it is one of these instances where there will be no consequences for negative behaviour. The child becomes engaged in a coercive family process (Patterson et al. 1992) whereby parents have few positive interactions with their child, punishment is frequent, inconsistent and ineffective. By middle childhood children exposed to this parenting style have developed an aggressive relational style.

It appears that in the control group higher levels of consistent behaviour management, in combination with mothers’ low scores of avoidance on the ECR-R, have acted as protective factors in the parent-child dyad, resulting in fewer reports of externalising behaviour difficulties. It seems logical that lower levels of parental consistency may occur in families where parents are disengaged and the reverse is more likely to occur in non-clinical samples.

4.5 Hypothesis four:
Total scores on the Child Behaviour Checklist (CBC) will correlate negatively with scores on the subscales of the Parenting Dimensions Inventory (PDI) and correlate positively with scores on the avoidance and anxiety dimensions of the Experiences in Close Relationships Questionnaire (ECR-R).

In the clinical group scores on the ECR-R and the PDI were unable to predict total T scores on the CBC. A loss of predictive power seems to emerge when looking at more general relationships. In the previous analysis for hypothesis three the avoidance dimension on the ECR was predictive of externalising scores in the clinical group, the focus was relationship specific. It is interesting therefore that Total CBC scores could not be predicted from either dimensions of the ECR or any of the variables on the PDI. A speculative interpretation of this is that relationships between adult romantic attachments and reports of child behaviour have specific influences rather than global and the carry over from one relationship to another, that contributes to the intergenerational continuity, occurs in very specific ways.
Given the literature on parenting and the strong influence parenting behaviours and attitudes have on adjustment in childhood it is surprising that the parenting variables on the PDI were unable to predict the Total Score on the CBC in the clinical group. A study by van Ijzendoorn (1995) suggested that adult attachment influences parenting, however, the analysis showed that the quality of parenting did not entirely mediate the relationships between adult and infant attachment. There is more to the parent-child relationship and childhood adjustment than the nine subscales of parenting attitudes and behaviours on the PDI, contextual and child factors are also important influences on problem behaviour (Rutter, 1991; Goodyer, 1990).

In the control group the parenting variables nurturance and non-restrictive attitude were the only predictor variables of Total scores on the CBC to emerge from the stepwise regression analysis. It was expected that parenting would have a significant effect on the Total scores of the CBC; higher scores on the subscales of the PDI would predict lower scores on the CBC in the control group. Only the subscales of nurturance and non-restrictive attitude confirmed this.

The ECR-R was unable to predict Total scores on the CBC. A similar argument can be made for this lack of association in the control group as in the clinical group described above.

High levels of nurturance and maternal sensitivity have long been associated with secure parent-infant attachments (Ainsworth et al. 1978). Caregiver sensitivity is regarded within attachment theory as the principal determinant of whether an infant develops a secure or insecure relationship with the caregiver. Subsequent research has indicated that secure attachment to a parent figure is a protective factor for later childhood maladjustment (Bretherton and Waters, 1985; Belsky and Nezworski, 1988). Therefore the results of this analysis support previous findings and reflect the importance of maternal nurturance and sensitivity as protective factors against maladjustment in childhood.

The role of maternal non-restrictive attitude also contributed to the predictive power of Total scores on the CBC. This subscale on the PDI is described as being particularly important to the general construct of maternal support (Slater and Power, 1987). Non-restrictive attitude refers to the mother allowing the child to be expressive, to try new things
and possibly fail, to participate in new experiences and to obtain new information. Non-restrictive parenting attitudes have previously been associated with children's adjustment and development (Baumrind and Black, 1967; Rickel and Biassatti, 1982) and are reconfirmed in the current analysis.

4.6 Strengths of the study
A main strength of the study is its focus on the parent-child relationship from the parent's perspective and the influence of the mother's relationship with her partner on the adjustment of the child. It is equally important to understand the parent-child relationship from the parent's perspective, particularly as clinicians often work with parents as well as the child who may present with behaviour difficulties. The current study is one of a few that examine how mothers with different attachment styles perceive their children in terms of behavioural difficulties.

It is beneficial to look at the parent-child relationship from a family perspective and in particular the influence of the marital or partner relationship. It is widely assumed that the marital subsystem affects family life through a crucial link with the parent-child relationship (Belsky, 1981), however, less is known about the influence of different types of adult romantic attachments on the parent-child dyad. This study aims to address some of these issues.

The study includes a clinical population and most of the research in the field of attachment has focused on non-clinical samples. Research with both normal and clinical populations, in the study of attachment and its relation to developmental pathways of normality and psychopathology, will provide useful information about appropriate clinical interventions.

In particular there are very few published studies of attachment in the childhood population with anxiety disorders which is surprising considering that anxiety is said to be the fundamental condition underlying insecure attachment (Bowlby, 1973). The current study includes in the clinical sample mothers who rated their children as having clinically significant internalising behaviour difficulties. However, in the current study a non-significant finding between higher scores on the anxiety dimension of the ECR-R and higher maternal reports of their child's internalising behaviours was indicated.
Much of the parent-child attachment research has focused on the early years of the infant mother attachment relationship. Less is known about the parent-child relationship in the middle years of childhood. Although children in middle childhood spend less time with their parents than pre-school children do, they still see their parents as sources of nurture and emotional support (Hunter and Youniss, 1982). The significant influence of the mother’s experience of close relationships on her child’s adjustment found in this study emphasises the importance of attachment concepts in middle childhood. Investigation of children with a variety of disorders, in which attachment is believed to play a direct or indirect role, increase or decrease risk factors, may provide important advances for treatment.

4.7 Limitations of the study

4.7.1 Methodological limitations

Before further examination of the implications of the findings, characteristics of the sample that might restrict generalisability merit consideration. The total sample size (n=50) and sample sizes of the separate clinical (n=20) and control groups (n=30) were small. A bigger sample, particularly in relation to the clinical group, might generate more robust findings. The attainable sample size depended on practical issues, such as difficulties recruiting in the clinical group and time constraints.

The demographic variables marital status and number of siblings in the family, that were highlighted as significantly different in the control and the clinical group, contribute to contextual and structural differences of the family environment and potentially adjustment in childhood. Parenting attitudes and behaviours have been identified as stronger predictors of a child’s adjustment than family structure, (Slater and Power, 1987), however, they found that parenting was more strongly predictive in children’s adjustment in single parent families than in two parent families. These significant differences between groups threaten the validity of the interpretations and make the generalisability and comparison of results very difficult. A more appropriate comparison group could be considered.

Comparisons between the control and clinical group and generalisations are also limited by the strict sampling criteria. The clinical group was biased by the researcher to represent maternal reports of both predominantly internalising and externalising behaviour difficulties, differentiated by a 10 point difference between the subscale scores. This was an
attempt to reduce co-morbidity of symptoms in order to investigate the specific relationships between adult attachment anxiety and reports of internalising behaviours in children and adult attachment avoidance and reports of externalising behaviours in children. Co-morbidity is far more common in clinical than community samples, (McConaughy and Achenbach, 1994) and it was highly unlikely that the low, non-clinically significant scores on the CBC, anticipated in the control group, would reflect a 10 point difference between the subscales of internalising and externalising behaviours.

Another limitation of the design in the current study was in the different environments and time scale in which the questionnaires were administered. All 50 participants completed the same questionnaires in the same order, however, mothers in the control group completed all three questionnaires consecutively, in a small group setting with other mothers, in a quiet and private room within a school environment. The mothers in the clinical group had already completed the Child Behaviour Checklist questionnaire as a prerequisite to their referral to the Child and Adolescent Mental Health Service. There was a time lag of between one week and two months before completing the remaining two questionnaires: the PDI and the ECR-R.

In addition, in the clinical group the questionnaires were completed on a one to one basis with the researcher in the home environment of the participant. In hindsight to remove these methodological limitations, clinical group participants could have been asked to attend at the clinic to which they had been referred in small groups in a similar setting as the control group participants. To remove the time lag clinical group participants could have been asked to repeat the CBC questionnaire before completing the remaining PDI and ECR-R to ensure the same methodological procedures in both groups. However, recruitment of the clinical group participants was particularly difficult and asking participants to attend a clinic for research purposes, when they often lived considerable distances away, would probably have reduced the likelihood of mothers agreeing to take part.

4.7.2 Limitation of the measures

All three of the questionnaires used in the current study are self-report measures which are subject to response biases and are inherent with validity problems. Self-report measures have been said to be vulnerable to a variety of biases (Kirkpatrick, 1998). They rely on each
participant's honesty and self-insight that is potentially limited particularly when fears and defences are an issue.

The measures used have been described as both reliable and valid, having sound psychometric properties, however it must be questioned whether they are reflecting accurately the theoretical constructs being examined.

Firstly, the Experiences in Close Relationships-Revised questionnaire, despite being the recommended multi-item dimensional measure to date (Brennan et al. 1998; Fraley and Waller, 1998) it is still subject to questions about which constructs of attachments are being measured. The ongoing debate over whether or not the measure of close relationships is measuring current relationships (Crowell and Treboux, 1995) or enduring features of a more general approach to relationship is a significant unresolved question for the current research. Loevinger (1957) noted a distinction between psychological traits and constructs: "Traits exist in people; constructs exist in the minds and magazines of psychologists" (p.642). The question remains about what exactly the ECR-R is measuring which limits our understanding of what processes are influencing the adjustment of children in the parent-child dyad subsystem.

The ECR-R used in this study as a self-report measure of attachment relies on the assumption that individuals have access to conscious feelings and perceptions about their relationships (Crowell and Treboux, 1995). Individuals, particularly those who appear to demonstrate insecure attachments, might be limited in their awareness of relationship strategies that they engage in.

Secondly, the measure of parenting used in the current study, Parenting Dimensions Inventory (PDI), will be discussed. Parenting is a complex activity that includes many specific behaviours and attitudes that work individually and together to influence child outcomes. Great variability exists in the parenting literature in the definitions used to categorise components of parenting. Due to these methodological difficulties little research specifically outlines parenting that is good enough.
The parenting model used in the PDI (Slater and Power, 1987) was developed to account for the complexities reported in the parenting literature. However, the results indicated that a focus on individual parenting dimensions is an insufficient approach to parenting research. The nine parenting dimensions identified were interdependent and therefore required a multivariate context to clarify their contributions to the parenting construct and their effects on children's adjustments. This suggests some limitations when looking at the contribution of individual subscales of parenting behaviour and attitudes when investigating the hypotheses in the current study.

The third measure used in the study, the Child Behaviour Checklist, was an assessment of the child's adjustment. This measure relied on the mother's perceptions of the child's behaviour and was not cross referenced with father or teacher reports of the child's behaviour which may have increased the reliability of scores on this measure. Correlations between parents' problems and CBC scores have sometimes been interpreted as reflecting parental biases (Achenbach and Brown, 1991). Therefore caution should be taken when interpreting these scores.

The sample was limited to the mother's perspective of the parent-child dyad. The influence of the father or current partner on parenting and adjustment of the child has been found to be an important determinant (Cohn, 1992). In hindsight it may have been useful to ask fathers of the children to also complete all of the questionnaires and look at the differences between two parent and single parent families.

4.7.3 Temperament
The influence of temperament and child characteristics on child adjustment have not been addressed in this study. Temperament theories are complex and the perspectives differ in terms of the characterisation of the domain of temperament, genes, physiological processes and the intersection between temperament and development. Although it is important to look at the parent-child relationships from the parents' perspective it is also important to acknowledge the reciprocal nature of the subsystem.

Even from soon after birth infants seem to vary considerably in their behavioural characteristics (Thomas and Chess, 1977). Temperamentally difficult babies may be more of a challenge for parents to cope with and may be more at risk for later behaviour
problems. Temperamental characteristics can be seen as inherent in the child or an alternative view is that it is a dyadic characteristic which much more reflects the mother’s own psychological state and how she understands her child’s behaviour. The interpretation that both attachment and temperament depend in part on qualities of the parent-child interaction has received some support (Belsky et al., 1991; Seifer et al. 1998). Regardless of the interpretation temperament may be one of the many factors that are important to consider in parenting outcomes. The fact that the current study does not assess temperament may have limited the understanding of the mother-child dyad.

4.7.4 Influences of sex, culture and ethnicity
It is important to distinguish between the differences in the distribution and correlates of parenting style in different subpopulations. Parenting practices have been found to vary with cultural norms and socialisation values (Ellis and Petersen, 1992). For example parents in China use more behavioural control and grant less psychological autonomy than parents of European background (Lin and Fu, 1990). Chao (1994) and Darling and Steinberg (1993) have argued that observed ethnic differences in association with parenting style and child outcomes may be due to the differences in social context, parenting practices, or the cultural meaning of specific dimensions of parenting style. In the current study only white mothers participated, given the diversity of cultures in Britain today the results are therefore somewhat limited in terms of generalisability. Research that includes multi-cultural participants will help to overcome these difficulties.

4.8 Clinical Implications and Future Research
4.8.1 Clinical Implications
Within the context of these limitations, the results of this study suggest implications for both clinical practice and theory. If we are to understand the interconnections between relationships it is necessary to take into account the range of dimensions that seem to be involved.

Attachment concepts have been important in alerting clinicians to the possible role of relationship difficulties in a wide range of psychological disorders, particularly conduct disorders (Greenberg et al. 1993) and social withdrawal (Rubin and Lollis, 1988). The current research supports these findings and suggests that attachment styles may have a fairly direct influence on maternal behaviour and mother-child relationships.
The focus on the mother’s perceptions of parenting and the influence of her close relationships on the adjustment of the child have implications for the way in which clinicians may choose to work with parents. Parents usually have attachment relationships with their children, however the current research highlights there is more to the attachment relationship than parenting practices and the overall relationship involves a complex mix of many different features. Therefore focusing on parenting practices alone in response to children who present with externalising or internalising behaviour difficulties may be insufficient for change to occur in some cases, particularly where insecure parent-child relationships exist.

Being aware of a parent’s adult attachment strategies in the context of a therapeutic relationship could be particularly helpful to the clinician. The understanding of defence, affect regulation, motivation and the dynamics of therapeutic relationships, that attachment theory can provide, may contribute to understanding the parent-child relationship and developmental and relational processes. In clinical practice the relationship between the parent and the therapist and the establishment of a secure external base for the parent, serving as an emotionally available, responsive and empathic “companion” to the parent (Bowlby, 1988), may underlie any work on parenting skills. Without this positive therapeutic relationship the parent’s capacity for empathy, to set limits, to put her own feelings to one side and focus on the child is unlikely to improve the quality of the parent-child relationship.

It is evident that parents have different relationships with different children and children have different relationships with each of their parents (Dunn, 1993). Interventions aimed at pinpointing specific deficits in the parenting relationship within the wider context, e.g., mother’s marital relationship and family context, may be more useful with a view to improving the interpersonal relationships of the child within the family. However, even when there are undoubtedly attachment difficulties within a family, it is by no means self-evident what form treatment should take. Cicchetti et al. (1995) suggest that improving the quality and consistency of caregiving when these are deficient should be the focus for intervention. The current research also indicated maternal nurturance and consistency as possible risk/protective factors for maladjustment in childhood. The difficulty is knowing what exactly constitutes good enough caregiving.
The implications of the current research for attachment theory relate to the possibility that conceptually analogous relationships exist between parent-child and romantic relationships. Mothers of children classified as avoidantly attached in the Strange Situation, who themselves tend to be avoidant (Main et al. 1985), behave in a colder, more distant and emotionally more rigid manor toward their children. Analogous patterns of emotional distance and lack of support have also been found in individuals who are avoidantly attached to their dating partners (Simpson, 1990); more men and women tend to be less emotionally close to and less committed to their dating partners. Attachment organisation and attachment history will have a profound effect upon the patient’s feelings about as well as conscious and unconscious expectations of the therapist.

1.8.2 Future Research

In future research it would be useful to gain a larger sample size to further investigate the effect of adult romantic relationships on parenting and childhood adjustment, preliminary findings in the current research suggest some significant relationships. Further development and refinement of particular risk/protective factors associated with externalising and internalising behaviours in middle childhood would be useful. This may require longitudinal studies of normal and high-risk children across different developmental periods.

It would be helpful to investigate why in some cases of childhood maladjustment adult attachment relationships appear to have no or little effect. Attachment findings have emphasised that insecurity itself is not an indicator of psychopathology (Belsky and Cassidy, 1994; Carlson and Sroufe, 1995). It is necessary therefore to find a way for clinicians to differentiate the disorders in which relationship insecurity represents a key feature as this may greatly influence the focus of treatment. The assessment of selective attachment in older children is less straightforward than it is with infants.

Significant differences between the clinical and control group in the areas of marital status and family size may be important contextual factors that influence parenting and childhood adjustment. In addition, most fathers are attachment figures for their infants, even though in most families they are not the primary caregivers and spend relatively less time with their infants (Parke and Tinsley, 1987). When researching potential risk/protective factors for
maladjustment in childhood it is important to consider the relationships of both parents with the child. Parenting research that aims to examine parenting features unique to specific family types may be of benefit.

Continued development of theory is needed with respect to the interconnections between parent-child relationships, sibling relationships and romantic relationships in adult life. Attachment concepts are clearly useful in thinking about relational disturbances and childhood maladjustment but it is also important for future research to bring together attachment concepts and other formulations of relationships so that each may profit from the contributions of the other, particularly with the complexities of parenting.

5.0 Conclusions
The current study found some evidence that adult romantic attachment was able to predict parenting attitudes, behaviours and childhood adjustment, with reference to internalising and externalising behaviour problems in middle childhood.

In particular maternal avoidance in close relationships was predictive of childhood adjustment in both the clinical and control group. A more complex relationship between maternal anxiety and childhood adjustment seems to exist. Three parenting variables on the PDI; nurturance, non-restrictive attitude and consistency appeared to have the most influence overall on childhood adjustment. The findings indicate that adult romantic attachment may have a direct influence on child adjustment, even when parenting does not.

The findings provide some tentative support for the hypothesis that different risk/protective factors predict different disorders that are represented by internalising and externalising behaviours (Manassis and Bradley, 1994; Shaw and Bell, 1993). Higher reports of avoidant attachments were predictive of externalising behaviour difficulties.

When dimensions of the ECR-R have proven to be predictive of scores on the CBC the possibility exists that the affect regulating process involved in the development of the mother’s working models of attachment to a partner also operate in the parent-child relationship to some extent. We still need to know more about how these processes operate.
Previous research has reported significant correlations between the quality of the parental marriage and child behaviour (Belsky et al. 1991; Erel and Burman, 1995). Therefore the findings in the current study that indicate adult attachment relationships are predictive of certain aspects of child adjustment may be understood more fully in the framework of family systems theory.

Small sample sizes in this study produced little power to detect significant relationships, particularly in the clinical group. Larger samples, from both clinical and normative populations, are necessary to identify protective and risk factors for childhood maladjustment and to understand the influence of adult attachment on child adjustment.

The realities and difficulties of undertaking research in a clinical setting were highlighted during the process of the study in a number of ways. Firstly, the difficulty with having to simplify attachment concepts for the purpose of research consequently limits the clinical contribution of the results and often seemed too narrow for the clinical situation. Secondly, child protection issues that needed to be passed on to social services during the data collection procedure from a mother in the clinical group highlighted the tensions between the role of the clinician and the researcher.

Attachment theory can be greatly beneficial in understanding the parent-child relationship but it is important to acknowledge that attachment is not the entirety of the relationship. Ideally, attachment theory can add to the therapist’s way of understanding clinical material and is likely to be useful to inform interventions with some patients but not others. The integration of attachment concepts and other formulations of the parent-child relationship may provide a wider understanding.
References


Loevinger, J. (1957). Objective tests as instruments of psychological theory. Psychological Reports, Monograph supplement, 9 (1, Serial No.3).


Main, M., & Hesse, E. (1990). Parents’ unresolved traumatic experiences are related to infant disorganised attachment status: Is frightened and/or frightening parental behaviour the linking mechanism? In M. Greenberg, D. Cicchetti, & M. Cummings (Eds.), *Attachment in the preschool years: Theory, research and intervention* (pp. 121-160). Chicago: University of Chicago Press.


Appendices
Appendix A

Taking Part in Research

Mother-child relationships and childhood behaviour problems.

You are being invited to take part in a research project. Here is some information to help you decide whether or not to take part. Please take time to read the following information carefully and discuss it with friends and relatives if you wish. Please do not hesitate to ask if there is anything you do not understand or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

1. You may or may not receive any direct benefit from taking part in the study. However, information obtained during the course of the study may help us to better understand children’s behaviour problems.

2. It is up to you to decide whether to take part or not. To help you to decide you have been given these information sheets. If you agree to take part you will be asked to sign a consent form. Even if you decide to take part, you are free to withdraw at any time without giving a reason. Your choice will not affect the standard of care you receive. Your doctor or key worker will not be upset if you decide not to take part.

3. All the information collected about you during the course of the research will be kept strictly confidential and anonymous. All questionnaires completed will be destroyed as soon as information has been entered into the computer.

Michelle Tuckey
April 2001
Version A
Taking Part in Research

Information for parents about the study

Mother-child relationships and childhood behaviour problems.

1. What is the purpose of the study?
The aim of the study is to look at the way mothers and their children interact with one another in relation to particular childhood behaviour problems such as aggression, anxiety or depression.

2. Why have I been chosen?
You have been chosen to participate if you reported that your child had particular difficulties associated with aggression, anxiety or depression on the questionnaire that you filled in called the Child Behaviour Checklist. Many other mothers who reported similar difficulties with their children will be asked to participate, up to 40-50.

3. Who is organising the study?
The study has the backing of Leicester University where the researcher, Michelle Tuckey, is undertaking a Doctorate Qualification and Leicestershire and Rutland NHS trust who currently employs the researcher. The Psychology Department in Nuneaton will be supporting the recruitment of participants. The study will run for approximately 12 months, (June 2001-2002).

4. What do I have to do?
The treatment programme offered to you and your child will not be influenced in any way by agreeing to take part in the research. The research simply involves filling in 2 further questionnaires. Firstly about your relationship with your child and secondly about your experiences of other close relationships, e.g. with your partner/husband. The questionnaires should take approximately 20-30 minutes. All the information you give will be confidential and anonymous.
Appendix A (continued)

5. Are there any disadvantages in taking part in this study?
None anticipated. Although you may not directly benefit from the research by being involved it is hoped that the information gathered from this study will help us to understand how problems can recur across generations and help to inform the way professionals work with children with behaviour problems and their families.

6. What if something goes wrong?
If you have any cause to complain about any aspect of the way you have been approached or treated in the course of this study, the normal National Health Service complaints mechanisms are available to you.

7. Who will know I am taking part in this study?
All information that is collected about you during the course of the research will be kept strictly confidential. Any information about you, which leaves NHS property, will be made anonymous so that you cannot be recognised from it.

8. Who has reviewed the study?
Warwickshire and South Staffordshire Research Ethics Committees have approved the study.

9. Contact for further information:
Michelle Tuckey - tel. 02476 350 111
Whitestone Day Resource Centre, Magyar Crescent, Nuneaton.

If you wish to participate you will be asked to sign a consent form and given a copy to keep with this information sheet.

Thank you for taking the time to read this information. Please do not hesitate to ask any further questions to help you to carefully decide if you wish to take part in this research study.
Taking Part in Research

Mother-child relationships and childhood behaviour problems.

You are being invited to take part in a research project. Here is some information to help you decide whether or not to take part. Please take time to read the following information carefully and discuss it with friends and relatives if you wish. Please do not hesitate to ask if there is anything you do not understand or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

1. You may or may not receive any direct benefit from taking part in the study. However, information obtained during the course of the study may help us to better understand children’s behaviour problems.

2. It is up to you to decide whether to take part or not. If you do decide to take part you will be given an information sheet and consent form. Even if you decide to take part, you are free to withdraw at any time and without giving a reason.

3. All the information collected about you during the course of the research will be kept strictly confidential and anonymous. All questionnaires completed will be destroyed as soon as information has been entered onto the computer.

Michelle Tuckey
April 2001
Version B
Demographic Information

1. Age of mother _______

2. Married / Single / Co-habiting——

3. Main Carer Yes / No

4. Age of child_______ (yrs)

5. Gender of child Male / Female

6. Birth Order of child ______

7. No. of siblings of child_____

8. Current occupation of mother_______________

9. Occupation of partner if applicable_______________

April 2001
Appendix D

The Parenting Dimensions Inventory  
(PDI)  
Slater (1987)

Child Rearing Inventory
This questionnaire was developed to learn about how parents think and what they do with regard to their children. Different parents will answer these questions differently due to varying circumstances; therefore there are no right or wrong answers. Please read and answer each item according to your personal views or behaviour. Even if an answer does not exactly reflect your own opinion or behaviour, please choose the response that is closest. Your answers to this questionnaire will be completely confidential.

I. Preliminary Information

1. Please list the sex and age of each child in your family. Place a check next to those who do not live with you.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. For the questionnaires that follow, you will be asked about your attitudes and behaviour toward one of your children. This child must be between the ages of 6 and 11 years, inclusive. Please answer all the questions that follow in regard to this child.

Please indicate the sex and age of the child you have chosen.

Child’s sex ________________  Child’s age ________________
Appendix D (continued)

3. This child is your…… (please check one)

☐ Biological child

☐ Adopted child

☐ Step-child

II. The following statements represent matters of interest and concern to some parents. Not all parents feel the same way about them. Circle the number that most closely applies to you and the child you have selected.

<table>
<thead>
<tr>
<th>Not at all Descriptive</th>
<th>Slightly Descriptive</th>
<th>Somewhat Descriptive</th>
<th>Fairly Descriptive</th>
<th>Quite Descriptive</th>
<th>Highly Descriptive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of Me</td>
<td>Of Me</td>
<td>Of Me</td>
<td>Of Me</td>
<td>Of Me</td>
<td>Of Me</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

1. I encourage my child to talk about his or her troubles.

2. I always follow through on discipline for my child, no matter how long it takes.

3. Sometimes it is so long between the occurrence of a misbehaviour and an opportunity for me to deal with it that I just let it go.

4. I do not allow my child to get angry with me.

5. There are times when I just don’t have the energy to make my child behave as he/she should.

6. My child can often talk me in to letting him/her off easier than I had intended.

7. My child convinces me to change my mind after I have refused a request.

8. I think a child should be encouraged to do things better than others.

9. My child and I have warm intimate moments together.
10. I encourage my child to be curious, to explore and to question things.

11. I find it interesting and educational to be with my child for long periods.

12. I don’t think children should be given sexual information.

13. I believe that a child should be seen and not heard.

14. I believe that parents who start a child talking about his/her worries don’t realise that sometimes it is better to leave well alone.

15. I encourage my child to express his/her opinions.

16. I make sure my child knows that I appreciate what s/he tries to accomplish.

17. I let my child know how ashamed and disappointed I am when s/he misbehaves.

18. I believe in toilet training a child as soon as possible.

19. I believe that most children change their minds so frequently that it is hard to take their opinions seriously.

20. I have little or no difficulty sticking with my rules for my child even when close relatives are there.

21. When I let my child talk about his/her worries s/he ends up complaining even more.

22. I expect my child to be grateful and appreciate all the advantages s/he has.

23. Once I decide how to deal with a misbehaviour of my child I follow through with it.

24. I respect my child’s opinion and encourage him/her to express it.
25. I never threaten my child with a punishment unless I am sure I will carry it out.

26. I believe that once a family rule has been made, it should be strictly enforced without exception.

III. Listed below are pairs of statements concerning parents’ attitudes to childrearing. For each pair, choose the one statement (A or B) that most represents your attitude and place a checkmark in front of the letter that precedes that statement. Make sure that you choose A or B for each pair, even if you agree with neither or with both. In these cases choose the opinion that is closest to or best represents your point of view.

1. ______ A. Nowadays too much emphasis is placed on obedience for children
   ______ B. Nowadays parents are too concerned about letting children do what they want.

2. ______ A. Children need more freedom to make up their own minds about things than they seem to get today.
   ______ B. Children need more guidance from their parents than they seem to get today.

3. ______ A. I care more than most parents I know about having my child obey me.
   ______ B. I care less than most parents I know about having my child obey me.

4. ______ A. I try to prevent my child from making mistakes by setting rules for his/her own good.
   ______ B. I try to provide freedom for my child to make mistakes and learn from them.

5. ______ A. If children are given too many rules they grow up to be unhappy adults.
   ______ B. It is important to set and enforce rules for children to grow up to be happy adults.
### Appendix D (continued)

### IV. Listed below are activities that you may or may not do with your child. Some of these activities are ones that may occur frequently, occasionally and some never. Please indicate, as shown below, how often you did the following activities with your child in the past month.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never in the past month</th>
<th>Once in the past month</th>
<th>2/3 times in the past month</th>
<th>Once/twice a week</th>
<th>3/4 times a week</th>
<th>5 times a week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Help child care for clothing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Visit friends or relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Supervise child playing by himself</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Help child with play activity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Comfort when s/he is upset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Explain something</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Discipline child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D (continued)

V. For each of the following statements circle the number which indicates how often the statement is true of your family.

<table>
<thead>
<tr>
<th>Never</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Most of the time</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

1. We have a regular dinner time each week.

2. Our house is clean and orderly

3. Our family is organised and together.

4. We get everything done around the house that needs to be done

VI. Circle the number of regular assigned chores in the following areas that your child is responsible for.

<table>
<thead>
<tr>
<th>None</th>
<th>One</th>
<th>Two</th>
<th>Three or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Meals (e.g. set table)

2. Housekeeping (e.g. make bed)

3. Laundry (e.g. put dirty clothes in washing basket)

4. Gardening (e.g. weeding)

5. Pet care

6. Other
Appendix D (continued)

VII. Listed below are several situations which frequently occur in childhood. You may or may not have had these experiences with your child. Imagine that each situation has just occurred and rate how likely it is that you would do each of the responses listed below.

1. Your child has gone outside without picking up his or her toys as you requested.

<table>
<thead>
<tr>
<th>Response</th>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let the situation go</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Take away a privilege</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Assign additional chore</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Take away something material</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Send to room</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Physical punishment</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Reason with child</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Ground child</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Yell at child</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
</tbody>
</table>

2. After arguing over toys your child strikes a playmate

<table>
<thead>
<tr>
<th>Response</th>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let the situation go</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Take away a privilege</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Assign additional chore</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Take away something material</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Send to room</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
<tr>
<td>Physical punishment</td>
<td>1  2  3  4  5</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix D (continued)

<table>
<thead>
<tr>
<th>Reason with child</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground child</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Yell at child</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

3. Your child becomes sassy while you discipline him/her

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let the situation go</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Take away a privilege</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Assign additional chore</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Take away something material</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Send to room</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Physical punishment</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Reason with child</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ground Child</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Yell at child</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

4. You receive a note from your child’s teacher to say h/she has been disruptive at school.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let the situation go</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Take away a privilege</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Assign additional chore</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Take away something material</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Send to room</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Physical punishment</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Reason with child</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Appendix D (continued)

5. You catch your child lying about something he/she has done that you do not approve of.

<table>
<thead>
<tr>
<th>Ground child</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yell at child</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let the situation go</td>
<td>1</td>
</tr>
<tr>
<td>Take away a privilege</td>
<td>1</td>
</tr>
<tr>
<td>Assign additional chore</td>
<td>1</td>
</tr>
<tr>
<td>Take away something material</td>
<td>1</td>
</tr>
<tr>
<td>Send to room</td>
<td>1</td>
</tr>
<tr>
<td>Physical punishment</td>
<td>1</td>
</tr>
<tr>
<td>Reason with child</td>
<td>1</td>
</tr>
<tr>
<td>Ground child</td>
<td>1</td>
</tr>
<tr>
<td>Yell at child</td>
<td>1</td>
</tr>
</tbody>
</table>

6. You see your child playing on a busy street which you have forbidden him/her to go near for safety reasons.

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Let the situation go</td>
<td>1</td>
</tr>
<tr>
<td>Take away a privilege</td>
<td>1</td>
</tr>
<tr>
<td>Assign additional chore</td>
<td>1</td>
</tr>
<tr>
<td>Take away something material</td>
<td>1</td>
</tr>
<tr>
<td>Send to room</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Physical punishment</td>
<td></td>
</tr>
<tr>
<td>Reason with child</td>
<td></td>
</tr>
<tr>
<td>Ground child</td>
<td></td>
</tr>
<tr>
<td>Yell at child</td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

Experiences in close relationships-Revised
(Fraley, Waller and Brennan 2000)

The 36 statements below concern how you generally feel in emotionally close romantic relationships. We are interested in how you generally experience relationships, not just what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it by writing a number in the space provided. Please use the following rating scale.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1. I am afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that s/he might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid that they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
Appendix E (continued)

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Moderately Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Moderately Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

15. I am afraid that once a romantic partner gets to know me s/he won't like who I really am.

16. It makes me mad that I don’t get the affection and support that I need from my partner.

17. I worry that I won’t measure up to other people.

18. My partner only seems to notice me when I’m angry.

19. I prefer not to show a partner how I feel deep down.

20. I feel comfortable sharing my private thoughts and feelings with a partner.

21. I find it difficult to allow my self to depend on romantic partners.

22. I am very comfortable being close to romantic partners.

23. I don’t feel comfortable opening up to romantic partners.

24. I prefer not to be too close to romantic partners.

25. I get uncomfortable when a romantic partner wants to be very close.

26. I find it relatively easy to get close to my partner.

27. It’s not difficult for me to get close to my partner.

28. I usually discuss my problems and concerns with my partner.

29. It helps to turn to my romantic partner in times of need.

30. I tell my partner just about everything.

31. I talk things over with my partner.

32. I am nervous when partners get too close to me.

33. I feel comfortable depending on romantic partners.

34. I find it easy to depend on romantic partners.
Appendix E (continued)

35. It is easy for me to be affectionate with my partner.

36. My partner really understands me and my needs.