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The role of attachment in maternal reports of oppositional behaviour in clinic referred children

Phil Renner

University of Wollongong

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THE ROLE OF ATTACHMENT
IN MATERNAL REPORTS OF OPPOSITIONAL
BEHAVIOUR IN CLINIC REFERRED CHILDREN

A thesis submitted in partial fulfilment of the
requirements for the award of the degree

DOCTOR OF PHILOSOPHY (CLINICAL PSYCHOLOGY)

From
University of Wollongong

by
Phil Renner, BA, MA, Dip. Ed.

Psychology Department
1995
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The theoretical and research literature referred to in this thesis has been acknowledged in the reference section. The current thesis has been entirely the work of the author and has not been submitted for purpose of a degree to any other university or institution.

P. Renner, November, 1995
Summary

This thesis examines the usefulness of attachment theory as an explanation of maternal reports of child oppositionality in a clinical sample. To provide a clinically convenient and accessible form of maternal attachment measurement a study involving university students was conducted to examine properties of Griffin and Bartholomew’s (1994a) self-report attachment questionnaires in an Australian population. Results suggested the multifaceted nature of attachment models and a lower endorsement of the secure attachment classification than theoretically predicted.

A second study involved a group of mothers who presented their children to a mental health clinic with reports of oppositional behaviour. Attachment theory (Bowlby, 1977) predicts that such mothers will possess an insecure attachment classification and will experience psychosocial difficulties such as depression and marital problems. Results did not demonstrate an association between self-report categorical maternal attachment classification, and reports of child behaviour, depression or marital problems. The thesis discusses: the problematic aspects of attachment theory in relation to intergenerational transmission of attachment style; singularity of attachment need; methodological problems with the validity of instruments used to measure states of mind regarding attachment; the construct of maternal sensitivity as a determinant of secure attachment; and limitations in attachment explanations for children’s disruptive behaviour.
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Oppositional behaviour problems in childhood are common and represent a major source of referrals to clinical services. Parents of clinic referred children consider their children deviant because of their experience that their children violate adult imposed rules and refuse to comply with adult instructions. Inconsistencies between observed child behaviours and parents' perception of the behaviour have been shown in several studies, suggesting that parental views of the child as problematic may not always be accurate (Delfini, Bernal & Rosen, 1976; Forehand, Wells & Griest, 1980). Rickard, Forehand, Wells, Griest and McMahon (1981) found that clinic referred children of distressed mothers were much less deviant than clinic referred children of nondistressed mothers. They concluded that mothers may inaccurately label their children as deviant due to their own personal adjustment problems, which include depression and marital dissatisfaction.

Patterson (1980) found that mothers of clinic referred children who were distressed either due to depression or marital dissatisfaction, were likely to express more commands and to be more negative or hostile in interaction with their children than nondistressed mothers. Such findings caution clinicians against over-reliance on mothers' perceptions of their children's deviant behaviours. They also suggest that children's behaviour may be used inconsistently by parents in forming their perceptions. Griest, Forehand, Wells and McMahon (1980) have argued that the reasons for clinic referral may reside in the parents in addition to, rather than in the child himself or herself.

Clinical experience indicates that raising children involves more joy, affection, anger and worry than most parents are prepared for, and that parenting is an overwhelmingly emotional
experience. Research also has supported the complex relationship between parental and child adjustment in the development and maintenance of harmonious/disharmonious parent-child relationships. Reviews of predictors of children's behaviour problems have found that parenting practices, in particular parental rejection and lack of involvement, are implicated across a range of studies (Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1986). From the therapy perspective, the social learning approach has strongly dominated the investigation of oppositional behaviour. Within this perspective, parents are seen to model and reinforce disruptive behaviour and conflict (Patterson, 1982; Forehand & Wierson, 1993). It has been suggested that parental over-reliance on coercion results from parental deficits in communication, behaviour management and problem solving skills (Webster-Stratton, 1994; Shaw & Bell, 1993). Families of children with disruptive behaviours are characterised by the use of harsh, inconsistent discipline (Shaw & Bell, 1993), lack of parental involvement (Sanders & Dadds, 1993), and a poor parent-child relationship (Baden & Howe, 1992; Sobol, Ashbourne, Earn & Cunningham, 1989).

These characteristics contribute to what Patterson (1982) described as the coercive cycle of interaction between family members whereby aversive behaviours by the child (whining, yelling, hitting) and the parent (e.g., yelling, threatening, hitting) are used by each party in an attempt to terminate the other individual's behaviour and reach a personally satisfying conclusion to the interaction. These interactions are fraught with verbal demands, threats and criticism with parents modelling physical aggression and antisocial behaviour which the child then uses both in and outside of the home environment (i.e., other settings such as school, social gatherings etc.) (Patterson, 1982; Forehand & Wierson, 1993; Sanders & Dadds, 1993). A primary clinical concern has been to identify factors pertinent to effective parenting and to reduce parent-child
conflict through behavioural parent training. Initial exclusive focus on overt parent-child
interaction has been modified to include a focus on parental cognitions in an attempt to extend the
effectiveness of treatment interventions.

Unfortunately, many of the factors implicated in the development and maintenance of
disruptive behaviours in children also contribute to treatment failure. So far the following risk
factors have been identified; single parent status (Webster-Stratton, 1992); lower socioeconomic
status (Dumas, 1984; Prinz & Miller, 1994; Wahler & Hann, 1984); poor marital adjustment
(Dumas, 1984; Dadds & Powell, 1991), particularly marital conflicts regarding child rearing
practices (Shaw, Vondra, Dowdell Hommerding, Keenan & Dunn, 1994); severity of child
problem (Prinz & Miller, 1994; Scott & Stradling, 1987); social isolation (Wahler & Hann, 1984;
Dadds & McHugh, 1992); maternal depression (Lovejoy, 1991; Griest, Wells & Forehand, 1979),
particularly in the child's first three years of life (Webster-Stratton, 1990; Shaw et al., 1994) and
the presence of multiple stressors (i.e., a combination of any of the above) (Webster-Stratton,
1992; Webster-Stratton & Hammond, 1990; Prinz & Miller, 1994; Shaw et al., 1994). The co­
existence of these factors with disruptive behaviours in the child increase the risk of treatment
failure as measured by dropout rates or reduces rates of change post-treatment. In the clinical
context the question becomes what intra or extrafamilial processes can be identified and changed
so as to alleviate or eliminate disruptive behaviour among children. Fauber and Long (1991) have
suggested that changing parenting is a way to change children's psychological problems,
contextual variables notwithstanding.

While acknowledging that parenting problems may also be society determined and that
parenting problems often are intractable in the face of extreme or multiple family difficulties.
recent clinical research has emphasized the interpersonal determinants of problematic parent-child behaviour. In particular the emphasis has been on cognitive and emotional aspects of parenting, not because parenting is the only way that risk factors can affect children, but because from a clinical perspective it is often the most proximal, immediate and accessible one. In looking at specific within-family factors, research increasingly implicates the role of specific emotions on parenting ranging from the presence of negative affective states such as depression to the presence of positive empathic emotions which may have the ability to sensitise parents to children's experience of events and to facilitate mutually co-ordinated interactions (Cummings & Davies, 1994; Dowdney, Mrazek, Quinton & Rutter, 1984). However, investigation of parental emotion has been limited by models which focus on overt events and which view emotion as a consequence of cognition. There are also methodological difficulties involved in observing and quantifying covert events which parents themselves may have difficulty articulating. Because of such constraints there has been little emphasis on exploring which factors specifically influence the affective tone of parent-child relationships, or the conceptualisation of parent-child dysfunction in terms of a failure to achieve satisfactory relationship functioning. Beck and Haaga (1992) have offered the suggestion that future developments in psychological explanations should "concern how people develop and modify important affect-laden beliefs, especially beliefs about the self and about relationships" (p.36). With regard to parent-child relationships, what is apparent in clinical work is the primary subjective nature of such relationships. Clinical experience suggests that development and treatment intervention may be enhanced by systematic investigation of such subjective relationship processes.
Attachment theory (Bowlby, 1969, 1973, 1977) offers the possibility of extending the focus in parent-child relationships from observable and cognitive factors to consideration of an individual's model of self and others, and their expectations and interpretations of dyadic interactions in terms of their own systems of personal affects and meanings. In particular the attachment model emphasises that the emotional bonds that develop between dyadic interaction partners are associated with variations in emotional regulation and expression and stem in part from the way partners respond to each others needs for comfort and support. The approach may offer a promise of detailing affect and affect regulation and provide new insights into emotional communication. Berman and Sperling (1994) offered the following working definition of adult attachment: "Adult attachment is the stable tendency of an individual to make substantial efforts to seek and maintain proximity to and contact with one or a few specific individuals who provide the subjective potential for physical and/or psychological safety and security. This stable tendency is regulated by internal working models of attachment, which are cognitive-affective-motivational schemata built from the individual’s experience in his or her interpersonal world" (p.8). Berman and Sperling have argued that the caregiving capacities of the parent towards their child be also regarded as attachment behaviour in view of aspects of reciprocity and the emotional experiences of anxiety, anger and love.

The present thesis, which has a clinical focus, acknowledges that there are many explanations for the etiology and maintenance of disruptive behaviour in children. It also acknowledges that the link between risk, etiology and treatment is not precise. However, the perspective of the thesis is with the use of theoretical accounts to improve clinical practice. In this regard, the present thesis focuses on the concept of the quality of the mother-child relationship, expressed in attachment terms, as one of the variable implicated in clinic
presentation and treatment outcome. Specifically, the present thesis argues for an expansion of coercion and cognitive models of oppositional behaviour to include an emphasis on the affective functioning of mothers in terms of the involvement of interpersonal processes in their relationship experiences with their 'oppositional' child. The aim of the present thesis is to empirically investigate a number of relationship concepts and hypotheses derived from attachment theory in relation to maternal reports of oppositional behaviour in their children. In particular the thesis explores whether attachment theory provides an adequate theoretical and empirical methodology to describe and explain the complex processes involved in clinical presentation of oppositional children. In the first chapter of this thesis an overview of oppositional behaviour is presented in terms of classification and etiological perspectives on parental and family correlates of oppositional behaviour in children. In the following chapter reciprocal, transactional, and cognitive models of oppositional behaviour are broadly presented. The next chapters provide a detailed presentation of the attachment model, its measurement, and the correlates of self-report attachment style in terms of adult social and personal adaptation. The implications of these various theoretical and empirical analysis for an integrative cognitive affective relationship process model of maternal perception of oppositional child behaviour is presented. Along with this, a rationale for an exploratory study to assess the usefulness of a self-report questionnaire measure of attachment is developed and the explanatory power of the self-report questionnaire in a clinic population of mothers of oppositional children is examined.
Chapter 1: Overview of Oppositional Behaviour

1.1 - Classification Of Oppositional Behaviour

Disobedience, negativism, showing off, aggression, temper tantrums, sulking, irritability, screaming and moodiness are some of the characteristics displayed by oppositional children. A variety of labels such as acting out, disruptive, aggressive, conduct disordered and noncompliant have been applied to such behaviours (Forehand & Long, 1988). The best known taxonomical system applicable to these behaviours is based on the Diagnostic and Statistical Manual of Mental Disorders (DSM). DSM IV (American Psychiatric Association, 1994) has divided the classification of these behaviours into discrete diagnostic categories of conduct disorder (C.D.) and oppositional defiant disorder (O.D.D.). This division appears to represent a severity continuum from O.D.D. to C.D. Manifestations of oppositional defiant disorder includes violating rules, opposing the suggestions of others, refusing to comply with requests, and carrying out forbidden acts. Confrontation and provocation are common. Conduct disorder involves a wide range of behaviours that violate social norms; some of these behaviours are illegal acts against persons or property, while others, such as truancy and running away from home may be considered seriously inappropriate for minors. The DSM system is designed as a categorical approach thought to represent discrete psychopathological entities. However, its purpose appears to be mainly communicative as there is little empirical data upon which to establish categories (Kazdin, 1988; Wells & Forehand, 1985).

An alternate classification system to the categorical (DSM) is the dimensional approach (Child Behaviour Checklist: Achenbach & Edelbrock, 1991). This approach stresses the use of descriptive or empirically derived clusters to characterise a disorder. The assumption of this approach is that there are a number of dimensions along which all children's behaviour varies.
The behaviours subsumed under the empirically derived C.D. dimension appear to mostly involve direct confrontation or disruption of the environment. Noncompliance is regarded as representing the midpoint of a continuum from temper tantrums, screaming, arguing, demanding, impulsivity, to alcohol and drug use, truancy and stealing (Loeber & Schmaling, 1985). The empirical approach has proposed a stepwise progression of behaviour through four stages: oppositional; offensive; aggressive; delinquent (Edelbrock, as cited in Mash & Barkley, 1989). Up to 50% of childhood C.D. remit by adolescence (Patterson, 1982). The progression in some children from O.D.D. to C.D. over time is thought to be associated with parenting skills and parental pathology (Robins & Rutter, 1990).

1.2 - Etiological Perspectives on Oppositional Behaviour

Rutter, Cox, Tupling, Berger and Yule (1975a) and Rutter, Yule, Quinton, Rowlands, Yule and Berger (1975b) reported an increase in the probability of children exhibiting a behaviour disorder as a function of multiple family stressors. In epidemiological work in London and on the Isle of Wight they compiled a Family Adversity Index (FAI) of chronic stressors. Family stressors included overcrowding in the home or large family size, the mother suffering from depression or a neurotic disorder, the father having been convicted of any offence against the law, marital discord, and the father having an unskilled/semiskilled job (Rutter, 1978). In isolation any one of these family stressors was not associated with an increased likelihood of child behaviour problems; however, when two or more stressors were present, the risk of child behaviour problems was found to increase two- to four-fold. Blanz, Smidt and Esser (1991) and Sanson, Oberklaid, Pedlow and Prior (1991) similarly found that family stressors were predictive of child adjustment across time. Sanson et al., (1991) in addition added several stressors to the FAI (e.g., infant temperament, prematurity, perinatal stress). Of these, difficult infant temperament, in combination with one or more risk factors
(e.g., sex of the child, perinatal stress, prematurity), was a particularly strong predictor of both externalizing and internalizing problem behaviour at age 4-5.

Richman, Stevenson and Graham (1982) studied a representative sample of three-year-olds in London and found that children, especially boys, with high rates of mother reported overactivity and discipline problems at age three were likely to continue to have difficulties when followed up at age eight. Maternal reports of problems at age three were also associated with reports of marital distress, depression, a poor mother-child relationship and a variety of other stresses on the family. The three strongest factors reflecting family relationships appeared to be the quality of the marriage, maternal warmth and maternal criticism. They also found that the effects of such within-family factors were maximised in the presence of social disadvantage. These studies suggest multiplicative rather than causal or additive relations among a number of risk factors and the likelihood of disorder. The studies suggested that risk factors can interact (or to use Rutter's term "potentiate" each other) to greatly increase chances for later psychopathology.

1.3 - Specific Within-Family Risk Factors - Parenting Behaviour

Patterson's (1982) coercive cycle model of antisocial behaviour development suggested that parents of antisocial children initially reinforce commonplace low-level aversive behaviours such as noncompliance, teasing and tantrums. Escalation into more severe coercive interchanges occurs as the child learns to respond to aversive acts through aversive counter attacks. Parenting and family interaction variables accounted for 30% - 40% of the variance in child antisocial behaviour, using structural equation models (Patterson, 1986). Quality of parenting has been found to interact with such variables as psychological well being, life stress and social support of the parent, in predicting antisocial behaviour. Zahn-Waxler, Iannotti, Cummings and Denham Waxler (1990) found that parental sensitivity and nonrejecting control
were protective against persistent severe aggressive behaviour among children of depressed mothers. In a sample of single-parent families, Patterson (1986) found that maternal stress from negative life experiences, daily hassles, financial burdens and medical conditions was a significant contributor to the mother's discipline strategies, which in turn, represented a chief determinant of child antisocial behaviour. Loeber and Stouthamer-Loeber's (1986) review of parenting behaviour suggest that the family factors that predicted later C.D. and delinquency most strongly in longitudinal studies were, lack of parental supervision, lack of parent-child involvement and parental rejection. Medium strength predictors included marital conflict and parental criminality, whereas harsh discipline, parental health, and separation from home were among the weaker predictors.

Demonstration of parent to child effects have been provided by studies showing that behavioural intervention which targets maternal behaviour can be successful in reducing the child's aggressive behaviour. Baum and Forehand's (1981) parent training intervention achieved reductions in antisocial behaviour which were maintained up to 4.5 years post treatment. Rutter (1979) found that a good relationship with one parent, marked by warmth and the absence of severe criticism, had a substantial protective effect against the development of conduct disorder. Frick, Lahey, Loeber, Stouthamer-Loeber, Christ and Hanson (1992) found an association between C.D. and maternal parenting (supervision and persistence in discipline) and paternal adjustment (paternal antisocial personality disorder (ASPD) and paternal substance abuse). The finding that maternal parenting behaviour was not associated with child C.D. when the effects of parental ASPD were controlled was thought to demonstrate the relevance of viewing multiple risk factors in etiology. The link between ASPD and C.D. could potentially operate through a psychosocial mechanism such as parental modelling of antisocial behaviour, parental reinforcement of deviant behaviour, or through a

Parenting behaviour among clinic referred and nonclinic children appears to involve similar frequencies of positive behaviour, such as verbal rewards, directed towards their children. However, parents of clinic referred oppositional children have been demonstrated to engage in significantly more aversive behaviours toward their child than parents of nonoppositional children (Loeber & Patterson, 1981). Aversive behaviours were usually defined to include the use of aversive voice, content, tone, and physical aggression. The most frequently observed behaviours were aversive instructions that were yelled at the child often accompanied by threats (Wahler, 1969). Forehand, King, Peed and Yoder (1975) found that mothers of oppositional children emitted higher frequencies of commands to their children than did nonclinic mothers. Patterson (1986) referred to adequacy in family management practices of monitoring, discipline, problem-solving and parent positive reinforcement as critical to successful parent-child interaction. He suggested several reasons for a disruption in such family-management practice; some parents are lacking in effective role models and simply do not know how to raise a child or manage a family; disruption of parental partnership by marital discord and the accumulation of family crises that impinge from outside, such as chronic illness, unemployment and difficulties at work.

Wahler and Dumas (1989) emphasised parental observational skills as accurate or biased in perception of their children. Wahler and Hann (1984) analysed mothers conversations and showed that severely troubled mothers said less about their problem children's actual deviant behaviour than did less troubled mothers. Such studies have suggested a picture of multistressed parents appearing unable to describe a fairly complex set of issues when talking about childrearing problems. The mother's have tended to render simplistic judgement when
asked to account for their child's deviance. Wahler argued for this to occur, the mother is influenced by deficient observational skills. Multistressed mothers have been observed to manifest trait-like patterns of behaviour (Patterson, 1982) and their observational descriptions are marked by global, information-deficient reports (Wahler & Afton, 1980). Gretarsson and Gelfand (1988) have suggested that parents who perceive their children as troublesome will experience a disruption to the pervasive positive adult bias regarding children which helps parents to act as consistent, effective and optimistic caregivers.

1.4 - Specific Within-Family Risk Factors - Child Temperament

An issue in problematic parent-child relationships is the extent to which the temperamentally "difficult" child is at risk for the development of behavioural problems. Thomas and Chess (1977) defined a difficult temperament pattern as primarily constitutional in origin and consisting of frequent negative affect; irregularity in eating, sleeping, and eliminating; intense reactions to stimuli; and initial aversion and slow adaptation to changes in environment. They described difficult temperament as a quality of an individual infant which sometimes produced psychopathology, but only as the cumulative result of adverse parental responses. They stressed the "goodness-of-fit" between infants and caregivers and argued that temperamental style was not unchangeable, as environmental events and parental caretaking style would be expected to modify a child's inborn tendencies to behave in one way or another. Given that the "temperamentally difficult" child is described from the outset to be intense, irregular, negative and nonadaptive, it may be expected that maladaptive parent-child interactions would occur.

Olweus (1980) in investigating familial and temperamental determinants of aggressive behaviour in adolescent boys, found that the boy's temperament contributed substantially to the production of aggressive behaviour. However, family variables (mother's negativism, mother's
permissiveness of aggression) contributed more than the boy's temperament variables to the explanatory variance. The external validity of the parental report of temperament is an important issue. Parent perceptions and the actual characteristics of the child probably influence one another, and both are probably important in the child's development (Broussard & Hartner, 1970). It is argued that the risk factors for "difficult temperament" appear to be interactional and dependent on the goodness-of-fit between parent and child as well as parenting variables such as depression (Lee & Bates, 1985).

1.5 - Specific Within - Family Risk Factors - Maternal Negative Affect

A parental characteristic associated with child behaviour problems or perceptions of such problems is depression. Lahey, Conger, Atkeson and Triber (1984) suggested that mothers who are depressed or distressed may have a lower threshold for child misbehaviour which may cause them to respond more negatively and to see their children as more deviant. Patterson (1982) suggested that mood influences the types of attributions parents make about their children's behaviour. Specifically, negative attributions are predicted to increase the likelihood of negative parent behaviour directed toward children (e.g., criticisms, reprimands) and negative parent behaviours tend to be reciprocated with negative child behaviours. Depressed mothers exhibit cognitive and emotional information processing and response styles that contribute to caregiving deficits. They experience role-taking difficulties, their responses are less consistent, sensitive and contingent on children's preceding behaviour than are the responses of other mothers (Field, Sandberg, Garcia, Vegalahr, Goldstein & Guy 1985). Overall, depressed mothers are characterised as self-preoccupied, unable to respond to the needs of their children and uninvolved in their children's ongoing behaviour (Cummings & Davies, 1994).
Research has demonstrated that negative emotion is prominent in the parenting of abusive mothers (Lahey et al., 1984); depressed mothers (Forehand, McCombs & Brody, 1987); and mothers of aggressive boys (Patterson, 1982). Negative emotions disrupt parenting when they result in exchanges that are based on anger and impatience (Panaccione & Wahler, 1986). The absence of positive emotion can lead to parenting that is unresponsive and unengaging. Researchers assume that such parenting deficits are due in part to the impact that stress and support have on parents' emotions (Patterson, 1982). Maternal depression, as well as stressful life events, may place children at risk because these stresses make parents unable to meet their young children's developmental needs. The impact of maternal depression on a child's affective functioning is thought to be of critical significance as the maternal disorder is one of affect regulation and control. It is thought that the impact of parental emotional insensitivity and unavailability may be especially great in infancy. Insensitive parental behaviour induces anger, distress, high activity, physiological arousal and other indicators of affective disregulation in infants (Field, 1987). Tronick (1989) argued that the parent's behaviour in interaction with the child in the first couple of years importantly influences the child's emerging capacities to regulate emotion and arousal. Warm, responsive and sensitive behaviour by parents in interaction with infants provides an optimal context within which infants can learn to effectively regulate their arousal. On the other hand, intrusive, hostile and insensitive parental behaviour is excessively challenging and negatively arousing for children, interfering with children's emerging capacities to modulate and regulate arousal.

In comparison to nondepressed parents, depressed parents are more inconsistent, lax and generally ineffective in child management and discipline (Forehand, Lautenschlager, Faust & Graziano, 1986) and on the other hand more likely to engage in direct, forceful control.
strategies (Fendrich, Warner & Weissman, 1990). Further, depressed parents tend to use the least effortful discipline and teaching strategies. Associations are reported between inconsistent, power assertive, lax parental monitoring and children's antisocial and aggressive behaviour (Patterson, 1982). Forehand et al. (1986), using path analysis, reported a pathway whereby parental depression led to the use of ineffective management techniques and that these impairments in turn contributed to the development of child noncompliance. Conrad and Hammen (1989) investigated the relation of maternal depression to perceptions of externalising and internalising disorders in children. They also investigated the quality of communication in a mother-child interaction task as a function of maternal depression and perceptions of the child. They found that maternal depression interacted with children's actual behaviour to predict mothers' perceptions. Nondepressed mothers were less accurate reporters of problems in children than were depressed mothers. Depressed mothers who perceived maladjustment in their disturbed children made more negative comments in interactions than did nondepressed mothers of disturbed children. The study was unable to establish the causal sequence between maternal depression, actual child maladjustment and maternal criticism. While some studies suggest a negative perceptual bias influences the depressed mother's reports of child deviance (Webster-Stratton, 1988), Lovejoy (1991) reported that while depressed mothers recalled more negative child behaviours than non-depressed mothers, these perceptions paralleled observed interactions.

Griest, Wells and Forehand (1979) reported that while maternal depression was a significant predictor of maladjustment in clinic referred children, either variable may cause or be the effect of the other, or both may be the effect of an unidentified third variable. Johnston and Pelham (1990) found that the link between maternal depression and disruptive behaviours in low income families was not evident in high income families. In fact in their study, maternal
depression was related to more appropriate child behaviour. It may be that high income families have environmental buffers which manage or mask disruptive behaviours. For example, the school they choose to send their child to may be better resourced and therefore likely to detect and remedy academic and social problems sooner. Boarding schools may provide the type of structure and consistency often necessary in managing disruptive behaviour in children. From the perspective of higher income "buffers" it may be that socioeconomic status is implicated in the link between maternal depression and disruptive behaviour.

1.6 - Specific Within - Family Risk Factors - Stress

Exposure to stress can have pervasive and reliable effects on human performance in general and on attention in particular (Averill, 1973). Studies of the after-effects of stress on social behaviour have shown that after exposure to unpredictable or uncontrollable stressors, subjects are less likely to engage in helping behaviour (Sherrod & Downs, 1974) and more likely to display aggression. Factors implicated in increasing parental stress include unemployment, single parenting, lack of extended family, financial and other pressures increasing at a time when there are too few family support services to compensate for family inadequacies. Changing family structures indicate that with high levels of male unemployment and divorce rates bordering on 40 percent for first marriages and 50 per cent for second marriages, women can no longer rely on their partners to support them. Even when mothers work outside the home, couples retain their traditional roles and mothers with full-time jobs remain responsible for domestic chores and child duties (Briggs, 1994).

Poverty involving the financial inability of parents to provide a 'decent standard of living' in terms of housing, heating and lighting, health care, education, clothing, nutrition,...
employment, access to transport and opportunities for recreation and socialisation, affects one in eight Australian children with numbers continuing to grow (King, 1991). Sole parent families constitute 16 per cent of all families with dependent children in Australia. Characteristics of such families are family income below the Henderson Poverty line, living in high density government housing and experiencing social isolation (Briggs, 1994). With unemployment and poverty, families lose their choices and life becomes monotonous. Such conditions frequently lead to families becoming alienated and socially isolated. The poor have no influence over the institutions and systems which control their lives and frequently experience aversive interactions with welfare and community agencies. Dumas and Wahler (1985) found that when a mother has a large number of aversive interactions outside the home (i.e., is "multiply coerced"), she is likely to become inconsistent or indiscriminate (i.e., noncontingent) in her responses to others, her problem child in particular.

The long term success of parent training requires that distressed mothers will learn to display consistent, prosocial contingencies in their relationship with their children and continue to use them across time and across situations. The evidence suggests that they generally fail to adopt and maintain such contingencies as long as they continue to receive high rates of aversive inputs from the environment. Dumas (1984) suggested that a mother's inability to control her child's aversive behaviour by prosocial means reflects more than a lack of parenting skills on her part and also reflects the broad ecological context in which mother and child function. A child's compliance and social competence may not be of primary importance to a mother who is repeatedly beset by personal, marital or economic difficulties. Wahler and Dumas (1984) point to the inaccurate perceptual style of such multiply coerced mothers as a possible mechanism whereby the mother's failure to monitor the child objectively may result in a tendency to notice only the most aversive child behaviour. The mother's trait like perceptual
style results in her interactions with her child becoming yet another in a series of coercive
interactions in her life. In relation to treatment intervention, Dumas (1984) reported that social
and maternal stress are associated with outcome in parent training and the probability of
treatment failure is increased as the number of adverse contextual events increased.

1.7 - Specific Within - Family Risk Factors - The Marital Relationship

The effects of family interaction, individual psychopathology and disruptive
environmental events on the development and maintenance of problematic parent-child
relationships appears to be mediated by the marital relationship of the parents (Dadds, Sanders,
Behrens & James, 1987). Externalising problems in children have most frequently been found
to be associated with parental ratings of marital problems (Emery, 1982). Porter and O'Leary
(1980) used a sample of 64 married mothers of clinic referred children and found a high
correlation between interparental hostility and behaviour disorders in boys only.

Studies using nonclinical samples have found only weak associations between marital
and child externalising problems and no significant sex differences (Emery & O'Leary, 1984;
Ferguson & Allan, 1978). However, most of these nonclinical studies used measures that only
tapped global marital adjustment and, as studies by Block J.H., Block J. and Morrison (1981)
have shown, it may be specific parenting factors such as discrepant child-rearing practices that
predict child problems rather than global marital distress. Dadds and Powell (1991) found in
both clinic and nonclinic groups a relationship between marital problems and child aggression
for both boys and girls. Forehand, Brody and Smith (1986) examined the relative and additive
effects of depression and marital adjustment in a sample of mothers of clinic referred conduct
disordered children and found that marital satisfaction was correlated with child and parent
behaviour, whereas depression was related to parental perceptions of the child. Rutter and
Quinton (1984) found that the effects of a parent's psychopathology on the child were largely
ameliorated if the parents had a nondiscordent marriage. Similarly, Patterson (1976) found that the impact of the mother's depression on the child may be predicted from the quality of the parents marriage

1.8 - Specific Within - Family Risk Factors - The Quality of the Parent -Child Relationship

Parental perceptions, attributions and locus of control appear as mediating factors in parental relationships with their children. Parents who experience stress from the multiple demands of caregiving often hold unrealistically negative beliefs around their child and the child's behaviour. Beck (1993) proposed that the stress reaction results in reliance on idiosyncratic cognitive patterns, which often contain distorted beliefs and assumptions. The stressed person becomes less effective in their ability to test reality, to be objective, and to see things in perspective. For example, studies have shown that parents of disruptive behaviour children demonstrate a negative perceptual bias toward their child such that they believe that their child's disruptive behaviour is intentional and attribute it to stable, global causes which are beyond their (parent) control (Baden & Howe, 1992; Roberts, Joe & Rowe - Hallbert, 1992). Such parental attributions lead parents to be highly likely to respond in a negative manner to child negative behaviour and contribute to coercive interaction cycles between parent and child.

Infants born with difficult temperaments and their parents are at risk of developing poor relationship pattern such that as the parent becomes less attentive to the infant, the infant escalates their demands on the parents. The reduction in parental attention results in poor parental supervision, reduces parental involvement with the child and possibly leads to parental rejection which are all markers for the development and maintenance of disruptive behaviour in children. The lack of positive interaction in families of children with disruptive behaviour is described by Sanders and Dadds (1993):
The more a child engages in (is reinforced for) problem behaviours, the less likely the child will be reinforced for positive behaviours. If parents feel that they are spending hours engaged in unpleasant interactions with a child (sorting out fights, arguing over chores, having attention demanded), the less likely it is that the parents will notice and attend to positive behaviours by the child. Thus, the vicious cycle entraps the parent and the child in which the parent has a break whenever, the child is not misbehaving, and the child must escalate problem behaviours to obtain the parent's attention (p.22).

1.9 - Overview of Risk Factors of Oppositional Behaviour In Children

It appears that within-family difficulties such as parenting skills, parental perception and cognition, parental depression and marital dysfunction in combination with extra familial difficulties are associated with disturbances in parent-child relationships. The presence of multiple stressors compared to a single stressor in the family is implicated such that multiple stressors have an additive effect on the presence and severity of child behaviour problems (Rutter et al., 1975a, 1975b; Sanson et al., 1991; Webster-Stratton, 1992). Specifically, low socioeconomic status is regarded as a highly salient environment risk factor for disruptive behaviour in children (Wahler & Dumas, 1989). However, there is little evidence about cause - effect relationships between intra and extra familial difficulties and child behaviour problems. It appears that reciprocal relationships exist between variables correlated with disruptive behaviour disorders. The proponents of the view of reciprocal relationships view the causes of childhood disorders as a set of systems, subsystems and components of systems interacting at the biological, interpersonal and social levels.

In this regard Sanders and Dadds (1993) hypothesise that the earliest precursor in the development of disruptive behaviour is the child's temperamental and nurture - soliciting behaviour. If the infant is irritable and has a difficult temperament this places stress on the
parents personally, this stress in turn can place a strain on the marital relationship. As the parents personal, social and marital adjustment deteriorates this in turn impacts on their management of the child's disruptive behaviours thereby increasing the risk of coercive interactions between parent and child (Patterson, 1982). This impacts on the child's personal and social adjustment affecting the child's interactions with the school and peers which then impacts on the family system.

It is clear from observation of nonclinic families that parenting is a difficult task, with a multitude of demands placed on parents. Not only must they provide basic physical needs, they must also facilitate the psychological development of their children by modelling self-esteem, appropriate social skills, attitudes and judgements, teaching children meanings and interpretations, and setting limits where rule breaking and uncooperative behaviour are pervasive challenging behaviours of childhood (Patterson & Reid 1973). A parent must simultaneously display personal skills of frustration tolerance, conflict resolution and optimism. Desirable personal assets include a knowledge of child development, problem-solving abilities, communication skills, help-seeking ability and the capacity to regulate emotional expression and interpersonal interactions.

It appears that success in the parenting role is likely to be maximised in circumstances where the child is temperamentally easy and validates parental caregiving by appropriate responding. The presence of a supportive marital relationship and access to social support are also variables implicated in successful parenting. Parenting success is also enhanced when parents display a positive bias in observing their children. This is thought to facilitate the maintenance of a positive image of themselves and others (Dix & Grusco, 1985). Nonclinic mothers appear to perceive their children's praiseworthy social behaviour as innate, stable and dispositional, and their negative behaviour as temporary and situationally caused (Dix &
Grusec, 1985). They also overestimate their children's cognitive abilities (Miller, 1988). Such positive parental emotions and perceptions are thought to promote patient, sensitive care, early parent-child bonding and parents' willingness to teach, comfort and encourage their children (Ainsworth, Blehar, Waters & Wall 1978; Belsky, 1984). Positive perceptions of children are suggested to psychologically help mothers to feel in control of events (Harvey & Weary, 1984), enhance feelings of self-worth, and enable them to experience their world as a coherent and enjoyable place (Epstein, 1973). From a within-family perspective it appears that parenting quality is determined by needs defined by the child in terms of parental availability and acceptance. From a clinical perspective it appears that families of children with disruptive behaviour are characterised by coercive cycle in which parents model and reinforce problem behaviour when dealing with child noncompliance, conflict and problems in general. Factors such as maternal depression, marital conflict, social isolation, and poverty interact with child behaviour problems, maintaining them.

In contrast to transactional models, Attachment Theory (Bowlby, 1969, 1973, 1977) offers a causal explanation for the determination of parenting quality and parenting success. The attachment model suggests that parental perception and sensitivity, in addition to parental psychosocial adjustment, is determined by internal working models of positive or negative expectations of self and others. Secure models of attachment facilitate parenting because of positive expectations of self and others, whereas insecure models of attachment result in negative expectations of self and others resulting in perceptual distortions, lowered tolerance for challenging behaviours, and reduced ability to engage in effective relationships. It is possible that transactional and coercion formulations of within-family processes may be extended by reference to a theory of relationship functioning such as Bowlby's. The following
chapters detail the current state of development in both transactional and causal models of parent-child relationship functioning.
Chapter 2.0: Transactional Explanations of Oppositional Behaviour

2.1 - Dyadic Reciprocity Theory

Bell (1977) proposed that transactions between dyad members serve to maintain the two-person system in equilibrium and that each member has upper and lower limits regarding the intensity, frequency, and situational appropriateness of the other’s behaviour. When the upper limit of one member is reached, he or she exerts upper-limit controls (e.g., discipline) to reduce the other’s excessive behaviour and to restore equilibrium. When a member’s lower limit is reached, he or she exerts lower-limit controls (e.g., encouragement) in an effort to stimulate increased behaviour. Following this model, Brunk and Henggeler (1984) hypothesised that anxious-withdrawn child behaviour should elicit lower-limit adult controls, and that noncompliant-aggressive child behaviour should prompt upper-limit controls. Their study supported Bell’s model of dyadic reciprocity with the conclusion that parent’s socializing influence will often be modulated by child characteristics. Specifically in the case of processes leading to disciplinary practices, Bell and Chapman (1986) concluded that experimental manipulation of child behaviour can produce variations in parental power assertions in artificial parent-child pairs.

2.2 - Social Learning Theory

From the formulations of Reid and Patterson (1989) power and demand variations, as suggested in Bell’s (1977) model, are explained in terms of coercive cycles of interaction depending on the demand and discipline techniques characteristic of the dyad. Observational studies comparing normal and clinic-referred samples shown that dysfunctional families engage in aversive interactions that are more frequent, more intense and of greater duration than those of normal families (Patterson, 1976; Delfini et al., 1976). Their prosocial
interactions are less frequent than those of normal families, and in addition, these families are more likely to reinforce deviant behaviour and to punish prosocial behaviour. The social learning model of family relations is based on the assumption that dysfunctional caregivers lack the necessary skills to manage their children in a prosocial manner (Patterson, Cobb & Ray, 1973). They become unable to fulfil their parenting responsibilities adequately because they are essentially inept at handling their children, that is, at using positive and aversive consequences to control their behaviour. Patterson and Reid's (1973) view is that parents who tend to respond noncontingently are likely to promote coercive cycles of interaction with their children. Specifically, this approach assumes that (a) deviant child behaviours are learned and sustained by the attention children obtain from various social agents, (b) a shift in contingencies such that a child's desirable behaviours obtain these reinforcements will be therapeutic, and (c) behaviour change will be maintained by a process of positive reinforcement.

Overall, variables thought to contribute to the development of dysfunctional parent-child interactions include a lack of parental social skills, parental traits such as antisocial behaviour, child traits such as having a difficult temperament, and disruption variables such as marital conflict and other sources of stress. These variables combine to result in ineffectual parental discipline and monitoring. Patterson's (1986) primary hypothesis is that parental rejection is a product of, not a determinant for, deviant child behaviour. Patterson has argued that there are certain things children do that alter the esteem and affection in which they are held by their parents. He also theorised that it is disruption in family management practice per se that serves as a primary determinant for deviant child behaviour. Remediation is viewed in terms of training parents in monitoring, discipline, problem-solving and parent positive reinforcement and to increase their use of these skills. A good relationship as well as a
dysfunctional one is regarded as a process centering on the interaction between familial crises and the quality of parenting skills practised by the caregiver. Prerequisites for a good parent-child relationship would include having an adequate means for resolving crises, and effective parent skills for teaching the child both prosocial behaviours and the control of coercive ones. Given success in these endeavours, parents are likely to perceive their children as good or normal and to judge the relationship between themselves and their children as a good one.

Patterson is explicit in his hypothesis that many mothers reject a child because they believe the child's behaviour signals the mother is a failure. Loeber and Patterson (1981) theorised that interactions with a coercive child produce the mother's overinclusiveness in their willingness to classify neutral events as deviant. They concluded that parental rejection may be largely determined by a lack of parenting skills. This skills deficit initiates a process that escalates and subsequently disrupts the affection and commitment of an otherwise attached mother. Treatment involves providing parents with behaviour management strategies that ameliorates many behavioural problems in young children (Patterson, 1982). In addition, Wahler (1980) recommended expanding maternal observational categories so that multistressed mothers could learn to discriminate complex patterns of child care stimuli. Training mothers to process information using more complex observational skill was hypothesized to result in a reduction in trait like maternal responding and facilitate the production of more elaborated thinking regarding the causes of children's behaviour.

Patterson's (1982) coercion model touches upon the relationship between pleasant and coercive family interactions. He suggests that the families of conduct-disordered children may be poor at teaching survival skills such as positive control and communication strategies, coupled with effectiveness at promoting coercive interactions. However, it may be that the skills required to manage oppositional children are qualitatively different from skills operating
in normal or nonoppositional interactions, which are negotiable and influenced by the nuances of emotional responsiveness. Clinical experience suggests that the atmosphere of joyful partnership, mutual respect and sensitivity between the partners in the parent-child dyad are the most prominent qualities differentiating the distressed from non distressed parent-child relationship. The subtle clinical issue in terms of successful relationship functioning is whether training for lack of disharmony is equivalent to training for harmony, that is, whether relational as opposed to instrumental behaviour change occurs, or whether the emotional tone of the relationship also changes to one of warmth and mutuality. In clinical applications, Patterson's approach, which views behaviour as a function of the environment, has been expanded to include cognitive aspects of an individual's information processing and their effects on behaviour. The popularity of this approach relates to the possibility of control it ascribes to the individual in terms of internal dialogue, and to the behavioural context, in terms of environmental interventions. A limitation of this clinical application is the suggestion that cognitive-behavioural formulations of emotional and behavioural dysfunction pay insufficient attention to the role of interpersonal variables. A review by Beidel and Turner (1986) concluded that cognitive behaviourists over-estimate the role that cognitive processes play in both psychopathology and therapeutic change. A strength of Patterson's approach and theory of coercive cycles is its transactional nature. It acknowledges that a troublesome child in the hands of a highly effective parent who demonstrates firmness and discipline skills, or a competent and easygoing child with a very ineffective parent might not emerge with antisocial behaviour (Reid & Patterson, 1989).

2.3 - Social Cognition
In relation to the study of parents' beliefs, their origins and their influence in parenting, Goodnow (1985) suggested two kinds of determinants of parental beliefs. One is cultural background. The frequent effects associated with ethnic status or socioeconomic status suggest that many parents' beliefs are less personal constructions than ready-made schemas - ideas that are incorporated from the surrounding culture. A second kind of determinant is the motivational-affective needs of the parent. Dix (1991) suggested that complex affective systems that ensure that concerns vital to individuals are promoted are at the heart of parenting. Parents bring to interactions with children countless concerns that they want to promote. These concerns determine the outcomes parents seek and the organizations of their cognitions and behaviour. For example, parents may view having children as an opportunity for change and or for reinforcement. Parents' problems with children often center on their difficulty in providing care that is sensitive to the child's needs rather than caregiving primary in relation to parental need and affect states.

It is difficult to identify what parental beliefs are given their association with specific contextual and cultural factors. There is also debate about the causal relationship between beliefs and behaviour and beliefs and affect. Lazarus and Folkman (1984), suggested that individual's cognitive appraisal of a potentially stressful event have powerful implications for his or her emotional response to it. Bugental, Blue and Cruzcosa (1989) focused on the way in which social cognitions of caregivers influence their interpretation of and response to potentially problematic child behaviour. Bugental and her colleagues (Bugental & Cortez, 1988; Bugental & Shennum, 1984) have discovered that adults with low perceived control respond with greater negative affect, helplessness, and elevated arousal to "difficult" children than do adults with higher levels of perceived control. Bugental and Shennum (1984) argued that the dimension of controllability has special features in mutually interdependent systems.
(such as caregiving systems). They speculated that interactants in such systems will be concerned with the extent to which system outcomes are under the control of self or of the other (or of both), and, to the extent that they believe that they have a relatively low balance of control, they are more likely to be affectively reactive to the behaviour of others. For example, if they have low perceived power to prevent negative events, they will respond with negative affect to the behaviour of others that is potentially construable as a social threat (e.g., unresponsiveness on the part of others).

It appears that cognitive inferences regarding the controllability of interpersonal events have important implications for the ways in which caregivers interpret and affectively respond to potentially stress inducing child behaviour (Bugental et al., 1989). If, for example, a child engages in aversive behaviour, very different outcomes can be anticipated for adults who believe that this is a controllable or "wilful" act on the part of the child as opposed to adults who simply believe that the child is responding to some aspects of the environment, or is tired. In the same way, adults who see themselves as powerless to prevent negative caregiving events can be expected to respond more negatively to difficult child behaviour. In both cases the groundwork is laid for higher levels of reactivity. Bugantal et al., (1989) interpret their research as providing support for the conceptionalization of socialization processes as reflecting reciprocal systems that are moderated by the cognitions of caregivers.

2.4 - Clinical Theories of Cognition

In relation to clinical phenomena and the association between emotion and cognition Ellis and Grieger (1977) suggested that most humans appear to possess strong tendencies of misperception, overgeneralisation, self damming, deifying and damming others, omnipotence, magical thinking, low frustration tolerance and other numerous forms of irrationality. Information-processing theories are used to model the mental processes that are proximally
responsible for the display of such maladaptive cognitive and behavioural responses to social
stimuli (Dodge, 1993). The first step in the sequence of processing social information involves
encoding relevant aspects of the stimulus array through sensory input, via selective attending.
Once cues are encoded, meaning is applied that relate the stimulus to the individual's emotional
needs and goals. Response accessing then occurs, where the mental representation elicits
behavioural and affective responses. Response evaluation is subsequently applied to the
accessed responses for acceptability and enactment. Bartlett (1932) defined a schema as a
generic cognitive representation which the mind extracts in the course of exposure to particular
instances of a phenomenon. In relation to clinical problems Beck (1967; Beck, Rush, Shaw &
Emery, 1979) used the concept of negative schemata, (i.e., stable, enduring cognitive
structures that affect the encoding, storage and retrieval of information) and dysfunctional
attitudes, as vulnerability factors for clinical problems. Schemata can be classified in a variety
of useful categories such as personal, familial, cultural, religious, gender or occupational
schemata. They result from the interaction between individual's genetic predisposition and life
events. Maladaptive schemata result from exposure to undesirable influence from other
people or specific traumatic events.

Young, Beck and Weinberger (1993) suggested an aetiological explanation for the
acquisition of maladaptive schemata, a "child learns to construct reality through his or her early
experiences with the environment, especially with significant others. Sometimes, these early
experiences lead children to accept attitudes and beliefs that will later prove maladaptive"
(p247). The position of particular schemata on the continuum from active (hypervalent or
valent) to inactive (dormant or latent) and their position on the continuum from impermeable
to changeable, are among the essential dimensions in conceptualizing clinical problems. Beck's
(1990) model refers to domains of sociotropy (interpersonal relationships) and autonomy
(personal achievement) with loss and, or gains in the domains triggering emotions of pleasure, pain, anger and anxiety. At the most basic level people have beliefs about self and about others. These beliefs are manifested by a disposition to assign a consistent meaning when a relevant event occurs. For example, if a rejection schema is hypervalent, whenever a schema of personal loss or threat is activated there is a consequent activation of affective schema, that is, a negative interpretation of an event is linked to an affect that is congruent with it (Beck, Freeman & Associates, 1990). In his treatment approach Beck et al., (1990) emphasize that such core schemata are in the realms of awareness and that with special training the products of the process may be accessible to consciousness. The process of therapy involves opening up thinking, enhancing the observing self, learning to learn, owning one's emotions, and review, that is, the individual can let go of the contents of beliefs and also of the process of immature thinking which is characterised by rigidity and lack of complexity.

In a similar evaluation of "schemata" concepts Safran (1990) referred to the centrality to the individual of core interpersonal schemas defined as generic cognitive representation of interpersonal events or self-other relationships. Such interpersonal schemas could be regarded as a program for maintaining relatedness to others. Safran argued that because such information possesses an affective component, interpersonal schemas are best conceptualised as cognitive-affective schemas that are coded at both conceptual and expressive-motor levels. It is suggested that the effect of relational schemas will be to shape the individual's expectations about and interpretations of other people's behaviour, as well as beliefs about appropriate responses. Safran also suggested a process referred to as a cognitive interpersonal cycle whereby maladaptive expectations and dysfunctional behaviours maintain one another. If with a cognitive interpersonal cycle, cognitions and behaviour are seen as elements in the cycle rather than independent events, then it is possible to envisage treatment intervention as
targeted at any point in the cycle to achieve change, that is, behavioural intervention could
effect cognition/affect; cognition/affect intervention could change behaviour (Andrews, 1989).
The central clinical concern of such schemata formulations is how to help individuals change or
elaborate their schemata, particularly those that are problematic inter or intrapersonally.
Formulations such as Safran (1990) and Young et al., (1993) appear to place increasing
emphasis on cognitions about relationships and interpersonal processes rather than about the
self or the other person in isolation and suggest these aspects as key targets of therapeutic
interventions.

2.5 Conclusion From Transactional Models

In relation to within-family variables it appears that parents who are distressed are
vulnerable to developing parenting difficulties with a child who may also, behaviourally and
temperamentally, present as a difficult interaction partner. While it is acknowledged that
parenting practice may be compromised by social factors such as poverty, the clinical
perspective suggests the need to identify parental perceptions of the child in addition to
changing instrumental aspects of the relationship (Wahler & Afton, 1980). Treatment outcome
studies, in particular, suggest the need to extend beyond the coercion model to focus on
affective - cognitive factors influencing parent - child relational processes. From developments
in the adult treatment field there is a suggestion that therapy requires the identification of
individual's interpersonal schemata. Young (Young et al., 1993) has identified core early
maladaptive schemata which reflect models developed in childhood and elaborated during the
individual's subsequent development. Safran (1990) referred to interpersonal schemas as
cognitively oriented elaborations of Bowlby's (1969) internal working model concept. While
such cognitive models refer to the influence of affective - cognitive schemata on behaviour, the
models have not been elaborated with specific application to parent-child relationships.
Bowlby's (1969, 1973, 1977) model, however, specifically offers an explanation of parent-child relational processes in terms of internal working models of attachment representations. According to Bowlby (1969), attachment patterns become internalized as internal working models in the child's earliest year and come to constitute an aspect of the self as well as a relational propensity. Attachment models explain how individual's interpret, understand and cope with negative emotions during stressful situations. Insecure models of attachment are suggested to explain the variables implicated in distressed parent-child relationships such as perceptual distortion, maternal depression, marital dissatisfaction and oppositional child behaviour. With a view to extending the coercion model to include the influence of affective-cognitive variables on relational processes, the attachment model may be of heuristic benefit. However, theoretically the attachment model is distinct from transactional models in relation to its view, that with regard to the directionality of parent-child influences, parental internal working models are causal. In view of the dominance of this latter view in clinical practice and in view of the potential heuristic value of the elaboration of parental affective-cognitive interpersonal schemata, it appears worthwhile to appraise key components of Attachment Theory and examine the extent to which they have been supported by empirical research findings. The attachment model and its measurement is examined in detail in the following chapter.
Chapter 3.0: Attachment Theory

3.1 - Bowlby's Model

Attachment theory (Bowlby, 1969, 1973, 1980) situates the determinants of parent-child difficulties in the parents' own childhood experience with relationships and the experience of having their physical and emotional needs met. Its attractiveness as an explanatory system lies in its integration of aspects of ethnological, psychoanalytic and social cognitive perspectives into a set of predictions concerning social behaviour, personality and parenting ability. Specifically, the quality of childhood relationships with caregivers is considered to result in internal representations of attachment relations that become integrated into the personality structures providing the prototype for later social relations, including parenting. Such models of relationships, referred to as internal working models of attachment, are conceptualised as dynamic cognitive structures that guide the individual's expectations about relationships and interpretations of experiences in relationships. Internal representations having been constructed initially in the sensorimotor period, that is, infancy, are hypothesised to operate largely automatically and outside of conscious awareness. Consequently, mothers' models of relationships affect their ability to attend to and to integrate cues/signals from their child thereby influencing her caregiving ability, that is, the ability to respond in a sensitive, contingent manner to her child. Bowlby (1977) stated the central assumption of attachment theory as:

The key point of my thesis is that there is a strong causal relationship between an individuals' experiences with their parents and their later capacity to make affectional bonds, and that certain common variations in that capacity, manifesting themselves in marital problems
and trouble with children as well as in neurotic symptoms and personality disorders, can be attributed to certain common variations in the ways that parents perform their roles (p. 206).

Bowlby (1973) identified two key features of these internal representations or working models of attachment in terms of a model of the self and a model of the other. The model of the other is based on "Whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection"; and the model of the self is based on the judgement as to "Whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular is likely to respond in a helpful way" (p.204). These models relate to the evaluation of self and other in terms of the individual's subsequent beliefs about the worthiness of the self to receive love and support and the trustworthiness and dependability of others in providing love and support. This model suggests that parents' relationship with their child is based on more than the child's specific behaviours. Their response to the child is driven by a collection of thoughts and feelings, representative of past relationships. Their child's behaviour functions as a stimulus which activates parent's internal working models of both self and others, resulting in the enactment of procedural rules in the form of behavioural/affective responses. Dysfunctional parent-child relationships are viewed as requiring remediation whereby the adult changes their thinking regarding their relationship to their parents. This change would affect their ability to care for their child and develop a relationship atmosphere of positive emotion and co-operative negotiation of stressful interactions.

Bowlby demonstrated that the accessibility of parental figures is uniquely capable of sustaining children's feelings of security and has used the term "attachment" to refer to such dyadic relational bonds (Bowlby 1969, 1973, 1980). Three characteristics have been proposed as distinguishing attachment from other relational bonds; proximity seeking - the child will
attempt to remain within protective range of his parents. The protective range is reduced in strange and threatening situations; secure base effect - the presence of an attachment figure fosters security in the child. This results in inattention to attachment considerations and in confident exploration and play; separation protest - threat to the continued accessibility of the attachment figure gives rise to protest and to active attempts to ward off the separation (Weiss, 1991). Bowlby's (1973) model stressed the importance of parental responsiveness to her child, in terms of the children's subsequent development of internal working models of their self as socially competent, worthy of support and expectation of others as accessible and helpful. The physical and psychological proximity of caregivers is considered important in the development of such working models of self and relationships. The concept of regulating the caregiver care in terms of sensitive responding (content of the parent's response is developmentally appropriate in relation to the caregiver's interpretation of child signals, Ainsworth et al., 1978) is regarded as critical for the child's further social and emotional development.

With regard to the development of externalising behaviour problems, Shaw and Bell (1993) have proposed that insecurely attached infants would be likely to show higher rates of later externalising difficulties because of the increased levels of anger, mistrust and chaos found in insecure mother - child relationships. Theoretically, oppositional behaviour is viewed as the child's attempt, via "problem" behaviour, to control caregiver care in terms of proximity regulation and emotional availability and responsiveness. Out of such experience of the worthiness of the self, in terms of the responsiveness of others, are thought to develop generalised cognitive expectations about the likely behaviour of others and self in social interactions and personal relationships. In this respect the child's oppositional behaviour is thought to reflect the strategy the child uses to regulate the caregiver's proximity but also the child's feelings and expectations about self and others. However, the strategy of oppositional
behaviour, while likely to facilitate parental proximity, is unlikely to generate parental sensitivity to the child's affective needs. Over time it is also unlikely to contribute to harmonious parent-child relationships. The attachment model extends the social learning and cognitive analysis of oppositional behaviour specifically to the role of cognitive/affective influences on the parent-child relationship, both in relation to the child's developing and the parents developed working models of caretaking and caregiving behaviours. The concept of goal-corrected partnership where set goals are verbally negotiated between parent and child is regarded as important for the development of the child's working model in terms of problem solving and communication skills around stress situations for the dyad. The model also emphasises the importance of the child's ability to renegotiate the balance between being connected to others and being independent and autonomous in relation to meeting novel developmental phases. The possibility that the ability to negotiate joint plans is what distinguishes conduct disordered preschoolers from nonproblem children has been referred to by Greenberg and Spelz (1988) as a "deficiency of planning" hypothesis.

This emphasis on the emotional and communicative aspect, that is, affective tone of the parent-child relationship, clearly positions the attachment model as both a proximal and distal (intergenerational transmission of attachment patterns) relationship approach. Interactions with the primary caregiver (focusing on affective sharing) is postulated to eventuate in the internalisation of an affective-motivational-cognitive model of relationships and affect regulation. With this approach personal and interpersonal affect has achieved equality status as an aspect of human behaviour and therapeutic interventions would emphasise the necessity of the processing of "hoi cognitions", i.e., affectively laden material, in terms of reworking models of original relationship experiences to effect relationship improvement. Treatment interventions are specifically formulated to highlight the influence of the parent's subjective
interpretations, based on their own working model of relationships, on their capacity to provide appropriate caregiving for their child's emotional and developmental needs. There would be an emphasis on parents' ability to utilise perspective taking skills in terms of understanding the relationship from the perspective of the other participant in the dyad, i.e., the child. There would also be an assumption that affect must be re-worked for therapeutic change and for the ability of the parent to become sensitised and appropriately responsive to the needs of the child.

3.2 Link Between Insecure Representation Of Attachment And Oppositional Behaviour

In contrast to transactional models of parent-child relationships (Bell, 1977; Patterson, 1982), Bowlby's (1980) Attachment Theory suggests that parental behaviour and socialization practices are grounded in parent's own internal representation of intimate relationships, formed in the context of early caregiving and affect perceptual biases, expectations of the responsiveness of others and models of parent and child roles. Parental response is viewed as essentially recreating familiar relationship patterns consistent with the parent's cognitive expectations (Sroufe & Fleeson, 1986). Theoretically, an insecure model of relationships is suggested to result in diminished personal resources (poor social skill, inadequate emotional regulation) and lack of social support (resulting from an impaired capacity to relate). The correlates of children's oppositional behaviour in terms of parental depression, marital dissatisfaction, and child management are viewed as the consequence of attachment history rather than the result of transactional influences. In Bowlby's model no causal role is assigned to variations in infant behaviour such as those produced by temperament. Sensitive and responsive mothering is a process internal to the mother and is not a consequence of reciprocal or transactional processes involving both mother and infant or mediated by social variables such as poverty. Negative expectations of self and others in social
relationships, or the distorted patterns of information processing that accompany insecure attachment organization are considered to increase the likelihood of developing any of a range of pathologies, perhaps by increasing social conflicts or reducing available social supports (Dozier, 1990). A mother’s model of relationships, may shape parent-child interactions that increase child oppositionally (e.g., diminished maternal attentiveness and support or increasing inconsistency in limit setting), or by lowering tolerance for difficult behaviour and distorting parent perception of the child.

Transactional models investigating family risk factors for parenting problems suggest the importance of both intrafamilial, extrafamilial and social factors in the development of parental perception of child behaviour problems. Cognitive clinical models of the influence of cognitive schemata on behaviour suggest that schemata result from the interaction between an individual’s genetic predisposition and life events (Beck et al., 1990). However, Bowlby’s (1967, 1973, 1980) thesis, that specific biases and distortions in social expectations and consequent maladaptive behaviour are related to insecure attachment organizations, frames this model as both a causal and prescriptive theory of family functioning, dyadic adjustment, and parenting quality.

3.3 - Assessing Infant Attachment Representation

The attachment model suggests that successful parent-child relationships depend on the primary caregiver’s sensitivity and responsiveness and on the child’s ability to trust in the caregivers accessibility. This relationship quality focus has been traditionally assessed by measuring the quality of the child’s attachment to the mother in a procedure known as the Strange Situation (Ainsworth et al., 1978). The Strange Situation paradigm consists of a series of three minute episodes in a laboratory playroom in which a one to two year old child is either alone with its mother, with an unfamiliar woman and the mother, with the unfamiliar
woman alone, or with no adult present in the room. The last two situations - when the child is either with the unfamiliar woman or alone - are considered to be the most stressful, and the child's behaviour during these periods, together with its reactions when the mother re-enters the room, provide the major information used to classify the child's attachment to the parent. It is assumed that such a conflict situation tests the child's and parent's ability to maintain a cooperative partnership by managing goal conflicts or relationship disruption. Although the classification scheme is currently being revised by Main and Solomon (1990) to include a fourth group known as disorganised or D pattern, until recently children were classified into one of three groups in terms of their relationship to their mothers. The securely attached child (Type B) who makes up approximately 65% of American children typically shows mild distress when the mother leaves the room but rushes to the mother and recovers quickly when she returns. There are two categories of insecurely attached children. The resistant child (Type C) who makes up approximately 15% of American children, exhibits extreme distress when the mother is gone and is not easily soothed when she returns. The avoidant child (Type A) who makes up 20% of American children does not become upset when the mother leaves and typically continues to play when she returns.

3.4 - Infant Attachment and Psychosocial Adjustment

Patterns of secure or insecure attachment in the one year old assessed in the Strange Situation were predictively linked to earlier patterns of sensitivity and responsiveness of mothers and also to significant aspects of developmental adaptation in the first and second year of life. Support for the assumption that the Strange Situation assesses both the prior and current relation of children to their mothers comes from studies revealing that children who are classified as securely attached (Type B) in the Strange Situation become more resilient, curious and socially adroit with peers then do children classified as less securely attached (Type
A and C) (Waters, Wippman & Sroufe, 1979). Erickson, Sroufe and Egeland (1985) found that evident attachments in particular were associated with later non compliance and hostile acting our behaviour. This association has been maintained in a follow up at age seven to eight years (Renken, Egeland, Marvinney, Mangeldorf & Sroufe, 1989), but only for boys who were rated Type A at 18 months of age.

While infant attachment security has been found to predict later child competence from ages two to five (Matas, Arend & Sroufe, 1978), the empirical relationship between attachment insecurity and later behavioural problems is considered problematic by some researchers. Fagot and Kavanagh (1990) found no relation between evident classification at 18 months and child externalising behaviour at 24 to 48 months. Lyons-Ruth, Alpern and Repacholi (1993) found that insecurely attached infants from lower socioeconomic backgrounds are more likely to develop externalising problems than their middle-class counterparts. Although limitations of outcome measures may partly explain such inconsistencies, studies that have identified clinical levels of problem behaviour (Lewis et al., 1984) or that have examined population with other risk factors (Renken et al., 1989) have been more successful in linking the quality of infant attachment with subsequent behaviour problems.

In relation to socioeconomic status, Shaw and Bell (1993) have speculated that buffers of the middle-class child's ecosystem may prevent the behaviour of the insecurely attached child from becoming dysfunctional. Shaw and Vondra (1995) have suggested that the added risk factors of insecurely attached lower socioeconomic children in terms of lack of resources, such as poor maternal support and inadequate child care, may increase an infant's vulnerability for developing psychopathology by continuing to affect the quality of parenting in these populations. According to van Ijzendoorn and Bakermans-Kranenburg (1996), low
socioeconomic status mothers more often appear to be classified as dismissing, and as unresolved with respect to the loss of an attachment figure or with respect to trauma of other kinds. They speculated that impoverished environments might provoke more traumatic events than average environments. Nonetheless they suggested that the over-representation of dismissing attachment is difficult to explain and postulated that harsh and adverse socioeconomic circumstances might turn reflection about attachment-related experiences into a lower priority. Such findings would suggest possible alternate explanation for the associations found between attachment status and behavioural competency which relate to contextual rather than relationship factors.

Similarly some theorists point to factors other than the mother-child relationship which make a significant contribution to a child's initial classification of behaviour in the Strange Situation. One factor is the child's temperamental tendency to become fearful or remain spontaneous in an unfamiliar situation (Kagan, 1989), and another is parental socialisation practices that may teach the infant to control behavioural signs of anxiety (Grossman, Grossman, Huber & Wartner, 1981). If some infants are more distress-prone than others, as indicated by their threshold and intensity of responsiveness across situation, then the nature of children's experience in situations relevant to attachment will differ. From studies of infant temperament from a psychobiological perspective, five to six dimensions have emerged from item-level factor analytic and other research (Rothbart & Ahadi, 1994). These dimensions include two kinds of negative reactivity, (a) fearfulness, and (b) irritability or anger and frustration; one positive affect variable, (c) approach or positive affect; along with (d) activity level, and (e) attentional persistence. A small rhythmicity factor also has been extracted. There appears to be similarities between these dimensions and the Big Five or Big Three higher
order factors emerging from studies of personality (Eysenck & Eysenck, 1985; Costa, & McCrae, 1985; Watson, Clark & Harkness, 1994).

The first two dimensions of infant temperament, fearfulness and irritability, appear to correspond to the childhood and adult dimension of negative affectivity or neuroticism, that is, a general tendency to experience or express negative emotions. The infant dimension of approach or positive affect and possibly activity level may be related to the child and adult dimensions of extroversion or positive affectivity, characterised by positive affect and an approach, stimulus-seeking, or reward orientation (Zuckerman, 1991). The later-developing infant dimension of attentional persistence may overlap with child and adult variation on the dimension of control or constraint reflecting attentional self-regulatory systems that can assert control over other temperament systems through effort or will (Rothbart & Ahadi, 1994).

Applied to the area of attachment behaviour, the infants' temperamental reactivity may serve to push the caregiver away, and with the caregiver less available, the child may develop soothing strategies that do not involve the caregiver. This argument suggests bidirectionality of effects in the infant-caregiver relationship. Kagan (1989) argued specifically that the child's temperamental vulnerability to uncertainty and distress in contrast with emotional spontaneity in unfamiliar contexts makes a contribution to the child's behaviour in the strange situation. The predication of a positive relation, based on temperament, between a Type C classification at one year and shy, timid behaviour in later childhood is suggested in a longitudinal study of 113 children who were observed in the Strange Situation at one year and evaluated again at age six (Lewis, Feiring, McGuffog & Jaskir, 1984). It appears, that a temperamental dimension reflecting negative emotionality, although it is one of many factors that influence children's responses to separation and reunion, is associated with insecure attachment (Thompson, Connell & Bridges, 1988; Vaughn, Stevenson-Hinde, Waters, Kotsaftis, Le Fever,
Other concerns that exist regarding the Strange Situation as a valid index of attachment are data suggesting that a child's behaviour in the Strange Situation is influenced by the degree to which the mother has encouraged her child to control his or her anxiety over the course of the first year. In contrast with American norms, where three-fourths of one year olds are classified as securely attached, only one-third of a group of middle-class German children behaved in the Strange Situation as though they were securely attached, and almost one-half were evident (Grossman et al., 1981). This finding can be interpreted to suggest that these German mothers promote independence and discourage crying and clinging when their child is anxious. Such observations suggest that both temperamental qualities and prior socialisation may influence the child's behaviour in the Strange Situation. Consequently, the assessment may not be a precise measure of mother-child relationship quality but reflects a variety of influences and may be more appropriately regarded as a global measure of unspecified interactive variables.

3.5 - Sensitivity in Maternal Behaviour as a Determinant of Secure Attachment

Clearly explanations of parent-child interaction involve ideas of mutuality and reciprocity. Observations indicate that each member of dyads respond in some way to the behaviour of the other. The idea of parental responsivity emphasises the idea of reciprocity and implies that a parent needs to be discriminating and perceptive in their responses to the child. However, such qualities, together with the qualities of sensitivity stressed in attachment theory's account of the determinants of the development of a secure relationship with the child, are difficult to precisely define, measure, and evaluate. Ainsworth et al. (1978) regarded maternal sensitivity as the primary determinant in the development of a secure relationship.
with the child as measured in the Strange Situation, and determined the child's subsequent socio-emotional competencies.

In a test of sensitivity and attachment theory, Erickson, Korfmacher and Egeland (1992) attempted to use therapeutic strategies built on attachment theory with a particular focus on training for maternal sensitivity. The STEEP (Steps Towards Effective Enjoyable Parenting) project was based on the attachment assumption that parent's behaviour significantly influences both the child's external attachment behaviour patterns and internal conceptualisation of the relationship. It was also assumed that by influencing the parent's internal working model, it would also be possible to influence the child's developing model. The project was designed to promote healthy parent-infant relationships and prevent social and emotional problems among children born to first-time mothers who were at risk for parenting problems due to poverty, youth, lack of education, social isolation and stressful life circumstances. The goal of the intervention was to educate the participants and provide them with information that would increase their responsivity and sensitivity to their infants once these infants were born. The outcome measure of interest was the number of infants who, seen in the Strange Situation at 12 months of age, would be classified as securely attached.

Egeland (as cited in Fox, 1995) reported that the intervention program had altered maternal behaviour and that program women were more sensitive and responsive to their infants. However, there were no differences between these women and a matched control sample who received no intensive intervention on the primary measure of outcome (i.e., the number of their infants securely attached, as classified by the Strange Situation). Van Ijzendoorn, Juffer, and Duyvesteyn (1995) claimed in a meta-analysis of attachment interventions that attachment treatment studies are effective in changing parental insensitivity as well as in changing children's attachment insecurity in the expected direction. However,
results of the STEEP project are problematic for the status of sensitivity as an explanatory
construct as the data appear to elude simple analysis and do not display the predicted
association between training for sensitivity and secure attachment.

Also problematic is the tendency to assume that secure attachment is adaptive and
represents conformity to a standard of normality. While there are associations between
patterns of parenting and qualities of attachment security most of the associations have been of
only moderate strength. The perceived lack of desirability of insecure attachment relates to its
association with maltreated children. However, the adverse environments that predispose to
attachment insecurity contain a variety of risk factors referred to in transactional models. No
causal interpretations are possible for insecure attachment because of the possibility that
alternative mediating processes are implicated (Rutter, 1995).

Another difficulty with the concept of sensitivity as a determinant of secure attachment
is the complexity of the mother-child pair sharing 50% of their genes. Empirically, it is difficult
to factor out the contribution of heredity from maternal sensitivity in the production of
maternal sensitivity and correspondingly socially competent children. Similarly, problematic
for the prediction of secure attachment determining subsequent secure attachments is the
finding that the correlations among a child's various relationships are quite low. A child who is
securely attached to mother is not necessarily securely attached to father (Fox, Kimmerly &
Schafer, 1991; Main & Weston, 1981), or to other caregivers (Goossens & Van Ijzendoorn,
1990). Efforts to link parent-child relationships with child-peer relationships have had
inconsistent results; some studies (Pastor, 1981; Waters, Wippman & Sroufe, 1979) find
positive results, others do not (Howes, Matheson & Hamilton, 1994). Hinde & Stevenson -
Hinde (1986) suggested that behaviours, emotions and cognitions acquired in a dyadic
relationship are specific to that relationship. The lack of secure attachments across
relationships may indicate the relevance of influences other than the maternal relationship affecting personality formulation, with particular emphasis on the influence of contextual and temperamental factors (Fox, 1995) and peer and sibling factors (Stocker & Dunn, 1990). Such other potential influences are included in transactional models but the boundaries of attachment theory preclude their inclusion as explanatory concepts or intervention targets.

3.6 - Assessing Adult Attachment Representation

The attachment model predicts continuities between maternal representations of relationships and caregiving behaviour with her child. Assessment of adult working models of attachment are inferred from interviews focusing on adult awareness of childhood relationship experiences. The Adult Attachment Interview (AAI), (as cited in Main, Kaplan & Cassidy, 1985; Main, 1991) asks parents to:

(a) describe relations with their own mother and father,
(b) consider the influence of these childhood attachments on them in the present, and
(c) describe their attitude to attachment relationships in general.

Measures focus on the link between the content of reported memories and the organisation of the emotional experience and thought processes concerning parental acceptance, availability, rejection and separation. Investigators operate on the assumption that interview responses reflect the functioning of the internal working model which is theorised to guide the individuals' perceptions and appraisals of experience. On the basis of the Adult Attachment Interview, three adult classifications of relationship models are made. Interviews in which a parent described childhood attachments with emotional openness and internal consistency are classified as autonomous/secure, regardless of the quality of the remembered relationship. These parents tend to value attachment relationships in general and acknowledge the influence of early attachments on their own personality development. Interviews are
classified as *preoccupied* if they contain lengthy and detailed accounts of conflicted relationships, without the ability to step back and evaluate relationships from the perspective of an external observer. An interview is classified as *dismissing* if the person has difficulty in recalling specific events from childhood, provided idealised general descriptions of parents but also recalled contradictory details.

### 3.7 - Intergenerational Continuity in Attachment Representation

As working models have their origins in the individual's experience of the sensitivity and responsiveness of earlier caregivers, attachment theorists argue that what is expected of current attachment relationships depends on the quality of these internalised representations and the individual's sensitivity to both representations of the child and parent role in relationships. Internal working models are also considered to contribute to the individual's ability to constructively manage stress and engage in effective help seeking behaviour in the broader social context. On the basis of individual's recollections of childhood attachment relationships, Main et al. (1985) identified the following patterns of attachment continuities between mothers and their children. Secure mothers have a model of a sensitive responsive caregiver and have children who are secure in relationships. Mothers who are dismissing of the relevance of attachment experiences have children who are insecure-avoidant in relationships. The children of mothers who are conflicted/preoccupied about their attachment experiences have children who are classified as insecure-ambivalent in relationships.

Crowell and Feldman (1988) reported a study involving both a clinic and comparison sample. Mothers were described as middle to upper class and presented at the child psychiatry clinic at Stanford University. The clinic sample comprised 20 developmentally intact and 20 developmentally delayed children with behaviour problems. A nonclinic comparison group of 24 was recruited from local preschools. Children's age ranged from two to four years.
Maternal attachment status was assessed using the AAI. No prevalence rates of attachment status were provided separate from their association with children's task behaviour. However, Crowell and Feldman reported that the "incidence of insecure models of relationships in the comparison group exceeded 50%" (p. 1283). Their results were that mothers classified as autonomous (i.e., secure) on the Adult Attachment Interview were more helpful and supportive with their preschool children in a series of teaching tasks than were mothers classified as either preoccupied or dismissing (i.e., insecure). Secure parents did not use confusing or chaotic communication nor were they directive or controlling in interactions. Children of secure mothers were also rated as being less negative, less avoidant, less controlling and less angry than were children of insecure mothers. These associations were found for both the clinic and comparison samples, but the effects were stronger for the mothers of referred children. The results were interpreted to support the view that mother's adult attachment classifications (i.e., internal working models of relationships) were associated with parenting behaviour.

Crowell, O'Connor, Wollmers, Sprafkin and Rao (1991) studied a sample of 48 mothers and their children, aged 5 to 11 years, in relation to the association between mothers attachment classification, mother-child interaction and child behaviour problems. The sample was taken from children who were brought for evaluation to a child psychiatry clinic at the State University of New York. The sample was described as 77% white and middle to working class. A T-score of 63 was used as indicative of clinical significance on the Child Behaviour Checklist (CBCL: Achenbach, 1991) for both parents and teachers. However, a T-score of 63 is generally considered as low for clinical significance, a T-score of 67 being the conventionally accepted criterion (Achenbach, 1991). The AAI was used to characterise mother's states of mind regarding attachment and parent-child relationships. The distribution
of maternal attachment classification was 12% secure (n=6), 39% dismissing (n=19), 49% preoccupied (n=24).

Results indicated that mother's attachment classification was marginally related to mother's behaviour in a mother-child interaction session. Of the five variables used to rate maternal interactive behaviour, two variables, (warmth and quality of assistance) achieved significance at the .10 level (chosen, to minimise type II error); one variable, (involvement), was nonsignificant; leaving the remaining two variables (organisation and supportive presence) as significant at the _p_ < .01 and _p_ < .05 respectively. Mother's attachment classification was found to be unrelated to child behaviours in the mother-child interaction session. A significant association between the child's clinical diagnosis and maternal attachment classification was found, with two-thirds of the children whose mothers were classified as secure receiving a primary diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) with the remaining one third receiving a dual diagnosis of ADHD and ODD. This distribution is unusual given the usually higher rates of comorbidity between ADHD and ODD (Barkley, 1990). Eighty four percent of children of mothers classified as dismissing received a diagnosis of ODD or CD versus one third in each of the other two groups. Children of mothers in the preoccupied group did not show a distinct pattern of diagnosis. No significant differences were found among the three classifications on parents ratings on the CBCL. However, planned comparisons showed that children of dismissing mothers received significantly higher T-scores than other children on CBCL externalising subscales.

The result for the association between maternal attachment classification and maternal behaviour in an interaction session was significant but with a small effect size. There was a nonsignificant association between maternal attachment classification and child behaviour in the interaction session and on maternal CBCL ratings. It was noted that difficulty existed in
drawing conclusions regarding direction of influence (mother's models of relationships influence child behaviour, verses mother's models of relationships are biased by current relationships with an oppositional child) with correlational data. Nevertheless, Crowell et al. (1991) concluded that insecure attachment classification in a mother is a risk factor for clinic presentation and appeared to contribute to the development of psychopathology in children as well as its type and severity. Although secure attachment in mothers was also associated with clinic presentation, Crowell et al. appear to imply that the secure mother's problems pertained to their child's ADHD status rather than to maternal behaviour or to the presence of severity of behavioural symptoms. In fact, the children of secure mothers did not appear to be representative of a clinical sample as they achieved the lowest scores across maternal attachment classification on CBCL maternal report and did not achieve a clinically significant externalising T-score of 67.

Haft and Slade (1989) studied affect attunement and maternal attachment in 14 middle class recruited mothers of 10 to 13 month old babies. Subjects were recruited through a commercial list of families who had recently had babies and who lived in the New York area. Letters were sent to 100 prospective mothers resulting in 25 responses. This low response rate is problematic in terms of the possibility of the sample being biased. The first 15 subjects who met criteria were selected for the study. In contrast to their expected distribution of a given sample of 60% secure/autonomous, 30% dismissing, and 10% preoccupied, their sample was distributed as 21% secure/autonomous (n=3), 43% dismissing (n=6), 36% preoccupied (n=5). Because of the size and skewedness of the sample, results were largely discussed on the basis of a qualitative descriptive analysis. Nevertheless, the data was interpreted as supporting the hypothesis that the nature of a mother's internal affective experience powerfully influences the affects she acknowledges and attunes to in her child.
Fonagy, Steele and Steele (1991) studied maternal representation of attachment during pregnancy and subsequent infant-mother attachment at one year of age. The sample consisted of 100 white well-educated, middle-class primiparous expectant mothers who presented for prenatal classes at the obstetrics and gynaecology department of University College Hospital, London. Participation represented 50% of women potentially recruited. Fonagy et al. stated that a "sizeable minority simply were not responsive to the idea of participating" (p. 893). The average age of the women was 31 with the majority being described as middle to upper income levels. Attachment status was assessed using the AAI. Prevalence rates for attachment were autonomous (n=59), dismissing (n=22), and preoccupied (n=15). Fonagy et al. concluded that maternal attachment classification successfully predicted 75% of subsequent cases of infant attachment classification. It was also noted that 24% of autonomous mothers appeared to have insecurely classified infants, while 27% of Dismissing/Preoccupied mothers had securely attached infants.

Cohn, Cowan, P.A., Cowan, C.P. and Pearson (1992) studied the association between mother's and father's working models of childhood attachment relationships, parenting styles and child behaviour. The sample consisted of 27 couples and their preschool children. All families resided within a 30 mile radius of a large western university United States community and were predominantly middle class and well-educated. The mean age of the mothers was 32 years. The AAI was administered in the presence of the spouse to assess attachment status. The prevalence of attachment styles was secure (n=34) (63%); Dismissing (n=2) (4%); Preoccupied (n=3) (5%); unresolved about loss (n=9) (17%); other (n=6) (11%). Because of the few cases classified as either dismissing or preoccupied the insecure classification was combined with subsequent analysis conducted comparing the insecure and secure groups. Results indicated that insecurely classified parents demonstrated less positive engagement and
provided less structure in interaction with their preschool children than did securely classified parents. Cohn et al. (1992) interpreted their study as demonstrating an association between mother's and father's adult attachment classification and the parenting dimensions of warmth and structure.

3.8 Limitations Of Attachment Theory

The results obtained by Crowell and Feldman (1988); Crowell et al. (1991); Haft and Slade (1989); Fonagy et al. (1991); and Cohn et al. (1992) are interpreted as demonstrating the influence of attachment representational and intergenerational influences on the nature of the mother-child relationship and the importance of examining the mothers attachment history in relation to current parenting problems. However, caution needs to be applied in relation to the direction of effect and generalisability of the results. What is striking about such studies is the preponderance of largely middle-class, well educated participants who volunteered to participate. It may be that the demonstrated associations would not hold for individuals in different socioeconomic situations or with individuals who declined to participate. The nature of the samples are suggestive that empirical investigation of attachment theory in relation to parent-child relationships may be generating norms based on middle-class data. There also appears to be a spread in the prevalence distribution of attachment style across various studies making it difficult to ascertain what the predicted empirical distribution are for "clinical" and "normal" samples. There is also cause for concern regarding sampling bias from low response rates to recruitment and consequent validity of the research findings.

Current attachment research appears to be assessing different samples, possibly unrepresentative of the general population. In some cases, there is insufficient information regarding demographics and methods of recruitment to enable clarification about the significance of findings and comparison across studies. The view of attachment theory is that
relationship skills and interaction difficulties have their origin in childhood in the form of internal working models. Relationship processes are theorised to be maintained by these working models, enacted according to procedural rules, and to have implications for the understanding and treatment of parent-child difficulties. However, the theory of continuity between childhood attachment experiences and adult competency with relationships requires empirical verification and adequate measurement of putative current internal models, their origins in childhood and their association with child functioning. The review so far has been unable to validate core constructs of attachment theory such as its emphasis on sensitivity as an explanatory construct for success in mother-child relationships, or unambiguously accept findings purporting to establish a causal relationship between attachment status of parent and child.

3.9 - Limitations of the Adult Attachment Interview (AAI) as a Measure of Internal Attachment Models Originating in Early Infancy.

The AAI method assumes that the individual's working model of attachment and associated emotional and social adaptation can be assessed through the emotional and verbal reactions elicited during an interview, pertaining to early parent-child memories. The primary role of the interviewer is to reveal the individual's childhood attachment experiences and activate the individual's representations of relationships. The interviewer is not interested in the individual's life events per se, but in the individuals interpretation of specific attachment experiences. The difficulty with the use of self-report to access the internal working model is the assumption that ultimate meaning resides in the defined attachment categories. The interview format is predetermined and structured around a theoretical theme of the intergenerational transmission of parenting. The coder favours certain patterns in the speakers self-report and concentrates on certain elements at the expense of others. In this respect the
AAI measures its own theoretical constructs and is limited in its ability to measure subjectively experienced emotion or relationship processes. The limitation of the model and method is that it attempts to assess subjective relationship experiences. Further, it is unclear whether the processes involved in answering the interview questions are the same as those that would occur in the absence of such prompts, or that such experiences necessarily guide the individual's behaviour. This raises issues regarding the core versus peripheral nature of the material elicited from the perspective of the individual as opposed to the interviewer's representational and structural organisation which is based on the core tenets of attachment theory.

In terms of the concept of intergenerational continuity of attachment, the retrospective nature of parental memory measures also raises validational questions. Even if it can be assumed that memories referring to one's relationship with one's parents may be relatively easily recalled (Perris, 1988), these recollections may be distorted in various other ways. Spanier (1976) mentioned "falsified accounts" and "faulty recall". The former refers to deliberately false reporting, often in order to gain a favourable impression. The latter is described as unintentionally false reporting due to poor memory or a changed perception of the past. According to Spence (1982) remembering, like language, is conceptualised as a generative and affable process that serves contemporary personal and social needs. Although the theory assumes that childhood experiences shape adult attachment models, it is also possible that the adoption of a particular attachment style in adulthood reshapes memories of attachment figures in childhood. Further to this point, the reliance on retrospective recall is also problematic because of the selective nature of memory recall. Such recall has been demonstrated to be mood dependent and attachment researchers have not demonstrated that their measures are not state dependent and as such simply represent measurements of a subset
of depressive symptoms, or reflect current relationship quality. Because of negative affectivity, reports of early childhood experience may be distorted. Depressed mood state whether experimentally induced or naturally occurring, may lead to the selective recall of unpleasant memories (Blaney, 1986). Lewinsohn and Rosenbaum (1987) argued that perceptions and parental behaviour are clearly related to current mood status.

It would appear that the AAI is accessing cognitive style, that is, characteristics associated with perceptual and explanatory style. The concept of internal working model appears similar to the concept of schemata (Beck, 1976), that is, hypothesised cognitive structures that when activated organise comprehension of event based situations. From a cognitive perspective, the issue of narrative content and discourse coherence with distressed parents has been investigated by Wahler and colleagues whose research details maternal observational categories and response class phenomenon. Wahler and Afton (1980) found that multistressed mothers manifest trait-like patterns of behaviour and their observational descriptions are marked by global information - deficient reports. Such simplistic attentional processes are likely to be manifested by statements of helplessness, confusion, anger, persecution and other single factor causes for performance problems, resulting in compromised sensitivity in reference to situational cues. Wahler and Dumas (1989) reported that the causal aspects of response class and settings events phenomena remain ambiguous although the maintenance of the phenomena appears tied to maternal observational style. The possibility exists that the individual's cognitive style characteristics may be the consequence of alternative mediating processes rather than determined by attachment history.

In relation to current parenting, lack of contingent sensitive care giving could be a correlate of negative mood, stress, or other contextual factors rather than predetermined by the individual's attachment history. Because the assessment measures used are retrospective no
statements about causality of attachment relationships and their implication in current problematic parent-child functioning are possible. In this regard, the major tenet of continuity of attachment style has not been empirically demonstrated. According to Fox (1995), "people's notions of their past are reconstructed ones based on not only the actual events but the multiple events that have since occurred in their lives, then what adults are describing as a sense of their past in the AAI may reflect more of their present psychological status than their previous psychological history" (p. 407). He argued that since current attachment status could be interpreted to result from current personality and accumulated life events over time, there is no need to assign determinism to the early years of life to explain the plausible relationship between current parent personality functioning and child behaviour. It remains a possibility, that what the AAI is picking up in its measure relates to processes such as those suggested by Wahler and Dumas (1989), or cognitive processes (Beck et al., 1990; Bugental et al., 1989) and in fact, while suggesting causality, is demonstrating the "how" rather than explaining the origins (the "why") of cognitive style.

Van Ijzendoorn (1995) in a meta-analysis of the predictive validity of the AAI, concluded that while its predictive validity is a replicated fact there is only partial knowledge of how attachment representations are transmitted. He also noted that the attachment paradigm had not yet addressed the ecological context in which the correspondence between the parent's attachment representations and the children's patterns of attachment behaviours are embedded. Van Ijzendoorn pointed to limitations in AAI studies involving mainly western industrialised countries whereby U.S. studies showed somewhat stronger associations in parent-child attachment status than other countries and lower SES samples showed weaker associations. He concluded that such results suggest the possibility of contextual constraints on the predictive validity of the AAI. He also indicated the need to explore the theoretical issue of
the primacy of early attachment experiences for the development of adult attachment representations. The data collected in the AAI could be interpreted to represent current psychological status rather than a reflection of previous attachment history. This interpretation could result in speculation that the AAI may be measuring something important for current personality functioning in the adult and the adult’s corresponding ability to parent a child. However, such associations can not be exclusively viewed as a theoretical validation of the deterministic presence of internal working models formed from early attachment experiences and may be more adequately explained by transactional models.


Attachment theory provides an elaborate explanation for the role of subjective relationship factors in parent-child interactions. However, the empirical evidence suggests that the theory infers more than is supported by available data. In relation to measurement it is problematic for the theory that a putative causal process is assessed by a circular explanatory process where the same person is recounting the events that are presumed to be predictive of their present state. Other problems with measurement of the attachment construct relate to the AAI’s lack of accessibility to clinicians in terms of its training requirements and lengthy administration and scoring procedures. There is also disagreement among researchers regarding its reliability and predictive validity. While it has been claimed that the AAI has overcome the difficulties of self-report measures by exposing defensive processes, it suffers from the same shortcoming as all assessment based on verbal responses, that is, the assumption that the meaning of the psychological process are captured in the investigator’s discrete data and are not merely products of the investigator’s methods of observation. It also may not have managed to overcome some of the biases individual’s experience in processing information,
that is, plaintive set and social desirability. Currently, the traditional AAI approach is costly, time consuming and lacks adequate norms for clinical practice.

3.1.1 Conclusions On Attachment Theory As A Causal Model for Oppositional Behaviour

The evidence so far suggests major difficulties with explanations offered by attachment theory to explain the origins of parent-child difficulties. The deterministic concept of sensitivity is difficult to specify and measure. Some research data suggest a negligible or nonsignificant association between maternal behaviour and secure attachment (Crowell et al., 1991; Egeland: as cited in Fox, 1995). The issue of continuity of internal working models across generations is also problematic. Results claiming to demonstrate such an association are amenable to alternative interpretations, such as the influence of current psychological status on child behaviour (Fox, 1995). In the light of problems with establishing the conceptual validity of Attachment Theory and difficulties in measuring attachment concepts it appears crucial that attachment measures be further developed to the point where the theory and its clinical utility as theory and or heuristic model can be empirically investigated.

With reference to clinical issues, attachment theory continues to dominate in many aspects of applied social policy and treatment. In this regard it appears useful to continue investigation of its causal hypothesis in clinical samples as a further test of conceptual validity. In addition, investigations from a transactional perspective have indicated the need to examine interpersonal correlates of relationship difficulty. From this heuristic perspective it may be that Bowlby's formulation of Internal Working Model as a form of affective-cognitive schemata may assist in elaborating thinking about the perceptual and affective aspects of parenting, not currently dealt with by the coercion model of dyadic relationships. The transactional perspective would, however, view the influence of affective-cognitive schemata as potentially explicable in terms of a variety of mediating processes rather than causally determined by an
individual early attachment experiences. The present advantage of attachment theory is that it has generated a set of procedures designed to access and measure such putative affective-cognitive internal working models of self and others which relate specifically to parent-child relationship functioning. Goldberg (1991) has commented that the training involved in the use of the AAI and associated attachment interviews consists primarily of training in clinical judgement. Based on this perspective it may be possible for clinicians to use versions of attachment interviews in the clinical context without undergoing extensive training in clinical judgement in relation to the attachment content. The following chapter will examine the development of self-report attachment measures and their relationship with measures of psycho-social competence.

Bowlby's (1969, 1973, 1980) theory not only claimed that the family of origin should be a major determinant of the individual's report of family functioning across family life-cycle stages, but also that characteristics of the relationship with partner or spouse and children would be correlated with analogous characteristics of the relationship with parents. He also theorised that the quality of children's bonding with their parents had a significant impact on their personal adjustment through adult life, affected ease of socialisation, success in establishing affectional bonds, and susceptibility to anxiety and depression. From the perspective of social psychology, Hazan and Shaver (1987) suggested that Bowlby's (1982) attachment theory provided a basis for understanding individual differences in feelings and behaviour in adult love relationships. They designed a simple three category forced-choice self report measure, presented in Table 1, which people could use to classify their characteristic experiences in romantic relationships. The three categories, or attachment types, were based on the descriptions of the behavioural and emotional characteristics of avoidantly, securely and anxiously attached children provided by Ainsworth et al. (1978). Shaver and Hazan (1993) suggested parallels between the dynamics of attachment between infant and caregiver and adult dyadic love relationships in terms of desire for physical proximity to the dyad member, reliance on partner availability, comfort seeking and experience of distress when the relationship is threatened.
Table 1

<table>
<thead>
<tr>
<th>Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>I find it relatively easy to get close to others and am comfortable</td>
</tr>
<tr>
<td></td>
<td>depending on them and having them depend on me. I don’t often worry about</td>
</tr>
<tr>
<td></td>
<td>being abandoned or about someone getting too close to me.</td>
</tr>
<tr>
<td>Avoidant</td>
<td>I am somewhat uncomfortable being close to others; I find it difficult to</td>
</tr>
<tr>
<td></td>
<td>trust them completely, difficult to allow myself to depend on them. I am</td>
</tr>
<tr>
<td></td>
<td>nervous when anyone gets too close, and often, love partners want me to</td>
</tr>
<tr>
<td></td>
<td>be more intimate that I feel comfortable being.</td>
</tr>
<tr>
<td>Anxious/ambivalent</td>
<td>I find that others are reluctant to get as close as I would like. I</td>
</tr>
<tr>
<td></td>
<td>often worry that my partner doesn’t really love me or won’t want to stay</td>
</tr>
<tr>
<td></td>
<td>with me. I want to merge completely with another person, and this desire</td>
</tr>
<tr>
<td></td>
<td>sometimes scares people away.</td>
</tr>
</tbody>
</table>

Hazan and Shaver found that the relative frequencies of the three attachment styles in adulthood (56% secure, 25% avoidant, 19% anxious/ambivalent) were similar to those found in infancy (Campos, Barrett, Lamb, Goldsmith & Stenberg, 1983). They also found that people's adult styles of love are related to their attachment working models. Feeney and Noller (1990), with an Australian sample, using Hazan and Shaver's single item trichotomous measure, found 55% of Australian undergraduates endorsed the secure attachment style, 30% the avoidant and 15% the anxious ambivalent style. Theoretically, attachment styles are regarded as expressions of beliefs and attitudes about self and others in interaction. Subjects are hypothesised to differ in their mental models regarding themselves and others according to categories of attachment. Hazan and Shaver (1987), using an eight items self report statement regarding mental models of self and others, found an association between attachment style and mental models. Secure subjects recorded a more positive attitude towards themselves and
others than either of the insecurely attached groups. Their results indicated that secure subjects endorsed themselves as easy to get to know and as liked by most people. Correspondingly, they endorsed other people are generally well intentioned and good-hearted. The anxious/ambivalent subjects reported having more self-doubts, being misunderstood and unappreciated and finding others less willing and able than they were to commit themselves to a relationship. The avoidant subjects generally fell between the statement endorsements of the secure and anxious/ambivalent subjects, and in most cases were closer to the anxious/ambivalent than to the secure. The two insecure groups more often endorsed the statement that one has to 'watch out in dealing with most people', that is, a negative other model; more of the avoidant subjects that of the secure or anxious/ambivalent subjects agreed that "I can get along quite well by myself".

Feeney and Noller (1990) reported results similar to Hazan and Shaver (1987) for attachment type and mental models. Strahan (1991), in another Australian study, found that the mental models separated the secure from insecure groups effectively but found no significant differences between the two insecure groups. In investigating the continuity of attachment hypothesis, Hazan and Shaver assessed attachment history with parents in two ways. Subjects were asked whether they had ever been separated from either parent or whether the parents ever separated or divorced. They were also asked to describe on a checklist how each parent had generally behaved toward them during childhood (using 37 adjectives, such as "responsive", "caring", "critical" and "intrusive") and the parent's relationship with each other (using 12 adjectives such as "affectionate", "unhappy", and "argumentative"). Hazan and Shaver found that the best predictors of adult attachment type were respondent's perceptions of the quality of their relationship with each parent and the parent's relationship with each other. Secure subjects described respectful, responsive, caring,
accepting, confident, and undemanding mothers, whereas insecure (avoidant and anxious/ambivalent) subjects described almost the opposite of this profile. In terms of differences between the avoidant and anxious/ambivalent groups, avoidant subjects described their mothers as having been cold and rejecting, whereas anxious/ambivalent subjects described their fathers as having been "unfair". These results have been conceptually replicated by other researchers. Feeney and Noller (1990) found that secure subjects reported positive early family relationships, whereas anxious/ambivalent subjects recalled a lack of supportiveness from their fathers. However, Hazan and Shaver did not find a significant difference among attachment types in terms of separation from parents during childhood. Feeney and Noller (1990) found that avoidant subjects were more likely to report separation from their mother.

The initial interpretation of such self-report adult attachment studies was that they provided support for the attachment model in terms of continuity of attachment models from childhood. They also appeared to support the view that attachment could be conceptualised in the form of a set of tripartite styles which reflected different coping strategies for affect regulation. Results were interpreted in line with theory as indicating that secure attachment style was the norm and was associated with successful socio-emotional adjustment. Characteristic types of dysfunctional behaviours were correspondingly associated with insecure attachment styles. These early results, while suggesting that attachment histories were influential in current relationship functioning, were based on simplistic forced-choice questionnaires and checklist assessments.

In addition to the restrictions of such attachment measures, conceptual developments were also occurring which suggested the need for revision of the number of attachment classifications needed to explain attachment behaviour. The infant literature proposed the addition of a fourth attachment classification, disorientated/disorganised (Main & Solomon,
This classification appeared to combine elements of both insecure styles and is marked by the absence of a coherent strategy for managing anxiety resulting in a mixture of avoidant and ambivalent behaviour. Crittenden (1988) suggested that this pattern occurs in infancy when the infant's primary caregiver is depressed, disturbed or abusive in someway. Van Ijzendoorn's (1992) review of adult attachment suggested that, as was the experience in infant research, the addition of a fourth attachment classification would change the prevalence of adult attachment classification. He speculated that the presence of a fourth classification would result in a distribution of 52% anxious and 48% secure. Such a redistribution of prevalence would pose questions regarding the assumption of secure classification as normative or as necessary for success in interpersonal relationships.

4.2 - A Fourth Category of Adult Attachment - Dismissive Style.

Bartholomew (1990) systematised Bowlby's conception of internal working models by defining individual differences in adult attachment in terms of the intersection of two dimensions - positivity of the self model and positivity of models of hypothetical others. If a person's abstract image of the self is dichotomised as positive or negative (the self as worthy of love and support, or not) and if the person's abstracted image of the other is also dichotomised as positive or negative (other people are seen as trustworthy and available, or unreliable and rejecting), then four attachment styles are possible (see Appendix C). Table 2 shows the four attachment patterns that are derived from a combination of the two dimensions. Each cell represents a theoretical ideal, or prototype that different people might approximate to different degrees. In this model, the underlying dimensions are dependence (related to the mental model of the self) and avoidance (related to the mental model of the other). Bartholomew and Horowitz (1991) argued that high dependence involved externalised self-esteem and the need for approval of others for validation of the self, whereas low dependence involved internalised...
self-esteem and little dependence on approval of others for one's own sense of self-worth.

High avoidance indicated a negative other orientation and resulted in a behavioural strategy of minimising social experiences. Low avoidance indicated a positive other orientation and resulted in a behavioural strategy of maximising social experience.

Table 2

Bartholomew's (1990) Four-Group Model of Attachment

<table>
<thead>
<tr>
<th>Factor One: (Sociability)</th>
<th>Factor Two (Self concept)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model of other (avoidance)</td>
<td>Model of self (dependency)</td>
</tr>
<tr>
<td>Positive (low)</td>
<td>Negative (high)</td>
</tr>
<tr>
<td>Secure</td>
<td>Preoccupied</td>
</tr>
<tr>
<td>Positive (low)</td>
<td></td>
</tr>
<tr>
<td>It is relatively easy for me to become emotionally close to others. I am comfortable depending on others and and having others depend on me. I don't worry about being alone or having others not accept me.</td>
<td></td>
</tr>
<tr>
<td>(Positive Self = Low Anxiety)</td>
<td>(Negative Self = High Anxiety)</td>
</tr>
<tr>
<td>(Positive Other = Low Avoid)</td>
<td>(Negative Other = High Avoid)</td>
</tr>
<tr>
<td>(Confident with Intimacy and Autonomy)</td>
<td>(Preoccupied with Relationships)</td>
</tr>
<tr>
<td>Dismissing</td>
<td>Fearful</td>
</tr>
<tr>
<td>Negative (high)</td>
<td></td>
</tr>
<tr>
<td>I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.</td>
<td></td>
</tr>
<tr>
<td>(Positive Self = Low Anxiety)</td>
<td>(Negative Self = High Anxiety)</td>
</tr>
<tr>
<td>(Negative Other = High Avoid)</td>
<td>(Negative Other = High Avoid)</td>
</tr>
<tr>
<td>(Dismissing of Intimacy)</td>
<td>(Fearful of Intimacy)</td>
</tr>
<tr>
<td>(Counter Dependant)</td>
<td>(Socially Avoidant)</td>
</tr>
</tbody>
</table>

Bartholomew (1990) identified two forms of adult avoidance of intimacy. First, a "fearful" style, where a conscious desire for social contact is inhibited by fear of its
consequences and, second, a "dismissing" style, characterised by a defensive denial of the need or desire for greater social contact. Such individuals actively avoid situations of intimacy in an effort to preclude the possibility of rejection.

Bartholomew and Horowitz (1991) suggested that Hazan and Shaver's (1987) self report questionnaire method, although explicitly defined to correspond to child attachment classifications, may have obscured the two conceptually distinct avoidant patterns in adulthood. The fearful group is thought to represent the grown-up version of the disorganised/disoriented classification in infancy (Brennan, Shaver & Tobey, 1991). Bartholomew's (1990) formulation appears to cover both Main et al.'s (1985) conceptualisation of avoidant individuals as defensively self assertive and prone to deny trouble and vulnerabilities and Hazan and Shaver's conceptualisation of avoidant individuals as consistently troubled and lacking in self-esteem. Bartholomew's work suggests that the four attachment classifications - secure, preoccupied (equivalent to Hazan & Shaver's anxious/ambivalent category), fearful (similar to Hazan & Shaver's avoidant category), and dismissing (similar to Main et al.'s 1985 dismissing category) - can be distinguished from one another on the basis of the intersection of the positivity/negativity of the self model and the positivity/negativity of models of hypothetical others.

Bartholomew and Horowitz (1991), using this four-category model of adult attachment, developed a prototype approach which can be expressed in terms of all three forms of measurement, dimensional, grouping and prototype. Although the four-category model is theoretically based on the intersection of two underlying dimensions (positivity of self model and of other model), Griffin and Bartholomew's (1994a) assessment procedure does not include a direct measure of the two underlying dimensions. To compute the self-model dimension the sum of the Avoidant and Fearful ratings are subtracted from the sum of the
Dismissive and Secure ratings. To compute the other model the sum of the Dismissive and Avoidant ratings are subtracted from the sum of the Secure and Anxious ratings (see Fig. 1). Bartholomew (1994, personal communication) has also recommended that investigators derive their own rating scales on the basis of the underlying dimensions obtained from their data set.

**POSITIVE**

**SELF MODEL**

<table>
<thead>
<tr>
<th>Secure</th>
<th>Dismissing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Other Model</td>
<td>Other Model</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>Fearful</td>
</tr>
</tbody>
</table>

**NEGATIVE**

**SELF MODEL**

\[
\text{Self-model} = (\text{Secure} + \text{Dismissing}) - (\text{Preoccupied} + \text{Fearful})
\]

\[
\text{Other-model} + (\text{Secure} + \text{Preoccupied}) - (\text{Dismissing} + \text{Fearful})
\]

**Figure 1:** Formula for computation of self and other models (Griffin & Bartholomew, 1994a).
In Bartholomew's four category model, the highest of the four attachment ratings can also be used to classify subjects into an attachment category. The resulting group membership indicates the "best-fitting" patterns. Griffin and Bartholomew (1994a) have demonstrated the construct validity of the self and other model underlying the four-category model and have also demonstrated that the two attachment dimensions are related to theoretically relevant outcome variables. Based on Bowlby's (1967, 1973, 1980) conception of the attachment dimensions, the self model dimensions were demonstrated to be related to the positivity of one's self-concept whereas the other model dimension was highly related to the positivity of one's interpersonal orientation. Knowing how well people correspond to all four attachment prototypes infers a less simplistic conceptualisation of the behavioural strategies people may use in interpersonal relationships than would be provided by reducing information to produce a categorical rating.

Bartholomew (1993) claimed that a two dimensional model of adult attachment adds interpretative power to the measurement of attachment style. It also adds sensitivity in terms of differentiating Hazan and Shaver's avoidant category into two more discriminating patterns of avoidance, that is, fearful (negative self; negative other) and dismissing (positive self; negative other). Bartholomew and Horowitz (1991) reported strong negative correlations between attachment ratings in opposite patterns of the model (i.e., between secure and fearful attachment and between dismissing and preoccupied attachment) - a pattern which is suggested to support the four category model. However, Feeney, Noller and Hanrahen (1994b) suggested that Bartholomew and Horowitz's data supporting the four prototype model owed a lot to the wording of the four prototype statements and speculated that the data could plausibly be explained by the fact that prototypes in opposite positions contain contrary themes.
4.3 - Dimensional Approach

Dimensional measures are constructed by generating a pool of relevant items and a method such as factor analysis is used to deduce the underlying structure. Attachment researchers have become aware that attachment styles may not be adequately characterised by a simple categorical type approach. There is a suggestion that attachment styles may not be mutually exclusive and that they are likely to be composed of multilayered, hierarchical networks of representations (Diamond & Blatt, 1994). In recent attachment research, descriptions of the different attachment groups defined by Hazan and Shaver (1987) have been broken down using phrases to form different items. Analysing such items by principal components analysis with either orthogonal or oblique rotations have been reported to demonstrate a two-dimensional solution defined by Comfort with Closeness and Anxiety over Abandonment (Feeney, Noller & Callan, 1994a; Simpson, 1990; Strahan, 1991). Collins and Read (1990) obtained a three dimensional structure Close and Depend (which appear similar to the bipolar Comfort dimension of other researchers) and Anxiety (which appears similar to other researchers Anxiety dimension).

Other researchers have obtained dimensions that appear to correspond to the diagonals of Bartholomew's (1990) four-category model. (Brennan, Shaver & Tobey, 1991: secure versus avoidant, and high versus low anxious-ambivalent dimensions). These two factors correspond closely to the self model and other model dimensions said by Bowlby (1969, 1973) to underlie attachment patterns (Griffin & Bartholomew, 1993). Griffin and Bartholomew (1994b) claimed to have demonstrated the construct validity of the self and other model dimensions underlying the four category model. The two attachment dimensions showed convergent validity across methods; that is, self-reports, peer reports, partner report, and expert raters' judgements of the dimensions intercorrelated highly. They suggested that such
empirically based continuous attachment scales may be a more sensitive measure of attachment constructs than categorical measures.

4.4 - Correlates of Attachment Styles

Attachment theory predicts that insecure attachment would be associated with poor psychosocial adjustment. There have been some attempts to examine the nature of attachment styles in relation to major personality constructs using self-report measures (Shaver & Brennan, 1992). Hazan and Shaver (1990) reported that both insecure groups (Avoidant and Anxious-Ambivalent) scored higher on measures of depression and anxiety than secure subjects, leading to a prediction in Shaver and Brennan's study that such subjects would score relatively high on neuroticism. Similarly, secure subjects were expected to be more extroverted and agreeable than insecure subjects. Results from the study indicated that the three category attachment styles, whether measured categorically or by means of continuous ratings scales, were significantly associated with three and possibly four of the Big Five (Neuroticism, Extroversion, Openness to Experience, Agreeableness, Conscientiousness) personality traits (Costa & McCrae, 1985). Secure subjects were less neurotic and more extroverted than insecure subjects, and more agreeable than avoidant subjects. Persons scoring high on avoidance were less open to feelings, whereas persons scoring high on anxious-ambivalence were less open to values. This latter result was taken to agree with Main et al.'s (1985) perspective that avoidants tend to deny or suppress attachment-related negative emotions.

Overall the Shaver and Brennan's study concluded that although attachment styles were meaningfully related to the Big Five personality traits they were not simply equivalent to them. Griffin and Bartholomew (1994a) suggested that the finding that neuroticism is highly negatively related to self-esteem may serve as a marker for the self-model dimension.
Extroversion, on the contrary, which focuses primarily on activation and surgency may fail to capture the warm sociability and comfort with intimacy characteristic of a positive other-model. In their study they found that 48% of the variance in the latent self-model dimension was explained by using all five factors and 27% of the variance in the latent other-model dimension was explained by the Big Five. They concluded that the attachment dimensions are not reducible to the fundamental personality dimensions.

Mikulincer, Florian and Weller (1993) examined the association between attachment style and adaptation to life stress. Bowlby (1980) claimed that secure attachment enhances interpersonal ties, coping skills and feelings of personal worth and self efficacy. Mikulincer et al.'s study examined the post traumatic emotional adjustment of people with different attachment styles to the gulf war in Israel. They hypothesised that secure people may have coped with the missile attack by reliance on active problem-focused strategies and searching for social support. Ambivalent people would deal with negative memories and effects by directing attention toward distress and inner tension in a contemplative and hypervigilant way. They are hypothesised to rely on more passive emotion-focused strategies than on problem-focused ones. Avoidant people are thought to rely mainly on distancing and disengagement strategies. Mikulincer et al. (1993) interpreted the findings as validating the different ways in which people characterised as secure, ambivalent and avoidant express their emotional distress in reaction to a specific and traumatic real life event. Results of the study were interpreted as indicating that avoidant people reported higher levels of somatisation, hostility and trauma-related avoidance than secure people. Ambivalent people used more emotion-focused strategies and avoidant people used more distancing strategies. Secure people used more support seeking strategies than insecure people.
Camelley, Pietromonaco, and Jaffe (1994) found higher levels of anxious attachment and fearful avoidance in mildly depressed college women than nondepressed women. They suggested that people with insecure attachment styles may possess a stable predisposing factor to depression that does not fluctuate greatly with depressed mood. People with avoidant style attachment are more likely to become depressed than people with the dismissive style who, she suggested, may be more likely to develop antisocial behaviour patterns. Attachment working models have also been found to be related to interpersonal processes in adulthood. Avoidant and ambivalent people were found to be more anxious and more hostile than secure people (Kobak & Sceery, 1988) and to have more negative and mistrusting views of the social world and human nature in general (Collins & Read, 1990). Ambivalent people were also found to have a more negative view of themselves than secure people (Collins & Read, 1990). Kobak and Sceery (1988) also found that attachment working models are related to the strategies people use for dealing with distress. Secure people dealt with distress by acknowledging it and turning to others for instrumental and emotional support. Ambivalent people dealt with negative memories and affects by directing attention towards distress in a hypervigilant way and by forming dependent and clinging relationships that exacerbate their anxiety. Avoidant people modulate distress by dismissing the importance of relationships, maintaining distance from others, and inhibiting emotional displays (Kobak & Sceery, 1988; Main, Kaplan & Cassidy, 1985; Mikulincer, Florian & Tolmacz, 1990).

In looking at the relationship between attachment style and marital relationships Noller (as cited in Feeney et al., 1994a) found that distressed spouses expressed more negative behaviours such as criticising, commanding and complaining and fewer supportive relationship behaviours such as approving than nondistressed spouses. Collins and Read (1990) found that women's satisfaction with their dating relationships was inversely related to their anxiety about
relationships. Feeney et al. (1994a) suggested that empirically based attachment scales (Comfort with Closeness and Anxiety over Abandonment) were related to concurrent measures of relationship satisfaction and marital communication. They reported that Anxiety over Abandonment was consistently associated with low relationship satisfaction and with negative responses to conflict. In general "Anxiety" appeared to be negatively associated with constructive approaches to dealing with conflict and heightened attention to negative affect. Comfort with Closeness appeared to be associated with wife's ability to decode neutral and negative nonverbal messages. They suggested that Anxiety about attachment was the force behind a range of negative and destructive patterns of communication in marital relationships. However, no differences in spousal interactions were found for wives with secure verses insecure attachments.

Broadly, a model of relationship functioning appears to be emerging from the self-report questionnaire literature which implicates metacognitive skills such as communication and problem-solving as mediators of relationship (dis) harmony. Attachment theory claims that such skills are a consequence of attachment representations. However, this theoretical assumption can not be validated by current empirical findings. The data are cross-sectional and correlational and may be equally interpreted to reflect the influence of current relationship experience or life events on attachment classification. In this regard Scharfe and Bartholomew (1994), found that self-report ratings are strongly related to relationship satisfaction and appear to reflect current relationship status rather than a generalised attachment style. Bartholomew and Scharfe's (as cited in Bartholomew, 1993) suggested that people in long-term romantic relationships inflate their ratings of security. In a sample of 158 such subjects, over 80% rated themselves as secure, although closer to 50% were judged to be primarily secure by expert coders on the basis of an interview. There is also some evidence of lack of concordance of
attachment patterns across relationship type (Sperling, Berman & Fagen: as cited in Barthomew, 1993). Overall, the issue of stability of attachment styles, which is theoretically crucial, has received little attention in research. Moderate stability has been demonstrated over 1 or 2 months by using short self-report measures of attachment (Collins & Read, 1990). In addition, Hazan, Hutt and Markus (as cited in Barthomew, 1993) found approximately 78% stability in self-report attachment classifications over one year. In that Hazan et al.'s study, the vast majority of reported changes in attachment patterns were from an insecure to secure style. Bartholomew (1993) suggested that some individuals who rated themselves as more secure at times may have entered important new relationships and their rating may reflect the current state of their relationships rather than an enduring attachment characteristic.

4.5 - Uses and Limitations of Self-Report Questionnaire Attachment Measures.

Categorical measures of attachment are popular because of ease of communication and comparison with previous studies. Bartholomew and Horowitz (1991) demonstrated that forced-choice categorical measures correctly classified 92% of their sample and that such measures correlate adequately with multivariate measures of attachment. The primary limitation of categorical measures relate to a lack of subtlety in forcing respondents to accept an entire description that may not adequately reflect the individual's feelings on all dimensions. Categorical ratings may also be vulnerable to social desirability bias or may reflect current relationship satisfaction (Scharfe & Bartholomew, 1994). Griffin and Bartholomew (1994a) suggested that modification of categorical items to produce likert ratings would facilitate assessment of individual's profile across attachment items, thus offering the possibility of tapping attachment representations of a more complex and unique presentation.

However, the psychometric properties of such prototype scores in terms of internal consistencies have been found to be variable and range from alpha of .41 for the secure to
alpha of .70 for the dismissing on the Relationship Scale Questionnaire. Griffin and Bartholomew (1994a) explained such low internal consistencies as resulting from a combination of two orthogonal dimensions (self model and other model) rather than caused by the low number of items making up each prototype score or from psychometric problems in the scale construction. For both Griffin and Bartholomew's categorical - Relationship Questionnaire (RQ) and dimensional - Relationship Scale Questionnaire (RSQ) measures, the convergent validity coefficient for the secure pattern was the lowest of the four patterns. Griffin and Bartholomew suggested that this may indicate that security of attachment is vulnerable to self-report bias. However ratings on the dismissing style which is suggested to be likely to tap into defensive ratings (Hazan & Shaver, 1987) did not indicate a self-report bias, achieving adequate convergence across methods. Overall, it appeared that the magnitude of the convergent correlations suggest that interview and self-report measurements of attachment are not identical, which raises an issue regarding the adequacy of attachment measures. Using a dimensional level of analysis Griffin and Bartholomew, reported higher convergent correlations; the interview measure of the self-model dimension correlating .41 with the RQ self-model and .37 with the RSQ self-model; the interview measure of the other-model dimension correlated .46 with the RQ other model and .48 with the RSQ other model.

4.6 - Summary of Current Status of Measures of Attachment and Associated Empirical Findings.

It appears that practical problems are faced by researchers attempting to study normative attachment processes in adults in relation to a lack of suitable methodologies for examining such constructs. Work has focused almost entirely on self-report measures or interviews with few caveats being imposed regarding issues of measurement and the validity of theoretical conclusions. Some measures assess discrete attachment categories (Hazan &
Shaver, 1987), others yield continuous rating of discrete patterns (Bartholomew & Horowitz, 1991), others assess dimensions hypothesised to underlie individual differences in attachment (Collins & Read, 1990). The self-report methodology of Hazan and Shaver and subsequent work (Collins & Read 1990; Feeney & Noller, 1990) assessed the content of people's conscious beliefs about their attachment patterns in romantic relationships. It differed from Main et al.'s (1985) approach which focused on how people organised and processed information about their childhood experiences. As such, the latter was more concerned with aspects of self-report as a projective devise, measured in terms of internal coherence, defensiveness and idealisation. Both Main et al.'s approach to assessing representations of childhood relations and Hazan and Shaver's (1987) self-report measures of styles of relating in romantic relationships were developed to correspond to child attachment classifications. However, it appeared that the groupings yielded by the two approaches differed in systematic ways. In particular dismissing individuals as identified by Main et al. appeared similar to secure individuals on self-report measures of distress and social competence (Bartholomew, 1993).

Such uses of different procedures to measure similarly named theoretical constructs is problematic in view of the apparent indifference to the relation between method and meaning. Investigators using such different methodologies use the same theoretical terms which raises issues of theoretical validity in the light of data originating from different sources. The assumption appears to be that different measurement methods are assessing the same theoretical construct and that results can be equally interpreted in terms of the predictions of Bowlby's (1969, 1973, 1980) theory. This assumption persists despite evidence that different methods of measurement demonstrate poor convergent correlations (Griffin & Bartholomew, 1994a). The identification of such discrepancies has not resulted in corresponding concern and investigation into the relationship between the patterns of attachment elicited from the short
self-report type measures such as Hazan and Shaver (1987) and intensive interview of representations of family relations (as cited in Main et al. (1985). In general, apart from Griffin and Bartholomew (1994a), little effort has been made to directly compare attachment representations derived from different measuring strategies. In this respect a current priority for investigation is the comparison of attachment representations using different methods of assessment, in order to clarify the assumption that the same process is being measured by diverse forms of evidence. It would appear that a concern regarding the validity of procedures and an examination of the methodological basis for current sources of theoretical evidence is required in attachment research prior to it being used as a method of clinical assessment or intervention.

4.7 Conclusions On Usefulness of Attachment Theory As A Relationship Model

Bowlby's (1969, 1973, 1980) model depicts attachment styles as relatively enduring characteristics of individuals that transcend infancy and particular relationships, and that act to structure the quality of interaction in intimate relationships. He specifically theorised a model dealing with the development and maintenance of affective interpersonal response patterns. The classification of a person into one of three or four attachment types implies that individuals can be classified without regard to situations or persons. This results from Bowlby's idea of singularity of attachment need (attachment to a single other) in determining putative mental models. This concept of singularity contrasts with a perspective suggestive of the possible influence of multiple sources of attachment with a corresponding flexibility and diversity of mental models across relationships and situations. Reducing a person's internal models to a single personality style may ignore the complexity of personality and may reduce experience and models of multiple relationships to a single common denominator (Kobak, 1994). It also fails to take contextual variation into consideration (Van Ijzendoorn, 1995). Further, if
individuals cannot be stably classified into one of these types, across people, the idea of attachment as a theoretical explanation for socioemotional functioning and parenting difficulties becomes less valid.

In this regard, limitations in the measurement of adult attachment is problematic for the theory. The idea of "internal representations" originating in early childhood, as an essential process containing components that do not change over time and that function as important determinants of behaviour, has not been empirically demonstrated by the current diverse and procedures of attachment measurement. Duck (1994) suggested that there was little convincing demonstration of continuity between infant and adult attachment style, which is problematic for the theory of integenerational continuity. He suggested that evidence for a parallelism between infant and adult styles could be explained by the ways in which researchers choose to ask questions of subjects about the two sets of circumstances. He argued that attachment style is not as influential as is claimed and would be better conceptualised, as a style of attaching meaning to social situations and evaluations of self. Therefore, attachment style is a subset of a larger class of psychological phenomena and not itself the set that subsumes other phenomena. In relation to evaluations of self, Baldwin (1992) proposed that a sense of self comes not just from a general self-concept made up of a list of traits but also relates to "who I am with this person or in this type of relationship" (e.g. Ogilvie & Ashmore, 1991). Such varied relational schemas would suggest "multiple selves" or the self as a theory (Epstein, 1973) as opposed to the self as a stable independent existing entity.

This conceptualisation of the self is supported by Hart's (1993) work on the relations of temporal selves across the lifespan. In his study, child and adolescent projections of the self into the future and memories of the self in the past were compared with their current self-conceptions. The results indicated that similarity between the present self and the future selves
was perceived to be higher than between past and present selves. Hart discussed his results as indicating a need to examine stories of transformations from the past to the present in light of the data demonstrating identifiably different representations of self from past to present to future. Attachment theory appears to place value on a particular cultural notion of the existence of a fixed self which is ultimately responsible for an individual's behaviour in a decontextualised environment, a philosophy of the priority of individualism and self-determination. In this regard, Lewis (1994) suggested that the attachment construct in relation to parent-child relationships, is dangerously narrow in its focus on the mother and may be limited in providing meaning to particular cultures and time periods. He proposed that there is an associated possibility that such meanings may be used to justify looking to the individual as an explanation for current or future behaviour rather than to social structures, values and needs. In their review of early parenting and subsequent formation of adult interpersonal relationships, Parker, Barrett and Hickie (1992) concluded that any deficiencies or vulnerabilities established because of parent-child dysfunctional relationships, except in the case of gross parental deprivation, appear capable of modification by a range of experiences, particularly subsequent interpersonal relationships.

Overall, there appear to exist some difference of opinion regarding the conceptual validity of attachment theory and some disquiet about its methods of measurement. Theoretically, there exist difficulties quantifying and clarifying explanatory constructs such as sensitivity as a determinant of secure attachment and successful psychosocial adaptation. There is also some query about the view of secure attachment as normative and some concern that attachment style may reflect particular social or cultural values. Research also appears limited in unambiguously demonstrating a link in intergenerational patterns of attachment or that security of attachment is determined by sensitive caregiving. Much evidence exists which
offers alternative explanations for the association between parental and child adjustment in
terms of temperament, contextual factors or current dyadic psychological status. Concerns are
valid in relation to researchers use of equivalent terms to label data generated from different
conceptual viewpoints and measurement techniques. The current evidence appears to suggest
limitations of the present attachment methodologies to adequately measure predictions and
constructs derived from attachment theory.

On the other hand attachment theory, through its hybridisation with social psychology,
has resulted in an enthusiastic investigation of relationship and interpersonal processes. This
direction may be of some heuristic value for the extension of cognitive-behavioural theorising
regarding clinical issues. Investigations such as Feeney et al. (1994a) appear to have
demonstrated interesting leads as to what processes and variables mediate relationship
functioning, associating skills such as communicating and problem solving with relational
dimensions of Comfort with Closeness and Anxiety about Abandonment. With regard to
relational issues in parent-child functioning there is evidence to suggest that effective parenting
requires the ability to demonstrate meta-cognitive skills such as those referred to by Feeney et
al. (1994a). Affective-cognitive schemata are also though to be implicated in quality of
parenting and the ability to regulate power and control issues occurring in parent-child
relationships.

From a theoretical perspective attachment theory has been a provocative influence,
especially in its implications that maternal characteristics are responsible for certain forms of
psychopathology. From a public policy and clinical practice perspective it appears useful to
examine predictions of the relationship between maternal insecure attachment and disruptive
behaviour in children. From the broader perspective of clinical theorizing it also appears useful
to extend beyond coercion theory and examine the heuristic value of the concept of internal
working models, as models of affective-cognitive schemata applied to relational processes in parent-child relationships.

Using self-report methodology, the present study proposes to clarify the usefulness and limitations of attachment theory's prediction that adults' internal working models of childhood attachment relationships affect the quality of current relationships with their own children. According to Bowlby's theory (1969, 1973, 1980) secure mothers (who possess experiences of adequate parenting) are expected to be more successful than insecure mothers (who possess experience of having been inadequately parented) in their relationships, as indicated by lower reports of child problems, marital problems and depression scores. Children of secure mothers should be less negative, less avoidant, less controlling and less angry in relationship style than are children of insecure mothers. The present study is interested in exploring the concept of attachment as a relationship variable in explaining perceived difficulties in maternal-child relationships.

In a clinical context, attachment theory would predict that children who receive an empirical classification for oppositional behaviour would have mothers who are classified as possessing an insecure attachment style. It has been suggested that a parent's orientation regarding attachment may be related to parental warmth and responsiveness and also be linked to the parents ability to set appropriate limits for the child. The self report, social psychology literature suggests that dimensional measures of anxiety would be implicated in negative and hostile relationship pattern with intimate partners. If the intimate world of the mother-child relationship is regarded as similar to other intimate relationships such as those between romantic partners, it would be expected that mothers of oppositional children would endorse Anxiety as a dimensional response on an attachment measure. In view of the uneven development of attachment measurement techniques the present study attempts to explore the
psychometric properties of selected self-report questionnaires prior to choosing self-report instruments for the clinical study. The aim of this strategy is to assist in clarification of the conclusions that can be drawn from the clinical data, given information about the adequacy of the measuring instruments. The following chapter details Study 1, and concludes with the selection of self-report attachment questionnaires for use in Study 2 - the clinical study.
Chapter 5.0: Study 1 - Normative Study

As a step in evaluating attachment theory's ability to predict and explain personality and interpersonal functioning across the lifespan it is important to show that membership of different adult attachment categories possess different internal models of self, of others and of attachment relationships. In addition, in order to apply self-report attachment questionnaires to an Australian clinic sample it was necessary to investigate the characteristics of the questionnaires on an Australian population by preliminary administration of the questionnaires on a pilot sample. This pilot investigation did not attempt a complete questionnaire validation study as its aim remained clinical, that is, to select an assessment measure which appeared clinically useful. This aspect (Study 1) involved initially administering the questionnaires to a sample of university students (n=103).

The aims of Study 1 were: (i) to examine the normative assumption of attachment theory in terms of the distribution of attachment styles in an Australian sample of university students, (ii) to examine self-perception of continuity in attachment styles by modification of a self-report attachment measure (RSQ) to provide opportunity for subjects to endorse attachment style across a projected time continuum of past, present and future, (iii) to examine the correlations of attachment styles between different methods of self-report, and (iv) to choose the most convenient and the most useful measures of attachment for subsequent application to mother's presenting to a mental health service with reports of child disruptive behaviour. A research question in this study was the issue of the dimensionality of the RSQ and the development of a rating scale based on a factor analysis of the underlying dimensions of the present data. The following hypotheses were investigated:
Hypothesis 1

The addition of two categories of anxiety in Bartholomew (1994) measure would result in a lower endorsement of the secure style compared to the insecure attachment styles.

Hypothesis 2

Different methods of measuring attachment, that is, forced choice, prototype and dimensional would display convergent and discriminant validity.

Hypothesis 3

Secure subjects would endorse both positive self and other models on Bartholomew's dimensions in comparison to insecure subjects.

Hypothesis 4

Secure subjects would record more positive attitudes towards themselves and others than either of the insecurely attached groups on Hazan and Shaver's (1987) checklist measure.

Hypothesis 5

On a family history checklist measure secure respondents would endorse their mother as dependably responsive and caring; avoidant respondents would endorse their mothers as generally cold and rejecting and anxious/ambivalent respondents would endorse a mixture of positive and negative experiences with their mother. Insecure respondents would also report more separations from their mother than secure respondents.

Hypothesis 6

Attachment classification would remain stable across endorsement of different time periods on a dimensional attachment measure.
5.1 Method

Participants

The sample consisted of 103 participants, 31% men and 68% women. The mean age was 23.46 years (SD = 7.90). All participants were engaged in tertiary education related to first and second year social science and psychology. Sixty per cent of the sample were from the University of Western Sydney and forty per cent were from the University of Wollongong. Most of the University students did not endorse themselves as "ethnic". Those who indicated ethnicity were equally dispersed from a range of ethnic backgrounds. The ethnicity of the Wollongong sub sample was inclusive of more Asian countries than the University of Western Sydney sub sample.

Assessment of Maternal Attachment Classification

The Relationship Questionnaire (RQ) is an adaptation of the attachment measure developed by Hazan and Shaver (1987). This measure consists of four short paragraphs describing the four attachment styles (secure, fearful, preoccupied and dismissing) as proposed by Bartholomew and Horowitz (1991). The questionnaire was administered according to a categorical forced choice RQ (F.C.) version based on nominating one of the four paragraphs as the best description of the individual. Attachment style was also measured using a continuous prototype rating questionnaire RQ (P.R.) on which individuals were asked to rate (on a 7 point scale 1 = "not at all like me" to 7 = "very much like me") how well they corresponded to each prototype as described in the paragraphs. The RQ (P.R.) score could also be used as a categorical score by choosing the highest prototype rating as the attachment category.

The Relationship Scales Questionnaire (RSQ) is an indirect measure of the prototypes. Reliability and validity data have been presented in Chapter 4, Section 5. The RSQ consists of
30 phrases drawn from the paragraph descriptions in Hazan and Shaver's (1987) attachment measure, Bartholomew and Horowitz's (1991) relationship questionnaire, and Collins and Read's (1990) adult attachment scale. Participants rated (on a 5 point scale 1 = "not at all like me" to 5 = "very much like me") how well each item fitted their characteristic style in close relationships. The four attachment styles were also coded by computing the means of the items representing the prototypes. Category ratings were then allocated according to the individual's greatest mean prototype score. Self and other model dimensions were calculated using Griffith and Bartholomew's formula (1994a) (see Figure 1).

Modifications to Bartholomew's measures used in the present study consisted of the development of a version of the RSQ which requested participants to respond in terms of past, present and future feelings about relationships, referred to as RSQ Timeframe (RSQ T.F). In addition present scores on the RSQ questionnaire would be factor analysed to derive current scales of the underlying attachment dimensions.

Assessment of Mental Models and Attachment History

Hazan and Shaver's (1987) attempted to measure working models of self and others using eight statements endorsed as agree/disagree. This eight item yes/no rating scale was used in the present study. An attachment history questionnaire adapted from Feeney and Noller (1990) was also used to assess periods of separation from parent and parental separation/divorce. Participants also were asked to endorse how each parent had generally behaved toward them during childhood (using 25 adjectives, such as responsive, caring, critical and intrusive), and the nature of the parent's relationship with each other (using 12 adjectives such as affectionate, unhappy, and argumentative). Adjectives used were based on Hazan and Shaver's (1987) original pilot study and terms referred to in the literature on attachment.
Table 3

Summary of Measures used in Study 1.

<table>
<thead>
<tr>
<th>Attachment Classification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Four item, forced-choice relationship questionnaire RQ (F.C.) (Bartholomew and Horowitz, 1991). (See Appendix A3).</td>
<td></td>
</tr>
<tr>
<td>2. Four item, Prototype Rated, Relationship Questionnaire RQ (P.R.) (Bartholomew and Horowitz, 1991). (See Appendix A4).</td>
<td></td>
</tr>
<tr>
<td>3. Relationship Scales Questionnaire (RSQ), 30 item dimensional measure. (Bartholomew, 1994). (See Appendix A5).</td>
<td></td>
</tr>
<tr>
<td>4. Relationship Scales Questionnaire - Time frame RSQ (T.F.). Modification of RSQ to cover perception of past, present, future (Renner, 1994). (See Appendix A7).</td>
<td></td>
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<tr>
<td>5. Relationship Scales Questionnaire - Scales of distrust, anxiety, close (Renner, 1994).</td>
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</table>

<table>
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<tr>
<th>Mental Models</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1. Bartholomew (1994), Self and other model dimensions (see Figure 1).</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Attachment History</th>
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</thead>
<tbody>
<tr>
<td>1. Checklist adapted from Feeney and Noller (1990). (See Appendix A9).</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Procedure</th>
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<tbody>
<tr>
<td>Questionnaires were distributed to first and second year full-time and part-time students attending psychology lectures. It was explained to students that as part of a PhD thesis, information was required from an Australian sample on questionnaires pertaining to family relationships (see Appendix A1). Course credits were not provided, and students were invited to take the questionnaire package if they were interested in participating and returning the completed consent forms and questionnaires at lectures the following week. Questionnaires</td>
<td></td>
</tr>
</tbody>
</table>
were randomly compiled to prevent any systematic effects due to order of completing questionnaires. Approximately 40% of the students chose to participate by returning questionnaires. A demographics questionnaire was administered which included information relating to age, sex, educational level, ethnicity, income, marital status, number and age of children, (see Appendix A2).
5.2 Results of Study One

SPSS for windows (1993, SPSS Inc.) release 6.0 computer software was used to analyse the data. First, the attachment styles were calculated (using the different measures) to determine their relative distribution and intercorrelations. Correlations of attachment styles with (a) Griffin and Bartholomews (1994a) dimensions of self and others and (b) Hazan and Shaver's (1987) attachment history and mental model concepts were also examined. Second, the RSQ was factor analysed to explore its dimensional structure. The association of the current dimensions to Bartholomew's model was also investigated. The RSQ was also examined to discover whether a pattern of stability of attachment style was evident across time using the RSQ (T.F.)

Preliminary Analysis

The distribution of the variables was checked in order to identify outliers and the presence of skewness for each variable. No outliers were identified and scores on the variables were not markedly skewed. Cases with missing data were few (n = 3) and were randomly scattered, and consequently were deleted from the analysis. On the RSQ (T.F.) missing data occurred on 6 questionnaires which were subsequently deleted from the analysis.

Demographic variables of age, educational level, ethnicity, marital status, number of children, income, sex and university did not differ significantly between the attachment style groups (using RQ), by posthoc Scheffe test, indicating that the prevalence of attachment classifications were not biased by demographic variables.

Attachment Classification
Cross tabulation was used to look at the prevalence of the four attachment styles in comparison with distributions reported in previous studies. Table 4 displays prevalence rates for attachment classifications among some previous studies and the current study.

Table 4

Comparison of Prevalence of Attachment Styles in Present Study with Previous Studies

<table>
<thead>
<tr>
<th>Prevalence of Attachment Style/Across Study</th>
<th>(Secure)</th>
<th>(Insecure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>62%</td>
<td>23%</td>
</tr>
<tr>
<td>Avoidant</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Anxious-Ambivalent</td>
<td></td>
<td></td>
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</tbody>
</table>

Campos et al. (1983) (Attachment Interview)

Hazan and Shaver (1987) (Self Report)

Feeney and Noiler (1990) (Self Report)

Van Izendoorn (1992) (Review Across Methods)

Renner (1994)

R.Q. F.C. 42% 56%
R.Q. P.R. 40% 44%
R.S.Q. 40% 53%

Although in the present study, the secure classification is the modal self-report attachment classification, combination of the insecure classifications results in a higher prevalence for insecure (56%) than secure 42% attachment classification. Binomial tests of significance for this prevalence discrepancy was not significant, p = .89. The difference
between Hazan and Shaver’s (1987) secure (56%) and Renner (1994) secure (42%) attachment classification were also nonsignificant, \( p = .18 \), as were, the difference between Hazan and Shaver’s insecure (44%) and Renner’s (1994), insecure attachment (56%) classification, \( p = .27 \). Comparing attachment prevalence rates between Adult Attachment Interview measures and current self-report measures did, however, demonstrate a significant difference. Compos et al.’s (1983) secure classification (62%) and Renner’s (1994) secure classification (42%) was significantly different, \( p = .06 \). Compos et al.’s insecure classification (38%) and Renner’s insecure classification (56%), was significantly different, \( p = .07 \). (Compos et al.,’s 1983 review of attachment prevalence, however, does not include the disorganised/disorientated classification).

Overall, in relation to Hypothesis 1, it appears that the addition of a fourth attachment category results in the insecure attachment classification being more prevalent than the secure classification in this study. However, the results are not statistically different from the self-report distribution found by Hazan and Shaver (1987) with a three attachment classification model. The prevalence of secure and insecure classification between the Compos et al.’s (1983) and the present study are statistically different with the limitation that the Compos et al.’s review related to AAI measures of a three category model, that is, did not include the disorganised/disorientated classification.

**Relationship Between Different Measures of Attachment**

In relation to Hypothesis 2, cross-tabulation was used to look at the correspondence between classification using different attachment measures. The results presented in Table 5 indicate that the secure category is the prevalent category endorsed across different methods of measurement. The fearful/avoidant category is also highly endorsed on the FC measure compared to other categories of insecure attachment (i.e., preoccupied and dismissing). This
very high endorsement of the fearful avoidant style was not maintained when participants were allowed to rate their characteristic style on likert scales RQ (PR) and RSQ. Fearful avoidant classification was still relatively highly endorsed on the RQ (PR) compared to the RSQ (difference of 16%). The RQ (PR) method produced the highest number of participants who could not be differentiated into adult attachment styles because of equal ratings assigned to two of the relationship styles. On the RSQ measure the dismissing style was the highest style endorsed after secure, in contrast to the RQ where the fearful category was highest endorsed after secure.

Table 5

Cross Tabulation of Attachment Styles Across Attachment Measures (FC: RQ: RSQ)

<table>
<thead>
<tr>
<th>Measures</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
<th>Undifferentiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ (FC)</td>
<td>42%</td>
<td>38%</td>
<td>9%</td>
<td>10%</td>
<td>-</td>
</tr>
<tr>
<td>RQ (PR)</td>
<td>40%</td>
<td>28%</td>
<td>7%</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>RSQ</td>
<td>40%</td>
<td>12%</td>
<td>14%</td>
<td>27%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Cross-tabulation was also used to look at the relationship between the various measures of attachment classification in relation to discriminant and convergent validity. Table 6 illustrates the relationship between the Relationship Questionnaire in its forced-choice format (F.C.) by its prototype likert (P.R.)rating format. By looking at the diagonals it can be seen that both methods classify 95% of the sample as secure. The fearful classification achieves 90% agreement. The preoccupied and dismissing classifications achieve 87.5% and 100% agreement respectively. With the introduction of 30 items on the RSQ there was less agreement between
classifications than was achieved with the simpler four item measures. Table 7 illustrates convergent validity between RQ forced choice and the RSQ for the secure (70.7%) and fearful classification (91.7%), but poorer convergent attachment classifications for the preoccupied (33.3%) and dismissing (17.9%) classification. Table 8 illustrates the relationship between the RQ highest prototype rating by the RSQ and demonstrates results similar to the previous table. There is good convergent validity for the secure (80.6%) and fearful classification (90%) with poorer convergence for the preoccupied (33%) and dismissing (21.7%) classifications.

These cross-tabulations suggest that attachment classification as measured by the Relationship Questionnaire (RQ) in both its forced choice (F.C.) and prototype (P.R.) form demonstrates convergent and discriminant validity for the four attachment classifications. However, it should be noted that both versions of the RQ method are not independent and contain similar items. Similarly, the RQ and RSQ contain overlapping content and cannot be considered to provide independent replication of attachment categories. With the addition of the 30 item RSQ, convergent validity between the RQ and RSQ measures for the Secure and Fearful was good but there was substantial difficulty in achieving convergent and discriminant validity with the preoccupied and dismissing categories.
Table 6

Cross-Tabulation of Relationship Questionnaire (RQ) Forced Choice (FC) by Likert Prototype

<table>
<thead>
<tr>
<th>RQ</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
<th>Row Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(F.C.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secure</td>
<td>39 (95%)</td>
<td>0</td>
<td>0</td>
<td>2 (5%)</td>
<td>41 (47.7%)</td>
</tr>
<tr>
<td>Fearful</td>
<td>2 (6.5%)</td>
<td>28 (90.3%)</td>
<td>0</td>
<td>1 (3.2%)</td>
<td>31 (36%)</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>0</td>
<td>1 (12.5%)</td>
<td>7 (87.5%)</td>
<td>0</td>
<td>8 (9.3%)</td>
</tr>
<tr>
<td>Dismissing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6 (100%)</td>
<td>6 (7.0%)</td>
</tr>
<tr>
<td>Column Total</td>
<td>41</td>
<td>29</td>
<td>7</td>
<td>9</td>
<td>86</td>
</tr>
</tbody>
</table>

47.7% 33.7% 8.1% 10.5% 100%

Table 7

Cross Tabulation of Relationship Questionnaire (F.C.) by RSQ Highest Prototype Mean (Bartholomew 1994)

<table>
<thead>
<tr>
<th>RQ (F.C.)</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secure</td>
<td>29 (70.7%)</td>
<td>0</td>
<td>5 (33.3%)</td>
<td>8 (28.6%)</td>
</tr>
<tr>
<td>Fearful</td>
<td>8 (19.5%)</td>
<td>11 (91.7%)</td>
<td>3 (20.0%)</td>
<td>13 (46.4%)</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>2 (4.9%)</td>
<td>0</td>
<td>5 (33.3%)</td>
<td>2 (7.1%)</td>
</tr>
<tr>
<td>Dismissing</td>
<td>2 (4.9%)</td>
<td>1 (8.3%)</td>
<td>2 (13.3%)</td>
<td>5 (17.9%)</td>
</tr>
<tr>
<td>Column</td>
<td>41</td>
<td>12</td>
<td>15</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
A discriminant function analysis was performed to clarify the relationship between the attachment classifications on the RQ and RSQ. However, the cell membership for the preoccupied and dismissing groups were too small to use this statistic in other than an qualitative way. The data in Table 9 suggest that attachment style as measured prototypically (RQ) and dimensionally (RSQ) demonstrates convergent and discriminant validity for secure and fearful categorisation with forced-choice classification.

Overall, the prototype measure achieves 92% correct classification as measured by forced choice. The dimensional measure fails to achieve correct classification for the preoccupied and dismissing categories as measured against forced choice but achieved satisfactory agreement in classification for the secure and anxious categories as measured by forced choice. Broadly, it appears that the various measures of attachment classification achieve satisfactory convergent and discriminant validity, with some classification drift.
occurring with the dimensional measure (RSQ) on the preoccupied and dismissing attachment classifications.

Table 9

**Discriminant Function Analysis - Percentage of Correct Attachment Style**

Categorisation using RQ FC as the Discriminator Variable.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ (P.R)</td>
<td>100%</td>
<td>93%</td>
<td>89%</td>
<td>60%</td>
<td>92%</td>
</tr>
<tr>
<td>RSQ</td>
<td>86%</td>
<td>75%</td>
<td>22%</td>
<td>10%</td>
<td>69%</td>
</tr>
</tbody>
</table>

**Bartholomew’s Self and Other Model Dimensions**

Hypothesis 3 predicted that secure participants would endorse both positive self and other models compared to insecure participants. Bartholomew's (1994) scoring formula permitting self and other models to be calculated from the RSQ data was used to examine the predicted association of these dimensions to attachment classifications.
Table 10
Cross Tabulation of RQ (P.R.) and RSQ Measures of Attachment Categories and Models of Self and Other.

<table>
<thead>
<tr>
<th>Attachment Categories R.Q. (P.R.)</th>
<th>Dimensions</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Self</td>
<td>90%</td>
<td>17%</td>
<td>-</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Neutral Self</td>
<td>5%</td>
<td>3%</td>
<td>71%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Self</td>
<td>5%</td>
<td>79%</td>
<td>29%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>+ Other</td>
<td>90%</td>
<td>3%</td>
<td>100%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Neutral other</td>
<td>5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td>5%</td>
<td>97%</td>
<td>-</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Table 11
Cross Tabulation of RSQ Measure of Attachment Categories and Bartholomew's Models of Self and Other.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Attachment Categories (RSQ)</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Self</td>
<td>98%</td>
<td>33%</td>
<td>53%</td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Neutral Self</td>
<td>-</td>
<td>-</td>
<td>7%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- Self</td>
<td>2%</td>
<td>67%</td>
<td>40%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>+ Other</td>
<td>83%</td>
<td>-</td>
<td>80%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Neutral other</td>
<td>2%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td>15%</td>
<td>100%</td>
<td>20%</td>
<td>96%</td>
<td></td>
</tr>
</tbody>
</table>

The cross tabulations displayed in Table 10 and Table 11 show that the different attachment categories as measured by both the RQ (P.R.) and RSQ do demonstrate differing
views of the self and other models. In accordance with Bartholomew's model of adult attachment style the secure category displays both a positive self and other model; the fearful category, as predicted, displays a negative self and negative other model, the dismissing category displays, as predicted, a positive self, negative other combination.

The preoccupied category, while displaying a positive other orientation, as predicted, does not unambiguously display a negative self view. On the RQ measure the self is endorsed as neutral to negative; while on the RSQ measure there is a somewhat higher endorsement of the self as positive, as opposed to negative. Overall, the data suggests support for Hypothesis 3 with some lack of support for the preoccupied classification's other model.

**Mental Models**

Hypothesis 4 proposed that secure participants would endorse more positive self and other items on Mental Model statements in comparison to insecure participants. To assess the effects of attachment categorical classification on the eight item mental model statements as the dependent variables, a one-way multivariate analysis of variance (MANOVA) was performed. Table 12 presents Hazan and Shaver's (1987) eight item dichotomous rating scale mean and standard deviation scores for participants based on their attachment classification by RQ (F.C.). MANOVA yielded that the effect of attachment classification on the items were significant, Wilk's Lambda = .38, \( F(4.24), (p<.01) \).
## Table 12

**Means And Standard Deviations For Mental Model Statement by RQ (F.C.).**

<table>
<thead>
<tr>
<th>Scale/Model</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
<th>F (3,98)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mental Models</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I am easier to get to know than most people</td>
<td>.93a (.25)</td>
<td>.33b (.47)</td>
<td>.67c (.50)</td>
<td>.40b (.52)</td>
<td>16.43**</td>
</tr>
<tr>
<td>2. I have more self-doubts than most people</td>
<td>.30a (.46)</td>
<td>.59b (.50)</td>
<td>.44 (.52)</td>
<td>.20a (.42)</td>
<td>3.33*</td>
</tr>
<tr>
<td>3. People almost always like me.</td>
<td>.95a (.21)</td>
<td>.77b (.43)</td>
<td>1.00 (.00)</td>
<td>.90 (.32)</td>
<td>2.87*</td>
</tr>
<tr>
<td>4. People often misunderstand me or fail to appreciate me.</td>
<td>.16a (.38)</td>
<td>.49b (.50)</td>
<td>.56b (.53)</td>
<td>.10a (.32)</td>
<td>5.58**</td>
</tr>
<tr>
<td>5. Few people are as willing and able as I am to commit themselves to a long-term relationship</td>
<td>.36 (.49)</td>
<td>.30 (.47)</td>
<td>.33 (.50)</td>
<td>.30 (.48)</td>
<td>.111</td>
</tr>
<tr>
<td>6. People are generally well-intentioned and good-hearted.</td>
<td>.90a (.30)</td>
<td>.77 (.43)</td>
<td>1.00a (.00)</td>
<td>.60b (.52)</td>
<td>3.04*</td>
</tr>
<tr>
<td>7. You have to watch out in dealing with most people; they would hurt, ignore, or reject you if it suits their purposes.</td>
<td>.18a (.40)</td>
<td>.43b (.50)</td>
<td>.22 (.44)</td>
<td>.50b (.52)</td>
<td>2.86*</td>
</tr>
<tr>
<td>8. I am more independent and self-sufficient than most people; I can get along quite well by myself.</td>
<td>.82 (.40)</td>
<td>.67 (.48)</td>
<td>.67 (.50)</td>
<td>.60 (.51)</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Note: Within each row means with different subscripts differ at the .05 level of significance according to a Scheffe test. *p < .05, **p < .01.

Note: See Appendix Table A12 for additional statistics.

Note: Standard Deviations Are In Brackets
Univariate analysis yielded results for the following items as significant; 'I am easier to get to know than most people', $F(3, 98) = 16.43, p < .01$, distinguished secure from fearful and dismissing categories, it also distinguished the preoccupied from fearful categories; 'I have more self doubts than most people', $F(3,98) = 3.33, p < .05$, distinguished secure and dismissing categories from the fearful category; 'People almost always like me', $F(3,98) = 2.87, p < .05$, distinguished secure from fearful categorisations; 'People often misunderstand me, or fail to appreciate me', $F(3,98) = 5.58, p < .01$, distinguished secure and dismissing from the fearful and preoccupied categories; 'People are generally well intentioned and good hearted', $F(3,98) = 3.04, p < .05$, distinguished the secure and preoccupied from the dismissing categories; 'You have to watch out in dealing with most people; they would hurt, ignore, or reject you if it suits their purposes', $F(3,98) = 2.86, p < .05$, distinguished the secure from the fearful and dismissing categories. Hypothesis 4, that secure participants would self-report more positive self and other mental model statements in comparison to insecure participants appears to be supported.

Family History Variables

Hypothesis 5 predicted that secure attachment would be associated with more positive parental descriptions than insecure and that insecurity of attachment would be associated with maternal separation. To test this hypothesis, univariate analyses of variance (ANOVA's) were conducted. Attachment classification served as the independant variable. The dependent variables consisted of the family relationship adjectives. Significant family history variables analysed by ANOVA’s and post-hoc Scheffe tests are presented in Table 13. Attachment classification was based on RQ (F.C). The significant family relationship variables are; father disinterested, $F(3,99) = 3.37, p < .05$, distinguished the preoccupied from the dismissing
categories; father unresponsive $E(3,99) = 10.36, p < .01$, distinguished secure, fearful and dismissing categories from preoccupied; mother accepting $E(3,99) = 3.74, p < .05$, distinguished the secure from fearful categories; mother likeable $E(3,99) = 4.81, p < .01$, distinguished the secure and dismissing categories from fearful; sympathetic mother, $E(3,99) = 4.44, p < .01$, distinguished the fearful from dismissing categories; Distant parental relationship $E(3,99) = 5.69, p < .01$, distinguished the secure and fearful category from the preoccupied.

The results provide limited evidence for Hypothesis 5 with only clear difference between secure and insecure attachment classifications relating to endorsement of having an accepting mother. The predication regarding maternal separation and attachment classification is not supported.

Table 13

Mean Proportions of Childhood Relationship Items By RQ (F.C.)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
<th>$E(3,99)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father Disinterested</td>
<td>.18</td>
<td>.20</td>
<td>.56a</td>
<td>.00b</td>
<td>3.3*</td>
</tr>
<tr>
<td>Father Unresponsive</td>
<td>.09a</td>
<td>.28a</td>
<td>.78b</td>
<td>.00a</td>
<td>10.3**</td>
</tr>
<tr>
<td>Mother Accepting</td>
<td>.70a</td>
<td>.38b</td>
<td>.67</td>
<td>.70</td>
<td>3.7*</td>
</tr>
<tr>
<td>Mother Likeable</td>
<td>.75a</td>
<td>.43b</td>
<td>.56</td>
<td>.90a</td>
<td>4.8**</td>
</tr>
<tr>
<td>Sympathetic mother</td>
<td>.57</td>
<td>.33a</td>
<td>.56</td>
<td>.90b</td>
<td>4.4**</td>
</tr>
</tbody>
</table>

Parental Relationship

| Distant                   | .09a   | .25a    | .66b        | .30        | 5.69**    |

Note: Means with different subscripts differ significantly at $p < .05$ according to Scheffe test.
* $p < .05$, **$p < .01$.

Note: See Appendix Table A13 for additional statistics.
Dimensionality of RSQ

To explore the research question of the issue of dimensions underlying questionnaire items and the relationship of discrete classifications to dimensional measurement,

Bartholomew's 30 item RSQ questionnaire was subjected to a principal axis factor analysis followed by initial oblimin rotation. On the basis of scree plots and eigenvalues greater than 1, the solution indicated that a 3 factor solution was appropriate. The factor correlation matrix that resulted from the oblimin rotation is presented in Table 14. It can be seen that Factor 1 and 2 correlate weakly indicating a nonsubstantial overlap between factors. In view of this, varimax rotation was adopted as it appeared that the dimensions are relatively orthogonal. Principal axis factoring was used instead of principal components analysis because it does not assume that all variables are measured without error (Simpson, Rholes & Nelligan 1992).

Table 14

Factor Correlation Matrix (Oblimin Rotation)

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>1.00000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2</td>
<td>.24459</td>
<td>1.00000</td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td>-.18745</td>
<td>.03840</td>
<td>1.00000</td>
</tr>
</tbody>
</table>

Factor loadings and variance accounted for after rotation are shown in Table 15. This table comprises 37 items, as items which loaded across the factors were included in each scale. Only loadings of .3 or larger were interpreted as defining a factor (Tabachnik & Fidell, 1989). The first factor contained items concerning the extent to which subjects could trust others and depend on them to be available when needed. Factor two consisted of items reflecting anxiety
in relationships, such as fear of being abandoned and not being valued/loved. The third factor contained items regarding the extent to which subjects were comfortable with closeness in relationships. On the basis of the items defining each factor the item scales were labelled "Distrust", "Anxiety" and "Close", respectively.

**Internal Consistency**

Cronbach's alpha coefficient for Distrust, Anxiety and Close scales were all reasonable (.87, .83, .77, respectively). The items defining each factor (15 items for Distrust; 10 items for Anxiety; 12 for Close) were summed to form three composite scales. Several items were recoded so that higher scores represented less confidence in the dependability of others and more comfort with closeness. High scores on each scale represented a high amount of distrust, anxiety and comfort with closeness respectively.

Table 15: Adult Attachment Scale Items and Factor Loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Distrust</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. I find it difficult to depend on other people. (Fear)</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I find it difficult to trust others completely. (Fear)</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I prefer not to depend on others. (Dis)</td>
<td>.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I am uncomfortable being close to others. (Fear)</td>
<td>.58</td>
<td>.30</td>
<td>-.43</td>
</tr>
<tr>
<td>5. I am not sure that I can always depend on others to be there when I need them.</td>
<td>.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I am nervous when anyone gets too close to me.</td>
<td>.54</td>
<td>.47</td>
<td>-.34</td>
</tr>
<tr>
<td>7. I am comfortable depending on others. (Sec)</td>
<td>-.52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 15 continues:
Table 15 continued:

8. I worry that I would be hurt if I allow myself to become too close to others. (Fear) .51

9. People are never there when you need them. .50

10. I know that others would be there when I need them. a -.49

11. I worry about others getting too close to me. .48 -.40

12. It is very important to me to feel independent. (Dis) .43

13. It is very important to me to feel self-sufficient. (Dis) .33 .32

14. I find it relatively easy to get close to others. a -.39 .47

15. I find it easy to get emotionally close to others. (Sec) a -.41 .41

**Anxiety**

16. I often worry that romantic partners won't want to stay with me. .78

17. I often worry that romantic partners don't really love me. .66

18. I worry about being abandoned. .63

19. My desire to merge completely sometimes scares people. .63

20. I worry about having others not accept me. (Sec R) .58

21. I find that others are reluctant to get as close as I would like them. (Pre) .56

22. I worry that others don't value me as much as I value them. (Pre) .50

23. I am uncomfortable being close to others. (Fear) .30 -.43

Table 15 continues:
Table 15 continued:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>I am nervous when anyone gets too close to me.</td>
<td>0.54</td>
<td>0.47</td>
<td>-0.34</td>
</tr>
<tr>
<td>25</td>
<td>I worry about being alone. (Sec-R)</td>
<td>0.36</td>
<td>0.31</td>
<td></td>
</tr>
</tbody>
</table>

Comfort with Closeness

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>I want emotionally close relationships.</td>
<td></td>
<td></td>
<td>0.60</td>
</tr>
<tr>
<td>27</td>
<td>I am comfortable having other people depend on me. (Sec)</td>
<td></td>
<td></td>
<td>0.55</td>
</tr>
<tr>
<td>28</td>
<td>I want to be completely emotionally intimate with others. (Pre)</td>
<td></td>
<td></td>
<td>0.52</td>
</tr>
<tr>
<td>29</td>
<td>I am uncomfortable being close to others. (Fear) a</td>
<td>0.58</td>
<td>0.30</td>
<td>-0.43</td>
</tr>
<tr>
<td>30</td>
<td>I am nervous when anyone gets too close to me. a</td>
<td>0.54</td>
<td>0.47</td>
<td>-0.34</td>
</tr>
<tr>
<td>31</td>
<td>I worry about others getting too close to me. a</td>
<td>0.48</td>
<td></td>
<td>-0.40</td>
</tr>
<tr>
<td>32</td>
<td>I worry about being alone. (Sec-R)</td>
<td></td>
<td>0.36</td>
<td>0.31</td>
</tr>
<tr>
<td>33</td>
<td>I want to merge completely with another person.</td>
<td></td>
<td></td>
<td>0.49</td>
</tr>
<tr>
<td>34</td>
<td>I find it relatively easy to get close to others.</td>
<td>-0.39</td>
<td></td>
<td>0.47</td>
</tr>
<tr>
<td>35</td>
<td>I find it easy to get emotionally close to others. (Sec) -0.41</td>
<td></td>
<td></td>
<td>0.41</td>
</tr>
<tr>
<td>36</td>
<td>I prefer not to have other people depend on me.</td>
<td></td>
<td></td>
<td>-0.34</td>
</tr>
<tr>
<td>37</td>
<td>Romantic partners often want me to be closer</td>
<td></td>
<td></td>
<td>-0.33</td>
</tr>
</tbody>
</table>

Eigen Value before Rotation

<table>
<thead>
<tr>
<th></th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.7</td>
<td>3.7</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Percentage of Variance after Rotation

<table>
<thead>
<tr>
<th></th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>27.2</td>
<td>15.5</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Note: (Sec) Indicates item used to score for Bartholomew's 'Secure' scale; (Fear), item used to score for Bartholomew's 'Fearful' scale; (Pre), item used to score for Bartholomew's 'Preoccupied' scale; and (Dis) item used to score for Bartholomew's 'Dismissing' scale.

Note: (a) Item was recoded when forming the composite score.
Attachment Dimensions of Distrust, Anxiety, Comfort with Closeness and Discrete Attachment Classification.

In order to examine the relationship between the present factor analytically derived dimensions of Distrust, Anxiety, Comfort with Closeness and Bartholomew's four category model of attachment, scores were examined for subjects on the RQ (F.C.) attachment classifications and on the present RSQ dimensions. A multivariate analysis of variance (MANOVA) was performed with dimension measures of Distrust, Anxiety and Close as the dependent variables and the attachment categorical classification as the independent variable. Table 16 presents the means and standard deviations pertaining to this analysis. Wilk's Lambda = .46, F (9.61), (p < .01), yielded a significant main effect for attachment category. Univariate analysis yielded differences for Distrust, F (3,97) = 20.47, p < .01; Anxiety, F (3,97) = 16.02, p < .01; and Close, F (3,97) = 10.26, p < .01.

The results suggest that a person with a secure attachment classification is not distrustful of people, is not worried about being abandoned and is comfortable with closeness. A fearful person distrusts others, is anxious about abandonment and is uncomfortable with closeness. A preoccupied person, is distrustful of others (in contrast to the "positive other predicted of the preoccupied pattern proposed by Bartholomew), is anxious about abandonment and is comfortable with closeness. A dismissing person is distrustful of others, is not anxious about abandonment and is uncomfortable with closeness. These results appear to indicate concurrent and discriminant validity of the present dimensional attachment ratings with a categorical attachment measure (RQ).
RSQ Attachment Dimensions and Bartholomew's Formula for RSQ Self/Other Model

Dimensions and Attachment Patterns.

A correlational analysis between Bartholomew's scoring system for self model, and other model for attachment classification was performed to investigate the relationship between the currently derived dimensional scores and Bartholomew's models of self and other. From Table 17 it can be seen that the dimension of Distrust is negatively correlated with self and other models and with the secure attachment style. Distrust is positively correlated with the fearful and dismissing attachment categories. Anxiety is negatively correlated to the self and other model and to a secure relationship category. Anxiety is positively correlated with the fearful, preoccupied and dismissing attachment categories. Comfort with closeness is positively associated with the other model and with the secure and preoccupied attachment categories. In contrast, comfort with closeness is negatively correlated with the fearful and dismissing attachment styles. The results suggest the dimensional rating scales demonstrate concurrent and discriminant validity with Bartholomew's dimensions of self and other. However, it needs to be acknowledged that given that the questionnaires are derived from Bartholomew's model and contain overlapping items, some relationship between measures would be expected.
Table 16

Means and Standard Deviations for RSQ Dimensions According to Attachment Type as Measured by RO (F.C.)

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Secure M SD</th>
<th>Fearful M SD</th>
<th>Preoccupied M SD</th>
<th>Dismissing M SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distrust</td>
<td>37.32a 7.00</td>
<td>50.80b 7.77</td>
<td>44.50c 11.05</td>
<td>49.70bc 8.55</td>
</tr>
<tr>
<td>Anxiety</td>
<td>19.69a 4.47</td>
<td>28.25b 7.63</td>
<td>30.75c 7.63</td>
<td>23.00a 5.57</td>
</tr>
<tr>
<td>Close</td>
<td>43.62a 7.20</td>
<td>36.90b 6.25</td>
<td>45.00a 6.02</td>
<td>35.10b 6.72</td>
</tr>
</tbody>
</table>

Note: Means with different subscripts differ significantly at \( p < .05 \).

Note: See Appendix Table A16 for additional statistics.

Table 17

Correlation Coefficients RSQ Present Study's Dimensions by Bartholomews: Self/Other Dimensions; and Secure, Fearful, Preoccupied and Dismissing Patterns.

<table>
<thead>
<tr>
<th>Bartholomew's. Dimensions</th>
<th>RSQ Dimensions</th>
<th>Distrust</th>
<th>Anxiety</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bart. Self</td>
<td>-.51**</td>
<td>-.69**</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Bart. Other</td>
<td>-.85**</td>
<td>-.31**</td>
<td>.71**</td>
<td></td>
</tr>
<tr>
<td>Bart. Secure</td>
<td>-.66**</td>
<td>-.64**</td>
<td>.47**</td>
<td></td>
</tr>
<tr>
<td>Bart. Fearful</td>
<td>.90**</td>
<td>.46**</td>
<td>-.57**</td>
<td></td>
</tr>
<tr>
<td>Bart. Preoccupied</td>
<td>.03</td>
<td>.56**</td>
<td>.32**</td>
<td></td>
</tr>
<tr>
<td>Bart. Dismissing</td>
<td>.62**</td>
<td>.21*</td>
<td>-.38**</td>
<td></td>
</tr>
</tbody>
</table>

Note: * \( p < .05 \) ** \( p < .01 \)

Note: RSQ Dimensions derived from Study 1 factor analysis.
Introduction of Perception of Stability of Attachment Dimensional Classification in RSQ Questionnaire Response.

Hypothesis 6 predicted that participants would demonstrate stability in responses on attachment/questionnaire items across perception of different time episodes. Questionnaire items were the same for administration of both the RSQ and RSQ (T.F.) questionnaires. However, the questionnaires differed in terms of formats for (a) instructions and (b) layout of items. Table 18 illustrates the relationship between participants scores on the general dimensional measure (RSQ) and a dimensional measure of past, present and future RSQ (T.F.) feelings about relationships. Ratings were based on the scales derived from the present factor analysis.

Table 18
Correlation Coefficients for RSQ Dimensions (General Feelings) By Time Factor Dimensions (Past, Present, Future).

<table>
<thead>
<tr>
<th>RSQ General</th>
<th>RSQ (Time Frame)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distrust</td>
<td>Past Distrust .24*</td>
</tr>
<tr>
<td>Anxious</td>
<td>Past Anxiety .18</td>
</tr>
<tr>
<td>Close</td>
<td>Past Close -.38**</td>
</tr>
</tbody>
</table>

Note: *p < .05 **p < .01

The data suggest a higher correlation between the dimensions of 'general' distrust and future distrust rather than past distrust and a higher correlation between 'general' anxiety and
future rather than past anxiety. Participants appear on the Comfort with Closeness dimension to be equating 'general' description with present description as they appear to rate themselves somewhat similarly on this dimension for both the past and the future. The data suggest that the more negative dimensions (i.e., Distrust and Anxiety) as a description of general feelings are most highly correlated with endorsement for descriptions of present and future feelings and that the more positive dimension of Comfort with Closeness as a general description of feelings is highly correlated with present description of feelings. The data demonstrates a degree of variability across past, present and future ratings with only moderate correlations between "general" and present descriptions, and between "general" and past descriptions. Overall, respondents appear to look more to present and future to offer a general description of feelings rather than to the past. The data do not support Hypothesis 6 which predicts stability of attachment across self-report time perception.
In general, the hypotheses of the present normative study have been supported. Hypothesis 1, that the provision of an additional avoidant category may result in a lower endorsement of the secure style than in previous studies was supported. However, while the prevalence of the insecure attachment classification in the present study is higher than the secure classification and is higher than Hazan and Shaver's (1987) secure classification the results are not statistically different. The results do, however, challenge the prevailing assumption that self-report secure attachment classification is normative in population terms. In the present study, Secure Attachment is the modal categorisation (40-42%) but if the Fearful, Preoccupied and Dismissing categories are combined to represent insecure categorisation, it appears as if self reported Insecure Attachment style is more prevalent than Secure in this normative population (56% versus 42%).

The second hypothesis which suggests that different methods of measuring attachment would display convergent and discriminant validity was broadly supported. The categorical measures of RQ forced choice (F.C.) and prototype rating (P.R.) achieved good convergent and discriminant validity. Bartholomew's (1994) dimensional measure (RSQ) correlated reasonably well with the categorical measures particularly in relation to the secure and fearful classifications. However, it should be noted that there may be a common method issue because of the reliance of the study on self-report of multiple similar questionnaires. It is possible that reporting bias, in terms of participants attempts to maintain consistency of response across similar measures may have inflated the relationship between measures. In this respect, it may be that the RSQ provided more interpretational ambivalence and correspondingly less cues for consistency in response for the preoccupied and dismissing
categories thus resulting in poorer correlations with categorical measures. Clearly, the present investigation of attachment measures is limited in terms of a validation study and there remains a need for further work in the area. However, the aim of the investigation of attachment measures was to establish which of the measure had more to offer in terms of ease of use (categorical measure) and usefulness of information obtained (dimensional measure); in this respect the results are interesting and useful both theoretically and clinically.

In relation to the research question regarding the dimensional aspects of the RSQ, the present study's main finding is that of a three factor structure underlying the RSQ. This factor structure appears similar to Collins and Read's (1990) three-factor solution, Comfort with Closeness, the degree one can depend on others, Depend, and Anxiety. Collins and Read's Depend factor has an eigen value of 1.01 with oblique rotation and correlates at .41 with the first factor Close leading to some scepticism regarding the third factor (Strahan, 1991). In the current study there is similarly a significant negative correlation (-.66) between the scales Distrust and Close leading to a possibility that these represent bipolar dimensions on a more global Comfort with Closeness scale (Feeney, 1990). Griffin and Bartholomew (1994b) state that a large body of evidence exists for two dimensions underlying adult attachment patterns. They refer to Collins and Read's (1990), Comfort with Closeness and Anxiety dimensions as corresponding directly to the self and other dimensions. For clinical purposes it appears that it may offer more complexity for individuals to operate on the basis of a three factor solution. In relation to complexity, in the present study the Close dimension has demonstrated an important distinction from the Distrust dimension by its 'present' focus on the RSQ (T.F.) compared to the 'future' focus of the Distrust and Anxiety dimension. The validity of the present study's dimensional scales is suggested by the pattern of associations with both categorical measures of attachment style and predictable patterns of correlations with Bartholomew's models of self
and other. However, in the data relating to Bartholomew's self and other model, the preoccupied attachment classification, as categorised by RQ (F.C.), is not as unreservedly positive in attitude towards others as Bartholomew's prototypic model of self and others suggests.

The third hypothesis relates to Bartholomew's (1990) definition of individual differences in terms of the intersection of two dimensions, positivity of the self model and positivity of models of hypothetical others. The hypothesis was that secure participants would demonstrate both positive self and other models in comparison to insecure participants. Examination of the four attachment patterns theoretically derived from a combination of the two dimensions support the hypothesis for participants endorsing a secure attachment classification. In relation to the bipolarity of positive and negative self and other it is interesting that the present data suggests a hierarchy of relevance of the self dimension for the preoccupied group. Theoretically, the positivity/negativity of self and other, representations are assumed to be tied to distinct patterns of emotional regulation and interpersonal behaviour. The preoccupied individual is theoretically characterised as experiencing a deep sense of personal unworthiness.

The present data for the preoccupied categorisation suggest the relative salience of the self model, that is, whether the individual's feelings about the self are less prominent than the feelings about others. The preoccupied category weighted the self as neutral to negative (RQ) and positive (RSQ). The nonadherence to bipolarity of rating, and apparent rating in the opposite direction from prediction is problematic for Bartholomew's (1994) models of the self and other where the dismissing and preoccupied classifications are expected to be clearly and diametrically opposed. Bartholomew's (1990) earlier work did refer to neutral designations as reflecting individual complexity but much of the more recent self-report research has not
reported this neutral aspect of self and other evaluation, apparently preferring bipolar
designations for conceptual clarity and theoretical consistency. The pattern for the
preoccupied classification suggests a more complex attitude to relationships that
Bartholomew's model predicts.

The fourth hypothesis predicted that on Hazan and Shaver's (1987) Mental Model
Checklist secure participants would endorse more positive self and other statements. This
hypothesis was supported as differentiating the secure from insecure attachment classifications.
Among the insecure classifications, the dismissing classification did display a more positive self
model than the fearful or preoccupied groups. The dismissing along with the fearful had a
negative other model in terms of it not being easy for others to get to know them and needing
to watch out in dealing with others. The preoccupied in common with the secure perceive
others as generally well intentioned and good hearted.

The fifth hypothesis related to the association between attachment classification and
checklist adjective descriptions of maternal and paternal characteristics, parental marital quality
and separation from the mother. This hypothesis was not fully supported in detail. Accepting
mothers were reported by a higher proportion of secure respondents compared to fearful but
this description did not separate secure from dismissing respondents. Likeable mothers
differentiated both secure and dismissing from fearful, respondents. Accepting mothers also
separated secure from fearful respondents. The hypothesis that dismissing participants would
report their mothers as cold and rejecting was not supported. However, based on attachment
theory, it could be hypothesised that the dismissing individuals would report their mothers as
sympathetic and likeable, in contrast to fearful individuals, because of a defensive coping style.
In relation to preoccupied individuals it appeared as if father, as opposed to mother variables,
were what distinguished them from other attachment categories. The preoccupied group also
reported the parental relationship as distant in contrast to the other attachment categories. The hypothesis that separation from the mother would distinguish secure from insecure attachment categories was not supported. This latter finding is similar to Hazan and Shaver (1987).

The sixth hypothesis predicted that participants would endorse stability in responses on attachment items when asked to consider their feelings about relationships across perception of different time episodes. This hypothesis was not supported with participants responses on the RSQ (T.F.) demonstrating an apparent multifaceted self representation. This result is consistent with Hart's (1993) research on the relations of temporal selves across the lifespan. In the current research, present and future representations appear to have more in common, than reference to the experience of self in the past. This finding suggests that individuals do not possess a trait like orientation to their representation of themselves and supports the conceptualisation of self representation as a process rather than a product and as composed of a variety of relational schema rather than a fixed entity (Epstein, 1973). It is possible that the apparent ability of humans to reflect themselves in a multitude of representations is not adequately reflected by attachment theory and/or measurement of attachment constructs using the structure of an imposed and restricted questionnaire.

There is a suggestion that current questionnaire methods are limited in terms of formulating a perception of human psychological adaptation. The questionnaires' propensity to assess the self in a trait-like fashion may inadequately reflect how people think about themselves. The popularity of such measurement possibly reflects a culture more accepting of self reports that present an image of consistency rather than fluctuation. Several studies of self-report attachment classifications have shown fairly high reliabilities compared over periods of several months and up to a few years (Brennan & Shaver, 1995; Kirkpatrick & Davis, 1994; Shaver & Brennan, 1992). These findings are consistent with Bowlby's claim that
working models of relationships tend to be stable. This is based on the conceptualisation of the transformation of a dyadic quality into an individual characteristic. Empirical findings indicate that there are continuities to later relationships from the early attachment relationship. It appears that some sort of attachment quality must be carried forward within the individual unless the continuity is merely a consequence of continuity in environmental influences (Belsky & Cassidy, 1994; Rutter, 1991).

It is possible that viewing all connections between relationships as demonstrating a persistence in attachment qualities ignores other dimensions of relationships such as shared humour, balance of control, intimacy and shared positive emotions (Sameroff & Emde, 1989; Dunn, 1993). The present results suggest that participants appear to reflect themselves as having varying relational experiences. This points to the need to consider relationships in terms that go beyond attachment concepts and to consider social systems that extend beyond dyads (Dunn, 1993). In this regard, it appears that a transactional approach to relational processes is more comprehensive than a focus on trait like individualism. As Ogilvie and Ashmore (1991) pointed out, individuals appear to demonstrate transactional relationships in terms of experiencing the self as who I am with this person or in this type of relationship. Clearly investigators need to exercise caution in interpreting data to support theory, as it is apparent from the modification of the RSQ how much the somewhat artificial demands of the task may produce particular patterns of results.

Overall, the present results suggest that the categorical classification approach demonstrates convergent and discriminant validity with prototype and dimensional measures. However, the categorical format, while convenient, is simplistic and may not access information relevant to more complex understandings of attachment representations. The likert/prototype classification approach offers somewhat more flexibility but results in
ambiguous interpretation of attachment categorisation due to its high undifferentiated response rate. In terms of self report attachment classification the most robust distinction across measures is between the secure and insecure classification. The potential clinical usefulness of the questionnaires are indicated by a number of findings namely, the pattern of associations between categorical and dimensional measures and the broad differentiation between secure and insecure classifications on family history and mental model checklists. The results of the present study broadly support Bartholomew's four category attachment model. However, the results for the preoccupied classification are not as clear cut as the four category model predicts in relation to the present study's findings of failure of the preoccupied classification to unambiguously endorse a negative self model. There is also some concern that the associations found may owe more to the structure of the questionnaires then to a demonstration of the validity of the underlying theoretical model.

This concern with the effects of the questionnaire structure is also apparent with dimensional measures which it appears are more responsive to the apparent multifaceted nature of the individual's representations of their relationship experiences. This complexity appears to have been largely obscured by restricting attachment evaluation to a typology model. In relation to the issue of stability of attachment classification, the modification of the dimensional measure to include a temporal perspective suggests caution in relation to the theoretical assumption that internal working models are stable. Participants appear to endorse different attachment classifications for perception of different relationship episodes. The present data suggest that researchers discover the coherences that their procedures permit. Such limitations in measurement would suggest the desirability of an emphasis on measuring change as well as stability in attachment classification. The clarification as to what extent internal models are specific to particular relationships or function as an all encompassing model for all relationships
is clearly an area requiring further investigation. Self-report attachment classification appears
to suggest multiplicity rather than singularity of assessed internal models. This perspective
however, would clearly be at odds with the main tenets of attachment theory in relation to the
deterministic force of the early primary relationship and the stability of internal working
models.

The current dimensional scales developed during the study appear to demonstrate
adequate validity with other attachment measures. Dimensional measures, in comparison to
categorical measures, offer more complexity in terms of item context and are increasingly
applied to studies of relationships and communication (Feeney et al., 1994a). For some
researchers there is controversy over whether the structure underlying the items is a two
dimensional structure (Feeney et al., 1994; Simpson, 1990; Strahan 1991), or a three
dimensional structure (Collins & Reed, 1990). However, it is possible to consider that the two
and three dimensional configurations are not incompatible and that Distrust and Close may
represent bipolar dimensions on a more global Comfort with Closeness factor (Feeney &
Noller, 1990). However, in clinical research it may be relevant to assess bipolar constructs
separately. The distinction may be of special relevance in parent-child interactions where
positive interactions and negative interactions may represent separate phenomena (Loeber &
Patterson, 1981).

In conclusion, the results from Study 1 suggest a gap in validation of attachment theory
both in terms of the robustness of the assumption of self-report attachment stability and the
prevalence of secure attachment as necessarily normative. These conclusions are tempered by
the limitation of using an analogue population and the use of exclusively self-report measures
for the measurement of complex attachment constructs. Study 1 succeeded in its aim of
producing an empirically based attachment rating scale of the attachment dimensions of
Distrust and Anxiety about relationships and Comfort with Closeness in relationships. It is considered that use of this dimensional measure on a clinical sample would overcome some of the limitations of more clinically convenient categorical attachment measures and would allow more sensitive assessment of the maternal affective-cognitive schemas thought to be implicated in clinic presentation of oppositional children.
Chapter 6 - Study 2, Clinical Study

Attachment theory attempts to explain and predict the nature of emotional processes in relationships. It suggests that maternal insecure attachment is implicated in children's oppositional behaviour, maternal depression and marital dissatisfaction. Applied to the area of maternal perception of child oppositionality it appears to offer problem explanation and treatment models for clinical populations. As such, it may provide a perspective on the subjective nature of dyadic relationships which has not been conceptualised in terms of primary emotional and relationship processes by the social learning and cognitive theoretical models. However, there exists some reservations about the evidence supporting the theoretical prediction of the development of relationship models both in terms of the singularity of the model, that is, attachment to a primary caregiver, usually the mother, and its continuity across development. Empirical efforts to link the quality of attachment with later behaviour problems have produced mixed results. Deklyen (1996) suggested that studies that identified clinical levels of problem behaviour or that examine populations with other risk factors have been more successful in linking attachment insecurity with behaviour problems. Accordingly, the present investigation uses clinical cut offs for significance of psychopathology to determine a dichotomous rating of clinically significant, non-clinically significant, ratings of self-report symptom severity.

Practical problems have been identified relating to the validity of self-report measures in terms of oversimplification and possible arbitrariness of attachment classification. Concern has been expressed that working models may not be accessible to consciousness and so correspondingly may not be available to the individual's introspection. Interview methods, although also based on self-report, are claimed as more valid in terms of overcoming
'defensiveness'. However, if defensiveness is judged by the quality of 'coherence', the self-report remains open to the bias of the interpreter's assessment, which appears to view greater coherence as indicative of greater self-development. If the self is viewed as a compositional process involving productive acts of remembering and interacting rather than a fixed construct the judgemental yardstick of coherence becomes problematic as a claim to judge real internal representations. Self-report has also been criticised from the perspective of ecological validity. It has been suggested that observation of relationship interactions is necessary to validate claims of attachment styles influencing procedural scripts. However, situational tests of such behavioural interactions are problematic in their own right. Issues such as how to elicit the target observational behaviour and coding and scoring concerns result in this approach experiencing its own forms of construct measurement limitations. Crowell et al. (1991) in their study of clinical dyads included an interaction test. However, the statistical findings could not unambiguously support the influence of attachment style on mothers and demonstrated a nonsignificant association with child's behaviour in the assessment task. It also appeared unlikely that such staged interactions could access the distress response suggested to be a necessary condition for a valid assessment of attachment behavioural procedural rules and competencies. Further issues pertain to, rater training time, equipment constraints, and the willingness of participants to engage in such exercises.

The literature review indicates that the normative assumptions of attachment theory and its claim as a determinant of psychosocial adaptation and parenting competence is based on cross-sectional and correlational data which is open to alternative explanations. Research in the area of mother-child relationships using the attachment paradigm have, in many cases, produced sample distributions of attachment categorisation not predicted by attachment theory. From Table 19 it can be seen that both Crowell and Feldman (1988) and Haft and
Slade's (1989) data for a normal group demonstrated a higher proportion of insecure than secure attachment in their sample. Cohn et al. (1992) demonstrated a lower than expected distribution of insecure attachment (preoccupied and dismissing) than predicted from theory. From Table 20 it can be seen that some ambiguity also appears to exist regarding the representativeness of the samples in terms of their predominantly middle class composition and the ratio of participant recruitment to subsequent participation, suggestive of biased population sampling. Such issues are of concern both in terms of theoretical validity, and clinical decision making predicated on the basis of results generated from non representative population sampling.

The development in Study 1 of a self-report dimensional attachment measure may facilitate the clinical measurement of the dimensions likely to have a regulatory role in organising behaviour perceptions and explanations in relationships. Use of dimensional measures may also facilitate measurement of such regulatory processes without loss of the conceptual framework of attachment classification that tie the dimensions to the attachment model. Dimensional research in the adult literature suggests specific associations between anxiety and conflicted relationships which may also have relevance for parent-child relationships.
Table 19

Parental Attachment Classification Across Studies.

<table>
<thead>
<tr>
<th>Studies</th>
<th>Secure</th>
<th>Insecure Preoccupied</th>
<th>Insecure Dismissing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical 'normal' (as per Haft &amp; Slade, 1989)</td>
<td>60%</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Haft and Slade (1989) 'normal' group (n=14)</td>
<td>21%</td>
<td>36%</td>
<td>43%</td>
</tr>
<tr>
<td>Crowell and Feldman (1988) 'normal' group (n=24)</td>
<td>42%</td>
<td>-</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>'clinical group' (n=40)</td>
<td>-</td>
<td>38%</td>
<td>33%</td>
</tr>
<tr>
<td>Crowell et al. (1991) 'clinical' group (n=49)</td>
<td>12%</td>
<td>49%</td>
<td>39%</td>
</tr>
<tr>
<td>Fonagy et al. (1991) 'normal group' (n=96)</td>
<td>61%</td>
<td>16%</td>
<td>23%</td>
</tr>
<tr>
<td>Cohn et al. (1992) 'normal' group (n=27) couples</td>
<td>63%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>(Additional categories - unresolved about loss; 17% (n=9); Other 11% (n=6))</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 20

Ratio of Participant Recruitment Versus Subsequent Participation.

<table>
<thead>
<tr>
<th>Studies</th>
<th>'Normals'</th>
<th>'Clinic'</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Crowell and Feldman (1988)</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>* Haft and Slade (1989)</td>
<td>25%</td>
<td>-</td>
</tr>
<tr>
<td># Fonahy et al. (1991)</td>
<td>50%</td>
<td>-</td>
</tr>
<tr>
<td># Crowell et al. (1991)</td>
<td></td>
<td>100% (?)</td>
</tr>
<tr>
<td># Renner (1994) (University sample)</td>
<td>40%</td>
<td>78%</td>
</tr>
<tr>
<td>Renner (1995)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Renner (1995) (Local mothers)</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

* Individual Letter Recruitment
# Group/Individual Approach
** Flyers distributed requesting volunteers; (schools, shopping centres); clients requested to ask friends.

According to Neimeyer (1994), "All definitions are working fictions, which classify or punctuate the ambiguity of experience in more or less useful ways, as justified by the person or language community adopting that definition" (p.238). In this respect the aim of the present study is to explore the usefulness of attachment formulations as both explanations of the determinants of mother-child relationship difficulties and as methods of intervention. It also aims to explore the usefulness of a categorical and dimensional self-report measures of attachment in a specialised clinical population. From these aims the following hypotheses are proposed:

**Hypothesis 1**

Insecure attachment classification would be predominant in mothers of clinical presented oppositional children.
Hypothesis 2

Compared with mothers with secure attachment classification, mothers with insecure attachment classification and mothers with higher dimensional anxiety scores would report more clinically significant CBCL externalising behaviours.

Hypothesis 3

Compared with mothers with secure attachment classification, mothers with insecure attachment classification would report more clinically significant problems with depression and marital adjustment.

Hypothesis 4

Compared with mothers with secure attachment classification, mothers with insecure attachment classifications would report more negative self and other representations on a self-report mental models rating scale, and also report more negative parental descriptions and maternal separation.

Three research questions are also of interest in the present study. First, Study 1 suggested the validity of the attachment dimensional measures with categorical attachment measurement. Such validity is also investigated in the present clinical sample. Second, there is a suggestion that social desirability is a self-report bias likely to operate in clinical samples. Time constraints prevent this possibility being currently investigated in a comprehensive way. However, a qualitative attempt is made to look at this question by examining the correspondence between categorical and interview attachment classification on a subsample of mothers. Third, there is a suggestion that ecological validity requires the use of mother-child observational measurement in addition to maternal self-report of child behaviour. Using a subsample a qualitative attempt is made to assess whether a behavioural interaction measure displays differences with maternal secure and insecure attachment classifications.
Method

Participants

The sample consisted of thirty-five mothers of a predominantly anglo-saxon background who referred their children ranging in age from two to twelve years to a secondary level community based child and adolescent mental health unit for specialist program treatment for children with disruptive behaviour. Forty-four percent of the children had previously been presented to other counselling services, twenty-five percent of the mothers had previously received counselling for personal difficulties and fourteen percent of the mothers had received marital counselling.

Children were excluded from the study if they were developmentally delayed or if they were under the supervision of a child protection agency. As a consequence of this criterion, more severely dysfunctional families were screened out. The mean age of the children was 6.77 (SD = 2.45). Fifty eight percent of the children were boys. Eight percent of the children had been previously diagnosed by a paediatrician as ADHD. Nineteen percent of the children were receiving medication (prescribed by a paediatrician) for disruptive behaviour.

The mean age of the mothers was 33.48 (SD = 4.46). The mean number of children per family was 2.47 (SD = .74). Seventy-five percent of the mothers lived with partners. Sixty-four percent of the families had a family income of $40,000 and less; thirty-six percent had a family income of greater than $40,000. Forty four percent of the mothers worked (either part/full time). Fourteen percent of the mothers described their occupational status as professional. The remaining described their job category as clerical, unskilled or no status. Fifty-three percent of the mothers had not completed high school to year 12.
Assessment of Child Behaviour

The children's behaviour was rated on the Child Behaviour Checklist (CBCL: Achenbach & Edelbrock, 1991). The CBCL is applicable to both boys and girls from ages two to eighteen years. It is composed of 118 items pertaining to behavioural problems which the parent endorses as being true, somewhat true or not true of their child. The items are grouped to yield a total T-score, Internalising (depression, anxiety) T-score and an Externalising (aggression, oppositional behaviours, tantrums) T-score. Internal reliability (Cronbach's alpha) is not available for the CBCL. For the present study only the externalising behaviour T scores were examined as an indicator of severity of behavioural problems because this scale incorporates all of the behavioural problems reported by the mothers as occurring in their children. The American norms for the CBCL were used as the Australian norms are only available for the 1981 version of the CBCL and not the 1991 version of the CBCL, which was the protocol used in the current study. Children scoring above empirically determined levels are regarded as showing deviant behaviour. The cut off T-score of 67 for the externalising scale was chosen as indicative of clinical significance in terms of severity for these behaviours (see Appendix Table B8 for level of psychopathology in present sample).

The child's behaviour in a subsample (n=12) was also rated on a variation of an interactional behaviour measure (Barkley, 1987) (see Appendix B10, B11). The observer tape records what the parent does/says what the child does/says, in response to the parent's commands; and the parent's reactions to the child's behaviour. No normative data have been reported. Equipment limitation prevented the interaction being video recorded for interrater reliability scoring. Interrater scoring was based on audiotape recordings. Scoring was blind and performed by the principal researcher (senior clinical psychologist) and an additional senior clinical psychologist.
Assessment of Maternal Personal Adjustment and Attachment Classification.

The Beck Depression Inventory (BDI: Beck & Steer, 1993) was used to assess maternal depression. The BDI is a 21 item self-report inventory with each item corresponding to a depressive symptom. Scores are interpreted by the following norms: 0-9 indicated minimal depression, 10-18 indicated mild to moderate depression, 19-20 indicated moderate to severe depression, greater than or equal to 30 indicated severe depression. Split-half reliability yielded a Spearman-Brown reliability coefficient of .93.

The Dyadic Adjustment scale (DAS: Spanier, 1976) was used to assess maternal marital adjustment. The DAS is a widely used 32 item self-report questionnaire which purpose is to measure the quality of marriage and similar dyads. Total scale reliability is .96.

Maternal attachment classification was assessed by self-report questionnaires; Relationship Questionnaire - categorical measure (RQ) - Bartholomew & Horowitz, 1991; Relationship Scales Questionnaire - (RSQ) - Bartholomew, (1994) (see Appendix B3, B4). The dimensional scoring used on the RSQ was derived from the factor analysis of the underlying dimensions on the RSQ in Study 1.

Maternal Attachment Interview (Bartholomew & Horowitz, 1991). A subsample of mothers (n=15) were assessed using a version of this semi-structured interview exploring participant's memories and evaluations of their experiences growing up in their families of origin (see Appendix B5, B6,B7). Two independent raters (the principal investigator and a senior clinical psychologist) coded each audio-interview for the individual's fit with a categorical attachment classification (RQ).

Maternal mental models of attachment were assessed using Hazan and Shavers (1987) dichotomous eight statement questionnaire relating to mental models of self and others, (see Appendix B8).
Maternal family relationship history was assessed using an attachment history questionnaire adopted from Feeney and Noller (1990), (see Appendix B9).

**Procedure**

Subsequent to initial phone screening for program suitability by a clinical psychologist, mothers were sent questionnaires to complete and return prior to the scheduling of a first clinic appointment (CBCL; clinic information form, demographics information, see Appendix B2). Initial return of forms resulted in 45 mothers receiving a clinic interview. At the interview mothers were invited to participate in the current study. As part of the requirements of the ethics committee they were informed that they did not have to participate in the study and that treatment would be provided irrespective of their participation in the study. They were also provided with written information regarding the study and a consent form for study participation. (see Appendix B1). Thirty seven mothers agreed to participate although most expressed concern in relation to; time commitments; having to complete questionnaires (RQ, RSQ, BDI, DAS); attend for possible parent-child recorded observations; and attend for personal interview about their own family relationships. Mothers (n=35) who agreed to participate completed the RQ, RSQ, BDI, DAS, MMQ, and the Family Relationship Checklist, prior to the commencement of a subsequent behavioural family treatment program.

Because of concerns regarding the limitations of self-report methodology, subsample was provided with an attachment based interview and a subsample was provided with a behavioural compliance task to attempt a qualitative comparison of the ability of such procedures to assist in the clarification of issues around maternal attachment type, maternal control style, and reports of oppositional child behaviour. Twelve mother-child pairs were assessed on the behavioural compliance task, while fifteen mothers were provided with an attachment based interview. Maternal scheduling difficulties prevented more mother-child dyads being provided
with the behavioural compliance task and the attachment interview. In relation to attachment questionnaires, a full completion response was achieved for the categorical measure (RQ) (n=35). In the case of the multi item dimensional questionnaire (RSQ), six profiles were not filled in and four profiles had missing data, resulting in an effective sample size of \( n = 25 \) for the dimensional measure.
Results of Study 2

SPSS for windows release 6.0 computer software was used to analyse the data. The attachment styles and dimensions were calculated to determine their relative distribution and their association with child externalising scores on the CBCL and with measures of depression (BDI) and marital harmony (DAS). The association of the attachment styles with Hazan and Shavers mental model questionnaire and with family of origin relationship history was also explored.

Preliminary Analysis

Questionnaires with missing data on items were deleted from the relevant analysis. Demographic variables of age, educational level, ethnicity, marital status, number of children, income, sex of child, did not differ significantly between the attachment style groups (categorical measure), by posthoc Scheffe test. Additional personal information supplied on the demographics form related to history of previous counselling treatments. Univariate F tests revealed significant dimensional differences for Close, $F(1,10) = 12.25, p < .01$ and previous personal counselling and Anxiety, $F(1,8) = 17.82, p < .01$ and previous counselling for depression, however the sample size was too small ($n=4; n=5$ respectively) to interpret the results (see Appendix Table B1). There were no significant differences between attachment classification measured categorically (RQ) and previous personal or depression counselling history.

Distribution of Maternal Attachment Classification in a Clinic Sample.

Hypothesis 1 predicted that insecure attachment style would be predominant in mothers of clinic presented oppositional children.
In this clinical sample, on the R.Q. categorical questionnaire 52.8% (n=19) mothers self-reported a secure classification, 22.2% (n=8) self-reported a fearful classification, 8.3 (n=3) mothers self-reported a preoccupied and 13.9% (n=5) mothers self-reported a dismissing classification. Condensing the insecure classifications to a single category resulted in a maternal attachment distribution of 19 secure and 16 insecure. Percentage of intrarater agreement for the secure and insecure attachment interview classification was 90%). Of the 15 mothers given an attachment interview, 60% (n=9) were classified as secure, 20% (n=3) as fearful, 13% (n=2) as preoccupied and 7% (n=1)), as dismissing, by the principal investigator. In relation to the percentage research question issue of social desirability response bias contaminating categorical self-report attachment measures a comparison between categorical and interview classification was performed. This comparison indicated 89% agreement across measures on the secure classification; 75% agreement across measures on the fearful classification; 50% agreement across measures on the preoccupied classification and 100% agreement on the dismissing classification. Table 21 illustrates the distribution of this subsample of participants across the two attachment measures, categorical and interview. It appears that insecure as opposed to secure attachment classification is not more prevalent in this clinic sample, assessed by both interview and questionnaire self-report.
Table 21

Distribution of Subsample of Participants Across Both Self-report (RQ) and Interview Attachment Measures.

<table>
<thead>
<tr>
<th>RQ</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure</td>
<td>8</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fearful</td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preoccupied</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dismissing</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Maternal Attachment Classification and Maternal Child Behaviour Ratings.

Hypothesis 2 predicted that compared with mothers with secure attachment classification, mothers with insecure attachment classifications, and mothers with higher dimensional anxiety scores would report more clinically significant CBLLL externalising behaviours.

A univariate analysis of variance (ANOVA) was performed to study the effects of self-report attachment classification on the dependant variable measures of child externalising behaviour as measured by maternal reports on the CBCL. From Table 22 it can be seen that, CBCL externalising mean scores were in the clinically significant range. (The CBCL internalising score has been included in the tables as a comparison of clinical interest. However, reference would be restricted to the externalising score as this is the dependent variable of interest in the current study). From Table 22 and Table 23 it can be seen that ANOVA analysis failed to demonstrate a significant difference in CBCL mean scores across either the four attachment groups, or the groups represented dichotomously as secure, insecure. There were also no significant associations between severity of psychopathology as
measured by the maternal reports on the CBCL externalising scale and maternal attachment
classification of secure and insecure.

Table 22

Child Behaviour Checklist Ratings by Mothers Self-Report Attachment Ratings.

<table>
<thead>
<tr>
<th>Mothers Attachment Classification</th>
<th>Secure</th>
<th>Fearful</th>
<th>Preoccupied</th>
<th>Dismissing</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>F (3, 31)</td>
</tr>
<tr>
<td>n=19</td>
<td></td>
<td></td>
<td>n=8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBCL internalising</td>
<td>66.36</td>
<td>8.82</td>
<td>67.62</td>
<td>13.09</td>
<td>n/s</td>
</tr>
<tr>
<td>CBCL externalising</td>
<td>71.68</td>
<td>9.97</td>
<td>73.50</td>
<td>10.00</td>
<td>n/s</td>
</tr>
</tbody>
</table>

Note: n/s = non significant
Note: See Appendix Table B22 for Additional Statistics

Table 23


<table>
<thead>
<tr>
<th></th>
<th>Secure (n=19)</th>
<th>Insecure (n=16)</th>
<th>ANOVA (1.33)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>CBCL internalising T score</td>
<td>66.36</td>
<td>8.82</td>
<td>n/s</td>
</tr>
<tr>
<td>CBCL externalising T score</td>
<td>71.68</td>
<td>9.97</td>
<td>n/s</td>
</tr>
</tbody>
</table>

Note: n/s = non significant
Note: See Appendix Table B23 for Additional Statistics

Maternal Attachment Classification and Mother-Child Interactive Compliance Behaviour.

A research question in the present study is to what extent behavioural interaction
measure distinguish between the secure and insecurely classified subsample of mothers. An
ANOVA analysis was used to compare measures of categorical attachment classification as measured by the RQ on the dependant variable of maternal and child interaction style measured by percentage of child compliance, child negatives, maternal positive and maternal negative interactions during a behavioural compliance task. This analysis failed to demonstrate significant associations between the measures (see Appendix Table B2).

**Attachment Dimensions and Categorical Attachment Measures.**

A further research question related to the association between categorical attachment measures and dimensional attachment measures in the present clinical sample. To investigate this relationship, participants completed the RSQ and their scores on attachment dimensions of Distrust, Anxiety and Close were computed. An analysis of variance (ANOVA) was performed to study the effects of attachment classifications on attachment dimensional measures as the dependent variable. No significant effects were obtained for attachment dimensions and attachment classifications measured as secure, fearful, preoccupied or dismissing (see Appendix Table B3). It can be seen from Table 24 that an ANOVA performed on attachment classification condensed to secure/insecure categorisation and attachment dimensions demonstrated significant attachment classification differences for insecure attachment classification and dimensions of: Distrust, $F(1,22) = 6.83, p < .05$, and Anxiety, $F(1,22) = 6.40, p < .05$. A power analysis conducted indicates a power coefficient of .70 for Distrust and .67 for the Anxiety dimension as measured by categorical attachment classification. These results suggest that the dimensions are theoretically consistent with categorical attachment classification grouped as secure, insecure, in this clinical sample.
Table 24

Maternal Self-Report Ratings on Attachment Dimensions, Distrust, Anxious and Close (RSQ) by Self-Report Attachment Classification (RQ) collapsed to a Dichotomous Secure/Insecure Classification.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Secure (n=13)</th>
<th>Insecure (n=11)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M   SD</td>
<td>M   SD</td>
<td>F(1,22)</td>
</tr>
<tr>
<td>Distrust</td>
<td>39.30 8.32</td>
<td>48.27 8.42</td>
<td>.016*</td>
</tr>
<tr>
<td>Anxiety</td>
<td>18.46 6.00</td>
<td>24.81 6.27</td>
<td>.019*</td>
</tr>
<tr>
<td>Close</td>
<td>39.69 5.60</td>
<td>38.45 6.39</td>
<td>.618</td>
</tr>
</tbody>
</table>

Note: *p < .05.
Note: See Appendix Table 24 for Additional Statistics.

Attachment Dimensions and Maternal CBCL Reports

In order to further investigate Hypothesis 2 and the relationship between the attachment anxiety dimension, and child behaviour ratings on externalising behaviours an ANOVA was performed. This computation failed to achieve significance for CBCL externalising behaviour ratings and attachment dimensional ratings (RSQ) (see Appendix Table B4).

Maternal Attachment Classification (RQ) and Measures of Marital Satisfaction and Depression

Hypothesis 3 predicted that compared with mothers with secure attachment classification, mothers with insecure attachment classification would report more clinically significant problems with depression and marital adjustment. ANOVA analyses to measure for the relationship between attachment classification and the dependent variables of BDI and DAS scores failed to demonstrate significance. Attachment classification condensed to secure, insecure attachment also failed to demonstrate significance on ANOVA analysis (see Appendix Table B5, B6).
Attachment Dimensions and Measures of Adult Adjustment.

An ANOVA was performed to examine the association between scores on attachment dimensions and scores on measures of marital satisfaction and depression. The analysis, demonstrated in Table 25 and Table 26, revealed significant dimensional differences for anxious, \( F (1,17) = 6.60, p < .05 \), power coefficient = .67 and marital dissatisfaction; and depression, \( F (1,23) = 5.09, p < .05 \), power coefficient = .57. However the sample sizes in the maritally dissatisfied and depressed groups were too small (n=3; n=8) to interpret the significance of the results and their generalisability.

Table 25

<table>
<thead>
<tr>
<th>Maternal Attachment Dimensional Ratings (n=19)</th>
<th>DAS&lt;100 (n=3)</th>
<th>DAS&gt;100 (n=16)</th>
<th>ANOVA (F 1, 17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distrust</td>
<td>M 46.33</td>
<td>M 40.00</td>
<td>n/s</td>
</tr>
<tr>
<td></td>
<td>SD 3.21</td>
<td>SD 9.74</td>
<td></td>
</tr>
<tr>
<td>Anxious</td>
<td>M 26.66</td>
<td>M 18.81</td>
<td>6.60*</td>
</tr>
<tr>
<td></td>
<td>SD 6.11</td>
<td>SD 4.66</td>
<td></td>
</tr>
<tr>
<td>Close</td>
<td>M 37.00</td>
<td>M 39.21</td>
<td>n/s</td>
</tr>
<tr>
<td></td>
<td>SD 1.00</td>
<td>SD 4.95</td>
<td></td>
</tr>
</tbody>
</table>

Note: * \( p < .05 \).
Note: See Appendix Table B25 for Additional Statistics.
Table: 26


<table>
<thead>
<tr>
<th>Maternal Attachment Dimensional Ratings (n=25)</th>
<th>BDI &gt; 10 (n=8)</th>
<th>BDI &lt; 10 (n=17)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distrust</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>44.62</td>
<td>11.51</td>
<td>42.23</td>
</tr>
<tr>
<td>Anxious</td>
<td>25.25</td>
<td>7.99</td>
<td>19.17</td>
</tr>
<tr>
<td>Close</td>
<td>38.75</td>
<td>6.62</td>
<td>39.41</td>
</tr>
</tbody>
</table>

Note: * p < .05
Note: See Appendix Table B26 for Additional Statistics.

Attachment Classification and Checklist Measures of Mental Models and Family Relationship Background

Hypothesis 4 predicted that compared with mothers with secure attachment classification, mothers with insecure attachment classification would report more negative self and other representations on a self-report mental model rating scale and would also report more negative parental descriptions and maternal separation. ANOVA with post-hoc Scheffe was performed to investigate the relationship between the eight checklist dichotomous statements of mental models and categorical attachment classification. This analysis demonstrated a significant difference between the secure and the fearful attachment classification and the statement "people often misunderstand and fail to appreciate me".

ANOVA was performed to investigate the relationship between parental descriptions, maternal separation and attachment classification. The item "unresponsive mother" differentiated the secure from the preoccupied attachment classification. No significant differences were found in relation to the item pertaining to separation from the mother (see Appendix Table B7).
An emphasis in study 2 was to explore the role of affective-cognitive schemata in maternal reports of child oppositionality, conceptualised theoretically as maternal attachment representations. It was argued that inclusion of a theoretical perspective which focuses on affective and interpersonal factors might help clarify which variables are empirically and conceptually important in understanding maternal reports of children's oppositional behaviour. Ultimately, the usefulness of attachment conceptualisations appear to revolve around the issues of whether the model possesses an adequate theoretical and empirical methodology within which the complex processes involved in clinical problem areas can be explained. The attempt of the present investigation to clarify such issues is limited by factors within the clinical study itself. These limitations include small sample size, questionable sample representativeness and also restrictions imposed by the difficulty of measuring attachment constructs. Analysis of small clinical samples increase the probability of rejecting the research hypothesis and overlooking real differences. The obtained results are therefore suggestive rather than conclusive and are likely to underestimate actual effects. Notwithstanding the sample size and methodological limitations the following patterns were found for this particular clinical sample.

In relation to Hypothesis 1, the current study does not support an association between insecure attachment classification and clinic presentation of oppositional children. The distribution of attachment styles in this study - 53% secure; 22% fearful; 8% preoccupied and 14% dismissing, does not conform to attachment theoretical predictions and are not consistent with a clinical study reported by Crowell et al. (1991). However, across attachment research there appears to exist variability in the reported distribution of attachment classifications in relation to both normal and clinical populations. Similarly, as has been demonstrated in Study
1 of the present research, attachment distributions appear to demonstrate a capacity to veer from the theoretically predicted distribution.

In the present clinical sample the higher self-report endorsement of the secure classification appears consistent with low reports of both depression and marital dissatisfaction. The low prevalence of the preoccupied classification also appears consistent with this classification's distribution in Study 1. However, it is possible that previous interventions for this sample, in terms of both previous adult and child treatment interventions, may be a factor influencing the present study's attachment distribution and associations. However, theoretically attachment style is predicted to be stable. The fact that this sample sought assistance from a specialist service appears to demonstrate that previous interventions did not result in change generalising to maternal relational satisfaction, and may consequently not have affected underlying models of self and others. However, it may also be the case, that attachment classification reflects specific relationship functioning and is not representative of a general style. In this respect Kobak (1994) suggested that attachment classification is a property of a particular relationship rather than a property of the individual. Similarly, Rutter (1995) suggested that it would be a mistake to regard all connections between relationships in terms of a persistence of attachment qualities. He further suggested that an understanding of relationships and their interconnections would require consideration of the range of dimensions involved which are unlikely to be reducible to a single process involving attachment security or any other postulated quality.

The research question regarding the implication of social desirability in self report attachment measures was investigated with a subsample assessed both with categorical and interview attachment measures. The interview used broadly followed Bartholomew and Horowitz's (1991) Family Interview format. However scoring was limited to a simple
attachment classification and the interviewers, although senior clinical psychologists, had not received the recommended formal training for interview administration and scoring. With the caveat in mind, the results for the interviews suggest a degree of consistency in classification across measures and do not suggest that participants exercise a self-report questionnaire bias. However, Scharfe and Bartholomew (1994) suggested that the secure categorisation is the most vulnerable to self-report bias and may reflect current relationship functioning. If this suggestion is accepted as relevant to clinic samples it is possible that models of relationships as measured both by interview and questionnaire self-report reflect specific relationships and are not represented as generalised models of self and other. This would help explain the discrepant reports across relationships regarding satisfactory marital relationships and unsatisfactory parent-child relationships.

Hypothesis 2 predicted that insecure maternal attachment classification would be associated with more clinically significant CBCL externalising behaviour reports. The present data do not support this prediction and agrees with the Crowell et al.'s (1991) study's finding regarding a nonsignificant association between maternal CBCL externalising scores and maternal attachment classification. The research question regarding a behavioural interaction test and maternal attachment classification in a subsample also failed to demonstrate a significant association between dyadic behaviour and maternal attachment. This latter finding contrasts with Crowell et al. who concluded, on the basis of two of five variables achieving conventional alpha levels, that significant associations exist between maternal attachment classifications and mother-child interactive behaviour. However, based on work suggesting that mothers' attachment representations precede and shape the caregiving interactions that influence child attachment (Foangy et al., 1991) and that the effects of parent characteristics on conduct problems are mediated through parent-child interactions (Patterson, Reid & Dishion,
1992) it may be the case that child clinic status would not be strongly associated with maternal attachment. In relation to the prediction that higher dimensional anxiety measures would result in higher maternal child behaviour checklist (CBCL) externalising rating, the present results do not support this prediction.

Hypothesis 3 predicted that insecure attachment classification would be associated with poorer psychosocial adjustment measured with reference to clinically significant levels of depression and marital dissatisfaction. The present categorical attachment rating do not support this prediction. However, dimensional anxiety measures demonstrated a significant association with measures of marital dissatisfaction and depression. This provides some support for Hypothesis 3 and the association of measures of psychosocial adjustment with attachment processes. However, the latter finding was based on such small sample size that the results are difficult to interpret and generalise.

Hypothesis 4 predicted that mothers' with insecure attachment classification would report more negative self and other ratings on mental model statements and more negative descriptions of family relationship history and maternal separation than mothers with secure attachment classification. The present data support the mental model statement "people often misunderstand me or fail to appreciate me" as distinguishing the secure from fearfully classified mothers and the adjective describing "unresponsive mother" as distinguishing the secure from preoccupied classification. These results are in the theoretically predicted direction, although the number of items distinguishing between secure and insecure classifications are not as numerous as previous studies would suggest. The item relating to separation from the mother did not significantly distinguish the securely from insecurely attached participants. This latter finding is consistent with Hazan and Shaver's (1987) original self-report finding and with the
finding of Study 1, however, it is not what would be theoretically predicted for a clinic sample of insecurely classified individuals.

The results of the present clinical study are not supportive of a causal model of mother to child effects and are problematic for validation of the usefulness of attachment theory in explaining oppositional behaviour in children. Further difficulties exist with the measurement of attachment constructs and the representativeness of clinical research samples. The current attachment distribution in a clinical sample does beg the question of what is referred to when the term clinical sample is used in research. The present sample is clinical but is restricted to a specific problem focus, that is, oppositional behaviour and excludes notifiable child maltreatment issues. In contrast to Crowell et al.'s study, the present sample contained a higher proportion of children whose mother's CBCL externalising score placed them in the conventional CBCL externalising clinical range of T-67 (78%). According to CBCL maternal reports, the Crowell et al. sample appear representative of a normal population with only the CBCL externalising score (M=70) for the dismissing maternal classification reaching clinical significance. It may be that "clinical sample" is more generally used to refer to multiproblem families that present or are mandated to attend primary level treatment agencies or refers to samples which receive payment as part of a research project. Such issues are of concern both in terms of theoretical validity and in terms of clinical decision making predicted on outcome from possibly biased population sampling.

The present sample, while not conforming to all the variables associated in the literature with oppositional children, was in many ways suited to an examination of the key research questions. It was comprised of a referred group to a Government-funded mental health facility from a defined geographical area. The education and socioeconomic status of the mothers are consistent with the demographics of the area. As representative of a particular grouping of
mothers the sample had the potential to act as a balance to much attachment research which is conducted with middle-class, well-educated samples in university-affiliated services. The sample mothers actively self-initiated help for their child, consequently, the present results may not hold for other behaviour problem groups, especially those experiencing more severe psychosocial stressors including social isolation and low socioeconomic status, and those where parents do not voluntarily initiate clinic contact.

Wells (1981) suggested that three groups of children referred to child outpatient clinics can be identified (a) behavioural and, or emotionally deviant children whose parents' perceptions are accurately based on their child's behaviour (b) children who are behavioural and, or emotionally deviant but whose parents' perceptions are also influenced by their own maladjustment, and (c) relatively normal children whose parents' perceptions are inaccurate and are based on their own personal maladjustment, low frustration tolerance for stress, or high standards of acceptability rather than on the child's actual behaviours. An attempt was made, using a subsample, to consider the ecological validity of maternal reports of child oppositional behaviour. However issues of ecological validity are complex in terms of the artificial nature of clinic observation and lack of normed observation measures. In fact, correlational data for CBCL externalising T score and Behavioural Interaction measures were nonsignificant (appendix B9). A decision was also made not to include alternative reports of child behaviour such as Teacher's School Behaviour Checklist because of issues of confidentiality and the general finding of low correlations between Child and School Behaviour Checklist scores (Achenbach, McConaughy & Howell, 1987). However, as the focus of the research was on the quality of the mother-child relationship, the concern was not primarily to establish the objective accuracy of maternal perception, the assumption being that clinical presentation indicates compromised relational functioning.
Overall, the result of Study 2 are consistent with some of the more recent concerns expressed in relation to the theoretical validity and clinical utility of attachment theory (Rutter, 1995). The use of a self-report measure of attachment could be suggested to have resulted in a failure to obtain general attachment representation and to have resulted in the measurement of a specific relationship. However, it is possible that irrespective of method of measurement, attachment is a feature of relationships and not individuals. Similarly in relation to relationship processes a transactional model, such as coercion theory, would suggest that because the effects of parental characteristics are mediated through the parent-child relationship it may be the case that a strong association between child clinical status and maternal attachment would not be demonstrated.
Attachment theory (Bowlby, 1973) attempts to explain the causal mechanism whereby responsive parenting is transmitted via an internal working model of attachment, which in turn determines the degree of responsiveness to the third generation. It implies that the child's initial relationship with the caregiver, usually the mother, probabilistically affects and predicts later relationship competence. It also implies a prescriptive social role for the primary caregiver in terms of sensitivity and views role failure as a personality deficit. Other theoretical perspectives, that is, cognitive-behavioural, take the view that there are a variety of explanations for poor caregiver competency, attributable variously to contextual factors and associated poor metacognitive and relationship skills use, for example, problem-solving and communication. While different models agree that the quality of the parent-child relationship plays an important role in creating and perpetuating behaviour problems, it is not agreed that parents' interactions with their child are shaped primarily by past experience with their own parents. While there may be an association between parents' internal representation of attachment and parent-child interaction (van Ijzendoorn, 1995) either variable may cause or be the effect of the other, or both may be the effect of further variables.

Much evidence exists for the involvement of multiple stressors in parenting which preclude the acceptance of an unidirectional relationship between attachment and reports of child disruptive behaviour (Rutter et al., 1975a, 1975b; Rutter, 1978; Sanson et al., 1991; Webster-Stratton, 1992). From a contextual perspective low socioeconomic status has been suggested to pose the highest risk factor for the development of disruptive behaviour in children (Wahler & Hann, 1984; Shaw et al., 1994; Ferguson, Horwood & Lynskey, 1994). Johnston and Pelham (1990) suggested that high-income families may have environmental
buffers which manager or mask their experience of child disruptive behaviours. From the perspective of within-family factors Sanders and Dadds (1993) have suggested that the earliest precursor in the development of disruptive behaviour is the child's temperament and nurture-soliciting behaviour. In addition, parental negative cognitive sets once established appear to negatively affect parent-child interaction, even in the absence of unusually negative child behaviour. Such cognitive biases may exacerbate and stabilise coercive cycles of parent-child interactions and interfere with efforts to change relationship patterns.

The process of dysfunctional relational patterns does not appear comprehensively explained by a direction of effect model which suggests that the source of negative cognitive sets is individuals' internalising and replicating disturbances in primary family relationships. The factors that may affect clinic referral by shaping parent-child interaction that increase child misbehaviour (e.g., diminishing parental attentiveness, availability, and acceptance or increasing inconsistency in limit setting) or by lowering tolerance for difficult behaviour and distorting parent perception of the child appear to be most usefully regarded as transactional and not unambiguously linked to attachment security as the causal mechanism. As Dunn (1993) pointed out, it is evident that parents have different relationships with different children, that children have different relationships with each of their parents; that the associations between relationships among different dyads within and outside the family are of only modest strength, and that patterns of relationships show reciprocity, rivalry and compensation as well as generalisation. Attachment theory also appears limited in its focus on the mother and its suggestion that adequacy in mental health can be obtained on the bias of a personal relationship, despite the possibility that the social context of the relationship is dangerous, impoverished or isolated. The boundaries of attachment theory in terms of its causal model has prevented reference to such alternative risk factors and consequently has resulted in a focus on
individual pathology as the target of both clinical explanation and intervention.

In relation to the aim of the present thesis to investigate explanations of affective-cognitive parent-child relationship processes, the findings of Study 1 suggest that the associations found using self-report attachment questionnaires may owe more to the structure of the questionnaires than to a demonstration of the validity of attachment theory. It also suggests that both the categorical measurement approach and the attachment model of individuals may obscure the apparent multi faceted nature of the individual's relationship experiences and conceptualisation of self as a compositional process. A further aim of Study 1 was the development of a clinically useful attachment measure. In line with current trends in self-report attachment research the conclusion of Study 1 in this regard, is that representation of relational knowledge appears to be more elaborated than can be captured by a description of a single attachment style. Correspondingly, it appears that a dimensional approach might offer a more subtle approach to the assessment of relationship processes. The results of Study 2 are limited by small sample size and methodological constraints. However, in relation to the aim of the usefulness of the attachment model in a clinical context the data points to a need for a reconsideration of original theoretical attachment formulations. Study 2's maternal attachment distribution does not support the theoretical prediction of the association between insecure attachment and problematic parent-child relationships and points to a concern with the tendency to apply attachment concepts to an individual rather than to a particular relationship (Kobak, 1994). Attachment research supports the practice of prototypical attachment classification. Its usefulness is suggested in that Fonagy et al., (1991); Fonagy, Steele, Steele, Higgitt and Target (1994), found a significant association between parental attachment security and their children's attachment.
However, the present thesis suggests that adequate etiological theories of parental reports of opposition behaviour must include multiple pathways to relational dysfunction in addition to a focus on interpersonal processes. With regard to the usefulness of relationship processes expressed as attachment concepts, it needs to be acknowledged that such research has adopted a pragmatic rather than a theoretical perspective. Bartholomew (1993), for example, has suggested that attachment theory may provide a useful framework for understanding adult relationships, independent of any claims of continuity between childhood and adult relationship patterns. In this respect, the researcher appears to be distancing the data from the theory and proceeding on the basis of the construct of attachment as a heuristic rather than a theoretical model.

In this regard, the aim of the present thesis to extend explanations for parent-child interpersonal difficulties beyond the coercion model to an examination of affective-cognitive considerations has been useful in clarifying what limitations are presented by attachment theory and what elaboration of affective-cognitive formulations may be useful. A priority for future research into family relational processes would include reference to significant others in addition to the mother; the investigation of additional dimensions of relationships; a focus on functioning across relationships rather than an assumption of a fixed relationship representation; reference to contextual variable; and the investigation of change and elaboration in affective-cognitive schemata. In particular, the present thesis suggests that the conceptualisation of stable internal working models guiding expectations about relationships owes more to researchers' choice and measurement of data than to the reality of the complexity of individuals relational experiences. A view of internal working models as "dynamic representations that may be altered in response to new information" (Collins & Reid 1990, p.661) appears to share the optimistic view of Beck et al., (1990) that schemata are potentially
modifiable. The description of schemata as existing on a continuum from active to inactive and from impermeable to changeable offers possibilities for clinically useful methods of assessment, intervention and evaluation.

Overall, Attachment Theory despite its compromised status as a causal model has led to a broad investigation of relational processes. Dimensional relational profiles or Beck's (1996) core cognitive schemata could be used heuristically as a method of attempting to match parents to elements of treatment. Parent training interventions (coercion model) outcomes could be evaluated on the basis of parents' affective-cognitive profiles or various treatment components could be developed and prioritised according to parents' relational profiles. Further elaboration in relational profiles could also be developed by including aspects of relationships in addition to attachment concepts (Dunn, 1993). With increasing complexity in conceptualising relational processes it is to be hoped that caution will prevail in making the leap from correlations to assertions of causality. As is evident from the limitations of attachment theory it is hoped that clinicians will view parenting within the larger family and social context and that the focus on the within-family interpersonal determinants of problematic parent-child relationships will not cause neglect of the possibility that parenting problems may also be socially determined.
REFERENCES


Appendix A1

Participants Information and Consent Form

Development of a Clinically Valid Attachment Questionnaire

In co-operation with the University of Wollongong and the South West Sydney Area Health Service I am investigating mother’s recall of their own experiences of being parented and whether or not such experience influences subsequent mother - child interaction. I am interested in exploring what kinds of thoughts mother’s have about themselves and their children and how this affects their interaction with them. Such information could be useful in understanding the processes which contribute to successful parenting and family harmony. The research is also being conducted as part of the principal investigator’s PhD psychology dissertation requirements under the supervision of Dr. S. Whitmont (Sydney University), and Peter Caputi/Professor Bob Barry (Wollongong University).

Participation in the study is entirely voluntary. If you choose to participate you may withdraw from the study at any point in time. Any concerns regarding the conduct of the research should be directed to the Secretary of the University of Wollongong Human Experimentation Ethics Committee on 042-213079.

You will be asked to fill in questionnaire forms covering topics such as: parental caregiving style and personal descriptions of interpersonal interaction style.

A subsample will be asked to attend for a personal interview covering attachment issues, experience of relationships with parents and with other attachment figures. This session will be audiotaped to permit accurate coding of the information by the principal investigator and will be subsequently wiped.

RISKS AND BENEFITS

The questionnaires and the clinic interview have been widely used in research. It is not envisaged that they will be experienced as upsetting or stressful. Counselling can be made available if requested by a participant. The information gathered will be used to drive a valid clinical measure of attachment.

CONFIDENTIALITY

All data gathered, will be number - coded only, thus ensuring that information will be anonymous and kept confidential. Research data will be separate from clinic data and will not be available to the clinic.

Cont...P/2
RIGHT TO REFUSE PARTICIPATION IN THE STUDY

You have a right not to participate in the study. Any decision not to participate will not affect your relationship with the institutions co-operating in this study.

RIGHT TO WITHDRAW FROM THE STUDY

If you agree to participate in the study, you are free to withdraw your consent and discontinue your participation at any time. Any such withdrawal will not affect any current or future relationship with the institutions co-operating in this study.

Philomena Renner
Senior Clinical Psychologist.
Development of Attachment Questionnaire (in co-operation with the University of Wollongong and the SWSAHS).

I agree to participate in the present study. My decision whether or not to participate will not affect any current or future relationship with the institutions co-operating in this study. If I decide to participate, I am free to withdraw my consent and to discontinue my participation at any time. Any such withdrawal will not affect my relationship with the institution co-operating in this study.

I have read and understood the Information Sheet and consent form and understand the purpose and risks of the study.

NAME: _____________________________________________(Please print)

SIGNATURE: ________________________________________

WITNESS'S NAME: _______________________________________(Please print)

WITNESS'S SIGNATURE: _______________________________________

DATE: ____________________

WRITTEN SUMMARY OF RESULTS YES □

NO □

(Please tick relevant box)
Development of Attachment Questionnaire (In co-operation with the University of Wollongong and the SWSAHS).

I agree to participate in the present study.

I agree to participate in the present study. My decision whether or not to participate will not affect any current or future relationship with the institutions co-operating in this study. If I decide to participate, I am free to withdraw my consent and to discontinue my participation at any time. Any such withdrawal will not affect my relationship with the institution co-operating in this study.

I have read and understood the Information Sheet and consent form and understand the purpose and risks of the study.

NAME:  ____________________________ (Please print)

SIGNATURE: ____________________________

WITNESS’S NAME:  ____________________________ (Please print)

WITNESS’S SIGNATURE: ____________________________

DATE:  _______________________________

WRITTEN SUMMARY OF RESULTS  YES    □

NO  □

(Please tick relevant box)
Appendix A2

Personal Information

1. Please circle to show whether you are: FEMALE or MALE
   (Circle one)

2. Please write down your age in years: __________

3. Circle one number to show the employment category which
   BEST describes your situation at the moment:

   **CIRCLE ONE**
   NUMBER ONLY
   
   Employed full-time.............................................. 1
   Employed part-time............................................. 2
   Part-time employed/part-time student....................... 3
   Student.................................................................... 4
   Home duties/child care......................................... 5
   Unemployed......................................................... 6
   Retired..................................................................... 7

4. If employed, circle the word that BEST describes the type of
   work you do.

   **CIRCLE ONE**
   NUMBER ONLY
   
   Professional......................................................... 1
   Managerial............................................................. 2
   Clerical.................................................................... 3
   Technical............................................................... 4
   Unskilled trade..................................................... 5
   Other (Please specify)............................................. 6

5. Circle the HIGHEST level of education that you have reached
   so far:

   **CIRCLE ONE**
   NUMBER ONLY
   
   Year 11 or below.................................................. 1
   Year 12/VCE/HSC................................................... 2
   Completed a certificate or diploma............................ 3
   Completed a Bachelor's degree................................. 4
   Completed a post graduate program........................... 5
   Other (Please specify)............................................. 6

Cont........
6. Do you tend to think of yourself as belonging to a particular ethnic group? (e.g., Italian, Greek, Lebanese, Chinese, etc.)

   NO..............................  1
   YES..............................  2

If YES, which ethnic group? .................................................. (Please print)

7. Circle one number to show what BEST describes your marital circumstances at the moment:

   CIRCLE ONE
   NUMBER ONLY

   Single, not in a marital-type relationship..................................  1
   Married, first time, not previously married................................  2
   Married, married previously..................................................  3
   Divorced or separated..........................................................  4
   Widowed..................................................................................  5
   Defacto type relationship.......................................................  6

8. Do you have children?  YES  NO

   If yes, how many?  __________

9. Combined Family Income: Circle one number

   (a) $5,000 - $10,000
   (b) $10,000 - $15,000
   (c) $15,000 - $20,000
   (d) $20,000 - $30,000
   (e) $30,000 - $40,000
   (f) Above $40,000
Appendix A3

Relationship Questionnaire

PLEASE READ DIRECTIONS!!!

Following are descriptions of four general relationship styles that people often report. Please read each description and CIRCLE the letter corresponding to the style that best describes you or is closest to the way you generally are in your close relationships.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don’t worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don’t value me as much as I value them.

D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.
Appendix A4

Please rate each of the following relationship styles according to the extent to which you think each description corresponds to your general relationship style.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

<table>
<thead>
<tr>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Very much like me</th>
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<tbody>
<tr>
<td>Style A.</td>
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<td>2</td>
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<tr>
<td>Style B.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Style C.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Style D.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Appendix A5

RSQ

Please read each of the following statements and rate the extent to which it describes your feelings about close relationships. Think about all of your close relationships, past and present, and respond in terms of how you generally feel in these relationships.

<table>
<thead>
<tr>
<th>Statement</th>
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<td>1. I find it difficult to depend on other people</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. It is very important to me to feel independent</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I find it easy to get emotionally close to others</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I want to merge completely with another person</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. I worry that I will be hurt if I allow myself to become too close to others</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I am comfortable without close emotional relationships</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I am not sure that I can always depend on others to be there when I need them</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I want to be completely emotionally intimate with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. I worry about being alone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. I am comfortable depending on other people</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. I often worry that romantic partners don't really love me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I find it difficult to trust others completely</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. I worry about others getting too close to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. I want emotionally close relationships</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. I am comfortable having other people depend on me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. I worry that others don't value me as much as I value them</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. People are never there when you need them</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. My desire to merge completely sometimes scares people away</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. It is very important to me to feel self-sufficient</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. I am nervous when anyone gets too close to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

RSQ Cont..P.2
RSQ Cont..P.2.

<table>
<thead>
<tr>
<th></th>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>I often worry that romantic partners won't want to stay with me.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>22.</td>
<td>I prefer not to have other people depend on me.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>23.</td>
<td>I worry about being abandoned.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>24.</td>
<td>I am somewhat uncomfortable being close to others.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>25.</td>
<td>I find that others are reluctant to get as close as I would like.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>26.</td>
<td>I prefer not to depend on others.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>27.</td>
<td>I know that others will be there when I need them.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>28.</td>
<td>I worry about having others not accept me.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>29.</td>
<td>Romantic partners often want me to be closer than I feel comfortable being.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
<tr>
<td>30.</td>
<td>I find it relatively easy to get close to others.</td>
<td>1 2</td>
<td>3 4</td>
</tr>
</tbody>
</table>
Appendix A6

Relationship Scales Questionnaire (RSQ) Items

1. I find it difficult to depend on other people. (Fear)
2. It is very important to me to feel independent. (Dis)
3. I find it easy to get emotionally close to others. (Sec)
4. I want to merge completely with another person.
5. I worry that I will be hurt if I allow myself to become too close to others. (Fear)
6. I am comfortable without close emotional relationships. (Dis, Pre-R)
7. I am not sure that I can always depend on others to be there when I need them.
8. I want to be completely emotionally intimate with others. (Pre)
9. I worry about being alone. (Sec-R)
10. I am comfortable depending on other people. (Sec)
11. I often worry that romantic partners don't really love me.
12. I find it difficult to trust others completely. (Fear)
13. I worry about others getting too close to me.
15. I am comfortable having other people depend on me. (Sec)
16. I worry that others don't value me as much as I value them. (Pre)
17. People are never there when you need them.
18. My desire to merge completely sometimes scares people away.
19. It is very important to me to feel self-sufficient. (Dis)
20. I am nervous when anyone gets too close to me.

21. I often worry that romantic partners won't want to stay with me.

22. I prefer not to have other people depend on me. (Dis)

23. I worry about being abandoned.

24. I am uncomfortable being close to others. (Fear)

25. I find that others are reluctant to get as close as I would like. (Pre)

26. I prefer not to depend on others. (Dis)

27. I know that others will be there when I need them.

28. I worry about having others not accept me. (Sec-R)

29. Romantic partners often want me to be closer than I feel comfortable being.

30. I find it relatively easy to get close to others.

Notes: Items scored on a 5-point scale ranging from "not at all like me" to "very like me". Items that make up subscales for the attachment patterns defined by the four-category model are marked as follows: Sec=Secure, Fear=Fearful, Pre=Preoccupied, and Dis=Dismissing. R indicates reversed scoring.

Appendix A7
R.S.Q. (T/F)

Below are listed ways in which people describe their feeling about close relationships.

Please show for each statement how true you think it is generally as a description of how you generally feel/felt in close relationships. Please also indicate how you might feel in the future.

<table>
<thead>
<tr>
<th>SCALE</th>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Very Much like me</th>
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<tbody>
<tr>
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<tr>
<td></td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Now (1-5)</td>
<td>Past (1-5)</td>
<td>Future (1-5)</td>
</tr>
</tbody>
</table>

1. I find it difficult to depend on other people.
2. It is very important to me to feel independent.
3. I find it easy to get emotionally close to others.
4. I want to merge
5. I worry that I will be hurt if I allow myself to become too close to others.
6. I am comfortable without close emotional relationships.
7. I am not sure that I can always depend on others to be there when I need them.
8. I want to be completely emotionally intimate with others.
9. I worry about being depending on other people.
10. I am comfortable depending on other people.
11. I often worry that romantic partners don't really love me.
12. I find it difficult to trust others completely.

Cont...P.2
13. I worry that romantic partners don't really love me.


15. I am comfortable having other people depend on me.

16. I worry that others don't value me as much as I value them.

17. People are never there when you need them.

18. My desire to merge completely sometimes scares people away.

19. It is very important to me to feel self-sufficient.

20. I am nervous when anyone gets too close to me.

21. I often worry that romantic partners won't want to stay with me.

22. I prefer not to have other people depend on me.

23. I worry about being abandoned.

24. I am somewhat uncomfortable being close to others.

25. I find that others are reluctant to get as close as I would like.

26. I prefer not to depend on others.
<table>
<thead>
<tr>
<th>SCALE</th>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Very Much like me</th>
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<tr>
<td></td>
<td>Now (1-5)</td>
<td>Past (1-5)</td>
<td>Future (1-5)</td>
</tr>
</tbody>
</table>

27. I know that others will be there when I need them.

28. I worry about having others not accept me.

29. Romantic partners often want me to be closer than I feel comfortable being.

30. I find it relatively easy to get close to others.
Please circle agree or disagree for each of the following statements:

1. I am easier to get to know than most people. 
   Agree/Disagree

2. I have more self-doubts than most people. 
   Agree/Disagree

3. People almost always like me. 
   Agree/Disagree

4. People often misunderstand me or fail to appreciate me. 
   Agree/Disagree

5. Few people are as willing and able as I am to commit themselves to a long-term relationship. 
   Agree/Disagree

6. People are generally well-intentioned and good-hearted. 
   Agree/Disagree

7. You have to watch out in dealing with most people; they will hurt, ignore, or reject you if it suits their purposes. 
   Agree/Disagree

8. I am more independent and self-sufficient than most people; I can get along quite well by myself. 
   Agree/Disagree
Appendix A9

RELATIONSHIP HISTORY

(1) Take a moment to think about your relationship with your mother while you were growing up. What were her attitudes, feelings, and behaviour toward you like? How did she come across to you? (Tick all that apply)

- loving
- demanding
- caring
- sympathetic
- overprotective
- fair
- predictable

- affectionate
- strict
- unresponsive
- disinterested
- inconsistent
- confident

- critical
- respectful
- understanding
- rejecting
- responsible
- humorous

- abusive
- attentive
- intrusive
- accepting
- likable
- happy

(2) Take a moment to think about your relationship with your father while you were growing up. What were his attitudes, feelings, and behaviour toward you like? How did he come across to you? (Tick all that apply)

- loving
- demanding
- caring
- sympathetic
- overprotective
- fair
- predictable

- affectionate
- strict
- unresponsive
- disinterested
- inconsistent
- confident

- critical
- respectful
- understanding
- rejecting
- responsible
- humorous

- abusive
- attentive
- intrusive
- accepting
- likable
- happy

(3) Which of the following describe your parents’ relationship?

- affectionate
- happy
- argumentative
- distant
- troubled
- comfortable

- violent
- unhappy
- strained

- caring
- supportive
- good-humoured

(4) Did your parents ever separate or divorce? 

(5) If so, how old were you at the time? 

(6) During your childhood, were you and your mother ever separated for what seemed to you like a long time? YES/NO

(7) If YES, how old were you at the time? 

(8) During your childhood, were you and your father ever separated for what seemed to you like a long time? YES/NO

(9) If YES, how old were you at the time
Appendix A10

ANOVA/MANOVA Statistics in addition of F, P, df, values reported in main tables.

Table A12

Mental Models (dependent variables) by categorical attachment classification (R.O.)

EFFECT: Categorical Attachment Classification (RQ)

Univariate F-tests with (3,98) D.F.

<table>
<thead>
<tr>
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<th>Error SS</th>
<th>Hypothesis MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig. of F</th>
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<tbody>
<tr>
<td>MMQ1</td>
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<tr>
<td>MMQ3</td>
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<td>.28536</td>
<td>.09931</td>
<td>2.87345</td>
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<td>MMQ6</td>
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<td>.13224</td>
<td>3.04304</td>
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<td>MMQ7</td>
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<td>.20603</td>
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<td>MMQ8</td>
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<td>.74258</td>
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<td>MMQ3</td>
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<td>MMQ6</td>
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<td>MMQ8</td>
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</tr>
</tbody>
</table>
Table A13

Significant Childhood Relationship Dictomous Items (dependant variable) by Categorical Attachment Classification (RQ).

Variable FADISINT father disinterested
By Variable RQ relationship

Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>D.F.</th>
<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3</td>
<td>1.5508</td>
<td>.5169</td>
<td>3.3740</td>
<td>.0214</td>
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<tr>
<td>Within Groups</td>
<td>99</td>
<td>15.1677</td>
<td>.1532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>16.7184</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

Variable FAUNRESP father unresponsive
By Variable RQ relationship

Analysis of Variance

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
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<tbody>
<tr>
<td>Between groups</td>
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<td>4.1341</td>
<td>1.3780</td>
<td>10.3611</td>
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<tr>
<td>Within Groups</td>
<td>99</td>
<td>13.1669</td>
<td>.1330</td>
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</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>17.3010</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Variable MOACCEPT accepting mother
By Variable RQ relationship

Analysis of Variance

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>2.5592</td>
<td>.3566</td>
<td>3.7467</td>
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<td>Within Groups</td>
<td>99</td>
<td>22.6341</td>
<td>.2286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>25.2039</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Variable MOLIKE: Likeable Mother Relationship

**Analysis of Variance**

<table>
<thead>
<tr>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>3.0858</td>
<td>1.0286</td>
<td>4.8153</td>
<td>.0036</td>
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<td>Within Groups</td>
<td>99</td>
<td>21.1472</td>
<td>.2136</td>
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<td>Total</td>
<td>102</td>
<td>24.2330</td>
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### Variable MOSYMP: Sympathetic Mother Relationship

**Analysis of Variance**

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<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
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</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>3.0549</td>
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<td>Within Groups</td>
<td>99</td>
<td>22.6927</td>
<td>.2292</td>
<td></td>
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<td>Total</td>
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### Variable PARDIST: Parents Distant Relationship

**Analysis of Variance**

<table>
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<th>Sum of Squares</th>
<th>Mean Squares</th>
<th>F Ratio</th>
<th>F Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>2.6277</td>
<td>.8759</td>
<td>5.69131</td>
<td>.0012</td>
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<tr>
<td>Within Groups</td>
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<td>15.2364</td>
<td>.1539</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>17.8641</td>
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</tbody>
</table>
Table A16

Attachment Dimensions (D.V.) by Categorical Attachment Classification (RQ).

**Analysis of Variance**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypoth. SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTRUST</td>
<td>4071.10764</td>
<td>6427.94186</td>
<td>1357.03588</td>
<td>66.26744</td>
<td>20.47817</td>
<td>.000</td>
</tr>
<tr>
<td>ANXIOUS</td>
<td>1884.60350</td>
<td>3802.06977</td>
<td>628.20117</td>
<td>39.19660</td>
<td>16.02693</td>
<td>.000</td>
</tr>
<tr>
<td>CLOSE</td>
<td>1385.21586</td>
<td>4364.54651</td>
<td>461.73862</td>
<td>44.99532</td>
<td>10.26192</td>
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</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Noncent.</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTRUST</td>
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<td>1.00000</td>
</tr>
<tr>
<td>ANXIOUS</td>
<td>48.08080</td>
<td>.99999</td>
</tr>
<tr>
<td>CLOSE</td>
<td>30.78577</td>
<td>.99815</td>
</tr>
</tbody>
</table>
Appendix B1

Participants Information and Consent Form

Attachment style and success in parenting. An exploration of the continuity of adaptation hypothesis.

Principal Investigation: Philomena Renner, Senior Clinical Psychologist.

Dear Parent:

In co-operation with the University of Wollongong and the South West Sydney Area Health Service I am investigating mother’s recall of their own experiences of being parented and whether or not such experience influences subsequent mother - child interaction. I am interested in exploring what kinds of thoughts mother’s have about themselves and their children and how this affects their interaction with them. Such information could be useful in understanding the processes which contribute to successful parenting and family harmony. The research is also being conducted as part of the principal investigator’s PhD psychology dissertation requirements under the supervision of Dr. S. Whitmont (Sydney University), and Peter Caputi/Professor Bob Barry (Wollongong University).

Participation in the study is entirely voluntary. The Research is not part of your treatment and does not affect your status as a client of the Psychological Health Services Child & Teen Programme. If you choose to participate you may withdraw from the study at any point in time. Any concerns regarding the conduct of the research should be directed to the Secretary of the University of Wollongong Human Experimentation Ethics Committee on 042-213079 and/or to the Research & Ethics Committee, South West Sydney Area Health Service on 02-821-5759.

**NATURE OF THE STUDY**

If you choose to participate you will be asked to provide information in two parts.

Firstly, you will be asked to fill in Questionnaire forms covering topics such as: parental caregiving style, personal description of interpersonal interaction style, experience of current parenting stress, perception of you child’s adjustment and your experience of caregiving.

The questionnaires can be mailed to you for completion at home or completed in a small group or individual sessions at the centre. The questionnaires should take one to one and a half hours to complete.
Secondly, you will be asked to attend the Centre for a personal interview to describe your experience of relationships with your parents, with others and with yourself. This session should take 60-90 mins. The session will be audiotaped to permit accurate coding of the information by the principal investigator and will be subsequently wiped.

RISKS AND BENEFITS

The questionnaires and the clinic interview have been widely used in research. It is not envisaged that they will be experienced as upsetting or stressful. Counselling can be made available if requested by a participant.

The information gathered is likely to contribute to our understanding of the views and behaviours of Australian mothers in relation to their children. Much has been written about overseas experiences of parenting but Australia suffers from a lack of information about typical Australian parent-child relationships. The information obtained may also contribute to the development of methods to assist those parents and children who experience troubled relationships.

CONFIDENTIALITY

All data gathered, will be number-coded only, thus ensuring that information will be anonymous and kept confidential. Research data will be separate from clinic data and will not be available to the clinic.

CONSENT

I am indicating my consent to participate in the study by signing below and sending this form back to: Philomena Renner, Psychological Health Service, 6 Browne Street, Campbelltown 2560. I should contact the Secretary of The University of Wollongong Human Experimentation Ethics Committee on 042-213079 and/or Research and Ethics Committee, South West Sydney Area Health Service on 02-821-5759 if I have any problems or questions concerning this study. The study has been accepted by the University of Wollongong's Ethics Committee. The attached copy of the letter is for me to keep. Also, I may indicate on the consent form if I would like a written summary of the results when the study is completed.

Philomena Renner
Senior Clinical Psychologist.
Relationship factors in parenting.

By signing below, I indicate that I have read and understood the information provided and have had the chance to ask questions.

I agree to participate in the present study. My decision whether or not to participate will not affect my future relationship with any part of the South Western Sydney Area Health Service or any other institution co-operating in this study. If I decide to participate, I am free to withdraw my consent and to discontinue my participation at any time. Any such withdrawal will not affect any current or future treatment, or my relationship with the South Western Area Health Service or any other institution co-operating in the study or any person treating me.

NAME: __________________________________________ (Please print)

PARTICIPANT'S SIGNATURE: ________________________________

WITNESS'S NAME: ______________________________________

WITNESS'S SIGNATURE: ________________________________

DATE: __________
Appendix B2

**Personal Details**

1. Please circle to show whether you are: **FEMALE** or **MALE** (Circle one)

2. Please write down your age in years: **MOTHER _____** **FATHER _____**

3. Circle one number to show the employment category which **BEST** describes your situation at the moment:

<table>
<thead>
<tr>
<th><strong>MOTHER</strong></th>
<th>(Circle One No. Only)</th>
<th><strong>FATHER</strong></th>
<th>(Circle One No. Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed full-time</td>
<td>1</td>
<td>Employed full-time</td>
<td>1</td>
</tr>
<tr>
<td>Employed part-time</td>
<td>2</td>
<td>Employed part-time</td>
<td>2</td>
</tr>
<tr>
<td>Part-time employed/part-time student</td>
<td>3</td>
<td>Part-time employed/part-time student</td>
<td>3</td>
</tr>
<tr>
<td>Student</td>
<td>4</td>
<td>Student</td>
<td>4</td>
</tr>
<tr>
<td>Home duties/child care</td>
<td>5</td>
<td>Home duties/child care</td>
<td>5</td>
</tr>
<tr>
<td>Unemployed</td>
<td>6</td>
<td>Unemployed</td>
<td>6</td>
</tr>
<tr>
<td>Retired</td>
<td>7</td>
<td>Retired</td>
<td>7</td>
</tr>
</tbody>
</table>

4. If employed, circle the word that **BEST** describes the type of work you do.

<table>
<thead>
<tr>
<th><strong>MOTHER</strong></th>
<th>(Circle One No. Only)</th>
<th><strong>FATHER</strong></th>
<th>(Circle One No. Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>1</td>
<td>Professional</td>
<td>1</td>
</tr>
<tr>
<td>Managerial</td>
<td>2</td>
<td>Managerial</td>
<td>2</td>
</tr>
<tr>
<td>Clerical</td>
<td>3</td>
<td>Clerical</td>
<td>3</td>
</tr>
<tr>
<td>Technical</td>
<td>4</td>
<td>Technical</td>
<td>4</td>
</tr>
<tr>
<td>Unskilled trade</td>
<td>5</td>
<td>Unskilled trade</td>
<td>5</td>
</tr>
<tr>
<td>Other (Please specify)</td>
<td>6</td>
<td>Other (Please specify)</td>
<td>6</td>
</tr>
</tbody>
</table>

5. Circle the **HIGHEST** level of education that you have reached so far:

<table>
<thead>
<tr>
<th><strong>MOTHER</strong></th>
<th>(Circle One No. Only)</th>
<th><strong>FATHER</strong></th>
<th>(Circle One No. Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 11 or below</td>
<td>1</td>
<td>Year 11 or below</td>
<td>1</td>
</tr>
<tr>
<td>Year 12/VCE/HSC</td>
<td>2</td>
<td>Year 12/VCE/HSC</td>
<td>2</td>
</tr>
<tr>
<td>Completed a certificate or diploma</td>
<td>3</td>
<td>Completed a certificate or diploma</td>
<td>3</td>
</tr>
<tr>
<td>Completed a bachelors degree</td>
<td>4</td>
<td>Completed a bachelors degree</td>
<td>4</td>
</tr>
<tr>
<td>Completed a post graduate programme</td>
<td>5</td>
<td>Completed a post graduate programme</td>
<td>5 Cont...</td>
</tr>
</tbody>
</table>
6. Do you tend to think of yourself as belonging to a particular ethnic group? (e.g. Italian, Greek, Lebanese, Chinese, etc.)

   NO...............1

   YES...............2

   If YES, which ethnic group? ______________________ (Please print)

7. Circle one number to show what BEST describes your marital circumstances at the moment.

   Circle One Number Only

   Single, not in a marital-type relationship 1
   Married, first time, not previously married 2
   Married, married previously 3
   Divorced or separated 4
   Widowed 5
   Defacto type relationship 6

8. If separated/divorced, how recently were you separated/divorced?

   Circle One Number Only

   One month ago 1
   Six months ago 2
   Twelve months ago 3
   2 Years 4
   More than 2 years (please specify number of years) ______ 5

9. If separated/divorced, what was the cause(s)

   Circle Any That Apply

   Domestic Violence 1
   Extra Partner Affair 2
   Financial Problems 3
   Other (please specify) 4

10. Do you have children? YES NO

    If YES how many? ____________

    Cont...P.3
Personal Details Cont.. P.3

11. Combined Family Income: Circle one number

   (1) $5,000 - $10,000
   (2) $10,000 - $15,000
   (3) $15,000 - $20,000
   (4) $20,000 - $30,000
   (5) $30,000 - $40,000
   (6) Above $40,000

12. Number of Agencies previously attended.

   (a) for child problems _________
   (b) for marital problems _________
   (c) for personal problems _________

13. How many close friends do you have contact with on a regular basis.

    _____________ (State number)

14. Have you or the child's other parent ever received counselling for:

   (a) Drug or alcohol problems
   (b) Depression
   (c) Schizophrenia
   (d) Marital difficulties
   (e) Other (Please specify)
   (f) Childhood physical or sexual abuse.

15. Are you currently being assisted by Department of Community Services regarding your parenting?

   YES  NO (Please Circle)

16. Are you or the child's other parent currently receiving counselling for:

   Circle any that apply

   Drug & Alcohol problems  1
   Depression  2
   Marital problems  3
   Anxiety  4
   Schizophrenia  5

17. Does your child suffer from physical or intellectual disability.

   YES  NO (Please circle)
Appendix B3

Relationship Questionnaire

PLEASE READ DIRECTIONS!!!

Following are descriptions of four general relationship styles that people often report. Please read each description and CIRCLE the letter corresponding to the style that best describes you or is closest to the way you generally are in your close relationships.

A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

D. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.
Appendix B4

RSQ

Please read each of the following statements and rate the extent to which it describes your feelings about close relationships. Think about all of your close relationships, past and present, and respond in terms of how you generally feel in these relationships.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I find it difficult to depend on other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. It is very important to me to feel independent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I find it easy to get emotionally close to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I want to merge completely with another person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. I worry that I will be hurt if I allow myself to become too close to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I am comfortable without close emotional relationships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I am not sure that I can always depend on others to be there when I need them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I want to be completely emotionally intimate with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. I worry about being alone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. I am comfortable depending on other people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. I often worry that romantic partners don’t really love me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I find it difficult to trust others completely.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>13. I worry about others getting too close to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. I want emotionally close relationships.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. I am comfortable having other people depend on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. I worry that others don’t value me as much as I value them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>17. People are never there when you need them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. My desire to merge completely sometimes scares people away.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. It is very important to me to feel self-sufficient</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. I am nervous when anyone gets too close to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tbody>
</table>

Cont...P.2
## Appendix B4 Cont...P.2

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Not at all like me</th>
<th>Somewhat like me</th>
<th>Very much like me</th>
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<tbody>
<tr>
<td>21</td>
<td>I often worry that romantic partners won't want to stay with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>22</td>
<td>I prefer not to have other people depend on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>23</td>
<td>I worry about being abandoned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>I am somewhat uncomfortable being close to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>25</td>
<td>I find that others are reluctant to get as close as I would like.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>26</td>
<td>I prefer not to depend on others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>27</td>
<td>I know that others will be there when I need them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>28</td>
<td>I worry about having others not accept me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>29</td>
<td>Romantic partners often want me to be closer than I feel comfortable.</td>
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<td>3</td>
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<tr>
<td>30</td>
<td>I find it relatively easy to get close to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Family Attachment Interview Format

Family Background

Please describe your family background. The kinds of things I'm interested in are: where you lived, how often you moved, that sort of thing.

What did your parents do for a living? If necessary: Did you parents separate or divorce? 

Siblings?

Who lived in the household? Where are the members of your immediate family now?

Were any other adults central in your upbringing?

Briefly describe the relationship between your parents when you were young. Was there much conflict? Were they physically affectionate with one another in front of you?

Briefly describe what kind of a young child you were.

How far back do your earliest memories go?

Relationship with Parents

I'd like you to describe your relationship with your parents as a child, going back as far as you can.

Which parent were you closest with? Why?

Was each of your parents affectionate? Describe how.

Adjectives

Could you give me some adjectives describing your mother.

Could you give some adjectives describing your father.

Specific memories or incidents to illustrate the adjectives for your mother.

Specific memories or incidents to illustrate the adjectives for your father.

Upsets

If you were unhappy or upset as a child, what would you do? Example. How did your parents respond?

When you were ill or physically hurt?

When you were emotionally hurt? (teasing, conflicts with teachers or siblings)

Did you cry very often? How would your parents respond? How often did you have temper tantrums?

If necessary. Why do you think your parents reacted to you in the way they did?

Separations

Do you remember the first time you were separated from your parents for any length of time? (e.g. camp, parents' holiday, hospitalization) Explore.
Family Attachment Interview Format Cont., P.2

If necessary: How about going to school for the first time?
Or going to college?

As a child, did you ever get lost? How did you react (feelings)? How did your parents react?

Did you ever run away from home? Why? How did your parents react?

Rejection

Did you ever feel rejected by your parents as a child? Describe. How did it feel? What did you do?
If not, did they ever hurt your feelings?

Did your parent realize she/he was rejecting you?

Did you ever feel that you'd disappointed your parents?
For instance, with regard to grades at school?

Were your parents ever threatening - either jokingly or for discipline?

What did they do for discipline?

Do you consider any of the discipline you received abusive?

As a child, were you ever afraid of either parent?
Could you predict the behaviors of your parents?

And what about the opposite? Did you feel loved? Were they proud of you? How was that shown?

Did you feel that they understood you?

Losses, Suicide, & Therapy

Has anyone that you've been close to died?
What about pets?

If so, or if previous loss has been mentioned, expand upon: Age and circumstances?

How did you respond at the time? Impact on daily life?
Have your feelings regarding this loss changed over time?

Have you or anyone in your family ever attempted suicide? Explore.

Have you or anyone in your family sought counselling for a personal concern or crisis? Explore

Changing Relationship with Parents

Have there been any major changes in your relationship with your parents since childhood? Describe. What brought them about?

Did you ever go through a period when there was more conflict than usual between you and your parents?

What is your relationship with your parents like now?

How often do you talk to them? Do you talk about personal concerns?

Are there things that it would be hard to talk to them about? Do you feel that they understand you?

Cont...P.3
Family Attachment Interview Format Cont., P.3

Does your family get together for family gatherings (e.g., holidays)?

Are you close with any of your siblings now?

Effects

Do you think your experiences growing up with your family have influenced your relationships with people outside of the family? How so?

If necessary: Is there anything that you consider a setback to your development?

Which of your parents do you feel most identified with or most like?

If necessary: By identification I mean which parent do you feel you share the same kind of personality, values, attitudes or world view?

Changes

Do you have any thoughts about how your parents came to be the kinds of parents they were?

How would you have liked your parents to be different?

As necessary: Is there anything you didn’t like about your parents? Anything that was irritating?

Or if all negative: Any positive memories with the parent?

How do you think that your parents would have liked you to be different?

In some families, siblings have quite similar experiences growing up and in other families they may have very different experiences. In your case, do you think your siblings would have a similar perception of their childhoods and your parents as you?

Other

Is there anything else about your childhood experiences or your relationship with your parents that you’d like to add?
Appendix B6

Family Attachment Group Prototypes

Secure
- most important: coherence, ability to evaluate, realistic appraisal of past, insightful, valuable attachment relationships (not necessarily with parents)
- common parenting dimensions: supportive parents, low idealization and role reversal, high coherence, good memory, and elaboration
- general tone: self-confident, thoughtful, mature, capable of feeling
- often have warm, accepting parents that have provided a sense of inner security (and believable) or difficult experiences but "worked through", intellectually and emotionally

Fearful
- most important: desire for closeness and acceptance, but avoidance due to fear of rejection; shy; low proximity seeking; feels fundamentally unloved; blamed self for parental rejection; difficulty trusting people
- general tone: shy, vulnerable, low self-esteem, continued emotional involvement with parents
- parenting dimensions: parental rejection, overly critical or harsh or so unavailable that it appeared uncar; not necessarily any idealization or role reversal; good memory and elaboration (unless shyness overrules)
- common experiences: rejected for attachment behaviors (i.e., crying); abusive or extremely cold parents; very shy or withdrawn as child; withdraws when upset; high separation anxiety

Preoccupied
- most important: emotional enmeshment with parents, continued dependence, lack of coherence or resolution of separation; high proximity seeking
- general tone: very emotional, either positive (with idealization) or conflicted; lack of independent identity; low self-esteem; overly sensitive to others' opinions
- parenting dimensions: high idealization and role reversal, low coherence, good memory and elaboration
- common experiences: over-protective enmeshed parents; inept parents; very inconsistent parenting; high separation anxiety; divorce or complicated family history
- may be: a) passive & enmeshed, often with idealized or negative memories or b) conflicted and ambivalent - with ongoing struggle for independence, anger toward parents, maybe pseudo-analytic, egocentric

Dismissing
- most important: emotional detachment; downplays importance of attachment relations; over-emphasis on independence, emotional control and/or achievement; lack of evaluation of early experiences; limited awareness of effects from parents; low proximity seeking
- general tone: cool, self-confident, overly rational, unemotional, at extreme arrogant
- parenting dimensions: high idealization, poor memory and elaboration, low coherence
- often: a) rejecting parents, but subject downplays importance of rejection or even defends parents; detachment from or inability to evaluate effects of early experiences
  b) cool unemotional parents that passed on their style; may have emphasized independence and achievement; lack of any physical or expressed affection from parents although no evidence of overt rejection
- common experiences: no separation anxiety; rarely upset; or if so dealt with on own; use of distancers in speech, such as "you" for "I"
## Appendix B7

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<th>Coder</th>
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<table>
<thead>
<tr>
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<th>Father</th>
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<tr>
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<tr>
<td>Acceptance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rejection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect (1-low, 9-high)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistency/Predictability (1-none, 9-high)</td>
<td></td>
<td></td>
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<tr>
<td>Emotional Expressivity (1-extreme reserve, 5-neither, 9-histrionic)</td>
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<td></td>
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<tr>
<td>Pushed to achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Reversal</td>
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<tr>
<td>Anger at parent</td>
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<td></td>
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<tr>
<td>Idealization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proximity seeking (1-never, 5-somewhat, 9-always)</td>
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<td></td>
</tr>
<tr>
<td>Dominance (1-child, 5-ideal, 9-parent)</td>
<td></td>
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<td>Current closeness (1-9)</td>
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<td></td>
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<td>Overall quality (in childhood, 1-9)</td>
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<td>Identification (1-9)</td>
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<td>Enmeshment (1-9)</td>
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<tr>
<td>Coherence</td>
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</table>

Elaboration

Coherence
Appendix B7 Cont., P.2

SUBJECT # _________

COUNTS

Insistence on not remembering
(I-none, 5-some, 9-constant) _________

Inappropriate Laughter
(1-none, 5-some, 9-constant) _________

I don’t know’s
(1-none, 5-some, 9-constant) _________

OTHER

Separation anxiety (1-9)
(1-none, 5-average, 9-extreme) _________

"Adolescent" rebellion (1-9)
(1-none, 5-some, 9-extreme) _________

Self-confidence (1-low, 5-average,
9-exceptionally high) _________

STYLES (1-9)

Secure _________

Fearful _________

Preoccupied _________

Dismissing _________
### ADJECTIVES

<table>
<thead>
<tr>
<th>Mother</th>
<th>Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>1)</td>
</tr>
<tr>
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<td>5)</td>
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</tr>
<tr>
<td>6)</td>
<td>6)</td>
</tr>
<tr>
<td>7)</td>
<td>7)</td>
</tr>
</tbody>
</table>

Losses, major separations, and/or illnesses:
- __________________________________________ Age ______
- __________________________________________ Age ______
- __________________________________________ Age ______

Discipline & Abuse: __________________________________________

Response when upset: __________________________________________

Effects of childhood: __________________________________________

How would like parents to be different:
- __________________________________________
- __________________________________________

Cultural influences: __________________________________________

Interpersonal style: __________________________________________
Appendix B8

MMQ

Please circle agree or disagree for each of the following statements:

1. I am easier to get to know than most people. Agree/Disagree
2. I have more self-doubts than most people. Agree/Disagree
3. People almost always like me. Agree/Disagree
4. People often misunderstand me or fail to appreciate me. Agree/Disagree
5. Few people are as willing and able as I am to commit themselves to a long-term relationship. Agree/Disagree
6. People are generally well-intentioned and good-hearted. Agree/Disagree
7. You have to watch out in dealing with most people; they will hurt, ignore, or reject you if it suits their purposes. Agree/Disagree
8. I am more independent and self-sufficient than most people; I can get along quite well by myself. Agree/Disagree
Appendix B9

RELATIONSHIP HISTORY

(1) Take a moment to think about your relationship with your mother while you were growing up. What were her attitudes, feelings, and behaviour toward you like? How did she come across to you? (Tick all that apply)

- ___loving
- ___demanding
- ___caring
- ___sympathetic
- ___overprotective
- ___fair
- ___predictable

- ___affectionate
- ___strict
- ___unresponsive
- ___disinterested
- ___inconsistent
- ___confident

- ___critical
- ___respectful
- ___understanding
- ___rejecting
- ___responsible
- ___humorous

- ___abusive
- ___attentive
- ___intrusive
- ___accepting
- ___likable
- ___happy

(2) Take a moment to think about your relationship with your father while you were growing up. What were his attitudes, feelings, and behaviour toward you like? How did he come across to you? (Tick all that apply)

- ___loving
- ___demanding
- ___caring
- ___sympathetic
- ___overprotective
- ___fair
- ___predictable

- ___affectionate
- ___strict
- ___unresponsive
- ___disinterested
- ___inconsistent
- ___confident

- ___critical
- ___respectful
- ___understanding
- ___rejecting
- ___responsible
- ___humorous

- ___abusive
- ___attentive
- ___intrusive
- ___accepting
- ___likable
- ___happy

(3) Which of the following describe your parents' relationship?

- ___affectionate
- ___distant
- ___violent
- ___caring
- ___happy
- ___troubled
- ___unhappy
- ___supportive
- ___arguementative
- ___comfortable
- ___strained
- ___good-humoured

(4) Did your parents ever separate or divorce? ______

(5) If so, how old were you at the time? ______

(6) During your childhood, were you and your mother ever separated for what seemed to you like a long time? YES/NO

(7) If YES, how old were you at the time? ______

(8) During your childhood, were you and your father ever separated for what seemed to you like a long time? YES/NO

(9) If YES, how old were you at the time ______
Appendix B10

Observational Measure (Barkley, 1987)

The observer records what the parent does, what the child does in response to the parent's commands, and the parent's reaction to the child's behaviour. Parents are given 7 minutes of habituation to the clinic situation. This system involves four parent and three child behaviour categories.

Parent Behaviours:

1. Original command: Imperatives ("I want you to...")
   - Interrogative ("Will you...")
2. Repeat command
3. Parent approval (praise): verbal
   - non-verbal
4. Parent negative: verbal
   - direct (includes criticisms)
   - indirect (includes inference, shouting, threats)
   - non-verbal (physical contact-aversive)

Child Behaviours:

1. Child compliance (if behaviour occurs immediately after parent command)
2. Child non-compliance (fails to commence compliance within 10 seconds)
3. Child negative (similar to child defiance/refusal or active non-compliance in Dadds et al's FOC described below).

Families are observed for 10 minutes, behaviours are coded in one minute intervals, and a maximum of 5 original commands can be coded per minute. Seven scores are derived:

1. Number of parent commands per minute.
2. Number of repeat commands per original command.
3. Percentage of child compliance.
4. Percentage of child negative.
5. Percentage of parent approvals.
6. Percentage of parent negatives.

The focus is purely on behaviour and there is limited standardisation. There is no specific coding of affective behaviour. Normative data is not reported. Parents are required to interact with their child in situations that are determined by the researcher.
Appendix B11

Ask your child to do the following tasks in the manner which you would use at home. If possible follow the sequence on the page. However, if for example, the child is already drawing a man, then ask the child to do something else on the list and return to that task later. When you have gone through the list, stop the tape and let the psychologist know you are finished. Be sure to wait until the child is involved in an activity before asking them to do a task off the list.

1. Shut the door.
2. Draw a man.
3. Give me one of those toys.
4. Take off your shoes.
5. Come here and let me fix your shirt/dress/hair.
6. Pick up those papers.
7. Put those books on the shelf.
8. Put this toy in the box.
9. Put on your shoes.
10. Put the chair under the table.
Appendix B12

ANOVA Statistics in addition to F. P. df. reported in thesis tables.

Table B22

CBCL Maternal Ratings (D.Y.) by Categorical Attachment Classification (R.Q.)

EFFECT: Secure, Fearful, Preoccupied, Dismissing
Univariate F-Tests with (3,31) D.F.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypoth. SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
<th>F</th>
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<table>
<thead>
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Table B23

EFFECT: Secure, Insecure
Univariate F-Tests with (1,33) D.F.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypoth. SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
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<td>EXTt1</td>
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<tr>
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Table B24

Maternal Dimensional Attachment Ratings (D.V.) by Categorical Attachment Classification (R.Q.)

EFFECT: Secure, Insecure
Univariate F-Tests with (1,22) D.F.

<table>
<thead>
<tr>
<th>Variable</th>
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Table B25

DAS (Dependant Variable) Scores by Dimensional Attachment Classification (RSQ)

EFFECT: DAS
Univariate F-Tests with (1,17) D.F.

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### Table B26

**BDI (dependant variable) by dimensional attachment classification (RSQ).**

**EFFECT:** Depression (BDI)

Univariate F-Tests with (1,23) D.F.

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<th>Error SS</th>
<th>Hypoth. MS</th>
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<td>31.06618</td>
<td>2092.93382</td>
<td>31.06618</td>
<td>90.99712</td>
<td>.34140</td>
<td>.565</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>200.66941</td>
<td>905.97059</td>
<td>200.66941</td>
<td>39.39003</td>
<td>5.09442</td>
<td>.034</td>
</tr>
<tr>
<td>CLOSE</td>
<td>2.38235</td>
<td>795.61765</td>
<td>2.38235</td>
<td>34.59207</td>
<td>.06887</td>
<td>.795</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Noncent.</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTRUST</td>
<td>.34140</td>
<td>.06655</td>
</tr>
<tr>
<td>ANXIETY</td>
<td>5.09442</td>
<td>.57817</td>
</tr>
<tr>
<td>CLOSE</td>
<td>.06887</td>
<td>.05001</td>
</tr>
</tbody>
</table>
Appendix B13

Table B1

**Mean Distribution of Attachment Dimension Scores (Distrust, Anxious, Close) by Problem Frequency Scores on Measures of Previous Adult Counselling.**

<table>
<thead>
<tr>
<th>Attachment Dimensions</th>
<th>Distrust (n=10)</th>
<th>Anxiey (n=10)</th>
<th>Close (n=10)</th>
<th>ANOVA F (1,10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous personal treatment (n = 5)</td>
<td>41.80 7.49</td>
<td>22.20 9.20</td>
<td><strong>44.00 4.30</strong></td>
<td>.006</td>
</tr>
<tr>
<td>Previous counselling for depression (n = 4)</td>
<td>44.50 3.78</td>
<td><strong>30.00 4.39</strong></td>
<td>42.00 5.94</td>
<td>.003</td>
</tr>
</tbody>
</table>

**p < .01**

Table B2

**Child and Mother Interactive Behaviour in Compliance Task by Self-Report Attachment Classification (RQ)**

<table>
<thead>
<tr>
<th>Mothers Attachment Classification</th>
<th>Secure (n=12)</th>
<th>Fearful (n=7)</th>
<th>Preoccupied (n=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M SD</td>
<td>M SD</td>
<td>M SD</td>
</tr>
<tr>
<td>Parent approvals per minute.</td>
<td>.30 .16</td>
<td>.11 .13</td>
<td>.45 .21</td>
</tr>
<tr>
<td>Parent negatives per minute.</td>
<td>.01 .03</td>
<td>.04 .07</td>
<td>.00 .00</td>
</tr>
<tr>
<td>Percent child negative per command</td>
<td>.17 .17</td>
<td>.20 .25</td>
<td>.00 .00</td>
</tr>
<tr>
<td>Percent child compliance</td>
<td>.58 .23</td>
<td>.60 .27</td>
<td>.80 .14</td>
</tr>
</tbody>
</table>

n/s = non significant
Table B2


<table>
<thead>
<tr>
<th>Attachment Dimensions (RSQ)</th>
<th>Secure (n=19)</th>
<th>Fearful (n=8)</th>
<th>Preoccupied (n=3)</th>
<th>Dismissing (n=5)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Distrust</td>
<td>39.30</td>
<td>8.32</td>
<td>51.20</td>
<td>9.57</td>
<td>43.50</td>
</tr>
<tr>
<td>Anxiety</td>
<td>14.86</td>
<td>6.00</td>
<td>27.20</td>
<td>6.14</td>
<td>22.50</td>
</tr>
<tr>
<td>Close</td>
<td>39.69</td>
<td>5.60</td>
<td>38.40</td>
<td>6.80</td>
<td>39.50</td>
</tr>
</tbody>
</table>

Study 1 dimensional rating.

Table B4

Mean Attachment Dimension Scores (Distrust, Anxiety, Close) by Clinically Significant Child Behaviour Checklist Ratings.

<table>
<thead>
<tr>
<th>Attachment Dimensions</th>
<th>Distrust</th>
<th>Anxiety</th>
<th>Close</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>CBCL internalising T Score ≥ 67 (n=13)</td>
<td>43.92</td>
<td>10.57</td>
<td>20.15</td>
<td>6.14</td>
</tr>
<tr>
<td>CBCL externalising T score ≥ 67 (n=19)</td>
<td>43.52</td>
<td>10.22</td>
<td>20.94</td>
<td>6.79</td>
</tr>
</tbody>
</table>

Note: n/s = nonsignificant
Table B5

**Maternal Mean Problem Frequency Scores on Measures of Marital Satisfaction (DAS) by self-report attachment style RQ, and by RQ Categories of Fearful, Preoccupied and Dismissing Collapsed as Insecure.**

<table>
<thead>
<tr>
<th>Secure (n=15)</th>
<th>Fearful (n=7)</th>
<th>Preoccupied (n=1)</th>
<th>Dismissing (n=3)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>DAS</td>
<td>118.40</td>
<td>13.73</td>
<td>114.00</td>
<td>15.55</td>
</tr>
<tr>
<td>118.40</td>
<td>13.73</td>
<td></td>
<td>115.54</td>
<td>15.14</td>
</tr>
</tbody>
</table>

Standard Deviations are in Parenthesis. n/s indicates non significant.

Table B6

**Maternal Mean Problem Frequency Scores on Measures of Depression (BDI) by self-report attachment style RQ, and by RQ Categories of Fearful, Preoccupied and Dismissing Collapsed as Insecure.**

<table>
<thead>
<tr>
<th>Secure (n=19)</th>
<th>Fearful (n=8)</th>
<th>Preoccupied (n=3)</th>
<th>Dismissing (n=5)</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>BDI</td>
<td>7.05</td>
<td>6.38</td>
<td>11.50</td>
<td>5.39</td>
</tr>
<tr>
<td>7.05</td>
<td>6.38</td>
<td></td>
<td>10.06</td>
<td>5.60</td>
</tr>
</tbody>
</table>

Standard Deviations are in parentheses. n/s indicates nonsignificant.
### Table B7

**Mental Model Questionnaire Items by Attachment Classification (RQ) (which reached significance).**

<table>
<thead>
<tr>
<th>Mental Model Item</th>
<th>Attachment Classification</th>
<th>ANOVA E (3.33)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Secure</td>
<td>Fearful</td>
</tr>
<tr>
<td>4. People often misunderstand me or fail to appreciate me</td>
<td>.14b</td>
<td>.85a</td>
</tr>
</tbody>
</table>

**Family History Adjectives**

| Unresponsive mother | .16b | .62 | .100a | 20 | 0.06 |

*p = < .01

### Table B8

**Frequency Distribution of Sample of Child Behaviour Checklist Scores in Terms of Clinical Significance.**

<table>
<thead>
<tr>
<th>CBCL Internalising T Score</th>
<th>Clinical Range &gt; 67</th>
<th>Not Clinical Range &lt; 67</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22 (62.1%)</td>
<td>14 (38.9%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CBCL Externalising T Score</th>
<th>Clinical Range &gt; 67</th>
<th>Not Clinical Range &lt; 67</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28 (77.8%)</td>
<td>8 (22.2%)</td>
</tr>
</tbody>
</table>

### Table B9

**Correlation Coefficient for Child and Mother Interactive Behaviour in Compliance task by Child Behaviour Checklist scores - Externalizing Behaviour.**

<table>
<thead>
<tr>
<th>Interactive Behaviour</th>
<th>CBCL Externalising T Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent approvals per minute</td>
<td>.13</td>
</tr>
<tr>
<td>Parent negatives per minute</td>
<td>.31</td>
</tr>
<tr>
<td>Percent child negative per command</td>
<td>.00</td>
</tr>
<tr>
<td>Percent child compliance</td>
<td>-.14</td>
</tr>
</tbody>
</table>
The four attachment styles as proposed by Bartholomew and Horowitz (1991) are summarised as follows:

(a) Secure Attachment Style: Characterised by a perception of personal worthiness (lovability) i.e. positive self model and the perception that other people are generally accepting and responsive (positive other). Feelings of a lack of anxiety in relation to interpersonal issues of intimacy and personal anatomy.

(b) Fearful (Avoidant): Characterised by a sense of unworthiness (unlovability-negative self) combined with an expectation that others will be negatively disposed (untrustworthy and rejecting - negative other). By avoiding close involvement with others, this style allows individuals to protect themselves against anticipated rejection by others. (May correspond to avoidant style described by Hazan and Shaver, 1987).

(c) Preoccupied: Characterised by a sense of unworthiness (unlovability - negative self) combined with a positive evaluation of others (positive other). Individuals with this style strive for self-acceptance by dependence on idealised others. (Appears to correspond to Hazan and Shaver's (1987) "ambivalent" or Main's (1985) "enmeshed" or "preoccupied group").

(d) Dismissing (Avoidant): Characterised by a sense of love - worthiness (positive self) combined with a negative disposition toward other people (negative other). Such individuals protect against disappointment by avoiding close relationships and maintaining a sense of independence and invulnerability. (Corresponds conceptually to "detached" or "dismissing" attachment attitude described by Main et al, 1985).
Appendix D

Tables associated with Study 2 but not referred to in main test.
Table D1

**Distribution of Self-Report Secure/Insecure Attachment Classification and Child Diagnosis (DSM IV).**

<table>
<thead>
<tr>
<th>(DSMIV)</th>
<th>Secure (n=19)</th>
<th>Insecure (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No diagnosis</td>
<td>13 (68%)</td>
<td>11 (69%)</td>
</tr>
<tr>
<td>ADHD</td>
<td>1 (5%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>ODD</td>
<td>1 (5%)</td>
<td>-</td>
</tr>
<tr>
<td>ADHD + ODD</td>
<td>3 (16%)</td>
<td>2 (12.5%)</td>
</tr>
<tr>
<td>CD</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1 (5%)</td>
<td>- (6.25%)</td>
</tr>
</tbody>
</table>

Table D2

**Distribution of Self Report (RQ) Maternal Attachment Classification and Child Diagnosis (DSM IV).**

<table>
<thead>
<tr>
<th>(DSM IV)</th>
<th>Secure (n=19)</th>
<th>Fearful (n=8)</th>
<th>Preoccupied (n=3)</th>
<th>Dismissing (n=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No diagnosis</td>
<td>13 68%</td>
<td>5 62%</td>
<td>3 100%</td>
<td>3 60%</td>
</tr>
<tr>
<td>ADHD</td>
<td>1 6%</td>
<td>2 25%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ODD</td>
<td>1 6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ADHD + ODD</td>
<td>3 15%</td>
<td>-</td>
<td>-</td>
<td>2 40%</td>
</tr>
<tr>
<td>CD</td>
<td>0</td>
<td>1 12%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>1 6%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table D3

**Attachment Classification (Secure: Insecure) ‘Normal’ and ‘Clinic’ Samples.**

<table>
<thead>
<tr>
<th>Higher Percentage of Insecure to Secure Classification</th>
<th>Higher Percentage of Secure to Insecure Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Normal Sample”</td>
<td>“Clinic Sample”</td>
</tr>
</tbody>
</table>

* Using self report questionnaires as opposed to AAI.