

Volume I - Main Research Project

**“The design and development of the Childhood
Attachment Interview (CAI) and its application to the
assessment of children with cystic fibrosis”**

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Abstract

This study documents the design and development of the Childhood Attachment Interview (CAI), which is a semi-structured interview for children between the ages of 6 and 12-years old. The CAI was designed to bridge the measurement gap between infancy and adulthood, its method of coding was informed by the rating systems of the Strange Situation and Adult Attachment Interview (AAI). The interview is then rated along a number of dimensions including emotional openness, balance of positive and negative references to attachment figures, use of examples, preoccupied anger, idealisation of attachment figures, dismissal of attachment figures, resolution of conflict, self-organisation and coherence. These scales give rise to a global classification ('secure' vs. 'insecure') and more detailed attachment classification ('very secure' vs. 'secure' and 'very insecure' vs. 'insecure') to mother and father respectively. A number of the CAI's psychometric properties are examined, including inter-rater reliability, internal consistency, and concurrent validity using the Separation Anxiety Test (SAT). Subsequently, a group of children with cystic fibrosis (N=20) were interviewed using the CAI and comparisons were made between patterns of attachments between this group and a matched control group. Family functioning was also assessed using the Family Adaptability and Cohesion Evaluation Scales (FACES) which provides a profile of families according to coherence and adaptability. Comparisons were made between clinical and non-clinical families and between those children classified secure with those classified insecure on family adaptability and cohesion. The theoretical and clinical implications of this study are discussed within an attachment framework.

PART 1

Attachment and Chronic Illness

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1

Introduction

This project has two principal components. Firstly, it presents the preliminary work in the design and development of an interview protocol and coding system for the measurement of attachment in children aged between 6 and 12 years old. Secondly, it examines patterns of attachment and attachment related themes between a group of children aged between six and twelve years old with cystic fibrosis and a control group of the same age.

It seems very fitting that this study should embrace both the development of a measure of attachment in middle childhood and the investigation of the effects of chronic illness upon the parent-child relationship. Inevitably, a child with a chronic illness such as cystic fibrosis has considerably more contact with medical services, sometimes resulting in periods of hospitalisation, than a child without such an illness. This situation contains echoes of the genesis of attachment research which examined the effects of separation due to hospitalisation in the very young (Robertson and Robertson, 1989). From the 1950s onwards, the Robertsons reported the detrimental effects of hospitalisation upon children in the first few years of life. Their work, especially the films they produced, have been credited with producing a significant shift in the care of children as inpatients and in time have led to parents being able to stay with their sick children. To some degree, this study addresses how the diagnosis of cystic fibrosis and the concomitant

increased involvement of medical services can affect the way in which the older child views the parent-child relationship.

2

Attachment

2.1 Attachment Theory

Attachment theory (Bowlby, 1958, 1969/82, 1973, 1980) provides a theoretical framework for the systematic study of attachment by integrating ideas from psychodynamic, ethological and systems theories. Attachment theory "is a way of conceptualising the propensity of human beings to make strong affectional bonds to particular others" (Bowlby, 1979 p.127). Traditionally, the bond between a mother and her child is viewed as an exemplar of all subsequent attachments (Hinde, 1979; Parkes and Stevenson-Hinde, 1982)). Furthermore, attachment is considered to traverse the whole of the lifespan, indeed "from the cradle to the grave" (Bowlby, 1988 p.62), with parents, partners, and significant others playing the role of attachment figures at various stages of an individual's life.

Traditionally, the infant-mother relationship had been conceptualised within the potentially harmful dependency and over-dependency frameworks (Bowlby, 1969/82, 1988). However, attachment theory considers this relationship to be as important and distinct as other instinctual behaviours, such as feeding, sex and parenting (Bowlby, 1969/82). An important distinction between attachment, attachment behaviour and the attachment behavioural system needs to be made (Bowlby, 1969/82, Hinde, 1982). Attachment, the emotional linking of one individual to special others, is both enduring

and confined to a few. Attachment behaviour is episodic but also more global in nature, aiming to promote proximity to the caregiver and the sense of a secure base. In the neonate this behaviour is clearly observable and consists of crying, sucking, clinging, following, smiling and calling (Bowlby, 1969/82). The attachment behavioural system consists of the reciprocal behaviours shown by the infant (care-seeker) and their caretaker, whereby they seek each other out whenever the care-seeker is in emotional or physical danger (Holmes, 1993).

Central to attachment theory is the concept of an internal working model which is a map or model of the world carried in the brain (Bowlby, 1969/82). This model consists of a network of mental representations of the self, others and the relationships between them. Indeed, it can be viewed as "representations of interactions that have been generalised" (Stern, 1985) and from these both cognitive and affective predictions can be made. Thus, the child who has generally experienced warmth and affection in response to their attachment behaviour will view the world as a friendly and welcoming place, and themselves as worthy of love and attention (Bowlby, 1969/82). Conversely, the child who has not experienced responsiveness to their need for a secure base or who have been abused will view the world as indifferent, or perhaps hostile, and themselves as ineffective and unworthy of love (Parke and Collmer, 1979; DeLozier, 1982).

There are two important theoretical implications that arise from the concept of an internal working model for attachment theory and that have been demonstrated by

attachment research. Firstly, the child's internal working model acts as a self-fulfilling prophecy - that is the way in which a child interacts with the world is determined by the way they conceive it which in turn may lead to others responding to them as expected (Bowlby, 1969/82). Secondly, internal working models are passed on intergenerationally (Main, Kaplan and Cassidy, 1985; Fonagy, Steele and Steele, 1991; Steele and Steele, 1994) as the parent's behaviour to their child is constrained by their own perception of their childhood, which may represent their own internal working model, which in turn shapes the emerging internal working model of their child. Thus attachment patterns are reinforced and self-perpetuated and provide an explanation of benign circles of healthy development and vicious circles of pathological development (Cicchetti, Cummings, Greenberg, and Marvin, 1988).

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2.2 The measurement of attachment

As has already been said, attachment is a hypothesised construct and as such cannot be directly measured, instead only its effects can be measured. In infancy, the nature of the attachment organisation has been measured using behavioural observations. Beyond infancy, attachment has been measured using representational paradigms which are described below. Before proceeding, the idea of representation will be discussed more fully. The very idea of a representation implies there is a distinction between representational artefacts, such as drawings or interview transcripts, and the internal process they are presumed to represent (Mandler, 1983). Representational artefacts are only of value to workers in the field of attachment to the degree to which they provide

raw material from which inferences can be made about the internal representation (Main, 1991). Thus, the challenge and preoccupation of attachment theorists and researchers has been to devise and to develop innovative assessment paradigms that will provide them with salient information concerning the quality of individuals' attachment. Some of these paradigms will be outlined below as they have bearing on this present study.

2.3 Attachment in infancy

Attachment in infancy has been solely, and for obvious reasons, assessed using behavioural observations. Furthermore, it was the research into attachment behaviour pioneered by Ainsworth (1963; 1967) with young Ugandan infants and their mothers that provided the empirical foundation for attachment theory. This research was further developed into a formal experimental paradigm, similar to ethological methods (Harlow, 1958; Hinde, 1982), in the late 1960s known as the "Strange Situation" (Ainsworth and Wittig, 1969; Ainsworth, Blehar, Waters and Walls, 1978; Ainsworth, 1985). The protagonists in this standardised assessment procedure or "miniature drama in eight parts" (Bretherton, 1991a) are the mother and her one-year-old child. It has the advantage of being naturalistic and yet reliably rated.

The Strange Situation (Ainsworth et al, 1978) lasts for twenty minutes. Initially the mother and child are shown into a novel playroom by an unknown experimenter, the mother is then asked to leave and the child is left with the experimenter for three

minutes. Following the mother's return and reunion with her child, both the mother and experimenter leave the room and the child is left alone for three minutes. The mother then returns and is reunited again with her child. The whole of this procedure is videotaped and rated, with particular emphasis upon the separation and reunion episodes. This way children's individual differences in coping with the stress of separation can be measured. This procedure, based upon the infant's response, has enabled one secure and three insecure attachment patterns to be identified. These types have been labelled as secure attachment (Type "B"); insecure-avoidant (Type "A"); insecure-ambivalent/resistant (Type "C"); and insecure-disorganised (Type "D").

In Ainsworth's (1978) initial study of middle-class participants the distribution of the sample was 66 percent for the "secure" group, 20 percent for the "avoidant" group and 12 percent for the "ambivalent/resistant" group. A "disorganised" group was subsequently identified. The Strange Situation has now been employed in over thirty different studies (Ijzendoorn and Kroonenberg, 1988) and is now considered as a reliable and valid instrument. There are cross-cultural variations, "avoidant" classifications are more prevalent in Western Europe and the United States, whereas "ambivalent" attachments are greater in Japan and Israel. However, there is greater variance between different socio-economic groups and between disturbed and non-disturbed families than for inter-cultural variance alone (Holmes, 1993).

Avoidant attachment is considered to mirror a history of caregiver unresponsiveness to distress. The infant learns to avoid activating the attachment system, because such activation triggers the fear of being rejected. The feelings of disappointment relating to the child's unmet needs are displaced to other activities. The internal working model of such a child is founded on the belief that others are invariably uncaring. This may result in the child interacting with others in a hostile and dismissing way which is associated with externalising behaviour problems (Cassidy and Kobak, 1988; Renken, Egeland, Marvinney, Mangelsdorf, and Sroufe, 1989). These children are not unaffected by the separation as they exhibit greater signs of internal physical stress than other children but are unable to find external expression for their distress (Grossman, 1993).

Resistant attachment is thought to reflect a history of an inconsistent response to distress. The infant is preoccupied with establishing and maintaining the attention of the caregiver at the cost of exploring their wider environment. These children in their early years remain emotionally dependent on their caregivers and are unable to move into the larger social world with confidence. Such children often become socially withdrawn and are at risk of internalising behaviour problems (Erickson, Sroufe, and Egeland, 1985).

Disorganised attachment is a relatively new attachment category, being observed with high frequency in the clinical populations of maltreatment samples (Carlson, Cicchetti, Barnett and Braunwald, 1989); of offspring of depressed mothers (Lyons-Ruth,

Connell, Grunebaum and Botein, 1990, Radke-Yarrow, Cummings, Kuczynski and Chapman, 1985) and of children whose parents were unable to resolve significant loss or trauma (Main and Hesse, 1990). These studies do not show that disorganisation is linked with a specific disorder per se, but that it appears to have a stronger link to psychopathology than the other types of insecurity.

Children classified as securely attached in the Strange Situation have been shown to have improved socio-emotional (Sroufe, 1983; Sroufe and Rutter, 1984) and cognitive (Main, 1973; Matas, Arend and Sroufe, 1978) development as toddlers and young schoolchildren. "Secure" classification in the Strange Situation correlated positively with children who at six-years-old were able to play with greater concentration and for longer, were more skilful in coping with conflict with their peers and possessed more social perceptions, compared with those children who were rated as "insecure" (Cassidy, 1988; Main and Cassidy, 1988). Indeed, Strange Situation classifications in longitudinal studies of ten years duration have provided very good predictive validity of children's subsequent social adjustment (Bretherton, 1985; Grossman and Grossman, 1991). Additional research reveals possible links between insecure attachment and subsequent behavioural difficulties (Cromwell and Feldman, 1988; Erickson, Sroufe and Egeland, 1985; Lewis, Feiring, McGuffog and Jaskir, 1984). These findings still hold when children's individual and temperament differences are taken into account (Sroufe, 1979, 1985). Attachment categories are stable over time provided there are no significant changes in the caretaking environment (Waters, 1978; Vaughan, Egeland,

Sroufe and Waters, 1979) and can reliably be used to predict how a child between four-and-a-half-years-old and six-years-old will approach a new person or tackle a new task (Arend, Gove and Sroufe, 1979).

There has been a number of studies that have investigated the quality of attachment in atypical populations of infants (Schneider-Rosen, Branwald, Carlson and Cicchetti, 1985). These atypical populations have tended to be maltreatment and psychiatric samples. In general, it has been argued that the value of studying atypical populations has been to inform and to illuminate our understanding of “the integrative nature of advances in the cognitive, social and emotional domains” (Cicchetti and Schneider-Rosen, 1984). Schneider-Rosen et al (1985) argue that part of the value in exploring the qualitative differences in the attachment relationship in atypical populations is that it can provide helpful information in the refinement of the construct of attachment.

It can be seen from this brief review of the literature that the majority of comparisons have been made between “secure” and “insecure”, rather than the different classes of insecurity. This has been due to the relative low frequencies of each of the insecure groups but may well mask important findings between the different types of insecurity. For example, there is evidence to suggest that any differences between “secure” and “insecure” as related to subsequent behaviour problems, may be accounted for solely by the avoidant group, rather than by insecurity itself (Goldberg, Gotowiec, and Simmons,

1995). If this is the case then there is a need to look much closely at the different patterns of attachment and to make comparisons at this inter-group level.

2.4 Attachment Research: A move to the level of representation

The attachment behavioural system can clearly be assessed using a behavioural framework, such as the Strange Situation, in the pre-linguistic period of a child's life. However, by the age of three years, the arrival of language and increasing psychological development allows more complex and appropriate ways of measuring attachment. Attachment research in this age group has sought to elucidate attachment patterns via representational methods (Main, Kaplan and Cassidy, 1985; Bretherton, 1991). These representational studies, like the Strange Situation, are designed to arouse mild apprehension in the child and thereby trigger the child's internal working model.

These new methods have also allowed attachment processes to be assessed longitudinally and enabled measures of validity to be established. Indeed, this change in approach reflects a move to greater pluralism of methods in developmental research in general (Parke and Tinsley, 1987). Furthermore, this has demonstrated that global rating scales are better predictors of later developmental achievements than micro-analytical scores (Parke and Tinsley, 1987).

2.5 Attachment in the Pre-school Years

Consistent with attachment theory and previous research these representational methods have focused upon separation and reunion themes. The aim has been to assess the child's attachment pattern via imaginative play themes. These paradigms have assessed children's reactions to family photographs (Main et al, 1985), children's drawings of family members (Kaplan and Main, 1986), doll-story completion tasks (Cassidy, 1988), story completion tasks (Bretherton, Ridgeway and Cassidy, 1991), puppet interviews with children (Cassidy, 1988) and children's responses to pictures of separations (Klagsbury and Bowlby, 1976; Main et al, 1985) from which the Separation Anxiety Test (SAT) was developed.

The SAT was devised as a semi-projective instrument for the assessment of internal representations of attachment relationships in response to separations from primary caregivers. Originally, the test comprised of six photographs depicting separations between a child and their parents with separations ranging from 'mild' to 'severe' (the criteria for what constitutes "mild" and "severe" varies from study to study). The photographs depicted the following scenarios: 1) parents go out for the evening; 2) parents go away for the weekend; 3) child's first day at a new school; 4) parents go away for two weeks; 5) park scene - parents tell child to run off and play because they want time alone together to talk; and 6) mother tucks child in bed and leaves the room. The presentation of each photograph is accompanied by a brief explanation followed by

a series of questions designed to elicit attachment-related responses. The underlying assumption of the SAT is that children will project onto the child in the picture their attachment-related feelings and experiences and thus their internal representations of attachment relationships.

In Main et al's (1985) study the SAT was administered to 37 six-year-olds as part of the Berkeley Longitudinal Study. Those children classified as "secure" in the Strange Situation tended to give more coherent, elaborate and open responses to the pictures than the "insecure" group. Children classified as "insecure-avoidant" described the separation pictures as sad but showed no problem-solving abilities to resolve the situation. The "disorganised" children were silent or offered bizarre responses. More recently, security of attachment on the SAT has been demonstrated to be positively correlated with theory of mind competence in pre-schoolers and young school-aged children (Fonagy, Redfern and Charman, 1997).

However, a study by Shouldice and Stevenson-Hinde (1992) of children aged four-and-a-half-years-old assessed both on the SAT and by a separation-reunion behavioural paradigm, similar to the Strange Situation, found that the results between these two procedures were not strong enough to justify using the SAT as an alternative to direct observation of attachment behaviour. Indeed, this has led some to argue that representational methods hold much promise but have to be sufficiently developed to replace direct behavioural observation and analysis (Melhuish, 1993). It is therefore

advocated that a multi-method assessment of attachment should be employed embracing both representational and behavioural analysis when studying attachment in post-infancy.

There have been a number of studies that integrate behavioural and representational approaches using joint-story telling and story-stem completion tasks (Oppenheim and Renouf, 1991; Hammond, 1993; Oppenheim, 1994). These studies have measured in a scalar fashion behaviours that have been shown to, or hypothesised to, contribute or be influenced by the attachment behavioural system. Results have indicated that both the content of the narrative and the behaviour of the child need to be taken into account.

2.6 Attachment in Adulthood

The Adult Attachment Interview (AAI) was designed and developed by Main and her colleagues (1985, 1994) as “a system for assessing an individual’s state of mind with respect to attachment” (Main and Goldwyn, 1994; p.1). The AAI is a semi-structured interview which lasts for around one hour focusing upon the interviewee’s childhood experiences of their attachment figures, its aim is to “surprise the unconscious” (Main, 1991). The interviewee is asked to choose five adjectives that describe their childhood relationship with each parent and to provide a memory which serves as an example for each of the words. They are then asked what they did when they felt upset in childhood, to which parent they felt closer to and why; whether they ever felt threatened or rejected by their parents, why their parents behaved as they did; how their

relationship with their parent has changed over time, and how their early experiences may have affected their current functioning.

The AAI is audio-taped and subsequently transcribed verbatim and it is this transcript that is rated along a number of scales, including “loving relationship with mother”; “loving relationship with father”; “role reversal with parents”; “quality of recall”; “anger with parents”; “idealisation of relationships”; “derogation of relationships”; and “coherence of the narrative”. Following this coding interviewees can be assigned to one of five categories on the basis of their “state of mind with respect to attachment” - secure/free autonomous (“F”), dismissing of attachment (“D”), preoccupied/entangled (“E”), unresolved with respect to trauma (“U”) and cannot classify (“CC”).

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Individuals assigned to the autonomous-secure category provide an account of a secure childhood, which is described in an open, coherent and internally consistent manner. They value attachment relationships, even if the experiences they describe are negative and contain pain that they had to overcome.

Individuals who are classified as dismissing of attachment give short and incomplete accounts, often stating that they have few childhood memories along with idealisation of the past. Pre-occupied -entangled individuals furnish accounts of their childhood which are inconsistent, and rambling. Additionally, they appear to be over-involved, and continue to battle with, past conflicts and difficulties. The unresolved-disorganised

group is rated separately and is related to emotionally unresolved traumas, such as the loss of an attachment figure through death, physical or sexual abuse. Assignment to the cannot classify group is rare, although increasing numbers of clinical cases are being assigned to this group due to the bizarre mixture of strategies in relation to attachment.

There have been a number of studies that have demonstrated a positive correlation between the attachment status of infants in the Strange Situation and the attachment status of their mothers as assessed in the AAI (Main and Goldwyn, 1994b; Main, Kaplan and Cassidy, 1985; Fonagy, Steele, and Steele, 1991; Steele and Steele, 1994). Thus, in the Fonagy et al (1991) study between 70 to 80 percent of secure infants had secure mothers, whereas only 20 percent of secure infants had insecure mothers. Additionally, avoidant infants tended to have dismissing-detached parents and ambivalent infants had preoccupied-entangled parents.

More recent findings have shown that there is a positive relationship between attachment security and reflective function (Fonagy, 1996; Fonagy and Target, 1997; Fonagy, Steele, Moran, Steele and Higgitt, 1991). Reflective function has also been termed mentalisation, both terms refer to an individual's capacity to understand their own behaviour as well other's behaviour in mental state terms. In other words, the ability to recognise and think about their own and others' thoughts, feelings, beliefs and desires which enable an individual to make sense of, but more importantly, to foresee others' actions (Dennett, 1987). Researchers in the London Parent-Child Project found that both

mothers and fathers who scored high on reflectiveness rated from AAI transcripts, recorded before the birth of the first child, were three or four times more likely to have secure children, as classified from the Strange Situation 18 months later, than parents whose reflective capacity was low (Fonagy, Steele, Moran, Steele and Higgitt, 1991). Furthermore, it has been posited that mothers' capacity to reflect productively on mental experience, despite childhood experiences of deprivation, is critical in establishing security of attachment in their children (Fonagy, Steele, Steele, Higgitt and Target, 1994).

2.7 Attachment in Middle Childhood - The Missing Link?

There is a measurement gap concerning the assessment of attachment in middle childhood compared with measures of attachment in infancy and adulthood. It is this gap that the first part of this project seeks to address by devising a developmentally appropriate assessment tool of attachment in these middle childhood years. The SAT is the best measure of attachment in middle childhood to date, although studies employing this measure fall into three main age groups, those of 4 to 8 years, those with 8 to 12 year olds and those studies of early and late adolescence (Hansburg, 1986). The SAT has been used in middle childhood to investigate the consequences of disruptions to family life as a result of death (Brody, 1981), separation and divorce (Miller, 1980); the relationship between school bullies and their victims (Bowers, Smith and Binney, 1995). More recently, Wright, Binney and Smith (1995) examined the reliability and validity of an adapted version of the SAT for 8 to 12 year olds with the Seattle scoring indices

(Slough, Goyette, and Greenberg, 1988) with a normal group (N=21) and psychiatrically referred group (N=21) of children. This study reported acceptable levels of inter-rater reliability and was able to distinguish between the two groups on two out of the three rating scales. However, the study failed to demonstrate test-retest reliability following a 4 week interval and the internal consistency was only sufficient for two out of the three scales.

However, there are a number of conceptual and methodological limitations with the SAT. Firstly, it is unclear whether the SAT and other representational measures are assessing attachment representations per se or rather producing responses that are influenced by social desirability factors or eliciting representations that reflect an 'ideal' representation of relationships that the child may hold. It is also possible that the child is simply accessing their story-telling capacities and demonstrating their imaginative abilities.

Secondly, it has been problematic to validate the SAT with concurrent behavioural separation-reunion episodes as such separations have often become commonplace in the child's life and are no longer sufficiently stressful to trigger the child's attachment behaviour system as in the Strange Situation (Ainsworth, 1990). Furthermore, behavioural observations by themselves in middle childhood, especially for short interactions, are difficult to interpret as the observed behaviour could be interpreted in various ways due to the increased complexity and sophistication of the attachment

behavioural system at this stage. For example, a parent who is not overtly interacting with their child could be viewed as distant and cut-off or as encouraging autonomy in their child. Thus, the meaning ascribed to a particular behavioural interaction is heavily dependent upon the hermeneutic framework of the assessor. Thus, depending upon the interpretation, the picture obtained concerning the attachment profile of a child could be completely different.

Thirdly, little consideration has been given the relationship between cognition, language and attachment security. Assessments of internal representations of attachment in pre-school and middle childhood years are invariably based upon language and cognitive abilities which relate to the ability to construct coherent responses. In adulthood, linguistic abilities have been found to be independent of security of attachment as assessed by the AAI (George, Kaplan and Main, 1985; Bakermans-Kranenburg and van Ijzendoorn, 1993). Only one study (McCarthy, 1998) using the SAT had controlled for the influence of language upon security of attachment and it failed to find a significant relationship between scores on the British Picture Vocabulary Test and SAT scores.

Fourthly, the SAT classificatory system implies an integrated internal working model of attachment for both parents and marks a departure from the Strange Situation in which separated classification are assigned to mother and father. Main et al (1985) found that sixth-year rating of security of attachment with the mother was significantly related to children's emotional openness in discussing separation from parents in addition to

children's responses to family photographs. However, sixth-year security of attachment to father bore little or no relation to responses on the SAT or the family photographs. Whilst adult attachment classifications are conceptualised in terms of a single 'current state of mind' (Main and Goldwyn, 1994a), Main et al's (1985) study illustrates the difficulty in making the leap from independent internal working models of attachment figures to a single unifying model in middle childhood.

The CAI seeks to overcome the limitations of both the semi-projective and behavioural assessment methods in this age group. Firstly, the child will be asked directly about their experiences rather than via a circuitous route, which may or may not tally with the child's own internal attachment representations. Secondly, control for academic competence will be made by asking the parents about their child's scholastic achievements. Thirdly, the CAI will ask questions concerning the child's relationship with both their mother and father and will not assume an integrated working model of attachment but instead will allocate separated classifications to mother and father respectively. Fourthly, a distinction needs to be drawn between what children say, i.e.; the content, but also how they communicate, i.e.; the form, which may well reflect individual differences in internal working models and thus attachment organisation (Openheim, D. and Waters, H., 1995). The construction of the CAI protocol and coding system will seek to make the distinction between content and form explicit.

A central issue is whether children would be able to understand and respond meaningfully to the questions posed as it requires the interviewee to step back and

consider their cognitive processes as objects of thought and reflection. A small minority of children will acquire this capacity by three years old and the majority of children will have achieved a simple form by six years old (Main, 1991). Thus, on average it is not beyond the ability of the majority of children between the ages of six and twelve years to be able to answer meaningfully questions posed about their own experiences with their parents.

Bowlby (in Hansburg, 1986) has argued that observational methods that have been objectively measured are preferable to test measures. The CAI attempts to integrate observational methods with the content of the responses. It is envisaged that the value of both the CAI and SAT is that they can determine the degree to which the personality had been affected by separation experiences and also predict separation behaviour. Such information would be most useful in identifying children who are particularly at risk, especially if having to undergo separations from parents.

2.8: Parenting Behaviour

Although parenting is considered to be reciprocal and complementary to attachment behaviour elicited by the child it has not been studied with the same rigour (Bowlby, 1988). Recognising the importance of parenting behaviour acknowledges the dyadic, or even triadic, nature of the attachment behavioural system and makes explicit the fact the system receives input from both child and parenting characteristics. There are a number of salient points reported in the literature which are relevant to this study. Firstly, the

central role of parenting is the provision of a secure base from which children can explore the world (Bowlby, 1988). The strongest influence upon the child in infancy is provided from the mother's or principal caregiver's input.

Secondly, the way in which the mother and father interact with their child is qualitatively and quantitatively different (Clarke, 1978, Parke, 1979; Parke and Tinsley, 1987; Main and Westen, 1981). Mothers spend significantly more time than fathers interacting with their children even when conditions are controlled for the amount of time available (Lamb, 1977; Belsky and Volling, 1986). This is a robust finding and holds for cases where the father is the principal caregiver (Lamb, Frodi, Hwang, Frodi and Steinberg, 1982) and where both parents are working full-time (Sagi, Lamb, Shoham, Dvir and Lewkowicz, 1985).

Thirdly, children relate to each parent independently of their relationship with the other parent. In a recent meta-analytic review (Fox, Rimmerty and Shakers, 1991) of 11 studies some convergence was found. This has yet to be extensively researched however Main and Westen (1981) found two principal findings: i) the distribution of attachment categories across mother and father groups is the same but ii) when analysed on an individual basis there is no correlation between the pattern of attachment with mother and with father.

Fourthly, if a child spends most of their time in the presence of other caregivers those caregivers will have a greater influence over the child in some areas than either the mother or father. These thoughts are borne out by a study of kibbutzim which found there was no relationship between infant-mother or infant-father attachment and socio-emotional development four years later (Oppenheim, Sagi and Lamb, 1989). However, infant attachments with the matapelet (careprovider) were good predictors of later socio-emotional development.

Overall, there has been a call to study child-mother/child-father interactions within a systemic framework, where the family is viewed as a social system, that is at the multiple levels of individual, dyadic and family unit components (Parke and Tinsley, 1987). This approach advocates setting the social system within the larger social context, incorporating relevant demographic and environmental changes which may play a part in the different developmental pathways experienced by children.

3

Chronic Illness

This section provides a brief overview of the literature on chronic illness and then focuses upon the specific example of chronic illness. There have been a variety of definitions of chronic illness in the literature to date (Bradford, 1997). These definitions broadly fall into two types, those which define chronic illness in terms of chronicity (Rutter, Tizzard and Whitmore, 1970; Pless and Pinkerton, 1975 Hobbs and Perrin, 1985) and those who define it in terms of severity (Mattsson, 1972; Eiser, 1990). This study adopts Eiser's (1990) definition which viewed chronic diseases as "conditions that affect children for extended periods of time, often for life. These diseases can be 'managed' to the extent that a degree of pain control or reduction in attacks, bleeding episodes or seizures can generally be achieved. However they cannot be cured." (1990, p.3).

There has been a progression in the way psycho-social theory has conceptualised children with chronic illness, which in part reflects evolving medical advances and changing social attitudes. Eiser (1994) identifies three phases, linked to different time domains, which professionals and families have used to "make sense" of chronic illness. During the 1950s and 1960s information concerning chronic illness was not shared with

children and families were unprepared for the inevitability of death. During the 1970s and 1980s there was a shift from “dying” to “living” with a life-threatening condition. During the 1990s there is a continued emphasis on “living”, in addition to addressing the psychological needs of the long-term survivor.

3.1 Impact of chronic illness on families

The impact upon a family of having a child with a chronic illness can be considerable. Following diagnosis, families have to make a number of important short-term changes in the family structure and function, which can include the redistribution of roles and responsibilities for most or all family members. Often family members will have to become intensely involved with the care, maintenance and treatment regimes. The parent or parental dyad is instrumental in initiating these changes and parental distress can occur concomitantly or as a consequence of these dramatic changes (Hauenstein, 1990). Four specific demands of having a child with a chronic illness have been identified (Willis, Elliot, and Jay, 1982) which are maintaining an appropriate level of vigilance for the symptoms associated with their child's condition; caretaking, maintaining family integrity and insuring financial security.

The literature clearly indicates that parents with chronically ill children experience additional demands upon their parenting, including having to acknowledge the painful reality that their child will have a limited life expectancy and be subjected to numerous painful procedures and limited opportunities (Eiser, 1994).

3.2 Cystic fibrosis and its treatment

Cystic fibrosis is one of the more common chronic illnesses and is the most common inherited disorder affecting children in Europe and North America (Bray, 1989, Wallis, 1994) and is transmitted as an autosomal recessive with an incidence in Caucasian populations from 1 in 1500 to 1 in 15 000 live births and in the UK one in 2300 children are affected (Edwards and Bouchier, 1991). It was first identified by Dr Dorothy Andersen in 1938, who noticed a similarity between numerous babies and young children who exhibited a collection of symptoms, including general failure to thrive, digestion problems and progressive chest disease, which in most instances led to an early death. She hypothesised that all of these deaths were due to a common factor and subsequent autopsy examination of the pancreas found abnormal appearances akin to cysts, along with excessive tissue fibres around the collection of cells that secrete the digestive juices. These findings gave rise to original name of 'Fibrocystic Disease of the Pancreas'. Subsequent studies revealed that the digestive juices in these children were particularly viscous and sticky, which blocked the passage of these juices from the pancreas to the small intestine (Bray, 1989).

Later, it was recognised that these children also suffered with repeated chest infections and bronchitis which were responsible for premature death. The cause of these infections, it was found, was due to excessively thick mucous secretions in the bronchial

tubes. Thus, what was meant to be thin and lubricating had become thick and blocking which is why in continental Europe cystic fibrosis is known as 'Muscoviscidosis'. It still continues to be the case that the main cause of morbidity and eventual death is the repeated respiratory infections and lung damage caused by the thick secretions in the lungs. Furthermore, both male and female sex organs are affected. Males are almost always infertile, but not impotent, and are able to participate in full sexual relations. Females often have a delayed onset of menstruation and experience difficulty in conception (Bray, 1989).

A diagnosis of cystic fibrosis can be made any age, ranging from a few hours of birth to late adolescence, although the majority of cases of cystic fibrosis are diagnosed within the first few months of a child's life (Wallis, 1994). It is a multisystem disorder with physical deterioration often starting at birth, although life expectancy has greatly increased in recent years due to improved medication, diet and physiotherapy techniques. On average, children born today with cystic fibrosis will live into their early thirties (Bryon, 1998)

The medical treatment is complex, time consuming and life long and consists of a number features that could be viewed as troublesome. There is a tendency for all treatment to be based at home rather than in hospital. This potentially has a significant impact on the home life of children with cystic fibrosis and places the burden of responsibility on principal caregivers which in turn could affect those relationships. The

daily treatment regimen varies across children and for the same child over time (Bryon, 1988). Usually, all or some combination of the following will be prescribed: medication - which includes antibiotics and pancreatic enzyme replacements plus vitamins. Chest physiotherapy several times per day to clear secretions from the lungs. Dietary recommendations include consuming a calorie intake of 100-150% recommended daily allowance for age and weight which often necessitates dietary supplements and, in some cases, tube feeding. Some children also require complex drug delivery systems such as nebulisers, puffers and inhalers. Some have commented that the current treatment for cystic fibrosis is purely palliative and concentrates upon the complications of the disease rather than its symptoms (Ievers and Droctar, 1996).

3.3 Cystic fibrosis and family functioning

There is a body of evidence that supports the view that a child's psychological adjustment is more dependent upon healthy family functioning than on the presence of the illness itself (Cowen, Mok. Corey, MacMillan, Simmons, and Levison, 1986; Giannanda, 1984; Shapiro, 1984; Lewis and Khaw, 1982). Cystic fibrosis, in and of itself, does not produce psychopathology in the nuclear family but increases the vulnerability of family members to the stresses of life (Cowen et al, 1986; Giannanda, 1984; Cowen, Corey and Simmons, 1984; Venters, 1981; Tavormina, Boll and Dunn, 1981; Steinhauer, Mushin, Rae-Grant, 1983). In one study (Cowen et al, 1986) family functioning was generally within the normal range, but there was an increase of family dysfunction when patients with cystic fibrosis reached adolescence

During the period of middle childhood, children with a diagnosis of cystic fibrosis are more likely to have behaviour problems, especially those of an internalising and somatising nature, compared to a pre-school group (Cowen, Corey, Keenan, Simmons, Arndt, and Levison, 1985) and a non-cystic fibrosis group of the same age (Steinhausen and Schindler, 1981; Simmons, Correy, Cowen, Keenan, Robertson and Levison, 1987). In keeping with other areas of research there is a preponderance of boys to girls with behavioural problems. Some argue that such a pattern indicates that leaving the protection of the family is particularly problematic to the child with a chronic physical illness, insofar as they have to encounter the normal stresses of separation and adaptation to a new environment coupled with the added complications of having a chronic illness (Simmons et al, 1987).

3.4 Parenting and cystic fibrosis

The majority of studies examining the impact of cystic fibrosis upon parents have only paid attention to the role of the mother (Bryon, 1998). These studies have identified depression, somatic complaints, feelings of guilt and inadequacy in mothers of children with cystic fibrosis (Ievers and Droctar, 1996). Unfortunately, most studies have failed to use control groups and no differences have been found when they have been employed (Walker, Ford and Donald, 1987). More recent studies suggested that mothers of children with cystic fibrosis are not suffering greater pathology than mothers in the population at large (Dadds, Stein and Silver, 1995).

There is only one study that specifically addresses the specific role of fathers in cystic fibrosis which demonstrates the maternal dominance of care (Angst, 1997). This study reports that mothers are usually the principal caregivers and the ones who become more involved with their children's treatment from the outset. Angst (1997) argues that the failure of services to include fathers in the care of children with cystic fibrosis has caused them to be less involved in the child's illness care, which may well lead to jeopardising the well-being of the family or its members. She concludes that mothers who perceive fathers as supportive have much better mental health and fathers are much less likely to be affected at "critical times" such as diagnosis, hospitalisation, increase in child's symptoms and evidence of disease progression.

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4

Attachment Processes and Chronic Illness

The assumption made in the design of this project is that chronic illness in a child may have a detrimental effect on the parent-child relationship, which in turn could lead to an insecure attachment classification. This assumption is based upon the knowledge that children with chronic medical problems are 2.4 times as likely to have a psychiatric disorder compared to healthy peers (Offord, Boyle, Flemming et al, 1989) and that such a clinical profile is positively correlated with insecure attachment classification.

4.1 General Overview

There is a dearth of research examining the relationship between chronic illness in childhood and attachment. A literature research using the key words of “attachment” and “chronic illness” employing the PychLit CD-ROM search facility revealed only fourteen studies. Of these, only eight were relevant after excluding studies which did not focus upon chronic illness in childhood. Seven of the eight are discussed below as they included children with cystic fibrosis. The remaining study, outlined an attachment-neurobiological model, proposing a link between neurochemical substances,

inter-/ intra-personal factors, social perceptions and attachment in chronically disabled children (Huebner and Thomas, 1996).

4.2 Specific Example of Cystic Fibrosis

A review of the literature revealed that there were only seven published studies looking specifically at the association between attachment and cystic fibrosis. Five of these were studies based at the Hospital for Sick Children in Toronto, Canada, one at the Oregon Health Sciences University and a single case study of a 12-month old published in Dutch (Hellingman and Hermanns, 1991). The majority of these studies examine the relationship between attachment and cystic fibrosis in pre-schoolers.

Interestingly, two of these studies which assessed infants using the Strange Situation paradigm have reported that it is the insecure-avoidant children that are at risk for impoverished nutritional status (Simmons, Goldberg, Washington and Fischer-Fay, 1995) and increased internalised behaviour problems (Goldberg, Gotowiec and Simmons, 1995). The Goldberg et al (1995) study also reported a different attachment distribution among a cystic fibrosis group (N=40) compared to a healthy control group (N=54). The cystic fibrosis group had fewer secure, more avoidant and more disorganised infants than the healthy group. In the healthy group 67 percent were classified as secure ("B") compared to 42 percent in the cystic fibrosis group, 12 percent compared to 20 percent in the avoidant ("A") group, 9 percent resistant ("C") compared to 5 percent, and 12 percent disorganised ("D") compared to 32 percent.

The differences between the two groups did not reach statistical significance for the four-way classification scheme (A, B, C, D) or the traditional three-way classification scheme ("A", "B", "C"). However, when the cystic fibrosis group was combined with another medically diagnosed group, those with congenital heart deformity, statistical significance was reached for both the three-way category scheme (ABC: Chi-Squared (2) = 5.79, $p < .05$) and the four-way classification scheme ((A, B, C, D): Chi-squared (3) = 9.84, $p < .02$).

5

Aims and objectives of this study

This study has two principal components. Firstly, the design and development of an assessment tool measuring attachment in middle childhood. Secondly, examining the quality of attachment across a normal group of children compared to a group of children with cystic fibrosis. Each of these objectives is self-contained and represents a different stage of this project.

In summary, this study has the following objectives and expectations :

1 To devise a developmentally sensitive assessment tool for measuring attachment in children aged between six and twelve years old, including an interview protocol and coding manual. Implicit within this objective are the following questions:

a) Is it possible to devise a protocol that will be understandable to children aged between six and twelve years old?

b) Will the responses to this interview be quantifiably different from one another and be able to be formed into distinct groups?

c) Will these responses be related to attachment and lead to forming an attachment classification system?

2. To begin to establish the reliability of the resulting classifications and rating scales on which they are based.

3. To examine the validity of this assessment tool with concurrent measures using the only existing measure of attachment for this age group and a measure of family functioning.

4. To explore the relationship between the quality of attachment in children with a diagnosis of cystic fibrosis compared to a group of children without cystic fibrosis. It is predicted that children with cystic fibrosis are more likely to be classified as “insecure” than those in the control group.

5. It is predicted that the group of children with cystic fibrosis will have different patterns of family functioning compared to a control group of children.

6. To undertake a qualitative analysis of the responses to the Childhood Attachment Interview. This will be undertaken with two aims in mind:

i) as the basis for suggestions as to a typology of insecure attachment patterns, as has been developed for adult and infant attachment procedures;

ii) to explore the different themes that emerge between the cystic fibrosis and control groups of children.

PART 2

Method

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6

Method Section for the development of the CAI

Two method sections are presented. The first outlines the method relating to the design and development of the CAI. The second section presents the method of the study comparing a group children with cystic fibrosis with a non-clinical group of children.

6.1 Design

The CAI was initially piloted on seventeen children and these interviews provided the basis for refining the interview protocol and for devising the CAI coding system. The revised version of the CAI was administered to forty children (20 control; 20 clinical) and twenty of these were coded independently by two raters to establish inter-rater reliability. The sample was then combined (N=40) to establish further psychometric properties of the CAI.

6.2 Participants

Ethical approval for this part of the study was obtained under the auspices of a larger standardisation project being conducted at the Anna Freud Centre (Appendix 1). Letters inviting the children to take part in the study were sent out to parents (Appendix 2) along with information sheets explaining what would be required of both the child and the parent (Appendices 3 and 4) along with parental consent forms and child assent forms (Appendices 5 and 6).

Participants for the pilot stage of this project were selected from a larger standardisation study at the Anna Freud Centre and were self-selected, their parents having responded to information circulated in schools. The sample consisted of 7 girls and 10 boys who ranged in age from 7 years and 8 months to 12 years and four months. The mean age for boys was 9 years and 7 months and the mean age for girls was 10 years exactly.

Participants for the main part of this project come from two sources, a school in north west London and a children's club in south west London. Parental consent was obtained and information sheets were provided explaining what would be involved to both the child and the parent. The twenty children who formed the basis of the development sample were also employed as the control for the second part of this project. Also, the twenty clinical children were grouped with the control group to form a combined group on which the psychometric properties of the CAI could be established as there no demographic differences between the two groups. Table 6.1 shows the demographic data of the CAI development sample and of the combined group.

Table 6.1: Demographic data of CAI development sample and combined control and clinical group.

Demographic data	Development sample N = 20	Combined Sample³ N = 40
Age (years)	X -10.5 (SD=1.5)	X -10.6 (SD=1.6)
Range	7.25 - 12.6 years	7.1 - 12.9 years
Males	11 (60%)	19 (47.5%)
Non-Caucasian	1 (5%)	2 (5%)
2-Parent Family ¹	18 (90%)	34 (85%)
Social Class ² : I-III	13 (65%)	27 (67.5%)
IV-V	7 (35%)	13 (32.5%)

Notes:

¹ Includes remarriages.

² Based on employment status - Classification of Occupations (1970)

³ The control and clinical groups of this study were combined to establish the psychometric properties of the CAI as there were no significant differences between the two groups on any of the demographic variables.

6.3 Procedure

This section divides into two main parts of “The Interview Protocol” and “The Coding System”. Each of these sections report a process of evolution in understanding and interplay between the development of the protocol and the subsequent coding system.

This procedure section is unusually long due to the amount of necessary documentation recording the development of the CAI. For ease of communication this section is reported under different subheadings.

6.4 The Interview Protocol

This section details the writing of the initial protocol through several revisions to the development of the final version employed for this project.

Devising the Protocol

The first draft of the CAI (Appendix 7) consisted of 31 questions which were included either because they had been shown to be useful from previous studies or because they were hypothesised to tap into a specific part of the attachment system. Many of these questions were similar in content to the AAI (Main and Goldwyn, 1994a) but were re-worded so that they could be understood by latency aged children. The questions included asking the child to describe the people in their family, to describe themselves, to provide three words that describe their relationship with their mother, to describe what happens when their mother gets upset with them, to describe their relationship with their father, to describe what happens when their father gets upset with them, what happens when they are ill/hurt, to describe what happens when their mother is ill, to describe what happens when their father is ill, to describe a situation when they wanted help but were unable to obtain to find it and to speak about what happens when their parents argue.

At this stage, there was deliberately some overlap between questions, in order to establish what was the best way of phrasing certain questions as well as discovering which questions elicited the most useful material from the children. The CAI protocol was designed so that the questions would produce mild apprehension in the child within

an attachment framework. The interview was conceived as an analogue of the Strange Situation, a meeting between an unfamiliar adult and the child. It is postulated that in such a situation children would draw upon mental representations or Internal Working Models (IWMs) of their attachment figures as a secure base, as accessible and responsive are likely to be less resistant and anxious (Ainsworth et al, 1978; Bretherton, 1991; Bowlby, 1979; 1988; Main, 1991).

The first four questions on the 31-question CAI protocol specifically addressed the child's representation of their family experience and history. It was anticipated that this set questions would be useful in both orientating the child to the task and that some children would actually see the memories through their own eyes whereas others would report these memories as if they were watching a film (Main, 1991).

The fifth question was concerned with the child's self-concept. It was hypothesised based upon previous work that children who presented an effective self, one which had the capacity to learn from experience rather than defend against it, would be rated more "secure" within an attachment framework (Fonagy and Target, 1997)

Questions six to eleven focused upon the child's relationship and representation of that relationship with their mother. The following six questions focused upon the child's relationship and representation of that relationship with their father. These twelve questions were concerned with the child's relationship to their primary attachment

figures and sought to establish the way in which they had internalised them. It was anticipated that “secure” children would hold an internal representation of parents who were available, accessible, and who could be used as a secure base in which to help them explore their wider environment (Bowlby, 1969/82, 1979, 1988; Main, 1991;)

The remaining questions focused upon times when the child may have employed proximity seeking behaviour, experienced loss or separation from attachment figures and times when the child may have had mixed feeling concerning their parents. These question were constructed to tap into the times when the child’s attachment system would have been triggered in response to separations from attachment figures (Ainsworth et al, 1978; Bowlby, 1979; Main et al, 1985).

Piloting the Protocol

The interview was then piloted on 6 children and video recorded. The responses of three of these children were transcribed and read with a view to establish whether the interview was eliciting material that might be informative about a child’s attachment status. Also, all six video interviews were observed on at least on two occasions by an MSc Student and the author. These viewings established the length of time the interview took, assessed the extent to which the children understood the questions, and the degree to which their responses provided material that was relevant to attachment. Based upon this review the CAI was modified.

Revising the protocol

From this initial piloting stage it was clear that the interview was too long, often taking nearly up to one hour to administer. Also, a number of the questions were eliciting purely autobiographical accounts of the child's experience which were not necessarily related to representations of attachment. It was considered that this made the interview somewhat unwieldy, repetitious and unnecessarily long. Based upon the review at this stage, a number of questions were deleted from the interview schedule and this revised version was piloted with another eleven children.

Piloting the revised protocol

This second revision produced a much more focused interview which contained children's descriptions of interactions with their attachment figures. It was these descriptions that seemed to be most informative concerning the possible attachment status of the child. It was at this stage that these interactions were conceptualised as "relationship episodes", based upon Westen's (1996) Q-sort method of studying children's narratives concerning family life. It was this conceptualisation that led to the idea that it was important to prompt the child for specific relationship episodes throughout the interview.

This thinking changed the structure and emphasis of the interview in two ways. Firstly, the interviewer was instructed to seek elaboration of relationship episodes whenever they occurred in the interview and to elicit them wherever relevant. Secondly, probes

were added to the protocol to elicit more information concerning the relationship episodes.

Revising the revised protocol

The revised protocol was considered to still be too long and in need of further honing. It is not possible to report quantitative data in this section but the majority of the responses to the CAI questions seemed to yield consistently useful, and subsequently codable, responses from the children. The majority of the children readily understood the questions and were able to offer some kind of response that demonstrated that understanding. However, there were two questions that repeatedly confused children. These were *“Can you tell me about a time when your parents didn’t understand you”* and *“Can you tell me about a time when you wanted help but were not able to find any”*.

The final version of the protocol consisted of twelve questions which are listed below and included the use of prompts which enabled sufficient codable information to be obtained from the children. The comparison between the interview with and without the prompts is considerable. A complete CAI protocol, with instructions and prompts, is included in Appendix 8. Below is a list of the basic CAI questions.

1. Tell me the story of the people in your family.
2. Tell me three words that describe yourself.

3. Tell me three words to describe the relationship with your mum.
4. What happens when you mum gets upset with you?
5. Tell me three words to describe the relationship with your dad.
6. What happens when your dad gets upset with you?
7. Tell me about a time when you were ill.
8. What happens when you hurt yourself?
9. Has anyone close to you ever died?
10. Have you ever been away from your parents for the night?
11. Do your parents sometimes argue?
12. In what ways do you want/not want to be like you mum/dad?

The interview thus consists of a warm-up question that orientates the interview to the child's family circumstances, a self-concept question, questions concerning the child's relationship with their mother, questions concerning the child's relationship with their father, questions concerned with times of separation and loss - the times when the attachment system is hypothesised to be activated, and a question concerning the impact of their parents upon their sense of identity.

6.6 The Coding System

The development of the CAI coding system was deliberately left until after the first pilot administration of the CAI protocol. The only a priori assumption was that it should be theory-driven and that it would be free to draw on other coding systems in as much as

they were grounded upon attachment theory and had previously proved useful. Initially, it was not decided whether a categorical or continuous measurement would be devised. Although, empirically it would be satisfying to devise a measure that neatly bridged the gap between the classifications obtained from the Strange Situation and the Adult Attachment Interview it was considered that such an objective would restrict the development of the CAI and so no explicit aim of this sort was stated.

After piloting the interview

After the first piloting of this interview, it became clear that it would not be sufficient to code the interview responses solely from transcripts as with the AAI (Main et al, 1985). It was apparent that important non-verbal information was transmitted from the child during the interview that would be important to take into account when coding the responses with respect to attachment. For example, one child would physically turn away from the interview and face the wall every time he was asked about his mother. It was also at this stage that the importance of relationship episodes was identified and was very much incorporated into the coding system. It is these memories of interactions with attachment figures that were key to making sense of the responses.

As mentioned earlier, from the very outset the interview protocol was driven by attachment theory and was constructed in such a way as to hopefully tap into the attachment system of children. At this stage, the protocol was also constructed so that it would elicit responses that would be able to be coded with an attachment framework

in mind and it was decided that the CAI would be coded directly from video recordings. This decision was based upon the following assumptions. Firstly, it was considered important that both behavioural and representational data was taken into account. Secondly, if a video rated coding system could be designed this would have considerably more immediate utility for clinicians working with children who want to apply attachment theory to their practice. In reality, it is only possible to transcribe interviews for research purposes and then there is an inevitably long time lag between the administration of the interview and its subsequent coding and assignment of an attachment classification.

Coding using a Q-sort method

At first the interviews were coded using Westen's (1996) social cognition and object relations scale for interview and narrative data (SCORS). This scale was chosen as it seeks to assess individual differences in relational style and attempts to provide a description of how people represent relationship within a family. This scale is a Q-sort method for assessing individual differences in dimensions of social cognition and object relations; the raw material is a set of items, printed on cards which provide a standard language for comprehensively describing a domain, such as relational style and capacity. To assess an interview using the SCORS-Q, the coder administers, reads, watches or listens to an interview, and then sorts the items according to the degree to which they are descriptive of the interview.

In employing this scale to the CAI, it soon became clear that only some of the scales were relevant. These scales were as follows: a) tends to describe people's personalities with little subtlety or complexity; b) tends to offer minimal or simplistic descriptions of other mental states; c) descriptions of interpersonal events tend to be bland or mildly negative; d) tends to feel trusting, secure, and nurtured when taken care of or mentored; e) tends to describe pleasurable instances of affiliation, friendship, belonging, or closeness with family or friends. These items were rated on a 5-point scale where 1 = "not at all" and 5 = "very much".

This attempt led to an alternative strategy for coding the video recordings of the interviews. Firstly, all the video recordings were viewed and episodes where the attachment system was deemed to have been activated were noted and edited onto another tape. In this way, new tapes were compiled that consisted of attachment related episodes from various children organised thematically. Initially the following tapes were constructed: a) how people deal with the question of illness; b) talking about mum; c) issues around separation and loss. These video montages were then viewed by a panel of attachment researchers (Prof. Peter Fonagy, Dr. Mary Target, Yael Schmeili-Goetz and the author) who firstly decided whether the tapes contained relevant episodes in terms of triggering the attachment system. They then discussed how each of the relevant episodes might be codified or categorised.

This rating approach initially appeared to hold promise in making sense of the interview data but one of its obvious disadvantages at the outset was that the ratings were based upon an overall appraisal of the child's responses. In order to overcome this limitation, it was decided that specific relationship episodes in the interview would be identified and coded on reduced SCORS-Q separately. Such a strategy would be more in keeping with previous attachment research which is rooted in detailed aspects of relationships.

The segmentation of the child's responses to the CAI is based upon the Core Conflictual Relationship Theme Method (Luborsky and Crit-Cristoph, 1990) which coded each relationship episode within a psychotherapeutic session. This method is based upon narratives, called "relationship episodes", that patients typically tell and sometimes enact during their psychotherapy sessions. *"A relationship episode is a part of a session that occurs as relatively discrete episode of explicit narration about relationships with others or with the self. The demarcation of the relationship episode is facilitated by the fortunate fact that as a narrative it tends to have a beginning, middle and end"* (Luborsky and Crits-Christoph, 1990). In each relationship episode a main other person with whom the interviewee is interacting is identified. Usually, the intent to begin a story is signalled by conventional stereotypical markers, such as a relatively long pause, signs of transition to a new topic, or even a direct introductory statement. Sometimes the narrative is given as an example of the type of relationship an interviewee has with significant others. Thus, words such as "like" and "for example" are used as part of the preface to the narrative. The end of the narrative is often

signalled by a long pause, by statements such as “that’s it”, or by the transition to a new theme or to a new person.

Based upon this revised coding of each relationship episode the following scales were used from the SCORS-Q for each relationship episode identified in the narrative. These were rated on the following dimensions: a) amount of detail; b) description of others’ mental states; c) expression of mixed or ambivalent emotions; d) instrumental or affective relationship theme; e) positive or negative affective tone. This rating scheme was employed when analysing seventeen of the pilot interviews and this initial analysis of the data provided the following information:

1. All interview responses contained relationship episodes. The range was 5 to 13 relationship episodes per child, with the mean being 8 episodes.
2. The duration of the relationship episodes varied. They ranged from 100.8 seconds to 480 seconds, with a mean of 276 seconds.
3. The proportional amount of time spent speaking about relationship episodes varied between children. The amount of time taken up with relationship episodes varied from 7% to 17.6% of the interview, with a mean of 12.8%.

This first attempt to code the transcripts using the condensed version of Westen's (1996) coding manual proved to be deficient in providing an adequate coding system

that captured the attachment organisation of the children, it nevertheless provided a fruitful subsequent line of enquiry. This was around seeing the videoed interview in terms of a narrative which consisted of various episodes, equivalent to paragraphs in a transcript. Some of these episodes are padding to the interview and some are charged with relevant information in respect to coding, that is the child is engaged in the task of the interview and is thinking about attachment related themes and it is only these episodes that can be reliably rated in terms of attachment classification.

Coding using a manual written based upon the material provided by the CAI

At this point it became clear that it would not be possible to capture the richness of the responses to the CAI without constructing a new coding manual that was built upon the aforementioned work. Such a manual was born out of watching the eleven second-pilot stage interviews several times and noting the recurrent themes that emerged from the interview. This coding manual was jointly written between the author and Yael Shmueli-Goetz (YSG), a Ph.D. student undertaking attachment research. At various stages of its writing, in-depth consultation was obtained from Prof. Peter Fonagy and Dr. Mary Target who are experienced researchers in the field of childhood and adulthood attachment. They provided advice and assisted in conceptual consistency.

The coding manual consisted of twelve scales which were each rated on a 9-point scoring system. Each of these scales were included because the underlying property they were seeking to measure was considered present in the majority of the pilot

interviews and linked to attachment theory. As an example, the relationship between attachment theory and the scale of *Emotional Openness* will be elaborated before outlining all of the scales as operationalised within this study.

The conceptualisation of the *Emotional Openness* scale was informed by Sroufe's (1996) affect-regulation model which posits a link between the attachment classification system and the development of affect regulation. This model states that secure attachment is associated with the expectation that the attachment figure will be effective in restoring homeostasis; avoidant-dismissing individuals consistently down-regulate affect, resistant-preoccupied individuals adopt a strategy of up-regulation, and disorganised-unresolved individuals fail to adopt a strategy but are overwhelmed with emotion. Given this, the rating of emotional openness needed to allocate high scores to children who demonstrated the ability to modulate emotionally-charged experiences but low scores to those who were "cut-off" or overwhelmed by emotion.

For each scale there were five defined anchor points (1, 3, 5, 7, 9) and coding instructions along with examples. These scales are outlined below, giving a brief description of the scale and a shortened definition of the extreme anchor points. The coding manual elaborated more fully on each of these scales (Appendix 9).

"Emotional openness and range of emotional terms used". This scale was concerned with the affective description provided by the child rather than the behavioural expression of the child. Emotional openness took into account the range of feelings that the child

described, the degree to which the child was able to place those feelings within a relational context and demonstrate an appreciation of the interplay of affect, mental states and behaviour. *Emotional Openness* was rated on a nine-point scale with '1' for "low emotional openness - no mention of affect" and '9' for "high emotional openness - affectively laden narrative with consistently detailed illustrations."

"Balance of positive and negative references to attachment figures." This scale assessed the degree to which the child described both good and bad qualities of, and interactions with, their attachment figures and did not solely refer to them in negative or positive terms. However, it was expected that the majority of children would tend to use more positive terms to describe their parents. This bias towards the positive was taken into account when rating. *Balance of Positive and Negative References to Attachment Figures* was rated on a 9-point scale with '1' for "highly unbalanced - attachment figures referred to solely in positive or negative terms" and '9' for "highly balanced - the child showed evidence of being able to contemplate, express, and fully elaborate upon both positive and negative aspects of the attachment relationship."

"Use of examples." This scale measured the extent to which the child was able to provide appropriate and complete examples in response to the interview questions. A low score on this scale was hypothesised to be possibly associated with an avoidant strategy. However, it was important that if the child consistently responded by saying "I don't know" or did not respond to additional prompts to crudely establish if an avoidance

strategy was being employed by seeking to elicit non-relationship examples. *Use of Examples* is rated on a 9-point rating scale, with '1' representing a narrative with "no examples despite frequent prompting" and '9' for "a narrative which contains at least four richly detailed and illustrative examples".

"Preoccupied anger with respect to mother" and *"Preoccupied anger with respect to father"*. This scale measures the degree to which the child expressed anger that is uncontained and overwhelming when describing relationship episodes with respect to each parent. A distinction was drawn between the expression of anger which in an attachment context could serve to call forth caretaking behaviour and aggression or violence that seeks to attack attachment figures and threaten attachment relationships. *Preoccupied Anger with Respect to Mother* and *Preoccupied Anger with Respect to Father* was rated on a 9-point rating scale with '1' for "anger was described but not re-experienced" and '9' for "anger is clearly expressed and escalation was evident to the rater."

"Idealisation of mother" and *"Idealisation of father."*. This scale measured the extent to which the child's representations of their mother and father are distorted in a positive direction. This scale did not measure derogation which was accounted for within the dismissal scale. This was a separate scale to *Balance of Positive and Negative References to Attachment Figures* in that idealising children may not use more positive descriptions than other children but it was discrepancy between the general and specific

that formed the basis for this rating. The central question the rater asked when rating was “How credible are the general descriptors of attachment figures in the light of specific examples?”. *Idealisation with Respect to Attachment Figures* was rated on a 9-point scale with ‘1’ for “no idealisation - positive generalised statements of attachment figures are consistently supported by relevant relationship episodes” and ‘9’ for “highly idealising - positive generalised descriptions of attachment figures are prevalent throughout the narrative but are not substantiated by specific examples .”

“Dismissal of attachment with respect to mother” and *“Dismissal of attachment with respect to father.”* This scale measured the extent to which the child adopted a strategy that served to minimise the importance of attachment figures and relationships by active dismissal. Dismissal was demonstrated by any expression of vulnerability, dependency or the need to be comforted by the child’s attachment figures being deliberately rejected and excluded. This scale was rated in relation to the child’s probable specific experience but independent of their history. For example, a separation of two weeks was considered a major event even if the child had experienced separation events in their earlier life. This scale took into account the severity of the event being described and the age of the child. *Dismissal of Attachment with Respect to Attachment Figures* was rated on a 9-point scale with ‘1’ “valuing - child affectively acknowledged both minor and major events and appeared comfortable with expressing vulnerability in response to separation and loss” and ‘9’ for “affect was deliberated and systematically excluded and the self is presented as invulnerable.”

“Resolution of conflicts within relationship episodes.” This scale measured whether the child recounted a relationship episode containing conflict which was subsequently resolved. Conflicts ranged in severity from minor disagreements to major conflicts arising from separation and loss. Solutions could be positive, negative or passive. *Resolution of Conflicts* was rated on a 9-point scale ranging from ‘1’ for “clearly unresolved conflict characterised by destructive or negative responses” to ‘9’ for “very clearly resolved where conflict was accurately reported, systematically addressed and a solution arrived at that seems satisfactory for the rater.”

“Self organisation” This scale attempted to assess the child’s representation of self-agency and self-efficacy. Rating was influenced by the degree to which the child represented themselves as being an active agent who was able to plan, organise and execute a sequence of actions which lead to a satisfactory outcome. *Resolution of Conflicts* was rated on a 9-point rating scale with ‘1’ for “very low self organisation where resolutions to conflicts were dominated by extreme passivity or impulsively” and ‘9’ for “very high self organisation where resolutions to conflicts were predominantly self-initiated, clearly planned and led to a satisfactory outcome.”

“Overall coherence.” This scale to some degree integrated scores from the “Idealisation”, “Preoccupied Anger”, “Dismissing” and “Use of Examples” of scales which acted as feeder scales. This feeder score could then be increased if there was evidence for additional positive indices of coherence, such as fresh speech and reflectiveness. Equally, the feeder score could be decreased if there was additional

evidence of violations of coherence, such as contradictions and inconsistencies within the narrative, dysfluency of discourse and perseveration. *Coherence* was rated on a 9-point scale with '1' for "highly incoherent narrative which contained consistent major and minor violations in the absence of any positive indices of coherence" and '9' for "highly coherent narrative in which there were no examples of major violations and at least one positive index of coherence."

A limited behavioural analysis of each video interview was also undertaken, which included recording any marked behaviour change in response to a particular question; marked anxiety during interview; maintenance of eye contact; tone of voice both overall and in relation to particular questions; discrepancy between behaviour in the interview and the content of the narrative; ability to maintain engagement with the task throughout interview and the negotiation of appropriate boundaries within the interview setting.

Based upon these rating scales, which were informed by the behavioural analysis, an overall classification was assigned to each interview with respect to the child's representation of attachment to mother and father respectively. This overall classification was either "Secure" or "Insecure." To obtain a "secure" classification, ratings had to be 6 or greater for *Emotional Openness*, *Use of Examples*, *Coherence*, the *Resolution of Conflict* scales had to be not less than 5, and ratings had to be no more than 3 for *Idealisation*, *Dismissal* and *Preoccupied Anger*.

To obtain an overall classification of “insecure”, ratings had to be 5 or less for *Emotional Openness*, *Use of Examples*, *Coherence*, and the *Resolution of Conflict* had to be not more than 7; and the scales had to be more than 4 on at least one of the following - *Idealisation*, *Dismissal*, and *Preoccupied Anger*. It was possible to receive a “secure” classification with respect to attachment with one parent and to receive an “insecure” allocation with the other as the *Idealisation*, *Dismissal* and *Preoccupied Anger* scales were assigned separately to each parent.

Following the classification of “Secure” or “Insecure” a sub-classification was allocated to each interview based upon the rating scales. The sub-classification ratings were ‘1’ = “Very Secure”; ‘2’ = “Secure”, ‘3’ = “Insecure”, ‘4’ = “Very Insecure” and this sub-classification rating was conceptualised as providing an indication of the strength of security or insecurity. In this sense, the sub-classifications were not considered to be distinct categories but rather dimensional in nature.

For interviews that had already been classified “Secure” to receive an allocation of “Very Secure” ratings had to be 8 or more on two of the following scales: *Emotional Openness*, *Use of Examples*, *Coherence*, the *Resolution of Conflict* scales had to be not less than 7, and ratings for *Idealisation*, *Dismissal* and *Preoccupied Anger* could only be as high as 3 on only one of these scales. If “Secure” narratives did not receive a “Very Secure” label their sub-classification would be “Secure”.

For interviews that had already been classified “Insecure” to receive an allocation of “Very Insecure” ratings had to be 4 or less on two of the following scales: *Emotional Openness*, *Use of Examples*, *Coherence*; the *Resolution of Conflict* scales had to be no more than 5, and ratings for *Idealisation*, *Dismissal* and *Preoccupied Anger* had to be at least 6 on any one of these scales. If “Insecure” narratives did not receive a “Very Insecure” label then their sub-classification would be “Insecure”.

6.7 Other Measures

The two other measures administered to this group of children are documented more fully in the following section. They are the Family Adaptability and Cohesion Scales (Appendix 10) and the Separation Anxiety Test (Appendix 11). The SAT was administered as a measure of concurrent validity and the FACES was used to take into account, albeit to a small degree, the wider context of the child especially the mother-child dyad. It was also hoped that the FACES might give more ‘objective’ information about family interaction and functioning, against which to compare both attachment security classifications and qualitative descriptions. To control for any order effects half of the children were tested in the order of the CAI, then FACES and then the SAT and the other half in the order of the SAT, then FACES and then CAI.

6.8 Planned Data Analysis

The planned data analysis for this study is outlined below. Also included in brackets after each planned analysis is the number of statistical tests that will be carried out, as the

author is aware that the greater the number of tests that are performed increases the chances of reporting a spurious finding.

The first planned analysis was to establish inter-rater reliability in three ways: i) comparing the rating scales between the two raters using Spearman's correlation coefficient for ranked data as equality of variance on the scales was not assumed (24 tests); ii) calculating the percentage of agreement and Cohen's *kappa* statistic (which is a more strict agreement for chance agreements) of the allocation of attachment security classifications ("secure" vs. "insecure") between the two raters; and iii) calculating the levels of agreement between raters on the assignment of sub-classifications which were conceptualised as dimensions rather than categories ('1' = "very secure", '2' = "secure", '3' = "insecure", '4' = "very insecure") employing Kendall's tau-b statistic.

The relationship between the demographic variables and attachment security ("secure" vs. "insecure") as assessed by the CAI and the SAT will be determined. For the effect of age using independent samples t-tests, and for social class, one or two parent households and gender using Chi-square tests.

Next, the differences between the "insecure" and "secure" groups, as determined by the CAI, will be examined in two ways: i) all of the scales will be compared using Mann Whitney U tests, a non-parametric test was considered most appropriate as a normal distribution could not be assumed (24 tests); ii) sub-classifications comparisons will be

made the CAI by constructing contingency tables but no formal statistical test will be carried out as it is anticipated that sample sizes will be too small.

Internal consistency of the scales will be established using Cronbach alpha. The relationship between each of the CAI rating scales will be examined using Spearman's rho, such analysis will be undertaken with the aim of illuminating distinct patterns of children's response to the CAI.

Concurrent validity will be determined by comparing results from the CAI and the SAT in the following ways: i) comparing CAI and SAT main classifications using Kendall's tau-b statistic; ii) comparing all of the SAT scales across "insecure" and "secure" groups as determined on the CAI using the Mann Whitney U test statistic (16 tests); iii) computing the contingencies of the CAI sub-classifications the SAT sub-classifications.

External validity will be examined by comparing the CAI with the FACES in the following ways: i)) comparing CAI main classifications with the four FACES family types using Kendall's tau-c statistic; ii) comparing all of the FACES scales across "insecure" and "secure" groups as determined on the CAI using the Mann Whitney U test statistic (14 tests); iii) computing the contingencies of the CAI sub-classifications against the SAT sub-classifications.

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A qualitative description of the CAI responses will be made but no formal qualitative analysis will be undertaken.

Method Section for the Cystic Fibrosis Study

7.1 Design

A quasi-experimental group matched post-test only design was employed, where the clinical group were children with cystic fibrosis and the control group were children not selected for physical or psychiatric problems. The control group is the same group of children who participated in the design and development part of this project.

7.2 Participants

Ethical approval for this part of the study was obtained by an application to the Institute of Child Health Ethics Committee and approval was granted (See Appendix 12 - GOS Approval Letter). Child assent and parental consent was obtained for the use of information obtained in anonymous form for research purposes (see Appendices 13 and 14) along with video recording agreement forms (See Appendix 15). Parents and children were also given information sheets outlining what their participation would involve and what the study was investigating (Appendices 16 and 17).

The parents of the prospective participants were contacted by a letter which explained the research and enclosed a consent form. Twenty children participated in this study. Table 3.1 shows the demographic details of this group and the control group from the first part of this study. Chi-squared tests were carried out to explore the association between the

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two groups of participants and no differences were found between the two groups on any of the variables.

Seven out of seventy-six potential cystic fibrosis participants who were contacted refused to take part in this study. Of these, one family had relocated to another country, another said their child did not know that he had cystic fibrosis and a third said that they did not have any contact with traditional medical services any more. The remaining four who refused to take part did not give any reason. Twenty-three out of the seventy-six potential cystic fibrosis participants returned the consent form agreeing to take part in the study. Eight other families who had not returned the consent forms when contacted agreed to partake in the study. It was not possible to compare the characteristics of the responders and non-responders as there was insufficient information concerning the non-responders.

No formal cognitive assessments were carried out on the children as it was considered that to obtain a meaningful profile would make the whole of the testing procedure too long. However, parents were asked how their children were coping academically at school. All of the parents said their children were at the expected educational level with respect to standardised assessment tests, where administered, for the majority of children.

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Table 7.1: Demographic data of control and clinical groups

Demographic data	Control Sample N = 20	Clinical Sample ³ N = 20
Age (years)	X -10.5 (SD=1.5)	X -10.8 (SD=1.7)
Range	7.25 - 12.6 years	7.1 - 12.9 years
Males	11 (60%)	8 (40%)
Non-Caucasian	1 (5%)	1 (5%)
2-Parent Family ¹	18 (90%)	16 (80%)
Social Class ² : I-III	13 (65%)	14 (70%)
IV-V	7 (35%)	6 (30%)

Notes:

¹ Includes remarriages.

² Based on employment status - Classification of Occupations (1970)

³ The control of this study is the same group that was employed as the development sample in the previous section and the clinical group the same sample that was combined in the above section to determine the psychometric properties of the CAI.

7.3 Procedure

Following agreement to take part in the study each parent-child pair was seen by the author. Initially, families were seen in hospital on the same day as child's outpatient appointment but this arrangement proved unsatisfactory and the author arranged to meet with the children and parents in their homes. After a brief explanation of the assessment procedure the interviewer saw the child by themselves and administered the Childhood Attachment Interview (CAI) (Appendix 8), the Separation Anxiety Test (SAT) (Appendix 11), and the Family Adaptability and Cohesion Evaluation Scales II (FACES II) (Appendix 10).. To control for any order effects half of the children were tested in

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the order of the CAI, then FACES and then the SAT and the other half in the order of the SAT, then FACES and then CAI. These measures are described more fully below.

After the measures had been administered each child was gently asked what it was like being interviewed. No child showed any visible signs of distress, although arrangements had been made to offer help to any child who was troubled as a result of taking part in this study. The interviewer met with the mother after interviewing the child and administered the FACES to her, on occasions some mothers talked informally about their experience of having a child with cystic fibrosis

7.4 Measures

There were three measures that are employed in this study, two of which are administered solely to the children and one which is administered both to the children and their parents. These measures are the Childhood Attachment Interview (CAI) (Appendix 8), the Separation Anxiety Test (SAT) (Appendix 11), and the Family Adaptability and Cohesion Evaluation Scales II (FACES II) (Appendix 10),

7.4.1 The Childhood Attachment Interview

The Childhood Attachment Interview (CAI) was developed in response to the lack of alternative assessment methods measuring attachment in children between 6 and 12 years old. Its theoretical foundations rest upon the same concepts and constructs as the Strange Situation (Ainsworth et al, 1978) and the Adult Attachment Interview (AAI)

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(Main et al, 1985). The design, development and construction of the protocol and coding system are outlined in the previous section so will not be further elaborated here.

7.4.2 The Separation Anxiety Test

The SAT (Klagsbrun and Bowlby, 1976; Slough and Greenberg, 1990; Wright et al, 1995) is a semi-projective test which assesses children's responses to representations of separations from parents. The photographs are the same as those used by Wright et al (1995) with the exception the photograph entitled "Dad leaving home after an argument" which was omitted at the request of one of the ethics committees.

The SAT was introduced as follows: *"This study is aimed at finding out how children feel about their parents and family life in general. I have a number of photographs which show a child about the same age as you in different situations which happen nowadays in a lot of families. Maybe these situations have happened to you, maybe not. Regardless of whether or not the same thing has happened to you, I would like you to tell me how you think the child in the picture might feel about the situation and what he/she would do following the situation, or what would he/she do next. This is not a test and there are no right or wrong answers. I want your opinion about the child in the picture."*

The photographs were labelled Mild or Severe following other SAT scoring systems (Klagsbrun and Bowlby, 1976; Shouldice and Stevenson-Hinde, 1992; Slough and

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Greenberg, 1990) based on face validity (Powell, 1989) taking normative developmental factors into account. The child was then shown the photographs, one at a time, in numerical sequence as follows:

- (1) The boy/girl is going away on a school trip for two weeks.
Here s/he is saying goodbye to his/her mum and dad. (Severe)
- (2) Mum is going shopping and the boy/girl is staying at home alone. (Mild)
- (3) Mum is going into hospital. (Severe)
- (4) Mum and dad are going out for the evening. (Mild)
- (5) The girl/boy is in town with his/her dad. Dad says
“Go and spend your pocket money, I’ll wait here.” (Mild)
- (6) It is the boy’s/girl’s first day at a new school. (Severe)
- (7) The boy’s/girl’s dad is going away to work. (Mild)
- (8) Mum and dad are going away for a few days and the boy/girl
is staying with his/her uncle. (Severe)

In keeping with previous studies (Klagsbrun and Bowlby, 1976; Wright et al, 1995; Resnick, 1993, the child was asked “How does the boy/girl feel?”; “Why does he feel that way?” and “What does the boy/girl do next?” After each question the interviewer paused for the child’s reply. If the child did not answer one of the questions or said “don’t know” it was rephrased or a gentle neutral probe was used.

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The child's responses to the SAT were audio-taped and transcribed verbatim, including all the child's utterances with brackets indicating the different tones of voice. These transcripts were coded using Resnick's (1993) revised rating scales which gave rise to an overall classification ("secure" or "insecure") and two sub-classifications based upon five types of security ("F1" = "some setting aside of attachment"; "F2" = "secure but restricted"; "F3" = "secure: free valuing of attachment"; "F4" = "some preoccupation with attachment"; "F5" = "some preoccupation with attachment figures"); and four types of insecurity ("DS1" = "dismissing of attachment"; "DS2" = "devaluing of attachment"; "E1" = "passive"; "E2" = "angry/conflicted").

The author attended two four day training courses run by Dr. Gary Resnick, Westat Inc., where he taught his revised SAT coding system (Resnick, 1993). Following this training the author obtained a reliability testing to satisfaction (86% agreement; $kappa = .70$ for the 15 reliability transcripts). The author coded all the SAT transcripts for this study.

7.4.3 The Family Adaptability and Cohesion Evaluation Scales

The Family Adaptability and Cohesion Evaluation Scales (FACES) were developed in an attempt to integrate central concepts from the family theory and family therapy literature (Olson, 1989, 1993). This effort gave rise to the circumplex model of marital and family systems (Olson, Bell and Portner, 1981; Olson, Russell, and Sprenkle, 1989) which through a process of refinement through factor analysis revealed three central dimensions of family behaviour, those of cohesion, adaptability and communication.

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Indeed, these three dimensions are conspicuous in the work of a large number of independent therapists and theories (Olson, 1989)

Olson, et al, (1981) describe these three dimensions as follows: “Family cohesion assesses the degree to which family members are separated from or connected to their family. Family cohesion is defined as *the emotional bonding that family members have towards one another*. Within the Circumplex Model, specific concepts used to diagnose and measure the cohesion dimension are: emotional bonding, boundaries, coalition, time, space, friends, decision-making, interests and recreation. Family adaptability (change) has to do with the extent to which the family system is flexible and able to change. Family adaptability is defined as: *the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress*. Specific concepts used to diagnose and measure the adaptability dimension are: family power (assertiveness, control, discipline), negotiation style, role relationships and relationship rules. Family communication is third dimension and it facilitates movement of the other two dimensions.”

There are four levels of family cohesion within the Circumplex Model ranging from very low to very high cohesion and are labelled “disengaged”, “separated”, “connected” and “very connected” (formerly, “enmeshed”). Likewise, there are four levels of family adaptability, ranging from extreme low adaptability to extreme high adaptability and are labelled “rigid”, “structured”, “flexible”, and “very flexible” (formerly, “chaotic”). For

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each dimension, the middle two levels (separated/connected and structured/rigid) are viewed as balanced or moderate and hypothesised to be the most conducive for healthy family functioning in the long-term, whereas families which function in the extreme levels generally experience more problems (Olson, Bell and Porner, 1981).

Sixteen different marital and family systems can be identified by bringing together the four levels of the cohesion and the four level of the adaptability dimensions. Four out of these sixteen types are labelled balanced types as they are moderate on both the cohesion and adaptability dimensions. Eight of the sixteen types are labelled mid-range types and are extreme on one dimension and moderate on the other. Four of the sixteen types are extreme types, being extreme on both dimensions. Figure 7.1 below lists the sixteen possible combinations on the dimensions of cohesion and adaptability and the family type label.

It was decided to use FACES II (Olson, Porner and Bell, 1981) in preference to the more recent FACES III (Olson, Portner and Lavee, 1985) upon the recommendation of the Family Social Science Department, University of Minnesota. FACES II has found to have a higher alpha reliability and concurrent validity than FACES III.

Figure 7.2 The 16 FACES Family Functioning Types

VERY FLEXIBLY DISENGAGED	VERY FLEXIBLY SEPARATED	VERY FLEXIBLY CONNECTED	VERY FLEXIBLY VERY CONNECTED
FLEXIBLY DISENGAGED	FLEXIBLY SEPARATED	FLEXIBLY CONNECTED	FLEXIBLY VERY CONNECTED
STRUCTURALLY DISENGAGED	STRUCTURALLY SEPARATED	STRUCTURALLY CONNECTED	STRUCTURALLY VERY CONNECTED
RIGIDLY DISENGAGED	RIGIDLY SEPARATED	RIGIDLY CONNECTED	RIGIDLY VERY CONNECTED

Note: The lightly shaded squares are balanced family systems, the eight medium shaded squares indicate mid-range family systems and the four darkly shaded squares in the corners are the extreme family systems.

7.5 Planned Data Analysis

Planned analysis of data for this study falls into three main sections. As in the planned analysis section of the design and development of the CAI, the number of tests carried out will be included where a relatively large number of tests are being computed as the chances of finding significant findings, which may be spurious, are increased proportionally to the number of tests carried out.

First, descriptive statistics will be computed for all three measures administered. For the CAI this will mean reporting the main attachment classification, the sub-classification and data (means and standard deviations) for the scales. For the SAT this will involve reporting the overall and sub-classifications. For the FACES family types will be reported and comparisons between the mother and child scores on adaptability and cohesion will be made using Mann Whitney U-tests.

Second, comparisons will be made between measures. The CAI and SAT main classifications will be compared with each other by Kendall's tau-c statistic. No formal tests will be made between SAT and CAI sub-classifications due to the relatively small sample size compared to potential categories but a contingency tables will be constructed. However, contingency tables will be constructed comparing the CAI sub-classification to mother and father against SAT sub-classification. The CAI main classifications will be compared with the FACES family types using Kendall's tau-c statistic and again comparisons between family types and CAI sub-classifications will only be made by the

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construction of contingency tables. The SAT main classifications and the FACES family types will be made using Kendall's tau-b statistic.

Third, comparisons will be made between the cystic fibrosis and control groups on all measures. Between group comparisons on the CAI main classifications to mother and father will be made using Chi-squared tests; for the CAI scales between group comparisons will be made using the Mann Whitney U-test (24 tests). Between group comparisons for the SAT main classifications will be made using Kendall's tau-b statistic and between the rating scales by Mann Whitney U-tests (8 tests). Between group comparisons on the FACES will be made for family types by Kendall's tau-c and for scales by Mann Whitney U-tests (8 tests).

PART 3

Results

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8

The design and development of the CAI

The results are presented in two parts. Firstly, the issues, including the psychometric properties, relating the design and development of the CAI. Secondly, the results concerned with the cystic fibrosis study are presented.

This section is divided into two main sections. The first addresses issues of reliability and the second concerns the psychometric properties of the CAI. These sections are further subdivided as necessary.

8.1. Inter-rater Reliability

It was necessary to investigate inter-rater reliability because the coding of the CAI requires raters to make judgements during coding which may be subject to personal biases. Also, it was important to establish whether the coding manual was useful in an operational sense. YSG (PhD attachment researcher) and the author independently scored responses to the CAI.

Inter-rater reliability was examined in three ways. Firstly, all the CAI scales were compared between the two raters. Secondly, the attachment classifications for both mother and father were compared between the two raters. Thirdly, the sub-

classifications for the CAI were compared between the two raters. These will now be reported in turn.

Inter-rater Reliability for the Scales

All of the scales of the CAI were compared across raters by calculating the percentage of exact agreement and establishing Spearman's correlation coefficient for ranked data (r_s).

The percentage of agreement ranged from 45 to 95 per cent. Correlations between the two raters across all of the scales ranged from $r_s = .601$ to $.973$. Table 8.1 below details the level of agreement and Spearman's rho on each CAI scale between the two raters.

The correlation between the two raters for *emotional openness* was $r_s = .973$ (75% agreement); for *balance of positive and negative references to attachment figures* $r_s =$

$.862$ (45% agreement); for *use of examples* $r_s = .868$ (60%); for *preoccupied anger with*

respect to father $r_s = .678$ (70% agreement); for *preoccupied anger with respect to*

mother $r_s = .770$ (95% agreement); for *idealisation with respect to father* $r_s = .601$

(75% agreement); for *idealisation with respect to mother* $r_s = .812$ (60% agreement);

for *dismissing with respect to father* $r_s = .919$ (70% agreement); for *dismissing with*

respect to mother $r_s = .908$ (55% agreement); for *resolution of conflict* $r_s = .901$ (70%

agreement); for *self organisation* $r_s = .900$ (50% agreement) and for *coherence* $r_s = .924$ (60% agreement).

Table 8.1: Correlation coefficients (r_s) and percentage of exact agreement between raters on all CAI scales.

SCALE	Correlation between Rater 1 and Rater 2 Agreement (r_s)	Percentage of Agreement on CAI Rating Scales
Emotional Openness	.973	75%
Balance of positive and negative references to attachment figures	.862	45%
Use of examples	.868	60%
Preoccupied anger with respect to father	.678	70%
Preoccupied anger with respect to mother	.770	95%
Idealisation with respect to father	.601	75%
Idealisation with respect to mother	.812	60%
Dismissing with respect to father	.919	70%
Dismissing with respect to mother	.908	55%
Resolution of conflict	.901	70%
Self organisation	.900	50%
Coherence	.924	60%

Inter-rater Reliability for the Classifications

All the CAIs were coded 'secure' or 'insecure' with respect to attachment security classifications to mother and father respectively as described above. There was hundred per cent agreement ($kappa = 1.00$) between raters for classifications to both mother and father.

Inter-rater Reliability for Sub-classifications

All the CAIs were coded using a four-point scale, where 1 = "Very Secure"; 2 = "Secure"; 3 = "Insecure"; 4 = "Very Insecure", for both mother and father. Inter-rater reliability was established by Kendall's tau-b coefficient (τ) where $\tau=.979$ for the mother sub-classifications and $\tau=.430$ for the father classifications.

8.2 Psychometric Properties of the CAI

A number of psychometric properties of the CAI were examined and this was done by combining the control and clinical groups to provide a larger sample size. Such a move was justified due to the relatively high levels of inter-rater reliability and that there were no statistically significant differences between the two groups on any of the demographic variables. The demographics of this combined group ($N=40$) are recorded in Table 6.2 in the method section above.

In this section the relationship between the demographic variables and attachment security as determined by the CAI was examined. The internal consistency of the rating

scales was established, and the initial stages of determining the concurrent and external validity were examined.

8.2.1 The Relationship Between the Demographic Data and Attachment Security

The relationship between age and attachment classification was determined by independent sample t-tests and was not found to be significant for either the CAI with respect to father ($t = .20$, $df = 36$, n.s.), the CAI with respect to mother ($t = .96$, $df = 38$, n.s.) or the SAT ($t = .40$, $df = 38$, n.s.). The effects of the remaining demographic variables (social class, gender, one or two parent households) were established by Chi-square tests for the CAI attachment classification to mother and father respectively as determined by the CAI and for attachment security based upon the SAT. The CAI and SAT results are reported in turn.

Effects of Demographic Variables with the Childhood Attachment Interview

Of all the demographic variables only social class was found to be related to attachment classification. The contingency tables overleaf report classification of attachment security as a function of social class for mother and father respectively on the CAI. Significance was only found for social class with respect to attachment security to father ($\chi^2 = .7.372$, $df = 1$, $p = < .01$ with continuity correction) where only one child out of the twelve was classified secure with respect to attachment to father.

Table 8.2: CAI attachment security to mother as a function of social class

Classification to Mother	Social Class		Total (N = 40)
	High	Low	
Secure	18	4	22
Insecure	19	9	18
Total	27	13	40

Table 8.3: CAI attachment security to father as a function of social class

Classification to Father	Social Class		Total (N=38) ¹
	High	Low	
Secure	16	1	17
Insecure	10	11	21
Total	26	12	38

Note:

¹ Two of the fathers, one from each social class, were excluded from the analysis as there was insufficient information in the interviews to assign an attachment classification.

Although statistical significance was not shown for the relationship between social class and attachment security classification to mother the result was approaching significance, $\chi^2 = 3.233$, $df = 1$, $p = .0721$ with continuity correction. Furthermore, only four children out of the thirteen within the low social class group were classified as secure with respect to attachment to mother.

Effects of Demographic Variables with the Separation Anxiety Test

With reference to the attachment security as determined by the SAT, two of the demographic variables were found to be of statistical significance, those of social class

($\chi^2 = .6.389$; $df = 1$, $p = < .02$ with continuity correction) and of one or two parents households ($\chi^2 = .8.837$; $df=1$, $p = < .004$ with continuity correction). The contingency tables below report attachment security as a function of social class and as a function of one or two parents households.

Table 8.4: SAT attachment security as a function of social class

Classification	Social Class		Total (N = 40)
	High	Low	
Secure	21	4	25
Insecure	6	9	15
Total	27	13	40

Table 8.5: SAT attachment security as a function of one or two parents households

Classification	Parents in Household		Total (N=38)
	1	2	
Secure	0	25	25
Insecure	6	9	15
Total	6	34	40

8.2.2 Differences Between Insecure and Secure Classifications on the CAI Scales

Main Classification Comparisons

A Mann Whitney U-tests were carried out to establish if there were any significant differences on the rating scales between those classified as “secure” and those classified

“insecure” for mother and father respectively. All but two of the scales were shown to be significantly different between the two groups when defined by security of attachment to mother, those of ‘*preoccupied anger with respect to mother*’ ($U=172.0$; $p=.255$) and ‘*preoccupied anger to father*’ ($U=132.5$; $p=.071$). . All of the scales were shown to significantly different from one another when defined by security of attachment to father. Tables 8.6 and 8.7 below report the Mann Whitney-U values, means, standard deviations and probabilities (1-tailed) for the comparison between the scales of the group classified “insecure” and the group classified “secure” for mother and father respectively.

Table 8.6: Comparisons on all of the CAI scales between 'secure' and 'insecure' classifications for mother.

Scale	Secure (N=22) Mean (SD)	Insecure (N=18) Mean (SD)	Mann Whitney U	Significance (p<; 1 tailed)
Emotional openness	6.33 (1.17)	3.06 (1.62)	24.0	.001
Balance	6.23 (1.77)	3.44 (1.50)	49.0	.001
Use of Examples	6.50 (1.15)	4.39 (1.42)	48.0	.001
Anger to father	1.25 (.64)	1.89 (1.23)	132.5	n.s. (p = .225)
Anger to mother	1.18 (.58)	1.50 (1.09)	172.0	n.s. (p = .071)
Idealisation of father	1.90 (1.44)	3.66 (2.14)	77.0	.001
Idealisation of mother	1.81 (1.01)	3.66 (2.14)	104.5	.009
Dismissal of father	1.55 (1.43)	5.33 (2.70)	41.5	.001
Dismissal of mother	1.45 (.80)	5.39 (2.59)	46.0	.001
Resolution of conflict	6.59 (1.14)	4.16 (1.15)	31.0	.001
Self organisation	6.00 (1.44)	2.94 (1.30)	25.5	.001
Coherence	6.73 (.94)	3.38 (1.19)	6.0	.001

Table 8.7: Comparisons on all of the CAI scales between 'secure' and 'insecure' classifications for father.

Scale	Secure (N=17) Mean (SD)	Insecure (N=21) Mean (SD)	Mann Whitney U	Significance (p<; 1 tailed)
Emotional openness	6.41 (1.23)	3.47 (1.87)	38.0	.001
Balance	6.24 (1.71)	3.90 (1.87)	64.50	.002
Use of Examples	6.53 (1.18)	4.71 (1.62)	65.0	.001
Anger to father	1.06 (.24)	1.95 (1.20)	108.0	.008
Anger to mother	1.14 (.46)	1.52 (1.08)	136.0	.04
Idealisation of father	1.59 (.80)	3.67 (2.20)	64.50	.001
Idealisation of mother	1.82 (1.02)	3.38 (2.20)	109.0	.04
Dismissal of father	1.29 (.69)	5.00 (2.80)	47.5	.001
Dismissal of mother	1.35 (.70)	4.86 (2.76)	55.5	.001
Resolution of conflict	6.59 (1.18)	4.52 (1.47)	52.0	.001
Self organisation	6.05 (1.24)	3.38 (1.38)	41.0	.001
Coherence	6.82 (.95)	3.36 (1.62)	25.5	.001

Sub-classification Comparisons

Contingency tables were constructed to show CAI sub-classifications with respect to attachment classification to mother and father respectively against SAT sub-classifications (Tables 8.8 and 8.9 below). No statistical tests were carried due to the small numbers in each group.

Part 3: Results of Childhood Attachment Interview

Table 8.8 (below) shows that of the six children whose CAI interviews were coded as “very secure” with respect to mother were coded as “freely valuing of attachment” (“F3” - n=5) or “some setting aside of attachment” (“F1” = n=1) on the SAT. Of the sixteen children rated “secure” on CAI; fourteen of them were rated within the secure bands (“F1” - “F5”) on the SAT, with the remaining two being rated “passive” (“E1”) on the SAT. Of the eleven CAI narratives rated as “very insecure” with respect to attachment classification to mother were also coded as either dismissing (n=5), passive (n=1) or angry (n=2) on the SAT, with the remaining three being coded on the SAT as “secure but restricted” (“F2”).

Table 8.8: Contingency table of CAI sub-classification to mother compared with SAT sub-classifications.

CAI sub-classification to mother	SAT Sub-classification									
	DS1	DS3	E1	E2	F1	F2	F3	F4	F5	TOTAL
Very secure					1		5			6
Secure			2		1	2	9	1	1	16
Insecure	3	1	1	1	1					7
Very insecure	3	2	1	2		3				11
TOTAL	6	3	4	3	3	5	14	1	1	40

Table 8.9 (below) shows that all four of the interview responses coded as “very secure” with respect to attachment classification to father were coded as “freely valuing of attachment” (“F3”). The four CAIs coded as “secure” were also coded secure on the SAT (“F1” = 1; “F2” = 2; “F4” = 1). Of the eleven interviews rated “insecure” on CAI, seven of them were rated within the insecure bands on the SAT (“DS1” = 3; “DS3” = 2; “E1” = 1; “E2” = 1), with the remaining four being rated “secure but restricted” (“F2”) or “freely valuing of attachment” on the SAT.

Table 8.9: Contingency table of CAI sub-classification to father compared with SAT sub-classifications.

CAI sub-classification to father	SAT Sub-classification									
	DS1	DS3	E1	E2	F1	F2	F3	F4	F5	TOTAL
Very secure							4			4
Secure			2		1	2	7	1		13
Insecure	3	1	3	2	1					10
Very insecure	3	2	1	1		3	1			11
TOTAL	6	3	6	3	2	5	12	1	1	38

8.2.3 Internal Consistency

In order to establish whether all the scales contributed to the classification of security Cronbach’s alphas were computed for classification to mother and father respectively. Internal consistency between the 9-individual scales for mother was Cronbach’s alpha = .921 and for father Cronbach’s alpha = .915. Internal consistency did not rise with the exclusion of any of the scales.

8.2.4 Inter-correlation of Scales

All of the scales of the CAI were compared with one another by calculating Spearman's correlation coefficient for ranked data (r_s). Positive correlation's ranged from $r_s=.039$ to .884 and negative correlation's ranged from $r_s=-.039$ to $-.767$. Table 8.10 below shows all the correlation's (r_s) between all of the scales on the CAI. The correlations are reported in full in the following the table. It is generally considered that only correlatioons of above .7 are statistically meaningful (Howell, 1992), this study observed this convention.

Table 8.10 Inter-correlation of scales using Spearman rho (r_s)

	EO	Bal	UoE	PA-F	PA-M	ID-F	ID-M	DS-F	DS-M	RES	SO
Bal	.733										
UoE	.695	.631									
PA-F	-.267	-.173	.039								
PA-M	-.175	-.051	-.039	.691							
ID-F	-.472	-.470	-.395	.307	.291						
ID-M	-.421	-.509	-.462	-.043	-.163	.694					
DS-F	-.713	-.630	-.419	.489	.314	.334	.219				
DS-M	-.767	-.690	-.564	.398	.248	.351	.233	.867			
RES	.699	.623	.681	-.262	-.234	-.472	-.416	-.632	-.712		
SO	.736	.729	.784	-.051	-.104	-.428	-.419	-.538	-.661	.778	
COH	.818	.789	.730	-.269	-.249	-.538	-.437	-.726	-.538	.824	.884

8.2.5 Concurrent Validity

Concurrent validity was determined by making comparisons between the CAI and SAT. This was done in two ways. Firstly, by comparing attachment classifications derived from the CAI with attachment classifications on the SAT. Secondly, by examining the SAT scales as a function of attachment security as determined by the CAI.

Comparisons Between Attachment Classifications on the CAI and SAT

All the CAIs were coded either “secure” or “insecure” for mother (N=40) and father (N=38) respectively and the SAT transcripts (N=40) were given a similar overall attachment classification (‘secure’/‘insecure’). The association between the CAI and SAT attachment classifications was established using Kendall’s tau-b coefficient (τ) where $\tau=.545$ for the CAI mother classification and $\tau=.687$ for the mother classification. Tables 8.11 and 8.12 below report the frequencies for CAI attachment classifications to father and mother compared with SAT security classification.

Table 8.11 CAI classification for father compared with SAT classification

CAI Classification to Father	SAT Classification		Total
	Secure	Insecure	
Secure	17	0	17
Insecure	7	14	21
Total	24	14	38

Table 8.12 CAI classification for father compared with SAT classification

CAI Classification to Mother	SAT Classification		Total
	Secure	Insecure	
Secure	19	3	22
Insecure	6	12	18
Total	24	14	40

Examination of SAT Rating Scales Based upon CAI Attachment Security

Comparisons of all the SAT coding scales were made between “secure with respect to attachment with mother” and “insecure with respect to attachment with mother” and then between “secure with respect to attachment with father” and “insecure with respect to attachment with father” using the Mann Whitney U-test statistic. There were significant differences on all of the scales with the exception of self-blame for both parents and preoccupied anger on the mother comparisons. Tables 8.13 and 8.14 below show the means, standard deviation, Mann Whitney U and significance (1 tailed) for all the SAT scales compared across the CAI “insecure” and “secure” groups for father and mother respectively.

Table 8.13 Comparisons between all the SAT scales based upon CAI “secure” and “insecure” classifications to father.

SAT Scale	Secure (N=17) Mean (SD)	Insecure (N=21) Mean (SD)	Mann Whitney U	Significance (p,; 1 tailed)
Emotional openness	7.41 (.71)	5.14 (1.46)	47.0	.001
Dismissing/ devaluing	2.19 (1.93)	3.86 (1.80)	80.05	.003
Self-blame	7.94 (.24)	7.62 (1.36)	171.0	n.s. (p=.637)
Resistance/ withholding	8.00 (.79)	5.71 (2.28)	57.0	.001
Preoccupied anger	7.89 (.33)	6.52 (2.11)	115.0	.02
Displacement of feelings	7.59 (1.18)	5.08 (1.75)	39.0	.001
Pessimism/ optimism	7.18 (.81)	4.53 (1.78)	29.0	.001
Coherence	7.37 (.61)	5.14 (1.46)	24.5	.001
Solutions	7.35 (.70)	5.33 (1.35)	36.0	.001

Table 8.14 Comparisons between all the SAT scales based upon CAI “secure” and “insecure” classifications to mother.

SAT Scale	Secure (N=17) Mean (SD)	Insecure (N=21) Mean (SD)	Mann Whitney U	Significance (p,; 1 tailed)
Emotional openness	7.18 (.85)	5.77 (1.22)	67.5	.001
Dismissing/ devaluing	2.00 (1.74)	4.33 (1.45)	48.0	.001
Self-blame	7.59 (1.33)	8.00 (.56)	171.0	n.s. (p=.108)
Resistance/ withholding	7.81 (1.00)	5.33 (2.22)	50.5	.001
Preoccupied anger	7.55 (1.33)	6.61 (1.94)	141	n.s. (p = .055)
Displacement of feelings	7.41 (1.63)	4.72 (1.63)	36.0	.001
Pessimism/ optimism	6.73 (1.35)	4.50 (1.79)	55.0	.001
Coherence	7.00 (1.02)	5.11 (1.49)	52.0	.001
Solutions	7.14 (.94)	5.22 (1.31)	47.0	.001

8.2.6 External Validity

External validity was looked by comparing the CAI classification of attachment for mother and father with family functioning as determined by the FACES. The same comparison was undertaken for the classifications obtained from the SAT responses.

Main classification comparisons

Due to the relatively small sample size of this study only the family system type was used to make across-category comparisons for statistical significance. FACES family types ('1' = "extreme"; '2' = "mid-range"; '3' = "moderately balanced"; '4' = "balanced") were compared with CAI attachment classification ("secure" and "insecure") for mother and father employing Kendall's tau-c statistic. No statistical significance was found for CAI classifications for mother or father.

FACES Dimensions as a Function of CAI Attachment Classification

The raw scores of adaptability and cohesion as reported by mother and the child, the mean mother-child scores and discrepancy scores were examined for differences between the "secure" and "insecure" CAI classification groups to mother and father respectively. A number of the FACES dimensions and attachment classification to mother ("secure" vs. "insecure") were demonstrated to be significant when comparisons were employing Mann Whitney U tests which were corrected for ties. These were the child rating of family adaptability ($U = 107.5$; $p < .01$; 1-tailed); the child rating for cohesion ($U = 124.5$; $p < .01$; 1-tailed); the mean adaptability rating ($U = 120$; $p < .03$; 1-tailed); and the mother-

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child discrepancy score ($U = 104$; $p < .01$; 1-tailed). Table 8.15 shows these significant findings with the means and standard deviations for each FACES dimension. No difference was found between any of the FACES dimensions and attachment classification to father (“insecure” vs. “insecure”).

Table 8.15: FACES dimensions compared with secure vs insecure on CAI attachment classification.

	CAI classification to mother			
FACES Dimension	Secure (N=22) Mean (SD)	Insecure (N =18) Mean (SD)	Mann Whitney U	Significance ($p < .1$ - tailed)*
Child adaptability score	44.32 (6.67)	39.55 (5.45)	107.5	.01
Child cohesion score	60.91 (7.06)	56.27 (7.46)	124.5	.04
Discrepancy score	9.65 (7.0)	15.53 (6.78)	104.0	.01
Man adaptability score	47.0 (3.59)	44.06 (3.64)	120.0	.03

* No statistical differences were found between on any of the dimensions for the mother, the child and the mean mother-child scores using Mann Whitney U tests.

SAT Classifications Compared with Family Functioning

No significance was found between the SAT attachment classifications and any of the FACES family functioning types using Kendall’s tau-c statistic.

9

Cystic Fibrosis Study

9.1 Results from the measures

Quantitative results for the cystic fibrosis study are reported in three parts. Firstly, for each measure in turn; secondly, the relationship between measures is examined and thirdly, comparisons are made between the cystic fibrosis group and the control group.

9.1.1 Results from the CAI

Attachment Classification

As outlined previously, all the CAIs were coded 'secure' or 'insecure' with respect to attachment security classifications for mother and father respectively. Seven out of the twenty CAIs with the children with cystic fibrosis were double coded by YSG and the author and an hundred per cent agreement was obtained between raters for overall attachment classification for mother and father respectively ($\kappa = 1.00$). The remaining interviews were coded by the author.

There was a greater number of "insecure" to "secure" CAI classifications for both mother and father codings. Eleven out of twenty classification assignments to mothers were 'insecure' and fourteen out of nineteen classification assignments to fathers were 'insecure' (see Table 9.1). Five of the interviews were rated as 'secure' with both mother and father, eleven were rated as 'insecure' with both parents, three were rated as 'secure' with mother

but insecure with father but none were judged to be 'insecure' with mother but 'secure' with father. Table 9.2 shows a contingency table showing the assignment as attachment classification across both parents.

Table 9.1 Frequencies of attachment classification for CAI and SAT

Classification	CAI - Mother (N=20)	CAI - Father (N=19)	SAT (N=20)
Secure	9 (45%)	5 (25%)	11 (55%)
Insecure	11 (55%)	14 (70%)	9 (45%)

Table 9.2 Contingency table of security of attachment compared across parents

CAI classification to mother	CAI classification to father	
	Secure	Insecure
Secure	5	3
Insecure	0	11

Attachment Sub-classifications

As mentioned earlier, all the CAIs were also coded using a four-point scale, where 1 = 'Very Secure'; 2 = 'Secure'; 3 = 'Insecure'; 4 = 'Very Insecure', for both mother and father. In the rating with respect to mother, only one child was assigned the rating of 'very secure', eight were classified as 'secure', three as 'insecure' and eight as 'very insecure'. In the rating with respect to father, again only one child was assigned the rating of 'very secure', four were classified as 'secure', five as 'insecure' and nine as

‘very insecure’. The sub-classifications for the children were the same for both parents with the exception of three children, all of whom were classified as ‘secure’ with respect to mother but of whom two were considered to be ‘insecure’ and one ‘very insecure’ with respect to father.

Assignment of Scales

Table 9.8 shows the means and standard deviations for all of the scales on the CAI contrasting them with the means and standard deviations from the control group. The cystic fibrosis group had a mean scale score of 4.30 (SD = 2.23) for *Emotional Openness*; a mean scale score of 4.75 for (SD = 2.40) for *Balance of Positive and Negative References to Attachment Figure*; a mean scale score of 5.30 (1.72) *Use of Examples*; a mean scale score of 1.74 (1.20) for *Preoccupied Anger with Respect to Father*; a mean scale score of 1.50 (1.10) for *Preoccupied Anger with Respect to Mother*; a mean scale score of 3.10 (2.42) for *Idealisation with Respect to Father*; a mean scale score of 2.90 (2.17) for *Idealisation with Respect to Mother*; a mean scale score of 4.21 (3.24) for *Dismissing with Respect to Father*; a mean scale score of 3.75 (3.09) for *Dismissing with Respect to Mother*; a mean scale score of 4.35 (2.03) for *Self-Organisation*; and a mean scale score of 4.80 (2.17) for *Coherence*.

9.1.2 Results from the SAT

As outlined earlier, the SAT is coded using a 9-point scale on eight dimensions which gives rise to an overall attachment classification (“secure” vs. “insecure”). Two sub-classifications are then assigned to the transcript. For the secure classifications there are a further five sub-classifications that can be assigned (F1, F2, F3, F4, F5). For the insecure classifications there are two types of insecurity that are identified, those of dismissing (DS1, DS2) and passive or angry (E1; E2).

Overall and Sub-classifications

Of the twenty cystic fibrosis children eleven of them were classified as ‘secure’ and eleven ‘insecure’ upon the basis of their responses to the SAT photographs (see Table 9.1).

Of the secure group, only three of the children were considered to be “secure/ freely valuing attachment” (“F3”), five were rated to be “secure but restricted” (“F2”), and there was one child in each of the remaining secure categories (“F1” - “some setting aside of attachment”; “F4” - “some preoccupation with attachment figures”; and “F5” - “somewhat resentful/ preoccupied”. In the insecure group, three children were judged to be “dismissing of attachment” (“DS1”=2; “DS3”=1) and four were considered “passive” (“E1”) and two were rated “angry/conflicted” (“E2”)

9.1.3 Results from the FACES

As stated previously, FACES gives a rating on coherence, adaptability and overall family functioning from the perspective of the child and the mother. This rating can be expressed as a type, category or score. For the purposes of study, due principally to the small sample size, only the 4-way type classification and scores were used and not the 8-way category system. Tables 9.3 and 9.4 (below) report the frequencies and percentages of the cohesion and adaptability dimensions for mothers and children.

Table 9.3: Contingency table comparing child cohesion with mother cohesion allocation.

	Mother cohesion type			
Child cohesion type	Disengaged	Separated	Connected	Very Connected
Disengaged	0	0	1 (5%)	1 (5%)
Separated	1 (5%)	0	5 (25%)	0
Connected	1 (5%)	1 (5%)	7 (35%)	1 (5%)
Very connected	0	0	2 (10%)	3 (15%)

Table 9.4: Contingency table comparing child adaptability with mother adaptability allocation.

	Mother adaptability type			
Child adaptability type	Rigid	Structured	Flexible	Very Flexible
Rigid	0	0	5 (25%)	0
Structured	1 (5%)	2 (10%)	6 (30%)	0
Flexible	0	0	5 (25%)	0
Very Flexible	0	0	1 (5%)	0)

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In terms of cohesion from the child's perspective, two children rated their families as "disengaged", six children rated their families as "separated", ten children rated their families as "connected" and two children rated their families as "very connected". From the mother's point of view, two rated their families as "disengaged", one mother rated her family as "separated", fifteen mothers rated their families as "connected" and two mothers rated their families as "very connected". None of the mean mother-child ratings for cohesion were within the "disengaged" type, six within the "separated" type, thirteen within the "connected" type and only one within the "very connected" type. The child's and parent's assignment to the same cohesion type only occurred seven times and in each case this was for the "connected" type.

In terms of adaptability from the child's perspective, five children rated their families as "rigid", nine children rated their families as "structured", five children rated their families as "flexible" and one child rated their family as "very flexible". From the mother's point of view, one mother rated her family as "rigid", two mothers rated their families as "structured", seventeen mothers rated their families as "flexible" and no families were rated as "very connected" by any of the mothers. None of the mean mother-child ratings for adaptability were within the "rigid" type, eight were within the "structured" type and twelve within the "flexible" type. The child's and parent's assignment to the same cohesion type only occurred seven times, twice for "structured" and five times for "flexible" types.

Comparisons were made between child vs. parent adaptability scores employing the Mann Whitney U-test statistic. Similarly, differences between parent and child allocation to adaptability and cohesion types were investigated using Kendall's tau-c. On both of these tests no statistical differences between the children and their parents were found. The FACES discrepancy scores ranged from .10 to 30.50 with a mean of 11.62 and standard deviation of 7.64.

9.2 Inter-measure relationships

The relationship between the three measures administered to the cystic fibrosis group are presented in turn.

9.2.1 CAI and SAT

Main classification comparisons

All the CAIs were coded either "secure" or "insecure" for mother (N=20) and father (N=19) respectively and the SAT transcripts (N=20) were given a similar overall attachment classification ("secure"/"insecure"). The association between the CAI and SAT attachment classifications for the cystic fibrosis sample were established using Kendall's tau-c coefficient (τ) where $\tau=.410$ for the CAI mother classification and $\tau=.499$ for the mother classification. Table 9.5 and 9.6 reports the frequencies for CAI attachment classifications to father and mother as a function of SAT security classification. This shows that there were five cases where the CAI with respect to father was coded 'insecure' but the SAT transcript was coded as 'secure'. Equally,

there were four cases where the CAI with respect to mother was coded as 'insecure' but received a 'secure' attachment rating on the SAT.

Table 9.5 CAI attachment classification to mother compared with SAT classification

CAI classification to mother	SAT classification		Total
	Secure	Insecure	
Secure	7	2	9
Insecure	4	7	11
Total	11	9	20

Table 9.6 CAI attachment classification to father compared with SAT classification

CAI classification to father	SAT classification		Total
	Secure	Insecure	
Secure	5	0	5
Insecure	5	9	14
Total	10	9	19

Sub-classification Comparisons

Firstly, SAT sub-classifications were compared with CAI main classifications as the SAT sub-classifications had been operationalised to a greater degree. This analysis showed that three out of the four discrepancies between the SAT and CAI attachment classification with respect to father were where the CAI was coded 'insecure' but the SAT as 'secure but restricted' (F2). Similarly, all four instances where the child was

rated as 'secure' on the SAT but 'insecure' on the CAI the SAT rating was 'secure but restricted' (F2). The two other discrepancies between the CAI attachment classification and SAT rating was the children were classified as 'passive' on the SAT but 'secure' on the CAI.

Secondly, CAI sub-classifications for mother and father were compared with SAT overall classifications. All four of the children classified as "very secure" with respect to attachment with father were rated as "secure/ freely valuing attachment" ("F3") on the SAT. All thirteen children rated as "secure" with respect to attachment on the CAI were with the "secure" band on the SAT ("F1"=1; "F2"=2; "F3"=9; "F5"=1).

Thirdly, SAT sub-classifications were compared with CAI sub-classifications (see Table 9.7). The four children whose CAI narratives were rated as "very secure" with respect to attachment father were classified as "freely valuing of attachment" ("F3) on the SAT; there were thirteen CAIs that were classified as "secure" with respect to attachment to father and all of these were classified within the secure range on the SAT ("F1"=1; "F2"=2; "F3"=9; "F5"=1). There were nine CAIs that were classified as "insecure"; of these only one was rated as secure ("F1") on the SAT with four being rated as dismissing ("DS1"=3; "DS3"=1) and five being E-type responses ("E1"=3; "E2"=2). There were eleven CAI narratives that were classified as "very insecure" with respect to father, of these four were classified within the secure range on the SAT ("F2"=3; "F3"=1), five

within dismissing categories (“DS1”=3; “DS3”=2) and two being E-type responses (“E1”=1; “E2” = 1).

Six children were rated on the CAI as “very secure” with to mother and of these five were classified on the SAT as “freely valuing of attachment” (“F3”) and one as “some setting aside of attachment” (“F1”). There were seventeen CAIs that were classified as “secure” with respect to attachment to mother and fourteen of these were classified within the secure range on the SAT (“F1”=1; “F2”=2; “F3”=9; “F4” =1; “F5”=1); one was dismissing (DS3) and two as “E1”. There were eight CAIs that were classified as “insecure, of these only one was rated as secure (“F1”) on the SAT with five being rated as dismissing (“DS1”=3; “DS3”=2) and two being E-type responses (“E1”=1; “E2”=1). There were nine CAI narrative that were classified as “very insecure” with respect to mother, of these three were classified within the secure range on the SAT (“F2”=3), three within dismissing categories (“DS1”=3) and three being E-type responses (“E1”=1; “E2” = 2).

Table 9.7:Contingency table showing CAI sub-classifications to mother and father compared with SAT sub-classification for cystic fibrosis sample.

CAI Rating	SAT Sub-classification									
	ds1	ds2	ds3	f1	f2	f3	f4	f5	e1	e2
Very Secure with Father	0	0	0	0	0	4	0	0	0	0
Secure with Father	0	0	0	1	2	9	0	1	0	0
Insecure with Father	3	0	1	1	0	0	0	0	3	2
Very Insecure with Father	3	0	2	0	3	1	0	0	1	1
Very Secure with Mother	0	0	0	1	0	5	0	0	0	0
Secure with Mother	0	0	1	1	2	9	1	1	2	0
Insecure with Mother	3	0	2	1	0	0	0	0	1	1
Very Insecure with Mother	3	0	0	0	3	0	0	0	1	2

9.2.2 CAI and FACES

The relationship between the CAI and family functioning, as assessed by the FACES was examined in two ways. Firstly, comparisons will be made between CAI main classifications and the FACES family types. Secondly, contingency tables were constructed showing CAI sub-classifications against SAT sub-classifications.

Main CAI Classification Comparisons

Due to the small sample size of this study only the family system type was used to make across-category comparisons. FACES types ('1' = "extreme"; '2' = "mid-range"; '3' =

“moderately balanced”; ‘4’ = “balanced”) were compared with CAI security of attachment classifications (“secure” vs. “insecure”) for mother and father by computing Kendall’s tau-c coefficient. No statistical significance was found between the FACES family functioning types and the CAI classifications to mother or father.

Sub-classification Comparisons

In order to examine in greater detail the relationship between the CAI sub-classifications and the FACES family types, contingency tables were constructed showing CAI sub-classifications against SAT sub-classifications. Table 9.8 shows the mother’s and child’s ratings of family cohesion and adaptability against attachment sub-classification to father. Table 9.9 shows the mother’s and child’s ratings of family cohesion and adaptability against attachment sub-classification to mother.

All of the children whose CAIs were classified as “very insecure” with mother (n=8) and father (n=9) perceived their families in terms of cohesion as rigid (n=3(M); n=3(F)) or structured (n=5(M); n=6(F)) whereas the mothers predominately viewed their families as flexible (n=6(M); n=6(F)).

Table 9.8: Mother's and child's ratings of family cohesion and adaptability compared with CAI attachment sub-classification to father.

FACES family type	CAI sub-classification to father			
	Very Secure	Secure	Insecure	Very Insecure
Child's rating for adaptability				
Rigid		1	1	3
Structured		1	2	6
Flexible	1	2	1	
Very Flexible			1	
Mother's rating for adaptability				
Rigid				1
Structured				2
Flexible	1	4	5	6
Very Flexible				
Child's rating for cohesion				
Disengaged				2
Separated		1	2	3
Connected	1	2	3	3
Very Connected		1		1
Mother's rating for cohesion				
Disengaged			1	1
Separated			1	
Connected	1	4	2	7
Very Connected			1	1

Table 9.9: Mother's and child's ratings of family cohesion and adaptability compared with CAI attachment sub-classification to mother.

FACES family type	CAI sub-classification to mother			
	Very Secure	Secure	Insecure	Very Insecure
Child's rating for adaptability				
Rigid		1		
Structured		2	1	3
Flexible		4	2	6
Very Flexible	1	1	1	
			1	
Mother's rating for adaptability				
Rigid				1
Structured				2
Flexible	1	8	5	6
Very Flexible				
Child's rating for cohesion				
Disengaged				2
Separated		2	2	3
Connected	1	5	3	3
Very Connected		1		1
Mother's rating for cohesion				
Disengaged		1		1
Separated			1	
Connected	1	7	1	6
Very Connected			1	1

9.2.3 SAT and FACES

The relationship between the SAT and family functioning, as assessed by the FACES, was only examined by making comparisons between SAT main classifications and the FACES family types. No statistical significance was found between the FACES family functioning types and the SAT main classifications as determined by Kendall's tau-b statistic.

9.3 Comparing the cystic fibrosis group with the control group

Comparisons are made for all three of the measures administered and are reported in turn. Demographic data is not analysed in this section as it had been addressed earlier.

9.3.1 Between group comparisons on the Childhood Attachment Interview

Comparisons of Attachment Security

The contingency tables (Table 9.10 and 9.11) below report attachment security between the children with cystic fibrosis and the children from the control sample to mother and father respectively. Significance was found only for attachment security to father between the two groups ($\chi^2 = 3.832$, $p = .024$, with continuity correction), whereas the attachment security to mother for the two groups was not statistically significant ($\chi^2 = 1.616$, $p = .170$ with continuity correction).

Table 9.10 Contingency table showing attachment security to mother as a function of cystic fibrosis

CAI Classification to Mother	Control Group (N=20)	Cystic Fibrosis Group (N=20)	Total (N=40)
Secure	13	9	22
Insecure	7	11	18
Total	20	20	40

Table 9.11 Contingency table showing attachment security to father as a function of cystic fibrosis

CAI Classification to Father	Control Group (N=20)	Cystic Fibrosis Group (N=20)	Total (N=38)
Secure	12	5	17
Insecure	7	14	21
Total	19	19	38

Comparisons for the CAI scales

A Mann Whitney U-test was carried to establish if there were any significant differences on all the rating scales between the cystic fibrosis and control groups. No statistical differences were found between on any of the scales between the two groups. Table 9.12 below shows the means and standard deviations of all the scales for the cystic fibrosis and control groups respectively.

Table 9.12: Comparisons on all of the CAI scales between the cystic fibrosis and control group.

CAI Scale	Cystic Fibrosis Group (N=20) Mean (SD)	Control Group (N=20) Mean (SD)	Mann Whitney U (all n.s.)
Emotional openness	4.30 (2.23)	5.40 (1.96)	144
Balance	4.75 (2.40)	5.37 (1.76)	176.5
Use of examples	5.30 (1.72)	5.80 (1.58)	168.0
Preoccupied anger to father	1.74 (1.20)	1.15 (.49)	157.0
Preoccupied anger to mother	1.50 (1.10)	1.10 (.52)	177.5
Idealisation of father	3.10 (2.42)	2.37 (1.42)	158.0
Idealisation of mother	2.90(2.17)	2.40 (1.57)	185.0
Dismissal of father	4.21 (3.24)	2.70 (2.16)	132.0
Dismissal of mother	3.7 (3.09)	2.70 (1.52)	167.5
Resolution of conflict	5.30 (1.81)	5.70 (1.52)	171.0
Self-organisation	4.35 (2.03)	4.90 (2.10)	169.5
Coherence	4.80 (2.17)	5.70 (1.52)	155.0

9.3.2 Between group comparisons on the Separation Anxiety Test

No statistical differences were found between the cystic fibrosis group and the control group on SAT main classifications (“secure” vs. “insecure”) using Kendall’s tau-b statistic. Additionally, no differences were found between the groups in terms of the scores they received on each of the eight SAT coding scales.

9.3.3 Between group comparisons on FACES

Comparisons between the clinical and control groups were made on this measure but not statistical differences for the child, mother and combined mother-child allocation to family functioning for cohesion and adaptability when calculating Kendall’s tau-c statistic. Comparisons were also made across scales for mother, child, mean mother-child for both cohesion and adaptability by Mann Whitney U-tests, again no significant differences were found between the two groups. There were also no statistical differences between the two groups on the discrepancy scores.

Qualitative Descriptions of the CAI

There was a wealth of material and information that was lost when using the scales to assign attachment classifications to interviews. It is beyond the scope of this project to provide a comprehensive qualitative analysis of the data, however, a limited description of the data was undertaken which did not employ any formal qualitative analysis technique. Instead, a number of responses have been looked at across all children to see the range and richness of material included in the children's narratives.

During this undertaking the interviews were viewed with two objectives in mind. First, to see if there were any types of responses which might illuminate our understanding about the nature of distinct attachment patterns, particularly of insecurity, in children aged between six and twelve years old. Second, to examine any qualitative differences between the responses of the cystic fibrosis children compared with the children from the control group.

The results to this section are listed under the following headings: i) use of words to describe the self; ii) use of words to describe mother; iii) use of words to describe father and iv) range of affective terms employed. To order the information contained within the interview responses, four 4X4 tables were constructed which consisted of developing profiles of four types of children - "secure-control group"; "secure-cystic fibrosis group";

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“insecure-control group” and “insecure-cystic fibrosis group”. The finding of these profiles are presented under the four heading below in turn below.

10.1 Use of Words to Describe the Self

The responses to this question are not taken into account when scoring the CAI narratives under the current coding system. It was, therefore, considered of great interest to see how children’s representation of themselves compared across groups (“secure” vs. “insecure”; “cystic fibrosis” vs. “control”). A whole variety of words were used by children to describe themselves. It is important to remember that children are asked *Can you tell me three words to describe your self, that is your personality, (the kind of person you are) and not what you look like.* Children were then asked to substantiate these words with specific episodic examples. For the purposes of this section, only the adjectives the children used will be outlined.

Secure-Control Group Profile

Children within this group were consistently able to respond freely, and described themselves in terms of positive characteristics. Five children described themselves as “kind”, and four mentioned each of the following: “friendly”, “generous”, “nice”, and “fun”. Only one child mentioned a physical characteristic, “sporty”, and there were two mentions of abilities, “clever” and “organised”. Of the remaining seventeen descriptors, which were all characteristics, only three could be conferred negatively; “naughty”(1), “quite bossy”(1) and “a bit nasty sometimes”(1). Other descriptors were “adventurous”

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(1), “loving”(1), “good friend”(1), “happy”(2), “exciting”(1), “caring”(2), “patient”(1), “jolly”(1), and “good”(1).

Cystic Fibrosis Secure Group Profile

This group, like the normal secure group, were able to describe themselves using positive characteristics. Of the 22 different ways in which they described themselves, only 3 were attributes, (“like art”(1), “like acting”(1), “hard working”(1)). The one physical descriptor was “not very sporty”(1). Three children described themselves as “happy”, two each as “caring” and “talkative and lively” and there was one mention of the following descriptors: “helpful”, “good friend”, “little bit stubborn”, “understand people”, “cheerful”, “not very sensible”, “funny”, “quiet”, “quite confident”, “gentle”, “trusting”, “kind”, “generous”, “good” and “friendly.

Normal Insecure group

In clear contrast to the secure group, this group tended to use physical terms and skill-based words to describe themselves, and only three characteristics were mentioned, two of which (“a little bit selfish” and “silly”) were negative, “caring” being the only positive characteristic mentioned by one child. Physically, three children mentioned being “sporty”, one their hair and eye colour, one their “insomnia”, one that they were “small” and one that they “loved animals” and one that they had a “good laugh”. Three children attributed themselves with being “clever” although one of these also said she was “slow at

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writing". Another said he "played a lot", which when asked to explain was put in the context of school work that needed to be done.

Insecure-Cystic Fibrosis Group Profile

Four of the children with cystic fibrosis could not provide any words to describe themselves; whereas all of the children in the control group were able to offer some kind of description of themselves. Some children found it very difficult and could just talk about themselves in physical terms, "I have to take tablets", or "I have a lot of stuff in my room" and "I'm nearly nine years old", and "my room is upstairs but is quite small"

Two children described themselves as "clever". This group of children differed from the normal insecure group, who did not use characteristics to describe themselves, in that they were able to do this, using terms such as; "relatively nice", "really funny", "quiet", "normal", "cheeky", "a bit worried", "happy", "shy", "clever", "bossy" "some sense of humour", and "lively". However, they did seem to show a pattern of giving a positive semantic description which was subsequently refuted by a contradictory episodic example.

For example this was a boy's response when asked to give an example for being happy; "All the time, um....um, I don't know (pause for 10 seconds) - I don't know really....um, there was yesterday at school, me and this boy at school, we're always having play fights and yesterday he hit me around, then I whacked him around the face and it made me happy because I got him back".

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This distinction between responses that were classified as “secure” vs. “insecure” can be seen in the following examples where two children from the cystic fibrosis group seek to justify why they described themselves as “quiet”.

The insecure child is asked to give an example and says: *“um, um, about, like, um, about half ten, I was in the car.”* [“Why quiet?”] *“Don’t know.”* [“Thinking anything?”] *“No.”* and is unable to give any other points to describe himself, screwing up his face for about 30 seconds before repeating *“I don’t know”*.

The secure child explains; *“I’m quiet at school, but loud at home, like any other person, keep with all the others. At home I sing to Phantom of the Opera”* and goes on to talk clearly about two other descriptors.

10.2 Use of Words to Describe Mother

Children were asked *Can you tell me three words to describe the relationship with your mother* and then they were asked to give specific examples to those semantic headings. The four profiles concerning those words will now be presented.

Secure-Control Group Profile

This group described their mothers in terms of positive characteristics. “Loving” and “kind” were each mentioned four times, and “happy” five times, other characteristics mentioned included “friendly” and “funny” (two mentions each), “safe”, “good”, “firm”,

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“talkative”, “scared”, “bit angry”, “dodgy”, “exciting”, “generous”, “honest”, “fun”, and “adventurous”. One girl responded to the question in role-reversal, saying how much she loved, helped and was grateful to her mother for everything. Two children mentioned their mother as helping them. It can be seen that this group spoke of their attachment figures in both positive and negative terms.

An architypical response from a boy who fitted this profile was his reply to the interviewer’s question to give an example of when it last felt loving with his mother:

“Yesterday we didn’t get on so well - so when we came back we sat on the sofa and had a cuddle, I wasn’t co-operating, I said “Sorry”, she said “Okay”, and it felt relaxing”.

Secure-Cystic Fibrosis Group Profile

This group also described mothers in terms of positive characteristics, although the most frequent point is that the mother is “always there for me and caring”, mentioned five times, and “loving”. mentioned three times.. Other characteristics mentioned include: “adventurous”, “we get on together”, “spoils me”, good”, “honest”, “trustable”, “scared”, “bit anxious”, “friendly”, and twice mentioned were “happy”, “understanding”, “talkative” and “friendly”. One said their mother bought lots of things for them, another that their mother was helpful. Another child described her mother as adventurous in a sporty way, and that she liked music. *“We are honest, with each other. If I have done something wrong I always tell her and if I don’t feel well, Mum thinks I don’t feel well, and she can contact the hospital.”*

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Insecure-Control Group Profile

This group did not use the same characteristics as seen so frequently in the control groups, and more negative terms were used. Mothers were described as “good”, “exciting”, “can say anything I like to her”, “relaxed”, “selfish”, “annoying”, “comforting”, “someone to look up to”, “kind with stuff”, “helpful, happy, buys stuff”, and two people mentioned that their mothers made them laugh. One child presented a reversed role answer and said that she comforted her mother and argued with her.

One example of a child unable to talk is to quote “*Don’t know any*” and he goes on to describe a situation where he is playing football with his mother’s assent.

Insecure-Cystic Fibrosis Group Profile

This group showed the most difficulty in responding to the question. Four of the sample were only able to give one word to describe their mothers, and there was the greatest tendency to describe the mother in terms of physical care amongst this group. This included “having a nice time together with cuddles”, “helpful”, “sometimes nice and buys things”, “takes me to fun places, well, 3-4 years ago”, “tidy”. Characteristics described included “happy”, “nice” (three times), “trusts me”, “bossy”, “special”, “friendly”, “funny”, “argues”, “annoying”, “loving”, and “kind”.

10.3 Use of Words to Describe Father

Children were asked *Can you tell me three words to describe the relationship with your father* and then they were asked to give specific examples to those semantic headings.

The four profiles concerning those words will now be presented.

Secure-Control Group Profile

Fathers were described using only positive characteristics by this group, “happy” and “funny” each being mentioned four times, “fun” three times and “kind”, “loving”, “friendly”, “nice” and “plays” all two times., other descriptors mentioned once included; “treats me”, “excited”, “safe”, “cuddles me”, “trustworthy”, “fair”, “we can get on”, “go places together”, “peaceful”, “I like his company”, “adventurous”, “makes me feel good” and “sporty”. An example was that of feeling “safe” : *“I was walking to the shop with him once and I saw these bad people who nick peoples’ money and stuff and I felt safe. He would look after me.”* .

Secure-Cystic Fibrosis Group Profile

This group described fathers variously as being: “physical”, “takes me places”, “likes Music” and “helps with schoolwork”. Characteristics used for fathers included; “annoying”, “likes to get out, doesn’t like staying in all day”, “spoils me”, “nice sometimes”, “close”, “caring”, “happy”, “friendly” and two people mentioned that he “helps by making me laugh”. To quote: *“If I don't feel too well in the mornings, he takes*

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me out for a walk, for fresh air, he plays games with me, just telling jokes and being silly, and I feel really good”.

Insecure-Control Group Profile

One child was unable to supply any descriptors. A couple of responses were physical, “loves sport”, and “always gets me things, kind”. The rest were characteristics which presented a far less uniformly positive profile than those seen in the secure control group. Adjectives used were; “hard”, “helpful when ill”, “horrible”, “sometimes nice”, “angry” (twice), “can’t talk”, “fun”, “caring”, one boy described his Step-father as “exciting”, “funny”, and said that they “get on well

Insecure-Cystic Fibrosis Group Profile

This group followed the pattern shown for it’s previous descriptions of self and mother, and showed three respondents unable to describe their father, apart from those who did not have contact with their father at present, to quote one *child* “*I don’t really have a relationship with my father*” The picture portrayed was of less intimacy between child and father than in the secure group. Physical characteristics were again listed by more people, variously “hard-working”, “untalkative”, “helps me with my physio”, “kind, gives me lifts”, “buys things” (twice), “takes me out”, and “tall”. One child said “I tell him off for smoking”. Adjectives used included; “bossy”, “punitive”, “angry”, “loving”, and “moody”.

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There were two mentions for “caring” and for “really good Dad”. “Fun” (twice) and “Funny” (three times) were mentioned, in contrast to the control cystic fibrosis group.

There were a number of inconsistencies and incoherence in their narratives, for example::

“He does care quite a lot, for example, I wanted to go on holiday with the Guides and my Dad said no, so he does care for me by not letting me go”

10.4 Affective Expression

The use of emotional terms used by each profile group is recorded below.

Secure-Control Group Profile

These children were able to demonstrate the widest range of words used couple with the greatest frequency. They used thirty-three different words representing eight different affective states. The children in this group would spontaneously speak using emotional terms and did not have to be prompted to provide them.

Secure-Cystic Fibrosis Group Profile

This group used twenty-two different words representing around six different emotional states, however this group used these words with considerably less frequency (55%) than in the secure-control group.

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Insecure-Control Group Profile

This group used only eight different affective words which represented just two emotional states. These words were not used with great frequency and in three cases were only offered after consistent prompting.

Insecure-Cystic Fibrosis Group Profile

This group used ten different affective words representing four different emotional states. Like the insecure-control group these words were not freely forthcoming and were not used with any frequency.

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PART 4

Discussion

11

Design and Development of the CAI

11.1 Overview of the Discussion Sections

The discussion, like the rest of this work, is divided into two main sections. The first section discusses the results and issues raised concerning the design and development of the CAI. The second section focuses upon the findings and implications of the cystic fibrosis study. The format for both of these sections is similar, in that a review of the initial aims and objectives are reviewed. Next, a number of caveats are made with respect to the limitations of the studies before discussing the findings and considering the wider theoretical and clinical implications.

11.2 Review of the Aims and Objectives

The design and development of the CAI part had three main objectives which will be reviewed and then discussed in turn before addressing the wider theoretical implications of the findings. At the outset of this study the following three aims were stated. First, to devise a developmentally sensitive assessment tool for measuring attachment in children aged between six and twelve years old, which included writing an interview protocol and coding manual. This overarching objective consisted of three central questions: a) Could an interview schedule be constructed that would be understandable to children in middle childhood; b) Would the responses to such an interview be quantifiably different from one another; and c) Would these responses be related to attachment theory and form the

basis of an attachment classification system. Secondly, could a coding system be devised that would be reliable, both in terms of the rating scales of that system and for the classification system. Third, would this new measure of attachment have validity when compared to the only other existing measure of attachment in middle childhood and with a measure of family functioning.

11.3 Limitations of this Study

There are a number of important limitations to this study. Firstly, in hindsight the study should have included discriminate measures of validity to control for psychiatric pathology and intelligence. This could have been covered by administering the Child Behaviour Checklist (CBCL) (Achenbach and Edelbrock, 1983) and perhaps a shortened form of the Weschler Intelligence Scale for Children (WISC-IV). The reason this was not done was there was a concern of including too many measures which would overburden the participants and not be able to be completed in one session. Upon reflection, it would have been possible to give the CBCL to parents to fill in without causing too much added work but this may have heightened their anxieties concerning the psychological functioning of their children.

Secondly, the small sample size relative to the number of statistical tests carried out means there is an increased chance of a Type I error, that is of finding a spurious effect. Convention suggests that greater levels of significance should be observed in such situations, for if the criterion for significance is at the 0.5 level and twenty tests are

conducted on data where in reality there are no differences, statistically speaking it is likely that at least one false positive could be observed.

Thirdly, the relatively small sample size means that even if children were demonstrating distinct patterns of attachment it would not be statistically possible to make meaningful three-way group comparisons especially if the group sizes varied dramatically.

11.4 The Interview Protocol

Is it possible to devise a protocol that would be understandable to children during middle childhood?

It has already been reported that it was feasible to write a protocol that attempted to tap into children's internal representations of attachment that could be understood by children in middle childhood. This finding is not to be underestimated as hitherto the vast majority of studies seeking to find out about attachment relationships in middle childhood have not asked the children directly about their experience (Cassidy, 1988; Kaplan and Main, 1986; Main et al, 1985; Oppenheim and Renouf, 1991; Wright et al, 1995). Hopefully, this finding may encourage others to adopt a similar methodology when researching attachment in middle childhood.

It became clear that the “relationship episode” prompts were vital in being able to elicit sufficient information upon which interviews could be subsequently rated. Children required different amounts of help, in terms of linguistic scaffolding, from the interviewer

which was taken into account when coding the interviews. Without such prompts it unclear whether the child was withholding information as a strategy or was simply unaware of the requirements of the interview. It was the presence of such prompts that distinguished the AAI from the CAI, which may well reflect an important difference in the way in which memory between adults and children is constructed. Another reason why these prompts might be necessary with the children is that the interview requires interviewees to talk about their current experiences; whereas the AAI asks adults about their retrospective childhood experiences. This may represent an underlying difference in memory structure, due to developmental and recency memory effects, but not of attachment organisation. Such a notion is in keeping with the idea of meta-cognitive monitoring (Main, 1991) which is the process of thinking about thinking, which encompasses the ability to hold a memory and reflect upon its validity, nature of source. Perhaps, the prompts in the CAI act as a means of "holding" the episodic memory (the examples) for the child, so that they are free to make the link with semantic memory (the adjectives).

It was also very important to reassure the children that the CAI was not a test, that there were no right or wrong answers, but instead they were telling their story about their family. Such an introduction proved useful in being able to allay a number of children's anxieties as some of the children thought they "had to do well, like in the spelling tests at school." The vast majority of children, however, did not appear to be inhibited by a

sense of loyalty to their parents; although it is possible that the few children who did appear concerned about speaking openly were worried about “telling” on their parents.

11.5 The Coding System

Are the responses to the CAI be quantifiably different from one another?

From the pilot stages of this project it became apparent that children responded to this interview in different ways. At a gross level, for example, some children were relatively at ease from the beginning of the interview and were able to provide relatively full responses to all the questions. Whereas others, appeared to experience difficulties in answering a number of the questions and even with additional help from the interviewer could not provide a fitting response. Furthermore, it seemed that some children were able to talk about affective states spontaneously whilst others appeared somewhat inhibited. Thus, from the early stages it became clear that there were differences between the children's responses and that the challenge of this work was to write a coding manual that would distinguish interviews upon the basis of these differences within an attachment framework.

Do the rating scales tap into the attachment system of children and how are they linked to attachment theory

The scales of the coding manual sought to establish with greater detail the differences in responses from the children within the framework of attachment theory. The scales will now be discussed in turn.

Scales determining Security

There were six scales that were hypothesised to be linked with security of attachment. These scales will be discussed in turn, outlining how they added to the coding system and their possible link with attachment theory.

Emotional Openness: This scale was helpful in making a number of distinctions between children's responses. It separated children's narratives upon the basis of frequency, richness and understanding of affective states. Upon the basis of these, it was possible to identify three groups of children when they were speaking about attachment related themes: those who became overwhelmed with emotion and became "stuck" in a particular part of their narrative; those who appeared to deliberately exclude affect and those who were able to speak relatively freely concerning emotionality.

These three patterns of response are consistent with Sroufe's (1996) model of affect regulation which links resistant-preoccupied patterns with up-regulation of emotion; avoidant-dismissing patterns with the down-regulation of emotion; and secure patterns with the modulation of emotionally charged experiences. Thus, it is possible that this scale may be important in being able to separate children's responses into more distinct attachment patterns if the sample size were increased.

Balance Of Positive And Negative References To Attachment Figures: Again, this scale proved useful in being able to differentiate between responses upon the basis of frequency

and the degree to which children were able to speak about mixed emotions with respect to their attachment figures. It was important that this scale was distinguished from *use of examples* because it was not concerned with richness of detail but rather with the ability of the child to contemplate both positive and negative aspects of their relationship with their attachment figures.

It is hypothesised that children who were locked into seeing their attachment figures from only one perspective would be more likely to be classified as “insecure” because they do not have an integrated model of different aspects of their attachment figures (Main, 1991). For example, some children said that their parents had never been upset or cross with them despite, in some cases, contradicting themselves within the interview. This contrasted markedly with the children who could freely speak about their attachment figures with mixed emotions. It is suggested that the latter hold “integrated” models of attachment whereas the former lack such integration.

Use of Examples : This scale initially proved problematic because it was essential to distinguish between children who genuinely could not remember and those who said “I don’t know” or “nothing” as a strategy of avoidance. In order to establish this, albeit at a rather crude level, it was essential to prompt for more concrete memories such as what the child did the previous day or where they had gone on holiday last year. It was hoped that this would allow one to possibly distinguish forgetting from “defensive exclusion” (Bowlby, 1980).

Based upon the interviews, it is suggested that this scale distinguished three types of response: those who solely provided concrete and physical descriptions; those who showed defensive exclusion; and those who were able to provide relatively full and free descriptions. In this respect, this scale may well prove critical in determining different types of attachment security and link to earlier comments about a semantic and episodic memory distinction (Main, 1991). Tentatively, one might suggest that the first two patterns linked to an avoidant strategy and the last one to a secure one. In the cases where gratuitous examples were given such a strategy may be linked to resistant attachment.

Resolution of Conflict: The theme of conflict, in the form of separation and loss, is central to conceptualisation of attachment theory (Bowlby 1969/1982, 1973, 1980; Hinde, 1979; Parkes and Stevenson-Hinde, 1982; Parkes et al, 1991). Infants who are classified as “secure”, unlike their “insecure” contemporaries, are able to tolerate such conflict knowing that it does not lead to the destruction of themselves or their caregiver. It could be hypothesised that “insecure-avoidant” children fear the destruction of themselves; “insecure-resistant children fear the destruction of the caregiver; and “disorganised” children fear the annihilation of both their caregiver and themselves.

Children’s responses to the CAI on this dimension broadly fell into four main types: those who through a process of negotiation with their attachment figures were able to resolve conflict; those who presented accounts where the attachment figures imposed their will

upon the child; those where the child appeared to be the only one responsible for resolving conflict; and those who presented passive accounts where “things just happened” in a somewhat mysterious and indeterminate way. These patterns of responses on this rating scale could relate to distinct pattern of attachment. The first one would clearly relate to a secure pattern. The second one could suggest a situation where the child holds a representation of an attachment figure who does not contemplate the needs of the child with any degree of subtlety. In the third type of response, the child has role reversed with the parent. The last response pattern might indicate a situation where the child holds a representation that there is nothing their attachment figures or they can do to make an impact upon their circumstances.

Self-Organisation: This scale was used to determine the degree to which the child conceived of themselves as an active agent who was able to exercise control over their own circumstances. It was hypothesised that this would be able to separate “secure” and “insecure” classifications upon the basis of passivity of action. Children who scored high on this scale demonstrated to the rater the capacity to learn from experience rather than to defend against. Such an observation is in keeping with attachment theory that suggests that those with an effective self are more likely to be “secure” in their attachment organisation (Fonagy and Target, 1997).

Coherence: Coherence was used a feeder scale but this score was then calibrated by positive and negative indices of coherence. This subsequent calibration procedure was

important so that it did not solely function as a summary score but added attachment related information in its own right. According to this scale, coherence is not simply a measure of verbal ability but more an analysis of the child's capacity to recall and organise experience in relation to semantic headings (Main, 1991).

Scales Determining Insecurity

There were six scales that were hypothesised to be related to insecurity, three of the scales related to mother and three to father. Again, these shall be discussed in turn.

Preoccupied Anger with Respect to Father and Preoccupied Anger with Respect to Mother: This scale proved to be rather difficult in being able to use as the vast majority of CAI responses did not contain preoccupied anger. This scale was problematic in two respects: the lower levels of inter-rater agreement and its lack of being able to distinguish between "insecure" and "secure" attachment would indicate that this scale needs to be elaborated further. It hypothesised that high responses on this scale would identify a distinct pattern of attachment which might correspond to the infant "disorganised" and parent "preoccupied-entangled" patterns. This scale may well be able to identify such an attachment strategy in middle childhood if it is administered to a greater number of children and/or to psychiatrically referred children.

Idealisation with Respect to Father and Idealisation with Respect to Mother: This scale seeks to capture the discrepancy between the generalised view of the attachment figure

and specific examples provided by the child; in this sense this scale is distinct from the “balance of positive and negative reference to attachment figures”. It is important to note that this scale was rated upon a continuum of “no idealisation” to “highly idealising”.

In order to rate this scale, the relationship episode prompts again proved critical as they enabled comparisons to be made between the semantic categories and episodic examples provided by the child. In this study, children who were high on “idealisation” tended to give less detailed examples. This observation would suggest that children who receive high scores on this scale are employing a dismissing strategy, in that the highly complimentary portrayal of their attachment figures serves to block any further contemplation of the nature of the child’s relationship with their caregivers.

Dismissal with Respect to Father and Dismissal with Respect to Mother: This scale sought to measure the degree to which children could speak about feelings of vulnerability with respect to their histories of separation and loss from their attachment figures. In the majority of cases in this scale was relatively easy to score as the children’s responses broadly fell in to three categories. Those who consistently and clearly expressed vulnerability; those who appeared to deliberately exclude speaking about their caregivers in valuing terms when reporting times of distress; and those who gave some acknowledgement of the impact of major separation events. It is hypothesised that high scores on this scale would relate to the infant-avoidant and adult-dismissing attachment strategies.

Will the responses be related to attachment and lead to forming an attachment classification system?

Attachment classifications of 'secure' and 'insecure' were assigned to each interview based upon the configuration of scores derived from the coding manual. It was understood from the outset that these were convenient labels, a heuristic device, in order to classify the responses based upon the scales. However, it appeared that distinct patterns of children's responses did emerge which were not incompatible with patterns of response seen in the Strange Situation and in the AAI. This tentative correspondence between responses to the CAI and responses to the measures of attachment in infancy and adulthood, suggested that the responses to the CAI were related to their attachment status.

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However, it may well be that the coding system separated children on the basis of some other variable, such as psychiatric disturbance, rather than on the basis of attachment. It was not possible within the framework of this study to control for this but this should be done in future studies.

11.6 Inter-rater Reliability

Inter-rater reliability was examined in three ways. Firstly, all the CAI scales were compared between the two raters. Secondly, the attachment classifications for both mother and father were compared between the two raters. Thirdly, the sub-

classifications for the CAI were compared between the two raters. The issues arising from these comparison will now be reported in turn.

Inter-rater Reliability for the Scales

The percentage of agreement on the rating scales ranged from 45 to 95 per cent. On some of the scales there was a high level of percentage agreement linked with lower correlations, this tended to occur on scales which were only rated within a restricted band and were therefore more sensitive to a difference in the rankings between the two raters. There were high levels of agreement ($r_s = .812 - .973$) between the two raters on all of the scales with the exception of two which were only moderate ($r_s = .678$ and $.601$). These scales were *Preoccupied Anger to Father* and *Idealisation with Respect to Father*. The lower agreement between raters on these scales may reflect the lack of information about fathers from some of the children which would lead to greater ambiguity in assigning ratings on these two dimensions. Indeed, both of these scales generally received a rating of 1 and therefore any differences between the raters were comparatively exaggerated.

The levels of agreement for the remaining ten scales were particularly good which could indicate that the coding system had been sufficiently operationised, especially with respect to anchor points, to provide a consistently high level of agreement between the

two raters. However, such levels of agreement are particularly unusual in the early stages of the development of a new measure.

Inter-rater reliability for the classifications

It was unexpected that there was exact agreement between the two raters concerning the assignment of a “Secure” or “Insecure” classification to mother and father. Again, such high levels of agreement could suggest the CAI coding system enables raters to consistently distinguish between two types of interview response. However, levels of agreement may well be inflated as the two raters had worked closely together writing the coding manual and thus had a increased level of shared understanding. The next step in the development of the coding system would be for the interviews to be coded by a naive rater using the manual which would establish the robustness of the coding system. Such an undertaking was outside the scope of this project but it is recommended that if the CAI is to be used more widely then it is essential that such inter-rater reliability is established.

Inter-rater reliability for sub-classifications

Inter-rater reliability was very high for the mother sub-classification allocation ($\tau = .979$) but much lower for the father sub-classification allocation ($\tau = .430$). The relatively low level of agreement for the father sub-classification may be due to the lack of information, especially with respect to attachment related themes, reported by a number of the children concerning their fathers. Furthermore, as fathers tended to be

described as more absent from their children's lives, evidenced by the lower frequency of child-father relationship episodes, it was in some cases difficult to distinguish between their probable experience and their internal representation of attachment. For example, one child when asked *"Can you give me three words to describe your relationship with your dad?"* replied *"Relationship - I don't have a relationship with my dad. He is always at work and busy."* Other interviews produced relatively neutral descriptions of fathers.

11.7 Psychometric Properties of the CAI

11.7.1 The relationship between the demographic variables and attachment security

The tendency for social class to negatively correlate with security of attachment was unexpected and unanticipated at the outset of this project. However, subsequent examination of the literature has revealed that this is not inconsistent with previous studies. Fonagy (1998) points out that attachment is powerfully influenced by its social context and that social inequalities, both directly and indirectly, have consistently been shown to predict security of attachment, with social advantage generally associated with secure attachment (Belsky, 1996; Murray, Fiori-Cowly, Hooper and Cooper, 1996; Shaw and Vondraa, 1993; NICHD Early Child Care Research Network). For example, in a study carried by Broussard (1995) in the inner city only 24% of infants were found to be securely attached while 32% were found to be insecure/disorganised.

11.7.2 Differences Between Insecure and Secure on the CAI Scales

The rating scales determined the assignment of children to one of two main classifications (“secure” vs. “insecure”) with respect to both parents. Significant differences were found across groups for all the CAI rating scales with the exception of two scales which were *Preoccupied Anger with Respect to Mother* and *Preoccupied Anger with Respect to Father*. The scales referring to anger were not predictive across groups because the scale was used very little, as evidenced by a mean of less than two to both parent in both groups. However, there was a tendency for the insecure group to receive higher scores on this scale and given that a preoccupied angry response is just one of five types of insecure response in the SAT, a sample size of forty is unlikely to detect a between group difference. This scale may prove to be particularly useful if the CAI were used on a psychiatrically referred group of children.

11.7.3 Internal Consistency

All the scales were demonstrated to be measuring the same construct as internal consistency did not rise with the exclusion of any on the scales. It would be perhaps too optimistic to assume that this was necessarily attachment, it could possibly be the result of some other variable, perhaps one even associated with security of attachment. There is, therefore, the need to ascertain to discriminant validity of the CAI.

11.7.4 Intercorrelation of the scales

The intercorrelation of the scales provide potentially useful information to draw parallels between the different patterns of attachment in infancy and adulthood. The information that may prove useful in this respect are the scales which have low correlations with one another despite the reported high internal consistency. The scales which fell into this category were the preoccupied anger scales with coherence , emotional openness, use of examples and self organisation. Also, the dismissal scales showed low correlations with the idealising scales and negative correlations with emotional openness, coherence, use of examples and balance of positive and negative references to attachment figures.

Such an observation could potentially identify three distinct patterns of responses to the CAI. First, children who give predominately angry responses which are incoherent, restricted in affect, limited in the number and quality of relationship episodes and in which they present themselves as impulsive. Second, children who give the reverse profile, that is their responses do not contain preoccupied anger but are coherent, affectively rich, full of relevant examples and they present themselves as active agents of planned action. Third, responses that are dismissing of attachment, but not necessarily idealising, and incoherent, restricted in examples, affectively limited and purely viewing attachment figures in negative terms.

At this stage it would not be possible to formally categorise these patterns. However, it is not inconceivable to think that the first pattern may correspond to the infant

ambivalent/ parent preoccupied-entangled strategies; the second pattern to architypical secure strategies; and the third pattern to infant avoidant/ parent dismissing strategies (Ainsworth et al, 1978; Main and Goldwyn, 1994)

11.8 Concurrent validity

Before discussing the main and sub-classification comparisons between the CAI and SAT there was one difference concerning the effect of the demographic variables that needs to be addressed. As mentioned earlier only the effect of social class was found to be significantly related to attachment security on the CAI. However, in addition to social class, the effect of one or two parent households was found to be predictive for attachment security on the SAT. Indeed, there were no “secure” responses on the SAT from the six children who came from one parent households. There are least two possible explanation for this finding which are not mutually exclusive. First, the SAT is more sensitive to the actual experience rather than the internal representations of attachment. Second, there is a link between “insecure” classification on both the SAT and CAI but due to the small number of one parent households in this sample this effect was not detected by the CAI.

Main Classification Comparisons

There was a moderate correlation between the SAT main classifications and the CAI main classifications with respect to mother ($\tau = .687$) and with respect to father ($\tau = .687$). Clearly there is an association between the CAI and the SAT, albeit a weak one.

It could be argued that both measures to some degree are measuring the same construct but that they are also measuring different things, even when allowing for measurement error. This is somewhat disappointing and encouraging. Disappointing because this reduces the concurrent validity of the CAI. Encouraging because the SAT has not been demonstrated to be a robust measure of attachment and would only offer limited validity of the CAI as a measure of attachment. It is therefore important to determine what the CAI is measuring but in the absence of a “gold standard” this become more problematic. One solution could be to administer the CAI to children who have been assessed in the Strange Situation as infants and whose parents have been interviewed with the AAI.

Sub-classification Comparisons

The association between the extreme ends security, as by determined by the CAI, appear to associate with insecure patterns on the SAT. This supports the idea that the classification “very insecure” probably contains at least two distinct patterns of attachment. If this were the case, it would be essential to identify, differentiate and classify those distinct insecure responses to the CAI

11.9 External validity

No statistical significance was found for CAI attachment classification to mother and father and the FACES family types (“extreme”; “mid-range”; “moderately balanced”; “balanced”). This could well be because to analyse these associations meant

looking at them in an 2 X 8 contingency table which meant with only 40 participants there was less power to determine a significant effect.

The child's perception of family cohesion and adaptability was statistically different for attachment security to mother. The children whose responses were classified as "insecure" were more likely to view their families less favourably on these dimensions, rating them as more "disengaged" and "rigid". According to Olson et al.'s (1981) formulation, "insecure" children would then perceive less "emotional bonding between family members" and "less ability for the family system to change its structure in response to situational and developmental stress" compared with the "secure" children's perceptions.

Such a finding needs to be interpreted cautiously, although there was a relatively high level of significance ($p < .01$) for the comparisons on the adaptability dimension, as FACES is a self-report measure and was administered after asking the child about attachment related themes. However, these findings are not incompatible with attachment theory (Bowlby, 1969/1982, 1979, 1988;), although it is important to bear in mind that there are many ways that a relationship might be specified between family functioning and attachment security. One explanation might be that "insecure" children are less confident concerning the accessibility of their attachment figures and thus report lower family "cohesion" scores; equally, the same children would perceive their

attachment figures as less responsive to them which may account for their lowered “adaptability” scores (Bowlby, 1988; Hinde, 1979; Sroufe, 1996).

Another difference between the two groups (“secure” vs. “insecure”) with respect to security of attachment classification to mother was on the discrepancy scores ($p < .01$). Children who were classified as “insecure” were much more likely to see their families as different from their mothers. Thus, mothers rated their families much higher on the dimensions of cohesion and adaptability than their children. This mismatch in perception is interesting when viewed through an attachment frame as it mirrors the experience of “insecure” children in the Strange Situation whose parents seem not to be attuned to their infants (Ainsworth et al, 1978). It may be this lack of attunement that mediates insecure attachment in infancy but maintains the insecure pattern through middle childhood.

11.10 Wider Theoretical Considerations

This part of the study raises a number of important issues concerning research into attachment in middle childhood, especially concerning its measurement and the implications of the usefulness and likely benefits of such research. For clarity, these points are dealt with under a number of sub-headings.

11.10.1 Measuring Change Over Time

One of the unique qualities of the CAI, compared with other psychological measures, is its attempt to capture an internal representation or state of mind with respect to

attachment in children aged between six and twelve years old. In many ways, such a measure may be of benefit in seeking to measure change over time, especially in psychotherapy outcome studies. However, the scales may well prove to be of greater utility in measuring such change rather than the global classifications which could be more resistant to change. If such a conjecture were correct, as Trowell (1998) has suggested for her psychotherapy outcome study with sexually abused adolescent girls using the AAI, it would provide a compelling argument for extending the number of scales and developing the existing scales.

Such a research strategy may be considerably more illuminating than comparing global attachment classifications, which at this stage are not fully operationalised and do not provide a detailed constellation of attachment patterns. Although, as stated earlier, the micro-analytical scores may not prove to be good predictors of later developmental achievement unlike the global rating scales (Parke and Tinsley, 1987). Thus, both the rating scales and global classifications are of use but for different purposes.

11.10.2 Different Attachment Classifications

The coding manual as outlined in this document did not set out to classify distinct attachment patterns, although a number of probable attachment patterns that may result from responses to the CAI have been discussed above. This discussion has not yet addressed the issue of disorganised attachment patterns. If this measure were to be

used with a psychiatric population it is expected that there will be a number of children who will fall into such a category.

Indeed, there were several interviews in the samples used for this study which may well provide useful indicators for operationalising such a classification. Such interviews were characterised by bossy and controlling children who provided unpleasant and tormenting narratives. This unresolved and disorganised attachment pattern is hypothesised to be linked to a controlling and punitive caretaking style (Goldberg, Muir and Kerr, 1995). The most probable candidate for this classification in this sample had strange gaps in her narrative, acted strangely with the interviewer and was preoccupied in an odd fashion. Thus, if there were more of these children it would be possible to classify a disorganised attachment pattern in middle childhood.. It is predicted that such narratives would contain dissociated responses, odd connections, bizarre images of death and a “switching-off” every time an attachment figure was mentioned (Carlson et al., 1989; Lyons-Ruth et al., 1990; Main and Hesse, 1990; Schneider-Rosen et al., 1985).

11.10.3 Issues of Measurement

This project has clearly demonstrated that it is possible to ask children between six and twelve years about their relationships with their parents. The issue of how to code those responses is far from resolved. A number of measurement issues concerned with using the CAI in middle childhood will now be discussed. These include paying greater attention to the behaviour children exhibit during the interview, whether there are

different types of attachment security in middle childhood and the issue of whether attachment is independent of verbal ability and intelligence

Behavioural Information

The current coding instructions pay particular attention to the content and form of the responses and uses gross behavioural information when assigning an attachment classification. However, there is a need to operationalise the coding of the children's behaviour throughout the interview for three main reasons. Firstly, a more detailed behavioural analysis may provide important additional information in being able to further separate patterns of responses to the interview beyond the 'secure' and 'insecure' classifications, providing more subtle distinctions between the children's responses. For example, a child who repeatedly avoids eye contact when speaking about emotions may be distinguished from a child who maintains eye contact throughout the interview.

Secondly, the provision of a coding system which fully incorporated both behavioural and representational expressions of attachment in middle childhood would theoretically bridge the gap between the study of attachment in infancy and adulthood (Ainsworth and Wittig, 1969; Ainsworth, Bleahar and Walls, 1978; Main, Kaplan and Cassidy, 1985). As already stated, attachment is considered to traverse the whole of the lifespan (Bowlby, 1969/82) and although there has been difficulty in finding an analogue to the Strange Situation in middle childhood (Shouldice and Stevenson-Hinde, 1992), attempts to capture salient behavioural information should not be abandoned. In this respect, the CAI is unique in

that the child's behaviour during the interview forms the background, and an important third variable along with content and form, against which the child's representation of attachment can be inferred. The contribution of the behavioural analysis from this study was of sufficient weight to endorse the recommendations of others who state that both the content of the narrative and the behaviour of the child needs to be taken into account (Oppenheim and Renouf, 1991; Hammond, 1993). Additionally, a research strategy that is broader, in the absence of information to the contrary, is more likely to prove fruitful.

Thirdly, it would be too difficult to justify the added complications of video recording the CAI if the behaviour of the child is not specifically taken into account. If a coding system were to emerge that ignored behavioural information then the interview should be audio-taped rather than video recorded.

Age Related Attachment Patterns

The possibility that there are different attachment patterns in middle childhood that are parallel to the Strange Situation and Adult Attachment Interview has already been addressed. However, this assumes that attachment organisation will manifest in the same ways during this period of development. It is possible that there are other patterns which are peculiar to this age group, such as activity fears; insecure interactions with peers; gender differences with associated social desirability, e.g.; boys may be more reluctant to speak about relationships in emotional terms; and transitional issues around changing schools which may be linked to an increased internal sense of independence.

Is Attachment Unified of Person Specific?

It has been shown that a child may be classified as secure to one parent but insecure to the other. This finding is in keeping with previous attachment research in infancy (Fox et al. 1991; Main and Westen, 1981) but not in adulthood (Main and Goldwyn, 1994). For example, the Strange Situation procedure gives rise to an attachment classification to mother and father respectively, whereas the SAT and AAI give rise only to a global attachment classification. Theoretically, it is of great interest to know when, if at all, there is a combining of an individual's state of mind with respect to attachment to justify only allocating a global attachment rating. The results of this part of the study would suggest that children between the ages of six and twelve years do not necessarily hold a global state of mind with respect to attachment. Instead, it appears that there is the possibility in some children of at least two states of mind with respect to attachment, one to mother and one to father, which are to some degree from one another.

Attachment, Intelligence and Verbal Ability

The issue of the relationship between intelligence and verbal ability is far from straight forward and rather complicated to tease apart. It has already been stated that infants classified as "secure" in the Strange Situation are more likely to have improved cognitive abilities (Main, 1973; Matas et al. 1978) compared with those children classified as "insecure". Therefore a central issue for this study is whether the measure of attachment has simply captured some aspect of improved functioning and labelled as "security".

It is not possible to determine these issues based upon the results of this study as no formal control was made for intelligence or verbal ability. Having said that, there is some suggestive evidence from this study which refutes the claim that all that is being measured is verbal ability or intelligence. Firstly, there were no gender differences with respect to classification (secure” vs. “insecure”) on the CAI. If the coding system were purely measuring verbal ability, one would predict that girl would more likely be classified as “secure” than boys.

11.10.4 Ethical Considerations

There are a number of important clinical and ethical questions that need to be raised. It is possible that the CAI could have an unsettling nature on some children and leave them with difficult thoughts following the interview. It would therefore be important that the CAI, if used for research purposes, is administered by experienced and sensitive interviewers who have been adequately trained. Furthermore, it would a minimum of good practice to offer additional help to children who were troubled as a result of the interview. However, a balance between acknowledging that it may be stressful and assuming that it will be stressful needs to be made. It is the author’s experience that children do not find this interview unduly stressful if it is administered with sensitivity and understanding.

11.11 Future Development of the CAI

The CAI has shown to be of use in being able to distinguish between children based upon their pattern of responses both in terms of content and form. As a result of this study, it is clear that the protocol could be improved in a number of important ways. Firstly, the interview schedule does not contain any questions which address the child's experiences and associated feelings of rejection and exclusion. It would be relatively easy to insert a question such as "*Can you tell me about a time when you felt rejected or left out*", followed up with the standard prompts, which may elicit responses which would help in determining the sub-classification of the child.

Secondly, the inclusion of the prompts around relationship episodes proved to be key in determining differences between children. The insertion of a similar universal prompt, this time tapping into the reflective capacities of the child would be a useful and perhaps critical addition to the protocol. Such a prompt could be integrated with the relationship episode prompts and phrased along the lines of "*What do you think your mum felt/thought (when she sent you to your room)?*". Such a development would be in keeping with the finding outlined previously (Fonagy, 1996; Fonagy, et al, 1991, 1994; Fonagy and Target, 1997) which suggested that the capacity to reflect upon others' mental states is positively related to security of attachment. If such a prompting strategy were adopted it would enable a new scale to be constructed which could be called "*Reflective Function*" which would broaden out the scope of the CAI and enable

comparisons to be made with AAI which had only been coded using the Reflective Function Scale (Fonagy, Target, Steele and Steele, 1998).

Thirdly, the current interview protocol ends rather abruptly and a more satisfactory ending might be *"If you had three wishes when you were older what would they be?"*. This would ensure that the interview might end on a lighter and more playful note and again may elicit helpful information concerning the child's attachment status. Trowell (1988, personal communication) has used such a question with adolescent girls and has reported that it generally has proved to be a helpful way of ending the interview.

The coding system, based upon the interview responses in this study, could be improved by the creation of a passivity scale and a facilitative scale, in addition to the reflectiveness scale outlined above. A passivity scale would be in keeping with the notion from the AAI (Main and Goldwyn, 1994) that passivity of discourse, as evidenced by an inability to finish sentences is a defining feature in certain types of insecurity. A facilitative scale would seek to code the degree to which the child had internalised their attachment figures as helpful rather than hindering objects, such a scale would be at the heart of attachment theory (Bowlby, 1969/1982, 1979, 1988).

The qualitative descriptions of the CAI demonstrated how this interview elicits a vast amount of material that is not directly considered within the current coding system. The further development of this manual would do well to pay attention to this qualitative

information. For example, the self concept question at the beginning of the interview could possibly relate to attachment processes as children may have a different sense of self organisation dependent upon their attachment status. The qualitative descriptions in this study indicate that “secure” children appear to have a much greater sense of self. This is in keeping with others who have already suggested that “secure” children possess a flexible and creative sense of self, whereas “avoidant” children have a rigid sense of self which although strong is also brittle; and preoccupied-entangled children do not have a sense of self because they are too busy working out what belongs to them and what belongs to the other people to possess an adequate sense of self (Fonagy and Target, 1997).

11.12 Summary of Findings

This part of this project has documented the initial stages of the design and development of a measure of attachment in middle childhood which will be continued to be refined and extended by others. Within the larger framework of the CAI's continued development, the preliminary investigations outlined in this document can be considered a pilot study. On the basis of this, the CAI holds much promise of being able to capture important aspects of the inner worlds of children in middle childhood that hitherto have not been systematically studied. However, there is much important and essential groundwork that needs to be undertaken before the CAI can be more widely employed.

This work includes establishing the utility of the existing coding manual with greater rigour by a naive rater re-coding the existing interviews. Furthermore, additional psychometric properties of the CAI need to be established, addressing issues such test-retest reliability, controlling for language ability and intelligence, in addition to developing new scales and refining the existing

In sum, it is hoped that this study has clearly demonstrated that the CAI has benefit both clinically and in research. At the outset three questions were posed concerning the CAI protocol. First, would it be possible to directly ask children about their experiences of childhood and of their relationship with their parents. Second, would the responses to this interview show recognisable individual differences which could lead to identifiable and distinct groups. Third, if there were identifiable patterns emerging from the narratives would they relate to the attachment status of the child. This study has shown that the answer to all of these questions, to some degree, is in the affirmative.

12

Cystic Fibrosis Study

This section, like the previous one, is divided into a number of smaller sections. First, the hypotheses set out at the beginning of this study are reviewed. Second, the limitations of the study are outlined. Third, the results of each measure are reported and linked to attachment theory. Fourth, the qualitative differences in the responses to the CAI between the children with cystic fibrosis and the children in the control group are discussed. Fifth, a section concerning the perspective of some of the parents is presented. Sixth, the clinical implication of this study are discussed. Finally, a conclusion and number of recommendations are offered.

The effects of the demographic data are not addressed in this here as they have already been discussed the previous section.

12.1 Review of Hypothesis

At the outset of this part of this study a number of hypotheses were made which proposed that the quality of attachment and family functioning between a group of children with cystic fibrosis and a control group would be quantifiably different. It was predicted that the cystic fibrosis group would be more likely to be classified as 'insecure' and that they would have different patterns of family functioning.

12.2 Limitations of this Study

There are a number of limitations to this part of the study which are additional to the ones outlined in the previous section. Firstly, it was ambitious to be developing a measure whilst at the same time using it as a test, as the measure had yet to be validated.

Secondly, employing discriminant measures of validity, such as the CBCL and a shortened form of the WISC, with this group would have been useful, especially in being able to control for psychological disturbance. However, some have argued that the CBCL is inappropriate to use with children with chronic illness as scores can be artificially inflated due to inherent health problems (Perrin, Stein, and Doctar, 1991) and was not feasible within the acceptable protocol for this sample.

Thirdly, it not possible to argue from insignificant findings due to lack of power with this study. At the outset it was anticipated that the effect size between the treatment and control groups would be large (.80). There would be 80% power to detect a difference between a normal group where the proportion of security is 60% and a cystic fibrosis group where the proportion of security is 30% where the sample size in each group is 40. Within the time restraints of this project, it was not possible to interview 40 children for each group.

12.3 The Childhood Attachment Interview

CAI Main Classifications

Within the cystic fibrosis sample there was a greater number of “insecure” than “secure” classifications for mother and father respectively. Furthermore, there were three children who were classified as “secure” with mother but “insecure” with father. This demonstrates that the classification to mother compared to father is independent of one another for a small number of children. This observation is in keeping with previous studies which report that there is no correlation between the pattern of attachment with mother and father (Main and Westen, 1981; Fox et al., 1991).

The only significant finding when comparing main classifications was that children with cystic fibrosis were more likely to be classified as “insecure” with respect to their fathers compared with the children from the control group. This observation needs to be interpreted with caution due to the limitations of the study outlined above. However, such a finding would suggest at least three possible explanations.

First, this is a spurious finding. This suggestion is a possibility but it could be argued that the strength of the finding was well within conventional limits ($p=.024$); was predicted at the outset of the study; and was one of only two planned tests (Chi-squared tests for classification to mother and father respectively).

Second, there is a greater number of “insecure” classifications between children with cystic fibrosis and their fathers than with their mothers. Such a conjecture would not be in keeping with previous studies (Main and Westen, 1981; Fox et al., 1991) which have reported the distribution of attachment categories across mother and father groups is the same. Furthermore, it is not possible to argue from this finding that children with cystic fibrosis are more likely to be “insecure” with respect to attachment to their fathers than to their mothers, as one cannot argue from insignificant findings.

Third, there is greater proportion of “insecure” classifications, to both mother and father, for children with cystic fibrosis compared to children without cystic fibrosis. It could be argued that this study only observed this difference for fathers and not mothers due the small sample size. This premise would be in keeping with studies that have observed a greater proportion of “insecure” infants with cystic fibrosis when compared with health controls (Goldberg, et al. 1995; Simmons et al., 1995). To establish if this speculation is well founded, it would be necessary to extend this study to include more children in both the cystic fibrosis and control groups.

If this were found to be the case, the means by which insecurity is passed on inter-generationally from mother-to-child and father-to-child may be different. Mothers are generally the principal caregivers and the ones who become more involved with their children’s treatment from the outset (Angst, 1997; Bryon, 1998). This involvement could lead to a preoccupation with the physical care of their child, at the expense of

emotional availability. Alternatively, fathers of children with cystic fibrosis may feel more shut out of their children's lives than the fathers of children without cystic fibrosis and thereby distance themselves from their children (Angst, 1997).

However, it is unlikely that patterns of attachment are passed on purely behaviourally. For example, previous studies have shown there is an association between the mothers' *state of mind* (italics mine) with respect to attachment prepartum and infants' subsequent attachment classification in a standardised laboratory procedure (Fonagy et al., 1991). It is more likely, that some parents' states of mind with respect to attachment are affected upon hearing the news that their child has cystic fibrosis which then affects the nature of the parent-child interaction. Such a model would also offer an explanation for the inter-generational transmission of secure attachment patterns.

CAI Scales

There were no statistical difference between the cystic fibrosis and control groups on any of the scales. However, on all the scales the cystic fibrosis group had mean scores that were towards the pole of insecurity compared with the normal group's scores coupled with higher standard deviations. This could be explained by the presence of a larger "insecure" type group within the cystic fibrosis sample.

12.4 The Separation Anxiety Test

No statistical significance was attained between the cystic fibrosis and normal groups on this measure. This could mean that there are no significant differences between the two groups on attachment security as assigned by the SAT coding system. However, as outlined earlier it is not possible to argue from insignificant findings when the sample size is too small.

It is of interest to note that there are twice as many insecure children in the cystic fibrosis group compared with the normal group. Furthermore, only the cystic fibrosis group contained “E” type responses (“E1”=4; “E2”=3). These responses identified passivity and angry/conflicted responses. It is difficult to comment as to whether this is of any significance given the relatively small numbers in each group. Upon reflection it would have been useful to conduct a sub-classification analysis across group where the sub-classification were reduced to “secure”, “insecure-dismissing” and “insecure-conflicted”.

12.5 The Family Adaptability and Cohesion Scales

It was surprising that no differences were found between the two groups with this measure. It was predicted at the outset that there would be differences in family functioning between the families in the cystic fibrosis group and in the control group.

There were a number of children who seemed to experience their parents and their family structure from a markedly different perspective to their mothers. Thus, they reported that

their family structure was 'rigid' and 'disengaged' whilst the parent gave a report of a 'connected' and 'very flexible' family. In this study, there were seven mother-child dyads with high discrepancy scores (>20 ; $n=7$). Of these, the four that were in the control group were all rated on the CAI as "secure" to both parents; whereas the three in the cystic fibrosis group were all classified as "very insecure" with both parents.

The inferences that can be drawn from this finding are restricted due to the small sample size and the limitations inherent in the FACES questionnaire, namely that the information obtained is based solely upon self-report. Having said this, the high discrepancy scores on the FACES may be an example of what Bowlby refers to as a suppression of a family context (Bowlby, 1973), in which he describes the inclination that parents have to omit, suppress, or falsify the role that their behaviour or feelings may be playing in their children's emotional problems. If this were the case, these findings would indicate that the suppression of a family context could be an important correlate of 'insecurity' of attachment .

Many of the parents of the children with cystic fibrosis said they sought to minimise the impact of their children's condition by focusing on the positive. Such a strategy may well be adaptive and essential but the corollary of such an approach might also lead to a failure to be able to acknowledge their children's and their own emotional needs which would be further compounded by the continued need for regular physical treatment of their child.

12.6 Qualitative Differences Between Groups

The qualitative analysis indicated that the children with cystic fibrosis tended to use less emotional words than the children from the control group. Instead, the children in the cystic fibrosis group would often describe their parents in terms of what their parents did for them practically rather than speak of their relationship with their parents or of their parents qualities. For example, the three children who spoke of their parents sorting out a problem at school contrasted markedly with the three children in the control group who said their parents would comfort them and then the child would go back to school and deal with the difficulty themselves. The children with cystic fibrosis consistently used words which described themselves in the passive voice and described situations where they were “done unto” rather than being enabled to deal with situations themselves. The children’s experience of considerable and continued contact with medical interventions, that they have little say over, may have either caused or reinforced the passivity observed in these children.

For all the qualitative profiles it was the insecure-cystic fibrosis group that seemed to be most compromised. It perhaps that the cystic fibrosis group are showing a different pattern of insecurity to the children in the control group. It may well be that the cystic fibrosis group contains a number of “disorganised” type responses.

Impoverished Examples

There were a number of children with cystic fibrosis who consistently provided impoverished examples, despite frequent opportunities to elaborate further. It would not be inconsistent to think that these children have been adversely affected by cumulative trauma. This trauma could result from the children being exposed to a series of unpleasant experiences from primary caregivers from their earliest days. Such experience may cease to be benign in the absence of an understanding of the relationship between the disease process and the necessary treatment.

If this were the case, asking these children about specific incidents and prompting for greater detail may bring to mind an episode with unpleasant association which leads to the blocking of that memory. Thus, in situations where the child could readily provide adjectives to describe their parents but could not elaborate upon those descriptions may well reflect a process in which the child is able to access semantic truth which is unsubstantiated with episodic information because of the emotional valence of that information.

12.7 Parental responses

Although parents were not formally interviewed about their experience of having a child with cystic fibrosis quite a number of them seemed glad to speak to the interviewer about that subject. The information provided was unsolicited but brief notes were made of the content of conversations shortly afterwards. It was thought that such information

may add to our understanding of examining the impact of having a child with cystic fibrosis with the framework of attachment theory. A number of discussion points follow which arose out of those conversations with parents, predominantly mothers. The points are organised thematically.

Care-managers rather than Mothers

Several mothers spoke about the how they saw themselves more as care-mangers than mothers. One mother in particular said she knew she was at greater of giving birth to a child with cystic fibrosis because a number of her family had died as a result of the illness. Her son tested positive following birth and she said that she decided there and then that she would not get really close to him. She added, that in a funny way, his having cystic fibrosis fulfilled her childhood ambition of becoming a nurse and that now she could nurse him but she did not necessarily feel like his mother. She said that such a care-taking role protected her from feeling too close to him and would make it easier when he died.

Another mother said that she did not have time to feel like a real mother with her child. She said that she was worrying all the time about him and was particularly concerned that he should carry out his treatment and undertake additional exercises. She said that she could not stand the thought of him being unwell and so was determined that he should be well. She said sometimes she did not feel like a “real mum” and found it hard to relax or have fun with her son.

The stories of these mothers may illustrate the ways in which parents defend emotionally protect themselves from the distress of having a child with a chronic illness. Such a defence is undoubtedly adaptive and necessary to enable some parents to continue caring for children day-in day-out. However, it is possible that this emotional blocking between the parent and the child may hinder the child's experience of coming to learn that their attachment figure is a secure base. It is perhaps here that we see two very powerful instinctual process in conflict with one another, those of parenting and attachment.

Ignoring the Disease

There were other parents who said they thought that their child was not affected by having cystic and that were just like any other child. One parent said they wanted to treat their daughter as if she did not have cystic fibrosis as the mother was worried that her daughter would "use" having cystic fibrosis as an excuse to avoid doing things she did not like doing.

12.8 Theoretical and Clinical Implications

As mentioned earlier, it not possible to draw any definitive conclusions from this study. However, there were a number of observations in the qualitative analysis of the CAI responses that merit further comment, especially with respect to both the theoretical implications for attachment theory and the clinical implications for psychological services to children with cystic fibrosis and their families.

The value of studying atypical populations

Investigating the quality of attachment in children who have cystic fibrosis, or any other chronic illness, affords a unique opportunity for examining children who have been exposed to a caretaking environment which is often dominated by a preoccupation with the physical rather than the emotional. Treatment regimens, the likelihood of further medical complications and the certainty of a premature death have already been shown to have an impact upon mother-child and father-child relationship (Ievers and Droctar, 1996). Such a situation provides a framework which, in terms of the development of attachment theory, is of similar value as the maltreatment studies reported previously (Schneider-Rosen et al., 1985). Studies such as this one provide an opportunity to examine the qualitative differences in the attachment relationship which can lead to an increased understanding of how and why attachment process develop.

Pathways of Insecurity

As mentioned earlier, the presence of cystic fibrosis per se does not produce psychopathology in the nuclear family but increases the vulnerability of family members to the stresses of life (Coven et al, 1986; Tourmina et al., 1981). In the same way cystic fibrosis might not directly cause an increase in “insecure” attachment classification in such children, rather the presence of the disease predisposes to a situation where the principal caregiver is preoccupied and emotionally unavailable at critical times of the child’s emotional development. Such a scenario is hypothesised to lead to a situation where the child would not necessarily be able to use their attachment figure as a “secure base”.

Specific Types of Insecurity

It would be of great interest to determine if there were a preponderance of insecure-avoidant children, or some age appropriate correlate, within the insecure group. Based upon studies using standardised laboratory observations, a link has been indicated between attachment security and nutritional status during the first three years of a child's life (Simmons et al., 1985). Given this, it would be interesting to determine whether there was a link between treatment compliance, further medical complications and classification of attachment security. If such a link were found, it might be possible to target particular interventions at "at risk" groups which would undoubtedly prove a cost effective strategy.

Issues of Emotion

There seems to be some evidence from this study to suggest that some children with cystic fibrosis are at greater risk for emotional impoverishment. This could be explained by an accumulative stressor explanation, in that it is not stresses in and of themselves that produce the risk, but simply the frequency of stressors. If this were the case, it would seem essential that those potential "at risk" families were targeted and provided with additional psycho-social help. The precise mechanism for doing this is outside the scope of this study and would need to be determined at a service level.

Given the potential suppression of family context (Bowlby, 1993) that may be experienced by cystic fibrosis families, and its potentially detrimental effect on the

emotional well-being of family members, especially children, this may well lead to clinicians considering offering supportive settings which facilitate open communication. Such environments would need not only to give heed to the physical consequences of the disease, but also the emotional impact on all family members concerned. However, such a service should in no ways be forced upon families and clinicians should be respectful of each family's way of coping.

The Role of the Father

Another implication of this study, albeit a tentative one, is that fathers are potentially less involved with their children than fathers of children without cystic fibrosis (Angst, 1997). If such a finding were substantiated, it would provide important justification for producing a programme which emphasised the importance of the father's involvement in their children's overall development.

Loss of Normal Development

It is known that many parents of children with cystic fibrosis focus upon the physical demands of the illness rather than the normal developmental needs of the child from the earliest months of the child's life. Such an emphasis, in and of itself, could explain why there might be increased "insecure" attachment classifications in this population. One of the ways in which this might be ameliorated would be to offer information about normal development to parents at the same time as talking to them about the impact of cystic fibrosis. It is suggested that something along the lines of a non-directive play intervention

would greatly assist in the process of parents viewing their child as one with a degree of agency that might otherwise be overlooked. It is argued, that such an approach may reduce the objectification of the child and may enable the parents to delight in the emerging emotional relationship.

12.9 Conclusion and Recommendations

This study of attachment in children with chronic illness, whose lives have been severely disrupted by continued medical interventions, resonates with the very origins of attachment research (Robertson, 1989). This line of inquiry may broaden our understanding of attachment processes from a theoretical perspective and hopefully provide models which could influence clinical practice, especially in regard to paying attention to the emotional aspects of the parent-child relationship.

Clearly, there is a need to extend this study in order to establish whether some of the above conjectures are confirmed or refuted. It is the intention of the author to continue to interview children with cystic fibrosis and arrangements are being made to add additional measures to determine discriminant validity with the remaining children.

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Appendices

APPENDIX 1
UNIVERSITY COLLEGE LONDON MEDICAL SCHOOL

Administration
Gower Street
London
WC1E 6BT

Telephone 0171 387 7050
Direct Line 0171 209 6305
Fax 0171 383 2462

All correspondence to:

Mrs Vanessa Revill
Committee Secretary
Joint UCL/UCLH Committees on the Ethics of
Human Research: Committee Alpha
(External address as above.
Internal address/deliveries by hand - 6th Floor, St.
Martin's House, 140 Tottenham Court Road
(opposite Warren Street Underground Station).



THE QUEEN'S
ANNIVERSARY PRIZES
1994

7 February 1996

Dr M Target
The Anna Freud Centre
21 Maresfield Gardens
London NW3 5SH

Dear Dr Target,

Joint UCL/UCLH Committees on the Ethics of Human Research: Committee Alpha

No: 95/2994 (Please quote in all correspondence)

Title: A core battery of change measures for the psychological treatment of children

Thank you for your letter of 29 January supplying further information at the request of the Committee. I am writing to let you know that this application is now approved. You may therefore go ahead with the study.

Please note that it is important that you notify the Committee of any adverse events or changes (name of investigator etc) relating to this project. You should also notify the Committee on completion of the project, or indeed if the project is abandoned. Please remember to quote the above number in any correspondence.

Yours sincerely,

Professor M Hobsley
Chairman

APPENDIX 2

«Title» «Mothers_First_name» «Mothers_Surname»

«Address»

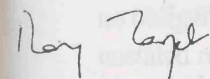
«Address2»

«Date»

Dear «Title» «Mothers_Surname»,

As I hope you remember, we have written to you previously concerning the Camden & Islington / University College London Research Project working with primary school aged children. Unfortunately, we have not been able to make contact with you and are unsure if you are interested in learning more about the project to decide if you would like to join.

If you are interested in learning more about the project, please let us know and we will contact you. However, if we do not hear from you shortly we will assume you do not feel joining the project is appropriate.



Mary Target Ph.D.

Senior Lecturer in Psychology
University College London

X

Date:

I «Title» «Mothers_First_name» «Mothers_Surname» and my child «Childs_First_name»

«Childs_Surname» would LIKE / NOT LIKE to be contacted by one of the research team to explain more about the project, and to see whether we would like to join. Our telephone number is

.....

(PLEASE CHANGE INFORMATION IF NOT ACCURATE)

APPENDIX 3

CAMDEN & ISLINGTON / UNIVERSITY COLLEGE LONDON RESEARCH STUDY

RESEARCH INFORMATION: PARENT

The Study's Purpose:

The purpose of this study is to understand child development and change. The tasks you and your child are invited to participate in will increase our knowledge of problems children are referred for and how they change following therapy. We will be able to share with you the overall results of the project as they become clear to us, if you would like us to.

What the Study Involves:

For you: You will be asked to complete questionnaires and to participate in interviews about your child's behaviour and general milestones. This will take approximately four hours in total, completed usually over two sessions. We would be able to meet you and your child at the same time or separately, at our research facilities in Hampstead, or in your own home.

For your child: These tasks are fun and administered in the manner of play. There is an interview about friends, a story that will need to be completed using toys, a story with pictures needing matching faces, and self-administered questionnaires. These tasks should take approximately five hours in total, completed over three sessions.

Participation:

Although we hope that you and your child will help us in carrying out the project, you are under no obligation to do so and are of course free to withdraw from the study at any time for any unstated reason. Your decision on whether or not to take part, or not to continue, will not affect your child's care in any way. However, we are hoping to follow a group of children over three years, to look at change over time, and would greatly appreciate those families who feel able to stay involved for follow-up appointments.

Confidentiality:

Written records of all research appointments will be kept securely and anonymously, identified by serial numbers. Three of the tasks will need to be video-taped, and in these cases, the material will be stored very securely without names. Apart from being the basis of some ratings for the project, they may also be used for research training purposes within the project. Publication of results will be based on statistical descriptions of groups, and not involve disclosure of individual or identifiable information. Parents would be able to see all research records relating to their child, if they wished.

*The Research Team can answer any problems or queries,
please contact Duncan Barron on 0171 794 2313*

APPENDIX 4

CAMDEN & ISLINGTON / UNIVERSITY COLLEGE LONDON RESEARCH STUDY

RESEARCH INFORMATION: CHILD

Why Are You Doing This Study?

We would like to know more about people like you, and the only way to find out is to ask.

What Will I Be Asked About? What Will I Have To Do?

You will be asked to do a number of different things :

- a) Be asked about your friendships;
- b) Listen to stories and use toys to make up the endings;
- c) Listen to stories with pictures and put matching faces on the people in the stories;
- d) Fill in two questionnaires about how you feel and what you think.

We will also be seeing the person who looks after you, to ask them a few questions. But primarily, we are interested in what you have to say.

How Long Will It Take To Do This? Where Will I Do It?

It will take about five hours to complete all of the above games. You and your parents will decide where you want to do this.

What If I Don't Want to Join or Change My Mind?

Whatever you decide to do will not affect your care at the Clinic, even if you decide later you don't want to be part of the project any more. If you find anything distressing or you change your mind in the middle, just tell us and you can stop. It is no problem, and you wouldn't need to tell us why.

Will Anyone Else Know What I Say?

Everything you do and say will be kept anonymously and confidentially - that means no one will know it is you - we use numbers and not your real names. Also, everything is kept locked away so no one can get to them.

*** All proposals for research using human subjects are reviewed by an ethics committee before they can proceed. This proposal was reviewed by the Camden & Islington Community Health Services NHS Trust on the Ethics of Human Research as well as the Joint UCL / UCLH Committees on the Ethics of Human Research: Committee Alpha ***

APPENDIX 5
C O N F I D E N T I A L

University College London

PARENT CONSENT FORM

CONSENT TO PARTICIPATE IN RESEARCH STUDY

I (name of Parent/
primary carer*)

of (name of child)

Address:
.....
.....

agree that my child/ward* may take part in the research project undertaken by the University of London.

I give my consent for members of the research team to contact my child's/ward's school and for teachers at the school to complete questionnaires on my child's/ward's abilities and behaviour at school.

School Address:
.....
.....

School Contact Name..... **Position:**

I confirm that the nature and demands of the research have been explained to me and that I understand and accept them.

I also understand that I may withdraw and may withdraw my child/ward from the research project if I find that I am/they are unable to continue for any reason or at any time.

Signed **Date**

Witnessed by **Date**

INVESTIGATOR'S STATEMENT

I have explained the nature, demands and foreseeable risks of the above research to the subject.

Name **Position** **200**

Signed **Date** *delete as appropriate

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C O N F I D E N T I A L

University College London

CHILD CONSENT FORM

CONSENT TO PARTICIPATE IN RESEARCH STUDY

I (name of Child)
of (address)
.....

agree to take part in the research project by the University of London.

I have been told what the Study is about and/or I have read the information sheet about this study which explains what I have to do. I have asked any questions I might have.

I understand that taking part in this project is not related to my treatment in any way.

.....
I know that at any time I may decide not to continue if I do not want to.

Signed **Date**

Witnessed by **Date**

INVESTIGATOR'S STATEMENT

I have explained the nature, demands and foreseeable risks of the above research to the subject.

Name **Position**

Signed by **Date**

CHILD ATTACHMENT INTERVIEW (CAI)

1. Tell me three words that describe your relationship with your mother.

These words (X1-3) are noted and followed up The following questions:

Tell me when she made you feel X1

Tell ne when she made you feel X2

Tell me when she made you feel X3

2. Tell me three words that describe your relationship with your father.

These words (X1-3) are noted and followed up The following questions:

Tell me when he made you feel X1

Tell ne when he made you feel X2

Tell me when he made you feel X3

3. What happens when you are upset/physical hurt/ill?

Again ask for specific incidents.

4. Do you ever feel left-out?

(Tell me about a time when you felt no-one understood you)

5. Tell me what happens when you are punished at home?

(Tell me what happens when you do something wrong at home)

This question may be followed-up with supplementary probing, asking what are the different ways the child is punished. Questions can also be asked about frequency and clarification may be needed concerning the meaning of a given discipline, i.e. "I get the wooden spoon".

6. Tell me about a time when you found your parents confusing.

7. Tell me about a time when you felt really frightened?

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8. What do you do when you are worried about something?

9 Tell me about a time when no-one understood you?

10. Has anything that you really cared about been take away from you/

11. Do you ever worry about your parents when you are not with them?

12. What happens when when your mum/dad gets angry (with you)?

How does it affect you when your mum gets angry?

13. Is there a time when you have had to take care of your mum or dad?

14.If you came home from school and found the door locked and no-one at home what would you do?

If the child is collected from school, this question would then be “If you were waiting to be collected from school and no-one came what would you do?”

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CHILD ATTACHMENT INTERVIEW (CAI)

1. Tell me the story of the people in your family, that is the people who live with you in your house.

2. Tell me three words that describe yourself, that is your character or personality and not what you look like.

3. Tell me three words that describe your relationship with your mother.
Take down the three words and then prompt for specific examples, i.e. tell me about a time when it felt X1 with your mother.

4. Tell me about a time when your mum was upset with you.

5. Tell me three words that describe your relationship with your father.
Take down the three words and then prompt for specific examples, i.e. tell me about a time when it felt X1 with your mother.

6. Tell me about a time when your dad was upset with you.

7. Tell me about a time when you were ill.

8. Tell me about a time when you hurt yourself.

9. Has anyone close to you ever died?

10. Have you ever been away from your parents for a night or longer than a day?

11. Do your parents sometimes argue?

12. In what way do you want to be like/unlike you mum/dad when you grow up?

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CHILD ATTACHMENT INTERVIEW (CAI)

SCORING MANUAL

WORKING DRAFT – June 1998

Written by

Adrian Datta and Yael Shmueli-Goetz

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Childhood Attachment Interview Scoring Manual

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1.0 Background

2.0 Relationship episodes

3.0 Coding sequence

4.0 Operational criteria for scoring relational episodes with rating scales

5.0 Guidelines for assigning attachment classifications

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1.0. Background

The CAI scoring system incorporates elements from both the Strange Situation Procedure (SSP) scoring and the Adult Attachment Interview (AAI) scoring and classification systems.

The CAI is conceptualised as in some respects analogous to the SSP in that it calls upon the activation of the attachment system and is characterised as a meeting between a child and a stranger/experimenter in an unfamiliar setting. It is thus postulated that the child would draw upon mental representations or Internal Working Models (IWMs) of his/her attachment figure/s in the interview as enabling or inhibiting engagement in the task. Children who hold IWMs of parents as a secure base, as accessible and responsive are likely to be less resistant and anxious. These children would also exhibit a higher degree of emotional openness and greater coherence in the interview thus drawing “Parallels between the secure base phenomenon in infancy and the security implicit in emotional openness” in later childhood (Kaplan, 1984). Hence, the nature and quality of the experimenter - child interaction and the degree to which material raised within the interview is explored may in some ways reflect the child’s IWMs of his/her attachment figures. Whilst the CAI is designed to access the child’s mental representations of parents, the coding also relies upon a detailed behavioural analysis as an important source of information in arriving at an attachment classification.

The scoring system is based initially on identifying Relationship Episodes (REs) within the entire interview. REs are subsequently coded individually and form the basis for an overall attachment classification with respect to Mother and Father independently.

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2.0. Working Definition of REs

Any part of the narrative where the child describes an interaction between themselves and an attachment figure would constitute an RE. Most REs would involve interaction with the child's mother and/or father. Some REs may include other family members, teachers and friends and these episodes may be used to inform the child's overall attachment classification. However, on occasions it is necessary to apply a more flexible definition when the narrative produced by the child concerning attachment-related experiences is impoverished. In those circumstances, 'non-interactions' should be recorded especially in children who adopt an avoidant style, as often these are the best these children will provide.

Examples:

Clear examples of relationship episodes:

"My relationship with my mum is good because we just like to be together. Often we will just have cuddles together because we like each other".

"My relationship with my mum is dodgy at times. She gets angry with me when I have an argument with my brother and will send me to my room. A few minutes later she would call me and I would say sorry."

Example of a 'non-interaction':

"The last time I was with my mother was yesterday. I was playing football with my friends outside". This example would constitute a 'non-interaction' in that although AF is alluded to, there is no direct contact between the child and the AF.

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3.3. Coding Sequence

Step 1: Identify Relationship Episodes (REs) throughout the interview and record on coding sheet.

Step 2: Assign rating on scales identified in coding manual.

Step 3: Based upon rating assigned in step 2, assign Secure/Insecure attachment classification with respect to Mother and Father independently.

Step 4: Assign a sub-classification of Secure/Very Secure or Insecure/Very Insecure.

Explain here how arrived at an overall attachment classification with respect to Mother and Father independently.

.....

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3.0. Operational Criteria for scoring REs

(NB: The following scales could be grouped in different categories – could be linked to a particular attachment classification, could be a form vs content distinction; experience scales vs. state of mind scales.)

3.1. Linguistic Analysis

3.1.1. Emotional Openness and range of emotional terms used. This scale is concerned with the affective description rather than the behavioural expression of the child. Emotional openness takes into account the range of feelings that the child describes, the degree to which the child is able to place those feelings within a relational context and has an appreciation and is able to express the interplay of affect, mental states and behaviour. Emotional openness is rated on a nine-point scale with 1 for low emotional openness and 9 for high emotional openness.

1 – No mention of affect and no illustrations. A child who makes little or no reference to emotional states of self and others throughout the narrative. A narrative that is dominated by concrete and physical characteristics of self and others. Descriptions of AFs are set within a utilitarian frame and they are only valued for what they can do or provide in material terms.

3 – Affects are labelled but not illustrated. A restricted range of affects are mentioned and are rarely accompanied by descriptions, which if present are impoverished. In addition, emotional states are not recognised as being temporary and there is no appreciation of their impact upon

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others..

5 – Limited range of affects only substantiated to a small degree. The child is able to identify and express a limited affective range and provides limited episodic illustrations. There is the sense that the child provides the basic structure of the emotional narrative such that the gaps can predominantly be completed by the rater. Hence, illustrations are present but are not fully elaborated. Additionally, the child may show limited understanding of the impact of emotional states on others.

7 – A full range of emotional states with some elaborated examples.

The child identifies multiple affects grounded in relevant examples. However, richly detailed illustrations are not consistent throughout the narrative and the rater is required to 'fill-in' the gaps. The child may demonstrate an understanding of the impact of emotions on others and recognise that emotional states change across time and context.

9 – Affectively laden narrative with consistently detailed illustrations.

High emotional openness. The child is able to describe a variety of emotional states and recognises that emotions are temporary and context specific. The child is able to provide a detailed depiction of their feelings, which are grounded in the REs and/or in the social context described, and also demonstrate an understanding of their likely impact on others.

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3.1.2. Balance of positive and negative references to attachment figures (AFs). The child is able to describe both good and bad qualities of, and interactions with, their AFs and does not solely refer to the AFs in negative or positive terms. (NB. It is expected that the majority of children will tend to use more positive terms to describe their parents. This bias towards the positive should be considered when rating). **This scale is independent of the Use of Examples scale and should be rated accordingly.**

1 – **Extreme polarisation.** A child who refers to AFs solely in positive or negative terms. The child's narrative does not contain references to the alternative view point.

3 – **Unbalanced.** Little mention of both positive and negative attributes of at least one parental figure but this only occurs in one part of the interview. If child does mention the alternative view point, he/she adopts a strategy in order to block out the thought by not talking, replying "I don't know" or digressing.

5 – **Moderately balanced.** In approximately half of the narrative there is evidence of the child being able to consider both positive and negative aspects of AFs. This contemplation may be tentative and unelaborated.

7 – **Balanced.** Mixed emotions are expressed throughout the majority of the interview. The child is able not only to contemplate but also express both positive and negative references to AFs.

"My relationship with Dad is fun and dodgy. It is fun because we make

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up jokes together and dodgy because he teases me”.

9 – **Highly balanced.** A child who is able to label both positive and negative aspects of the relationship with AFs throughout the narrative. The child shows evidence of being able to contemplate, express, and fully elaborate upon both aspects of AFs.

3.1.3 Use of examples. For example, in extreme avoidance the child consistently cannot remember, or replies with “I don’t know” or “nothing”. In such cases it is important to crudely establish that the child is using an avoidance strategy rather than genuinely not being able to recall. It is therefore essential to prompt for other more concrete memories such as what the child did the previous day or what the child ate for dinner the previous evening. This would allow to possibly distinguish forgetting from ‘defensive exclusion’ (Bowlby, 1980). The idealising child would be able to provide a generalised description of their overall relationship with their AFs but will not be able to substantiate it with specific examples. Another pattern can be observed where the child is unable to provide generalised descriptions or specific examples pertaining to AFs.

1 – **No examples despite frequent prompting.**

3 – **Very occasional use of examples.** Interviewer elicits them but the examples provided are not relevant or illustrative. The examples are either rare and not detailed and do not provide a complete account of the RE despite prompts. There is not one single illustrated answer.

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5- Limited. Around half of the prompts elicit examples, they are on the whole understandable but not very detailed. The interviewer needs to use their imagination to fill in the gaps. All the examples are very recent or only dominant themes are presented. Only one good example is provided. Children who offer examples that are tangential and consistently provide superfluous detail which is irrelevant to the question being addressed should be assigned this rating.

7 – Predominantly illustrative examples. Relatively little difficulty in offering detailed examples, although some of the examples will be irrelevant or narrow. At least three richly detailed, appropriate and relevant examples should be offered.

9 – Fully illustrated examples. At least four richly detailed and complete examples are provided with minimal prompts. The examples provided need to be relevant and appropriate.

3.1.4. Preoccupied Anger. The degree to which the child expresses anger that is uncontained and overwhelming when describing REs. A distinction is drawn between the expression of anger which in an attachment context could serve to call forth care taking behaviour and aggression or violence that seeks to attack attachment figures and threaten attachment relationships. **Only expressions of anger should be rated on this scale and not aggression, violence.**

N.B. Code separately for each parent.

1 – Anger is described but not re-experienced and has been clearly resolved. Thus, no current anger is expressed.

Insert 107 transcript here

3 – Anger is expressed and re-experienced to a slight degree. There is

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suggestion that traces of anger are still present. However, anger is contained and is not pervasive throughout the narrative.

5 – Anger is clearly stated and is not resolved. However, it is not markedly present throughout the narrative and tends to be limited to one or two episodes. Anger is a persistent but not dominant theme, although it is re-experienced to some degree it does not escalate and therefore is not pervasive throughout the narrative.

7 – Anger is expressed in description of REs and is unresolved. There is an indication of escalation of anger that brings forth other related memories. Anger is clearly a pervasive theme and the child's references to anger seems to fuel their angry preoccupation.

9 – Anger is clearly expressed and escalation is evident to the rater. Repeated references to anger are made which leak into other parts of the narrative. Anger is an all-pervasive theme and dominates the majority of the narrative and there is therefore no question that the child is angrily preoccupied.

3.1.5 Idealisation of attachment figure/s. This scale measures the extent to which the child's representations of AFs are distorted in a positive direction. Idealisation on this scale is rated on a continuum from 'no idealisation' to 'highly idealising' and does not measure derogation, which is accounted for within the dismissal scale below.

The child only provides generalised positive descriptions of attachment figures

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and relationships that are not substantiated by concrete examples. Evidence for distortion is identified in the relationship between generalised descriptions and probable experience. This is a separate scale from the scale of balance of positive and negative references to AFs in that idealising children may not use more positive descriptions than other children but the discrepancy between the general and specific is the basis for this rating. The central question the rater is asking is “How credible are general descriptors of AFs in the light of specific examples?”.

Code separately for each parent.

Preliminary analysis of existing interview responses suggest that children may adopt the following strategies of idealisation. These however, are not mutually exclusive and can all be manifest within the narrative:

- I. The child may provide a generalised description but does not substantiate it with an example (e.g. responses such as ‘I don’t know’ or ‘I can’t remember’ in response to requests for specific examples to generalised descriptions).
- II. The child may provide a positive generalised description that is subsequently contradicted by an unfavourable example (e.g., a child may describe his/her mother as ‘very loving’ and yet provide an example where the mother was rejecting in some form).

The following is an extract from a girl (C819) explaining why she sees her relationship with her mother as “friendly”:

“Well, we don’ t have many fights so ahm , we rarely fall out.” Can you give me an example of when it felt friendly with your mum? Well, my sister and my mum and dad were having a fight about who fed the guinea pig. Me and my sister

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kept fighting about it and then my sister was threatening like my mum and my mum was threatening my sister and everything and then ahm, I kind of like felt a bit scared and then I came downstairs and my mum was being friendly to me. Well, my mum was threatening to kill the guinea pigs and my sister said 'If you kill the guinea pigs I am going to run away and everything.'"

- III. The child provides a generalised description that is only partly substantiated by near-miss examples. Near-miss examples are those where the child initially offers a seemingly contradictory or irrelevant example which subsequently is turned around and shown to be relevant (e.g., child describes mother as 'caring' and subsequently offers an incident where the mother was unable to take care of the child's needs but who eventually is described as being available to meet the child's needs).

1– Positive generalised statements concerning AFs and experiences are consistently supported by relevant REs. The child provides episodic examples that are relevant, do not contrast with the general description given, and does not employ any of the strategies of idealisation presented above. Examples can be brief but must not be contradictory.

3 – Positive generalised descriptions are on the whole substantiated by specific REs. However, there may be one or two instances where the child does not provide convincing examples and may employ any one of the strategies of idealisation outlined above.

5 - Generalised positive descriptions of attachment figures and relationships are only partly supported often by unclear, or near miss, episodic examples. Alternatively, the child may provide episodic

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examples which are mildly contradictory, partial or unclear. Furthermore, the child may provide a neutral statement that is not supported

7 – Generalised positive descriptions are rarely substantiated by specific examples. Very positive generalised descriptions of AFs are sparsely supported. A neutral description is associated with a markedly negative and thus contradictory example, or there are several instances where the valence of the story shifts from positive to negative. Alternatively, neutral or balanced descriptions may be contradicted by episodes which contain rejecting or abusive behaviour

9 – Positive generalised descriptions are prevalent throughout the narrative and are not substantiated by specific examples. If episodic examples are provided, these are invariably contradictory to the generalised descriptions put forward. The child may throw in gratuitous praise and spontaneously insert unsolicited positive descriptions. Alternatively, there may be a shift in valence which is pervasive throughout the narrative.

3.1.6 Dismissal of attachment. This scale measures the extent to which the child adopts a strategy that serves to minimise the importance of AFs and relationships by active dismissal. Any expression of vulnerability, dependency or the need of comfort from AFs is deliberately rejected and excluded. The degree to which information concerning attachment-related stress such as child's illness, physical hurt, conflicts, separations and death is central in rating on this scale. This scale should be rated in relation to the probable specific experience but independent of

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the child's history. For example, a separation of two weeks would be considered a major event even if the child has had repeated separation events in their earlier life. The degree of dismissal as operationalised on this scale is dependent upon the severity of the event and the age of the child.

Accordingly, three classes of events have identified from minor through to major. Thus, it is assumed that such events have varying degrees of impact upon the child and the attachment relationship. The child's failure to acknowledge the effect of a major event as a potential threat to the attachment relationship will be rated highly on this scale, whereas a child who fails to acknowledge the likely impact of a minor event will only receive a low to moderate rating.

As a guide the following can be used but the age of the child also needs to be taken into account:

Minor event: The child experiences a physical or emotional pain that would normally require the parent to comfort the child. Examples would include situations such as when the child is ill with a cold/flu/or other minor childhood ailment, child has an accident that can be immediately attended to and does not require medical intervention,

Moderate event: Circumstances that would constitute a moderate event include a planned separation of 1-2 days duration, more significant accidents or illnesses which require medical intervention.

Major event: These events, by definition, are not likely to occur very often. Separations of longer than one week, unplanned separations, loss through death of close family member or friends (often pets will fall into this category but not

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necessarily), serious physical injuries or illnesses which require prolonged medical intervention which may include hospitalisation, rations from AFs, death of a close family member or friend.

1 – Valuing. The child affectively acknowledges both minor and major events and appears comfortable with expressing vulnerability in response to separation and loss.

3 – The child expresses some feeling of vulnerability in relation to some major events but denies vulnerability with respect to some minor events.

5 – Emotional vulnerability in response to minor events is largely denied. Some acknowledgement of the impact of major events is present but this may be limited.

7 – The feelings of vulnerability evoked by separation and loss are denied for all minor events and the majority of major events, although these may be partially acknowledged.

9 – Affect is deliberately and systematically excluded. Vulnerability to rejection and disappointment is denied and the self is presented as invulnerable. Major events, e.g. separation from parents for longer than 3 days, are totally denied or dismissed as inconsequential.

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3.1.7 Resolution of conflicts within REs. The child is able to recount an episode containing conflict which is subsequently resolved. Solutions may be positive, negative or passive. Positive solutions include examples of reconciliation initiated by the child or parent. Negative solutions include destructive and potentially catastrophic scenarios that may be incomplete. Passive solutions are those where the child describes a situation where the conflict has not been directly addressed, e.g.; the child watches television or plays a computer game following a conflict or disagreement. Conflicts range in severity from a minor disagreement to conflicts arising from separation and loss.

1 – Clearly unresolved conflict. These are often characterised by destructive/ negative responses. For example a child may minimise the sense of separation by talking about absent people in the present tense.

3 – Unresolved.

5 – Limited resolution. Although resolutions to conflicts are not systematically addressed there is the sense conveyed to the rater that the issues have been resolved. The process of resolution is not described.

7 – Resolved

9 – Very clearly resolved. Conflict is accurately reported and then is systematically addressed, ultimately arriving at a solution that seems satisfactory for the rater.

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3.1.8 Self-Organisation Scale

This scale attempts to assess the child's representation of self-agency and self efficacy. It is assumed that secure children will represent themselves as being active agents who are able to plan, organise and execute a sequence of actions which lead to a satisfactory resolution. Two main strategies have been identified that may lead to a low score on this scale; a strategy whereby the child adopts a passive stance or alternatively an impulsive one. Passivity is defined as the experience of having performed no action to address the problem akin to notion learned helplessness , e.g.; child would go to watch television which is not regarded as a actively initiated solution. Impulsively is defined as the experience of having performed an action that seemingly cannot be rationally linked to the conflict situation, e.g., the child just finds himself/herself responding to a conflict situation in an ill-thought out manner which lacks any forward planning.

1 – Very low self organisation. Resolutions to conflicts are dominated by extreme passivity or impulsively and there are no clearly planned self-initiated resolutions.

3 – Low self organisation. Resolutions to conflicts are on the whole passive or impulsive. Self-initiated solutions may be alluded to but these are not clearly stated or elaborated.

5 – Moderate self organisation. Self initiated resolutions to conflicts are limited in frequency and are interspersed with more passive and/or impulsive responses. The child does not necessarily demonstrate an awareness that his/her behaviour leads to a satisfactory/desired outcome. Thus, the sense conveyed is that the child employs a 'hit and miss' strategy.

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7 – **High self organisation.** Self initiated and well planned solutions to conflicts predominate. However, there may be no more than one passive and/or impulsive solution. The child is aware that his/her behaviour directly leads to a positive/desired outcome.

9 – **Very high self organisation.** Resolutions to conflict are predominantly self-initiated, clearly planned and executed leading to satisfactory outcomes.

3.1.9 Overall coherence. This scale to some degree integrates information from the Idealisation, Preoccupied Anger, Dismissing and Use of Examples Scales. These scales thus constitute feeder scales that are used to gauge the initial level of overall coherence which is subsequently fine tuned by consideration of violations and/or evidence of high coherence as outlined below.

This scale comprises both positive and negative indices of coherence. Coherence indices are not weighted equally, some are considered to be more fundamental to coherence than others. Violations of coherence as manifested in various forms throughout the narrative may be compensated by evidence of reflectiveness and spontaneity in discourse, both considered as positive indices of coherence.

A. Positive indices of coherence

Scores can be inflated by 2 points by the positive indices of fresh speech and reflectiveness.

Fresh speech

Fresh speech is defined as speech that reflects a new understanding, when the child is making sense of something for the first time, as distinct from a scripted or

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well-rehearsed account. Such speech gives the impression of thinking aloud.

Reflectiveness

Reflectiveness is the ability to appreciate and to consider intentionality in oneself and others. (In time this may be used as a separate scale, especially when reflective self probes are inserted into the protocol).

B. Negative indices of coherence (Violations)

When considering violations of coherence the rater should be mindful of the way in which the feeder scales have a bearing upon coherence. The components of coherence contained within these scales need to be extrapolated to provide a comprehensive evaluation of overall coherence. Thus, the feeder scales link with coherence in the following ways:

The “idealisation” scale highlights contradictions and inconsistencies contained within the narrative and demonstrates the extent to which the child is able to provide convincing evidence for what they say.

The “dismissing” scale reveals the quantity of the narrative, i.e. those children with high scores on this scale are likely to provide very brief and incomplete descriptions.

The “use of examples” establishes the extent to which the child is able to provide relevant evidence for what they say. This scale is central in determining the comprehensibility of the narrative as a whole. Narratives that are impoverished in elaborated REs are considered low on the coherence scale.

The “preoccupied anger” scale similar to the “dismissing” scale provides a

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measure of the quantity contained within the narrative. However, the “preoccupied” scale frequently records overly detailed and potentially irrelevant accounts.

Major violations.

Spontaneous Vs inhibited narrative production/Comprehensibility. This scale measures the extent to which the child is able to produce a narrative that is constructed by themselves with limited number of interviewer prompts. Does the narrative hang together? How much mental effort does it take to understand the narrative? Stories are conflated and relevance is not obvious. Does the narrative contain too much or too little detail?

Contradiction and inconsistencies within narrative. For example, a child who uses the adjective ‘kind’ to describe his father but later reports that he would not want to be like his father as he wants to be kind (see 3.1.4.)

Minor violations.

Dysfluency of discourse. Any excessive pauses, hesitations, digressions should be noted. The dialogue is principally initiated from the child and the interviewer prompts are kept to a minimum.

Perseveration. The extent to which the child may become stuck in talking about a person, event or feeling and cannot seem to respond to the new demands of the interview. The narrative therefore may contain repetitious descriptions. Excessive Perseveration would link to unresolved classification.

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When scoring attention must be paid to the frequency and intensity of violations to coherence and/or the positive indices of coherence.

1 – **Highly Incoherent.** The narrative contains consistent major and minor violations and there is no evidence of positive indices of coherence.

Violations may include:

General comments are either consistently unsupported by specific examples or actively contradicted.

3 – **Incoherent.** Major violations predominate and the narrative is full of minor violations. There is no more than one positive index of coherence.

5 – **Moderately coherent.** The narrative contains a few coherent passages but there are quite a number of minor violations and no more than 2 major violations. However, a narrative that contains more than 4 positive indices of coherence, despite several major violations, can be assigned this rating.

7 – **Coherent.** There is no more than one major violation and only 2-3 minor violations. However, the presence of positive indices are not necessary to be assigned this rating.

9 – **Highly coherent.** There are no examples of major violations and only 1-2 minor violations. However, to be assigned this rating at least one positive index of coherence must be present.

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3.2. Behavioural Analysis.

3.2.1 Marked behaviour change in response to a particular question, e.g.; turning away, drawing legs up to body, slouching in chair.

3.2.2 Marked anxiety during interview (e.g., fidgeting, rocking, wanting to go back to parent).

3.2.3 Maintenance of eye contact.

3.2.4 Tone of voice both overall (e.g., flatness, excitement) and in relation to particular questions.

3.2.5. Discrepancy between behaviour in the interview and the content of the narrative. Pay particular attention to emotional openness and coherence scales. For example, a child may smile or laugh when recounting an incident of being frightened and chased by his angry mother and subsequently crying under the bed covers. In this example, there is a clear incongruence between the child's behaviour, i.e., smiling, and the content of story which was clearly distressing for the child. (This can be seen as a dual communication where the content reveals that the child is in touch with vulnerable feelings/ shows a degree of emotional openness but his/her manner is in opposition to the content.

3.2.6 Ability to maintain engagement with the task throughout interview.

Negotiation of appropriate boundaries within the interview setting. The child should ideally maintain a healthy degree of guardedness and reserve in relation to the interviewer whilst not compromising emotional openness.

APPENDIX 10: FACES II: REVISED FOR CHILDREN

DIRECTIONS: I want to learn about your family, the people that live together in your house. I am going to ask you some questions about your family. After each question I want you to tell me if that is the way it is *almost none of the time; once in a while; sometimes; a lot of the time; almost all of the time.*

1. In our family people help each other during hard times.
2. In our family it's easy for everyone to express their own ideas.
3. It's easier to talk about things with other people than with people in own family.
4. When a big decision comes up in my family, everybody has something to say.
5. Our family all gathers together in the same room.
6. In my family the kids have a say in their discipline.
7. Our family does things together.
8. People in our family talk about problems and feel good about what happens.
9. In our family, everybody does his/her own thing.
10. In my house people trade chores from person to person.
11. People in our family know each other's close friends.
12. It is hard to know what the rules are
13. People in my family talk to each other before they make a decision.
14. In my family, people say what they want.
15. It's hard for our family to think of things to do together.
16. When we have problems in our family, people follow the kids ideas.
17. People in our family feel very close to each other.
18. Punishments are fair in our family.
19. People in our family feel closer to people outside the family than to each other.
20. When we have problems in our family, people try to think up new ways to solve our problems.
21. People in our family go along with what the family decides to do.
22. In our family everybody shares the chores.
23. People in our family like to spend time together when they're not busy.
24. It's hard to get a rule changed in our family.
25. People in our family avoid each other at home.
26. When we have problems we all give in a little.
27. In our family we like each others' friends.
28. People in our family are scared to say what they think.
29. We do things with one other person in the family instead of all together.
30. People in our family like to do the same kinds of things.
like to spend time together

PROTOCOL FOR THE SEPARATION ANXIETY TEST (SAT)

Introduction

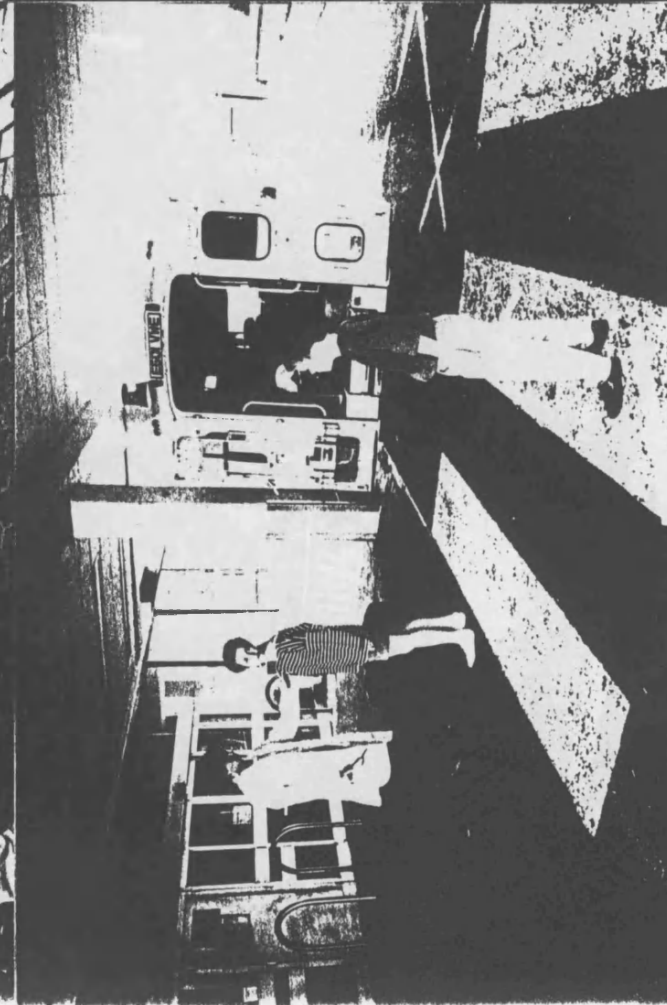
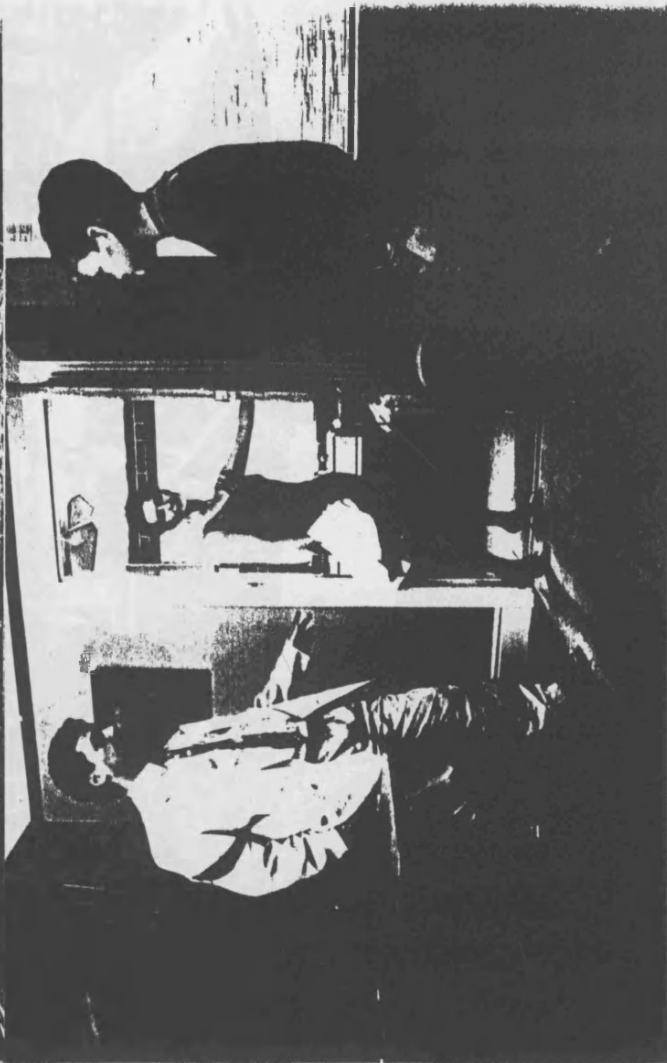
“This study is aimed at finding out how children feel about their parents and family life in general. I have a number of pictures which show a child about the same age as you in different situations which happen nowadays in a lot of families. Maybe these situations have happened to you, maybe not. Regardless of whether or not the same thing has happened to you, I would like you to tell me how you think the child in the picture might feel about the situation and what he/she would do following the situation, or what would he/she do next. This is not a test and there are no right or wrong answers. I want your opinion about the child in the picture.”

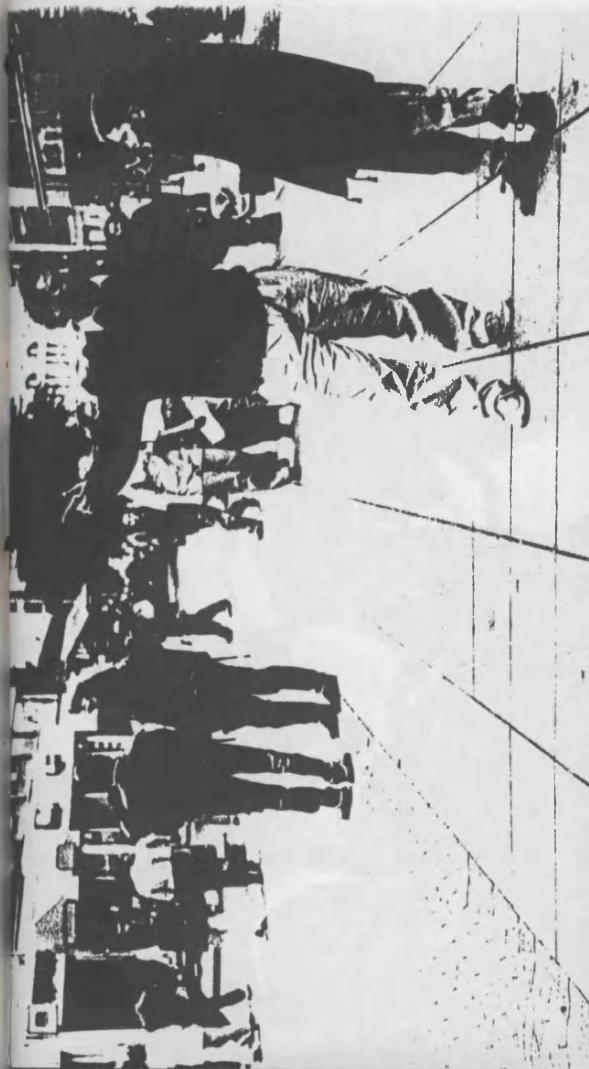
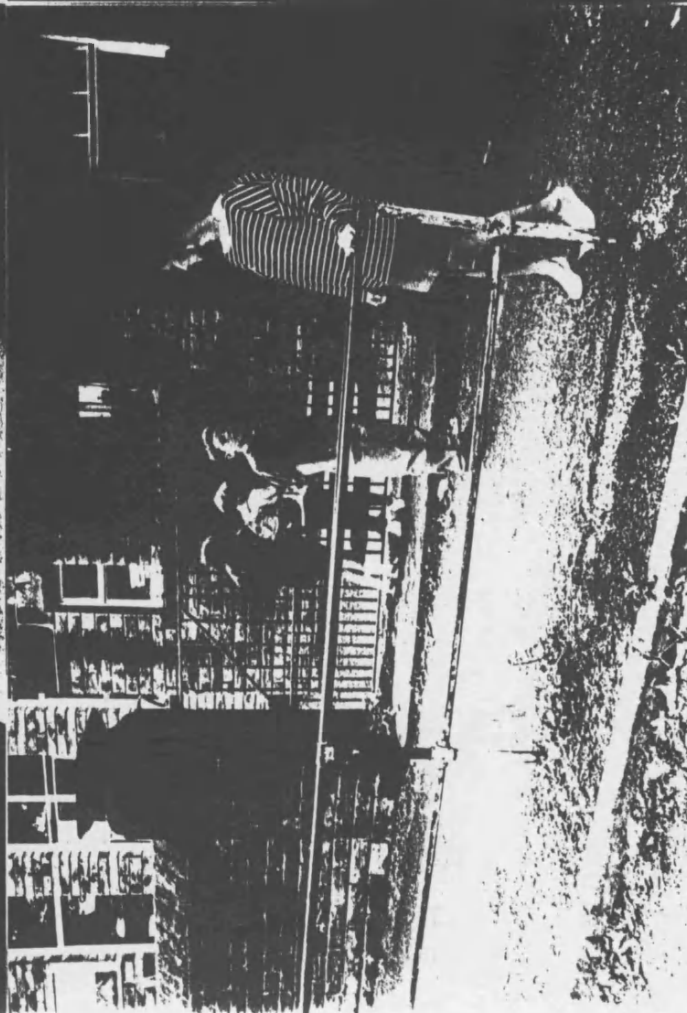
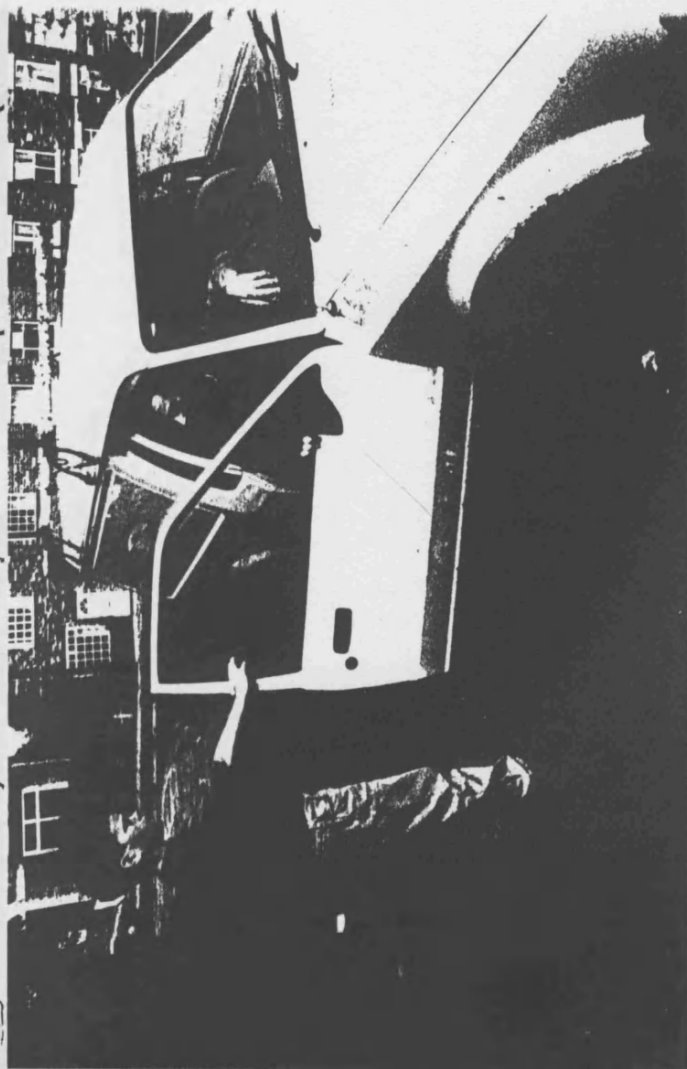
Titles of the Photographs

- (1) The boy/girl is going away on a school trip for two weeks.
Here s/he is saying good-bye to his/her mum and dad.
- (2) Mum is going shopping and the boy/girl is staying at home alone.
- (3) Mum is going into hospital.
- (4) Mum and dad are going out for the evening.
- (5) Dad is leaving home after an argument.
- (6) The girl/boy is in town with his/her dad. Dad says “Go and spend your pocket money, I’ll wait here.”
- (7) It is the boy’s/girl’s first day at a new school.
- (8) The boy’s/girl’s dad is going away to work.
- (9) Mum and dad are going away for a few days and the boy/girl is staying with his/her uncle.

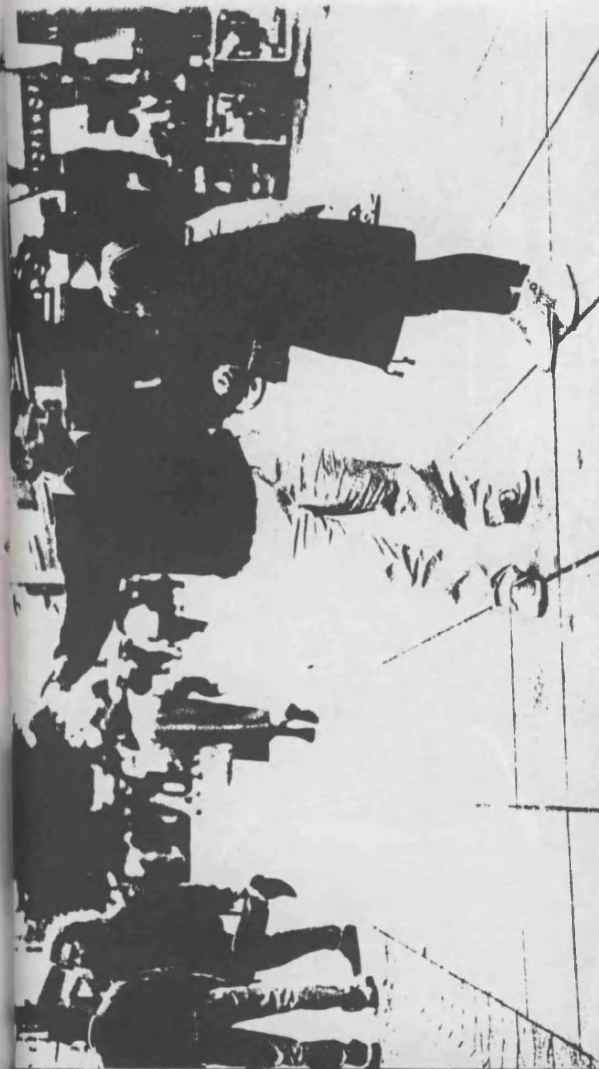
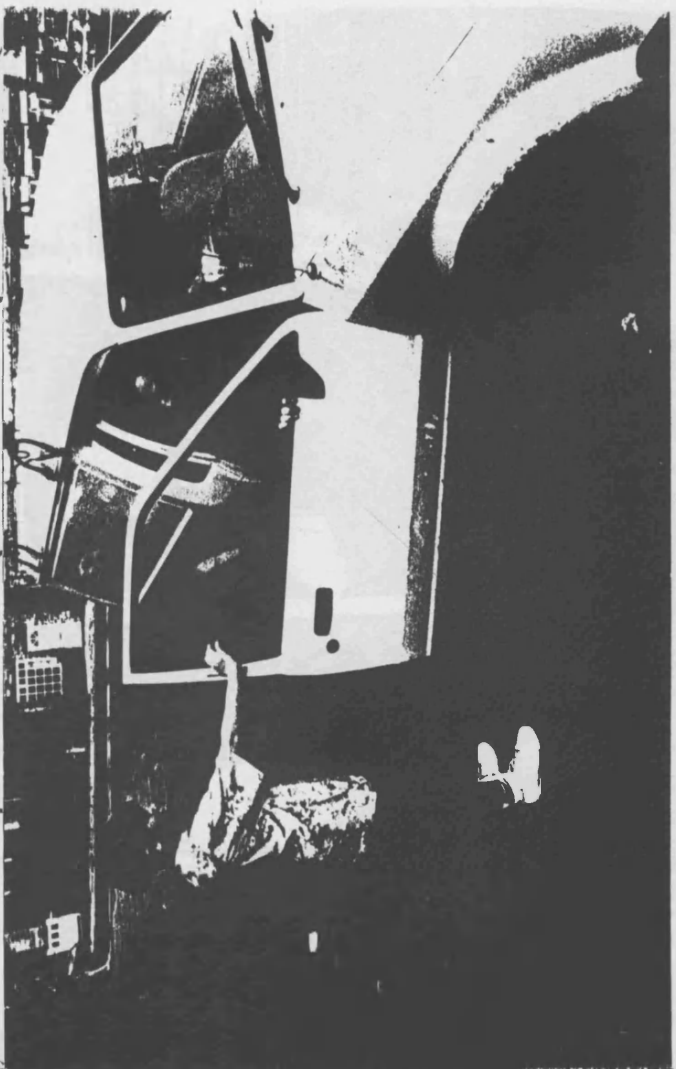
Administration

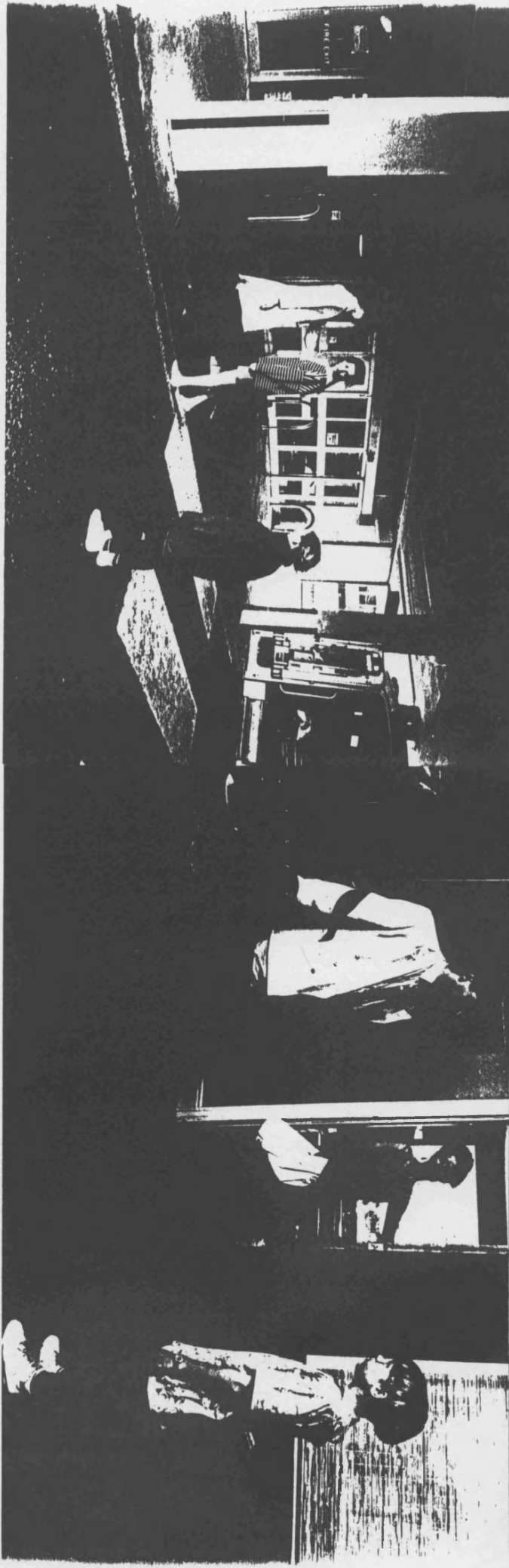
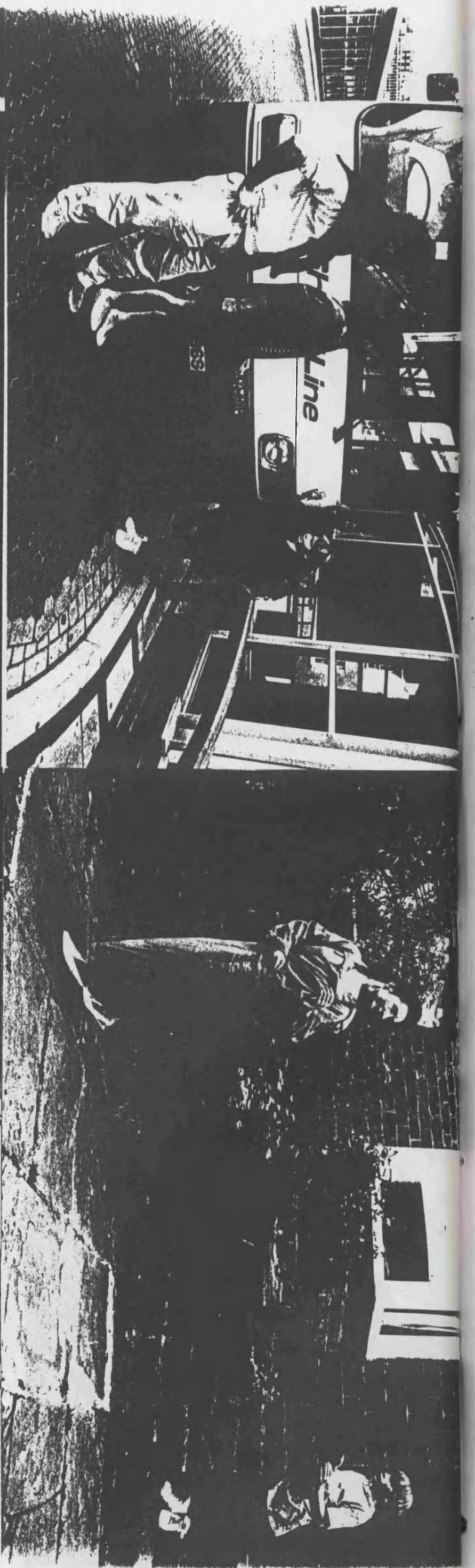
1. Read the title exactly off the back of the photograph and place the picture in front of the child. Do not embellish on the title or give any further explanation of what is going on in the picture. If the child asks for more information then just say that it is up to them and they can make up any scenario they want for what is happening.
2. Ask the child what the child in the photograph is feeling about the situation.
3. Try to elicit a justification, if not already given, for the feeling given by the child.
4. Ask the child what the child in the picture might do next.
5. Move onto next photograph.













HOSPITAL



The
Child
Trust
and
Hospital

25 Grafton Street,
London WC1N 1BN

Telephone: 0171 246 9785
Direct Fax: 0171 813 8334

Child Health Research Ethics Committee

approved after review by the Great Ormond Street
Child Health Research Ethics Committee

Your research must normally be within twelve months of the date of this letter and ethical approval is given for a period of 12 months from the commencement of the project. If you wish to start the research more than twelve months from the date of this letter or extend the duration of your approval you should seek Chairman's approval.

You must seek Chairman's approval for any proposed amendments to the project for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature or using the same procedures (or materials/products). Each research project is reviewed separately and if there are significant changes to the research protocol, for example in response to a grant giving body's requirements, you should seek confirmation of continued ethical approval.

It is your responsibility to notify the Committee immediately of any information which would raise questions about the safety and continued conduct of the research.

Specific conditions pertaining to the approval of this project are:

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Research and Development Unit

Tel: 01753 600000
Fax: 01753 600001

Tel: 01753 600002
Fax: 01753 600003

Tel: 01753 600004
Fax: 01753 600005

Tel: 01753 600006
Fax: 01753 600007

Great Ormond Street Hospital for Children NHS Trust

and the Institute of Child Health
(University College London Medical School)



14 October, 1997

Ms M Bryon
Consultant Psychologist
Psychological Medicine
GOS Trust

30 Guilford Street
London WC1N 1EH

Telephone: 0171 242 9789
Direct Fax: 0171 813 8234

Dear Ms Bryon

**97BS08 Investigation into the effect of cystic fibrosis on the emotional links
between parents and their children.**

Notification of ethical approval

The above research has been given ethical approval after review by the Great Ormond Street Hospital for Sick Children NHS Trust / Institute of Child Health Research Ethics Committee subject to the following conditions.

1. Your research must commence within twelve months of the date of this letter and ethical approval is given for a period of 12 months from the commencement of the project. If you wish to start the research more than twelve months from the date of this letter or extend the duration of your approval you should seek Chairman's approval.
2. You must seek Chairman's approval for of proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature, ie. using the same procedure(s) or medicinal product(s). Each research project is reviewed separately and if there are significant changes to the research protocol, for example in response to a grant giving bodies requirements you should seek confirmation of continued ethical approval.
3. It is your responsibility to notify the Committee immediately of any information which would raise questions about the safety and continued conduct of the research.
4. Specific conditions pertaining to the approval of this project are:

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Research and Development Office

Patron
Her Majesty The Queen

President
*Her Royal Highness
The Princess of Wales*

Chairman
Sir Brian Hill MA FRCS FCIOR

Chief Executive
Robert Creighton MA

APPENDIX 12

- The use of the enclosed standard consent forms for the research. A copy of the signed form must be placed in the patient's clinical records and a copy must be kept by you with the research records as our insurers may demand access to them.

Yours sincerely



Anna Jenkins
Secretary to the Research Ethics Committee

enc

✓cc Dr A Datta

APPENDIX|3 PARENT CONSENT FORM

CONFIDENTIAL

GREAT ORMOND STREET HOSPITAL

PARENT CONSENT FORM

CONSENT TO PARTICIPATE IN RESEARCH STUDY

I (name of Parent)

of (name of child)

address.....

.....

.....

**agree that my child may take part in this research study examining the emotional links between
parents and their children.**

**I have read the information sheet and understand what we have been asked to do. If I require further
information I can ring at any time.**

**I also understand that I may withdraw and may withdraw my child from this research project
immediately.**

I give my consent to take part in the study.

Signed..... Date.....

INVESTIGATOR'S STATEMENT

I have explained the nature, demands and foreseeable risks of the above research to the participant.

Signed..... Date.....

APPENDIX 14 CHILD CONSENT FORM

CONFIDENTIAL

GREAT ORMOND STREET HOSPITAL

CHILD CONSENT FORM

CONSENT TO PARTICIPATE IN RESEARCH STUDY

I (name of Child)

of (address)

.....

.....

agree that my child may take part in this research study examining the emotional links between parents and their children.

I have been told what the study is about and/or read the information sheet about this study which explains what I have to do. I have asked any questions I might have.

I know that at any time I may decide not to continue if I do not want to.

Signed..... Date.....

INVESTIGATOR'S STATEMENT

I have explained the nature, demands and foreseeable risks of the above research to the participant.

Signed..... Date.....

APPENDIX 15 VIDEO CONSENT FORM

DEPARTMENT OF PSYCHOLOGICAL MEDICINE - VIDEO CONSENT FORM

Please read this carefully and feel free to cross out any statements you do not agree with.

I the undersigned give my consent to the videotape recording of this interview being used as described below.

- a) I give permission for this tape to be used solely for research purposes and only to be shown to the researcher on this project.
- b) I give my permission for this tape to be shown for teaching purposes within the Department of Psychological Medicine, The Hospital for Sick Children, Great Ormond Street.
- c) I give my permission for this tape to be shown for teaching purposes to professional audiences outside the hospital.
- d) You may add any special conditions here:

N.B. In giving this signature of consent you do not lose any rights of legal action should you ever feel the tape has been shown irresponsibly.

Date:..... Signed:.....

Signature of staff member responsible:.....

Tape No:.....

PATIENT AND PARENT INFORMATION SHEET FOR RESEARCH INTO THE EMOTIONAL LINKS BETWEEN PARENTS AND THEIR CHILDREN

1. TITLE OF PROJECT

"Investigation into the affect of cystic fibrosis (CF) on the emotional links between parents and their children."

2. THE AIM OF THE STUDY

The aim of the project is to look at the emotional links between children aged 6 -12 years old and their parents. We would like to know if there is any difference between the way children with CF think about their relationship with their parents compared to children without a chronic illness.

3. WHY IS THE STUDY BEING DONE

Little is known about the way children, including those with a chronic illness, between 6 to 12 years old think about the relationship they have with their parents. As children start school they become more able to use language as means of communication. This study seeks to find out what children of this age group say about the emotional links they have with their parents.

4. HOW IS THE STUDY BEING DONE

General description

For this study, there are two groups of children who are the same age but one group have cystic fibrosis and the other group do not have a chronic illness. Both groups of children are asked the same questions, we will then look at the differences and similarities between the responses. Everyone who takes part in this study will be told about the findings by a poster that will be put up in the clinic. No-one will be named or identifiable from these results.

Details of what the study will involve

If you agree to take part it will involve the child meeting with the researcher for no more than one hour during a routine outpatient appointment. There will be a short videoed interview in which the child will be asked about their relationship with their mother and father. There is a second audio-taped task, in which the child is shown some photographs of a child the same sex as themselves in different situations and is asked what that child might be feeling. Finally, there is a questionnaire that asks about relationships in the family that both the child and parents are asked fill in.

5.0 ARE THERE ANY RISKS AND DISCOMFORTS?

No risk to the child can be foreseen. However, any child or family whom may have difficulties as a result of this research will have opportunity to see Mandy Bryon, Consultant Clinical Psychologist. The researcher is also a Clinical Psychologist in Training.

6. WHAT ARE THE POTENTIAL BENEFITS

Our hope is that through this research we will gain a greater understanding of how chronic illness can affect the relationship between parents and their children. This will then help us provide a service to families which better meets their needs.

7. WHO WILL HAVE ACCESS TO THE CASE/RESEARCH RECORDS/

All the tapes and questionnaires will be given a code number so that the identity of the child and parents is anonymous. The video and audio tapes will be kept in a locked cupboard and only the researchers will have access to the data collected in this study. The video and audio records will be erased after five years from the time of the interview and we inform you of this before it happens.

8.0 WHAT ARE THE ARRANGEMENTS FOR COMPENSATION?

This project has been approved by an independent research ethics committee who believe that it is of minimal risk to you. However, research can carry unforeseen risks and we want you to be informed of your rights in the unlikely event that any harm should occur as a result of taking part in this study. No special compensation arrangements have been made for this project but you have the right to claim damages in a court of law. This would require you to prove fault on the part of the Hospital involved.

9.0 DO I HAVE TO TAKE PART IN THIS STUDY?

If you decide, now or at a later stage, that you do not wish to participate in this research project, that is entirely your right, and will not in any way prejudice any present or future treatment.

10. WHO DO I SPEAK TO IF PROBLEMS ARISE?

If you have any complaints about the way in which this research project has been, or is being conducted, please, in the first instance discuss them with your researcher. If the problems are not resolved, or you wish to comment in any other way, please contact the Chairman of the Research Ethics Committee, by post via the Research and Development Office, Institute of Child Health, 30 Guilford Street, London, WC1N 1EH, or if urgent, by telephone on 0171 242 9789 ext. 2620, and the Committee administration will put you in contact with him.

11. RESEARCHER WHO WILL HAVE CONTACT WITH THE FAMILY

The researcher who will have contact with the family is Adrian Datta who is a Clinical Psychologist in Training.

12. DETAILS OF HOW TO CONTACT THE RESEARCHER

Adrian Datta, Clinical Psychologist in Training or Mandy Bryon, Consultant Clinical Psychologist can be contacted at The Department of Psychological Medicine, GOS on 0171-829-8679.

APPENDIX 17 CHILD INFORMATION SHEET FOR RESEARCH INTO THE EMOTIONAL LINKS BETWEEN PARENTS AND CHILDREN.

Why are you doing this study?

We would like to know more about people of your own age, and the only way to find out is to ask.

What will I be asked about? What will I have to do?

You will be asked about what you think and feel about family life.

We will be seeing your parents, to ask them a few questions. But primarily, we are interested in people your own age.

How long will it take to do this? Where will I do it?

You will spend no longer than one hour with the researcher. This will normally take place at Great Ormond Street Hospital.

What if I change my mind?

You must remember if you find anything distressing or you change your mind in the middle, just tell us and you can stop. It is no problem, and you would not need to tell us why.

Will anyone else know what I say?

Everything you do and say will be kept anonymously and confidentially - that means no one will know it is you - we use a number and not your real name. Also, all the forms, audio and video tapes will be kept locked away so no one can get to see them.

APPENDIX 18

Dear Parent,

The Cystic Fibrosis team would like to understand more about the effects of cystic fibrosis on the family. We are carrying out a small piece of research into the affect of cystic fibrosis on the emotional links between parents and their children.

Currently, we are looking at children who are between the ages of 6 to 12 years old. We are writing to you to ask for consent for your child to take part in this study. Attached to this letter is a "Parent's Consent Form" and an information sheet explaining what participation in this study would involve.

Please sign and return this for as soon as possible if you are willing for your child to take part. Your participation would be greatly appreciated.

Yours sincerely

.....
Adrian Datta
Clinical Psychologist in Training

Mandy Bryon
Consultant Clinical Psychologist

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

CAI - Transcript

E: Okay, so the first family I am going to ask you is what is the story of your family

Tell me about your family

C: Um....

E: What's your place in the family ? Tell me about your brothers and sisters.

C: Um well, I'm like, I'm know I'm not the middle one but it seems like I'm the middle one sometimes because I've got some younger than me and two people older than me

And the I like having a big family because you always have someone to play with or talk to and it's much better than if you just have one person in your family then you've got no-one to play with. But if you have um lots of people um then if one person doesn't want to play you can go and play with someone else

E: So what's it like to be a middle child ?

C: It's nice

E: Yeah

C: Cos they don't say you're little, you're big or anything cos and um sometimes I wish I was older but i don't really want to be older because i like to be sixth I mean third in the family because if you're like the first one at things then you're the first one to know what it's like you can tell um it's not nice to be the first to do something like go to secondary school but if you're third or something it's better because you know what it's like and you know what to do and stuff and you know what kind of homework you get because your sisters get um and it's nice not having two boys in the family cos they'd probably fight (L)and it's better if you just have one cos if you have more boys they start fighting

Mmm

Um, and I find it really nice cos my Mum and Dad are really nice to me and everyone else and they always make sure that everyone gets the same cos if like sometimes my brother or sisters say "Oh they've got more, she's got more" but my Mum says no, you've all got the same

Mmm Hmm

and so we sometimes play on the computer cos it takes a long time to find all the plugs for it but we've found them so now we can play on it we've got a really good game and we all take it in turns playing and if someones won we say to them well done

we don't just go "Oh I could do better than that" because you can't cos um to score it um it's numbers that've got..

it's a game where you have to shoot these men and they're really hard

and the men can shoot you as well and they shoot you and the bullet goes .. it follows you wherever you go so it's really horrible and so

my sister got 1000

E: so you all encourage each other

C: well yeah, yes we try and say "come on, you can do it" and say " you've got a really good score~" and even if some people aren't that good at it

we don't make them feel like they're not that good

we say you've got a really high score it's though, cos you don't really get that high a score i don't get that high a score

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

my sister Samantha she got the highest score she got 1000 but i've only ever got 900
E: Oh well you'll do better.. Heh

E: The next question is tell me the first three things that you can remember
close your eyes and try to see those things you just Oh whoops OK.

What are the first three things that you can remember ?
when you were little

C: I when I um threw my brothers socks into the dustbin
cos we lived on the top flat and I was only a little baby and I took my brother's socks
off him off his feet and I threw them down into um cos under the cos we were in the
top flat and it was really big and at the bottom nearby there was a dustbin and it
landed in the dustbin and then we started throwing all our Mum and Dad's things
down into the dustbin (laugh)

E: (Laughing) Why did you do that ?

C: Cos I thought it was a fun game cos I thought cos they were all in um bags and
stuff cos um we were going to move soon so we were going to move here and so and
I thought they were rubbish and I thought they'd be happy that I was getting rid of all
their rubbish and so I started dropping them (L) and then my Mum came and
she, she was wondering where all her stuff had gone
then when she saw it had gone down she thought well we can't really do anything
about it and when she went out like to get lunch
when she went to get the shopping um, um she looked in the bin and the bin men had
just gone and they had taken everything so you couldn't get it out, cos the bins were
really big metal bins and..

E: Do you remember two other things, two other early memories ?

C: um, um (long pause) I remember when I was, when we'd just moved here my
Dad said lets see if we can film Father Christmas and we put the tape recorder on
We saw him, well we didn't really see him, but we saw his arm turn the camera and
turn the camera off

E: Father Christmas? Or you don't know.. maybe... How old were you then ?

C: um, about Seven

E: and how old were you when you threw your parents' things in the dustbin ?

C: I was too small, I don't remember

E: Do you remember one other early memory ?

C: Um (long silence) Oh yeah, every morning we had to have that awful breakfast
we didn't like, it's called weetabix,

E: Weetabix.

C: Yeah, and we don't like it and when we used to have a table in our bedroom that
we have now um, we kept flicking it when it went all over the wall

E: Laughs

C: And when Mum came to see if we'd finished it she saw it all running down the
walls: it was all over the walls and she, we had to clean it up.

It hadn't been, the wall paper hadn't been put on yet

because we were just going to do that room so we thought we might as well because
we didn't like it so we flicked it on the wall that was when I was quite small, I don't

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

I was about seven as well and my big sisters mainly did because um, they were the ones who thought of it and started it and I say one more, cos, one thing from school, maybe?

E: you want one more from school ? What ? focus on the three you just told me about. OK, now try and close your eyes and try to see the things you just told me about just try and look at that time you just told me about and tell me what you see. Do you see yourself or where you were ?

C: I can see where I was

E: For which, for which one?

C: where I was sitting on the balcony when I was little and I can see my brother as well cos he was sitting right next to me

E: Is that when you were throwing things down the dustbin ?

C: Yes and round me I can see lots of bags and stuff and then I can see my brothers blue sock.

I didn't throw both of them down, I only threw one and so we had to throw the other one away because we didn't have another one to match

Umm..

E: The next one you told me about, Father Christmas, can you see yourself there?

C: I can't see myself, I can just see Father Christmas's arm turning round the camera and turning it off. Umm

E: How about the Weetabix, can you see yourself throwing it against the wall?

C: Yes I can see my sisters flicking it across the wall and I can see my brother, he was only little, he was about six and he just did what anyone did and he did it the most cos he started doing it all the time

E: He couldn't stop, huh

C: and um..

E: What is Christmas usually like, what have you done in the past and what happened last year ?

C: um last year at Christmas in my stocking i put (mumbles) my bed and it had gone

E: You put money under your bed?

C: No I put my stocking

E: Oh, your stocking under your bed

C: No, on the end of my bed

E: on the end of your bed

C: and then in the morning, when I woke up early to check it and it had gone and so I thought where's it gone ? and so I went upstairs and I found all these little toys in it (Ahhh) and it was full of chocolate, it had an orange and an apple in and it had some money in it too

E: Oh Yeah. How did you feel, how do you usually feel around Christmas ?

C: I feel happy and excited, and I keep thinking, I can't wait, I wonder what I'm going to get cos I think, well, cos I never really know what I want for Christmas, and I think whatever Mum and Dad get me I'm going to like because I always like the things that they get me cos they know what I like, they get things I never seen before A few Christmases ago I got a giant toy, it's my best toy now.

E: What was it ?

C: A monkey

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

E: It was giant monkey ?

C: Well, it wasn't that big, it was quite big, it was about that big.

E: Oah. Was it a stuffed monkey, was it stuffed or was it, was it a stuffed toy?:

C: Yeah. I called it babby

E: Babby

C: Yeah, because I wanted to call it my little baby, but I couldn't just call it baby it wouldn't have done, it just looked so cute (mumbles)
then I just thought I'll call it babby because my mum said it's short for baby

E: OK, now tell me three words that describe yourself.

C: Happy. (long pause). Good.(giggles) Helpful.

E: OK, so tell me now why did you chose each of those words.

C: What was the first one?

E: Happy.

C: I'm happy all the time cos I've got a nice family, and I've got lots of food and I've got..

E: Lots of what?

C: Food, I'm not starving all the time like some people, and I've got a house and I've got a nice family and that's all. I've got everything I could ever want.

E: Wonderful. Why did you choose good ?

C: Because like I'm sometimes good when it comes to it like when everyone is talking at night I sometimes don't talk and I don't always like.. when everyone starts when my brother starts fighting sometimes, I tell him to stop and I don't start and if anyone starts fighting I go and tell because I don't want anyone to get hurt

E: Mmm and why did you chose helpful?

C: Cos when we are coming home my brother never ever carries anything so me and my Mum have to carry all his stuff but I try to carry lots of stuff because Mum'd always.. I think she must be tired and I don't want her to carry everything and I think Adam should carry it but cos he's not.. and I help her making cakes and scones and I always try and help people if they can't carry stuff, I try and help them carry some stuff.

E: Good. Now, tell me the story of your life, whatever you think is most important to tell, starting from as early as you can remember, and going right up to this present time, and I am just going to keep quiet and listen.

C: Do you mean starting from now and then going..?

E: I'm starting from as early as you can remember, from ages two or three or four, and going all the way up until today and you can just tell me whatever you think is most important to tell.

C: Um, (pause) When I was about three or something I did all the things on the balcony with his sock and stuff and when I got older I tried to ride on my dog's back, I didn't really, I thought well

E: You tried to do what ?

C: I tried to get on my dog's back but I knew I couldn't because it wasn't allowed because I knew it would hurt him so I tried thinking, I want to be, when I got a bit older now, five I think, I want to be a dog.

E: A dog?

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

C: Yes, I started trying to be my dog's puppy, going under him and um, pretending I was a dog and my dog started thinking that I was, cos he started licking me, and my Mum said, don't cos let him lick you because it makes you get spots and when I was about seven I saw Father Christmas, when I was seven I put the weatabix on the wall, umm.. and(pause) when I was just eight um I tried making myself bigger because I thought when you're growing if you stretch you get bigger so I tried pulling and going like (giggle) and tried pulling my legs to make them bigger and when I had done it I thought I was taller and, um

E: How about more recently, has anything happened that's been very important recently that you can think to tell ?

C: Well, it isn't that recently, it was ever since when we went back to school after the holiday, um, when we went into different classes, and there was a new reception class and um, we made some new friends there, the little twins, those were the first friends I made and they were really nice and something that has just happened is the little twins they had to go and have laser done to their eyes and its gone all red and it doesn't look that nice and it um, it makes me feel sorry for them because it doesn't look nice cos I don't like looking at it much I just pretend it's not there, anyway it's going away now

E: They both had to that done to their eyes ?

C: Yes

E: OK

C: Um. This was when I was about eight. Um, I thought, I broke, We had some flowers, and I thought I want a vase of flowers, I'll put them in my sister's dolls house I want a little bit of flowers so I can put them in my sister's dolls house my sister has got a dolls house that my Uncle made for her, and um, it's got all little pots in there, I thought I can put some flowers in one of the pots, so I broke some flowers on the table,

E: Oh no (sympathetically said)

C: not like those cos they had some white ones so I took some, broke it off, so I could put it in the vase and then my Mum said , cos she noticed straight away, she said where's that little bit gone has it broken off and I said I snapped it off and she said, "Where's it gone then ? "and I said I put it in Michelle's dolls house, and she said can you not break bits off flowers cos
(tape goes off)

E: So next day, Tell me three words that describe how you feel when you are with your Mum.

C: Happy, thankful, and um (pause) helpful.

E: OK. and Can you tell me about a time that you felt happy with her?

C: Cos um, when I go out with her just on my own, she sometimes buys me some chocolate or something, but if we're, everyone goes or two people goes she doesn't usually buy them, anyone, it any chocolate or anything um,

E: but she does when you're one person

C: yes, just with me

E: Can you tell me about a time that you've felt thankful with her?

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

C: Yes, I feel thankful that I've got her, my mum. cos I like going shopping with her and thankful that she gives me stuff sometimes and she lets me spend a bit of money in Woolworths and stuff so that I can buy something like toys and I feel happy and thankful that I've got my mum and... well

E: Can you tell me about a time that you've felt helpful with her ?

C: When I carry the shopping back with her and.. and when, sometimes when we're coming home, if we go a long way away, on, um to see, we usually get the bus then , but if she doesn't have the money to come back and I sometimes bring my money to the shops and I sometimes give her money so that she can, we can go back on the bus

E: Mmm. Just change that you have that, in case she needs change or something.

C: yes cos I found £5 outside the shop round the corner, so I've got lots of money.

E: So what happens when Mummy gets upset with you ?

C: um. She sometimes wacks me and tells me to go to bed well, that's if I've been really, really bad, but I'm not bad much. If she gets upset with me, then I... she doesn't really get upset with me much cos.

E: How do you feel when she does get upset with you ?

C: I feel upset, and I feel I wish I didn't do.. If I have done something bad or anything

I go and say sorry and um try and make up for it by doing something.

E: Why do you think that she gets angry with you sometimes?

C: Sometimes when she doesn't feel that well and she's got a headache and stuff she sometimes gets a bit angry and says sorry I just feel a bit tired at the moment and..

E: OK. How about Dad, Can you tell me three words that describe how you feel when you're with him ?

C: Happy,

E: Ahh haa

C: thankful and good

E: Can you tell me about a time when you felt happy with him ?

C: Happy that I've got, we've got, my Dad's got a car and that we don't have to walk all the way cos I get tired and happy that cos he sometimes has sweets in his car and he umm sometimes gives me them

E: Can you tell me about a time when you felt thankful with him ?

C: Thankful that I've got a Dad, and thankful that sometimes he gives me sweets that he's got in the car, and um, sometimes, when we're going to school or something if I haven't had any breakfast much he has some lunch left over from the other day, like half a Twix, or something, he gives me.. and I feel thankful. umm.

E: Can you tell me about a time that you felt good with him.

C: Well I try to make be really good cos and I feel cos I always am really go' cos I really like him and I like my Mum and I like my whole family and when I'm with my Dad I feel good because I'm happy that um I've um got

E: That you've got

C: That I've got a nice Dad and I've got and when I'm with my Dad I'm sometimes allowed things that I want and my Mummy says no you're not allowed

E: He'll sometimes get it for you, or do things with you that your Mum doesn't?

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

C: sometimes like little things like sweets with colours cos I'm not allowed sweets with colours because I get eczema but we're only allowed them sometimes but my Dad always says yes.

E: What happens when Dad gets upset with you ?

C: He says, well he says.. like if i've done anything wrong he says did you do it or um, why did you hurt him and um he sometimes tells me to go to bed um um... and he ..

E: So how do you feel when that happens, when he tells you to go to bed or he gets upset with you?

C: I feel sad or sometimes I haven't done anything and I wish he'd believe me but he never really no-one really blames me for stuff I haven't done so that's all good but stuff I have done I feel Oh I wish I hadn't done that now cos if we're watching a really good programme I'm not allowed to watch it because I've got to go to bed.

E: So why do you think he does that, gets upset sometimes with you?

C: Sometimes when he's angry and sometimes when he, he wants us to tidy up and we don't really want to but we do and...

E: anything else ?

C: no

E: Has there been a time when you felt you wanted help from some-one and no-one understood you ?

C: um, well, My Mum doesn't always understand things like school if we are doing something she doesn't always understand, but if my Mum doesn't then my Dad does if my Mum does, my Dad, I think they can both, if my Dad doesn't then my Mum probably would but if, if um they could both know, probably, about something.

E: So. are you talking about like homework, and things like that?

C: Yes

E: Or has there been a time that you felt that no-one understood you ?

C: No, cos

E: I mean in terms of troubles, or worries, that you wanted help from someone, or just because no-one understood?

C: No, well, If my mum and dad don't understand anything, I'd tell my brothers or sisters and if one or them don't understand I'd just ask someone like if one of my sisters don't understand I'd ask my other sister right, if that sister don't understand I'd tell my brother, my brother would probably understand cos someone in my family will understand anyway my Mum and Dad nearly always understand

E: Has there been a time that you've found your parents confusing ?

C: N.. when they.. I don't know many .. what some words mean and when they taught me oh yeah if I ask back at home i say "what does that mean?" they say "it means kind of" some.. they use all words I never heard of and I get confused cos I don't know what they.. I think does that mean that or what does that mean but confused..

E: What happens when you are ill ?

C: Um, when I get ill and it's really bad I sometimes don't go to school if it's school and umm my mum tries to make me better cos my Dad has to go to work umm

E: Do you stay in bed?

C: Umm my Mum said it gets cold in bed so I sometimes come and lie on the settee.

E: Mmm. what happens when Mum is ill ?

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

C: well, she's nearly always ill on a Saturday Cos every time She's always ill on a Saturday and she always says that's the day she's always ill cos she said she's had a busy week and she starts feeling ill and so we all start looking after her and like did to us and make sure she's OK.

E: What happens when Dad is ill?

C: When my Dad is ill he stays in bed so did my Mum when she was ill and umm we all try to look after him, cos he was ill a few days ago, last saturday, no last Sunday and we all tried to look after him and I tried to do anything he wanted me to do, like if he wanted me to get him a cup of, a drink of water, I'd get it for him if he wanted a cup of tea or anything I'd make a cup of tea for him I'd try to do anything like that to make him feel better?

E: Do you remember having an accident when you were hurt ?

C: Err, An accident, what do you mean by that ?

E: An accident can mean something when you don't mean to get hurt, it can mean like being in a car crash or if you accidentally trip and break your arm, something like that.

C: Well, I've never broken my arm or anything, I've never broken anything but um, I've got a scar cos when I was little we lived in the flats and there was a football pitch that me, my brother and my Dad always used to go to , it was really fun, then there was this horrible man who used to live in the flats and he always used to be saying move your car, this is my space so one day he came and he said move your car to my Dad and my Dad went up and said my Dad said you wait here and my brother ran off with him and I thought I'm going to too, and I ran off and I ran and, you know the fence, well you know the wire sticking out, it went right in my leg and it scraped all the way

E: Ouch!

C: Shall I show you the scar? Is it on this leg? I fell over a few days ago. It could be on my other leg. Shall I just look on my other let to see?

E: Oh, maybe right there!

E: When did that happen?

C: When I tried, when I was with my Dad..

E: But how old were you?

C: I was about.. umml..

E: Can't remember?

C: I was about six and I had to be rushed to hospital with my Mum and Dad in the car.

E: Was it scary?

C: Yeah. And then we had to wait eight hours and my mum said no, and we went home and my mum said we can do it there.

C: And My sister Samantha once had a really bad accident, well it was, I was, we had a motorbike and it had sharp bits on it, and one day, she made just to sit on it because she'd never sat on it before, well nor had anyone, but she was the first one and she slid off and she cut all her leg open and she had to be brought in, it was really bad, and it would have needed lots of stitches so did my scar, but

E: Did you need stitches for yours ?

C: yeah I would havebut but we would have had to wait eight hours so we couldn't wait so my Mum brought me back home and it healed up.

E: Has anyone close to you ever died? has any animal ever died or a person?

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

C: I used to have a pet tortoise called Billy, he was really nice and my Mum didn't know if he'd hibernated or not and one day we thought well, he is hibernating and so we put him in a box and he left him in there ages and every day we tried to check on him to be really sure and we didn't know he was dead

E: Oah ho

C: cos he um he was he was a box tortoise and they're not supposed to hibernate but we didn't know that and he'd died

E:

C: and he used to nip my cat's tail

E: Were you sad when he died?

C: Yeah.

E: Did you have any other feelings about it, or have you ever had a person that you know died ?

C: Yeah my Uncle Jack, he always used to be really nice, we always used to go to a park with him and cos he used to look after my Nan's dog when we used to come over cos we had a cat and my Nan's dog, he was trained to kill rabbits and stuff so he'd kill a cat so he had to go there and we always used to go to this park but he died. um. At school everyone used to know a boy called Dominic and he died

E: A boy at school?

C: Yeah.

E: Did you know him?

C: Yeah. He was coloured. He had cancer, all his hair fell out, and he died. cos um it was quite a long time we found out about it we got a letter that he'd died and I was really sad cos I thought he'd just left cos I didn't know that he'd just gone I didn't even know that he had, that he had that bad a cancer, but then he died, I didn't know that he'd been in hospital I thought he was just, like he'd gone to a different school and my teacher Mr Spencer he was always being, telling jokes little boys to try to make them like him he was nearly crying cos he really liked Dominic.

and.. we used to have pet rats that were trained and there was one called Marina, and something else, I don't remember, and they got cancer and died cos they got a big lump and they died and now my sister's guinea pig, he's getting a big lump and we thought it was just cos he's quite fat but when we brought him to the vet he wasn't born a bit fat, he was about that thin cos we thought he was fat cos he was about that big but that's how big he was born but he's about that, about that thin but we didn't know cos if you like squash it a bit here it goes all thin So now we have to feed him a lot and I hope that he gets better.

E: I hope so too.

E: Has anything that you cared about ever been taken away from you?

C: Once I was bad and my Mum and Dad took away my monkey for a few nights and I can't sleep without my monkey so I tried to get it and I was really sad cos I wanted to.. and um...I... um... I don't know how ever I didn't ever sleep. It's so nice and big I love cuddling it cos it's so nice and warm.

E: So were you able to sleep?

C: No I didn't get any sleep I was just lying there thinking about it cos they'd put it, they just threw it down the back of the chair and I wasn't allowed to get it

E: Mmm

C: and then cos I kept trying to get it they moved it somewhere else and I didn't know where they'd put it. and then my brother found it and he took it to me but I

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

knew if my Mum and Dad found it they'd take it away from me so I thought right, can you bring it put it back cos I won't get in trouble

E: Have things happened that changed your life much? Like a change of environment or a new school or moving ?

C: Well, when I moved it changed my life cos I used to love where we lived in the flats
and I know that I would say that I don't like flats but we used to have one of the best flats cos it used to have a secret door and it was really small um about this
it was a giant room and it had a giant computer in and I don't know how we got it in, it's the one we've got downstairs and I don't know how we got it through the tiny door cos it was really big so even fit through the little door so I don't know and couldn't get it through the window cos it was the top flat window and always used to think It was secret in there and no-one else in the whole world had ever found it, we were the only ones who had ever found it and when I was little my mum and dad said fairies had come and we had a tea party in the middle of the night, we went into the secret room cos at night we were going into the secret room and my mum and dad heard so they thought they'd do something cos we..when I was little I used to, my sister used to say something Samantha used to say we were fairies um, so we thought, well we thought let's go to fairyland we said when we go through this door we'll be in fairy land but Michele (?) and I just fell asleep and when I woke up I just woke up ordinary but then I thought I'm going on my own and when I saw, I saw we used to have this little pony house and it was plastic and um
my mum and dad were in there they said this is a fairies house and it was a little and we all had orange juice and biscuits and it was really fun because..

E: so how did you feel when you moved from there?

C: I felt really sad cos I've got lots of memories from there

E; Mm m I can tell. OK have you ever found your parents frightening?

C: Well ,yes several times. oh well Hmm.. Last night I was frightened cos um I got in trouble cos my brother started to cry because um cos he we couldn't get the computer on and he asked if he could try and we said "OK but what do you want to do?" and he said can I just say, can I just do it, we said no can you just tell us what you want to do first please" and he shouted no and he went upstairs and started crying and Michele, Michele's on my side and, and she went and she said "Daddies really mad he wants you to come up now" and I got really scared uh ha and I said to her, "anyway, what have I done?" cos I hadn't done anything much because it wasn't even me who had done it, it was my sister, I was just down there with them
I didn't really say anything and I was just thinking (mumble) um why's he crying and cos he was crying cos he couldn't ..and my sister said I didn;t know cos I don't really know because I was in the bathroom brushing my teeth and everything cos um err I was, well cos I had just eaten my dinner and it wasn't that, it was something I didn't really like I always say, well well I usually eat likethe things I hate first and so then I can eat the things I like and then it takes away the taste but that time I hadn't I went, I was brushing my teeth to get take the taste away so by the time I came out Adam had already gone upstairs so it was really strange and he was asking me what happened and stuff and I didn't even know it was really strange cos um

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

E: So you were frightened?

C: Yeah cos I thought why does (mumble) Michele said he's really mad (mumble) and what have I done

E: so did anything happen?

C: no, Adam just... well nothing really happened.. Well Adam was just told to um if you want to do just say it what you want to do ..first

E: Have you ever been away from your parents for the night, or longer than a day?

C: Oh yeah, for when for a long time, me and my sister Samantha went to spend a long time with our grandparents, without our Mum and Dad we once did that before when um my only me and Samantha did that and Michele and Adam were at my other Nans and um.. um you'll um um (break in tape, restarts) and um i've forgotten

E: So how did you react when you were away from them and how did they react ?

C: I felt really sad when my mum sometimes sent me letters and at night errr we slept in a big double bed but then when Auntie Cathy came from what's it called? I've forgotten.

E: How long were you apart from them ?

C: it was.. for a month

E: a month, wow

C: there was, they had to start like tidying up the house and packing stuff because we were going to move and the next people had to come and look

E: so how did you feel about that seperation?

C: I felt sad and I wanted to I wanted to go home and see them.. No I did like it with my nan and my Auntie Cathy cos I'd never ever seen my Auntie Cathy before cos she came from... I can't remember... from some... from Meah I think.. it's.. I can't remember..

E: That's ok. How did your parents feel about the seperation ? Did they feel ?

C: yeah cos we phoned them () and they said that they were sad and they missed us and they can't wait til we come back and I felt the same cos I missed them I can't wait until I got back

E: Do your parents sometimes argue? ()

C: Um They never argue. They never argue much But they But they sometimes argue a bit about the house like if my mum um they never really argue much, like horrible kind of.. like..

E: How do you feel when they do?

C: I kinda say stop

E: You can't say stop or you do?

C: I can say stop

E: Ahha

C: I can say sorry please stop

E: Why do they argue, do you think ?

C: Cos my Dad likes modern houses new kind of and my Mum likes old kindda that's why in our house we've got like somethings are old fashioned people and somethings are new things.. Ha

APPENDIX 19 - EXAMPLE OF CAI TRANSCRIPT

Can I say something about when my Mum was little she lost her, she had a monkey and she lost it when she was little and she had some () but guess what this jumble sale, well this jumble sale we go to every we.. well not jumble sale you know second hand shop we found her monkey there, it was being sold, and we got it down stairs now but it's hand's gone, it's damaged, my Mum said she's going to make it another she said it's the same one it was her one, she was showing us everything how she knew it was hers.

E: There are few more questions. What happens when your parents tell you off do you know why they tell you off and what you've gone wrong?

C: Yes sometimes I know I've done wrong.. um..

E: What happens ? (mumble)

C: I sometimes cry and I get upset

E: and is it fair, do you think, when they tell you off sometimes?

C: Um.. yeah.. but..I know it is fair cos .. well..it's my fault that I did it ..and.....

E: Do you worry about your parents ?

C: Yes, sometimes, I worry about them...yes like there's been a fire at the house

E: If there's been a fire, or a fight ?

C: A fire kinda cos when they're away I think and I hope they're OK and I hope nothing happens

E: Do they worry about you?

C: Yeah they worry. I sometimes worry about my mum and dad when they've been out a long time and I think Oh no and I hope nothing's happened to them.

If they've been out a

E: any idea about what you want to be when you grow up ?

C: Teacher but I don't want to spend years training cos it must take a long time but I do want to be one but I tried to think I could do hairdressing or something

E: What sort of mum would you like to be when you grow up and have your own children ?

C: Hmm well I'd like to be just like my mum (silence) um I'd like to have lots of animals I thought I didn't used to want to want a cat cos they brought in rats and dirty stuff

E: OK, we're done !!!!

APPENDIX 20 - EXAMPLE OF SAT TRANSCRIPT

SAT

1. School Trip

What Feeling?

She looks quite upset, that she's leaving, going away from them and everything, but I think that she still feels quite happy, that she's like on her own, and that she's like, grown up and everything.

Else?

Um... Pretty excited, she'll be away from home, won't have to do all the boring things you have to do at home, um....

Do next?

Um...probably like give them a hug and stuff, and say "Don't worry about it" and stuff, and get on the bus, and go.

2. Shopping

What Feeling?

She'll probably feel like, quite scared, that she's home alone, that something might happen to her, but also thinking like she's grown up, that she can be at home alone and everything.

Else?

Um.... probably like wandering how long she's going to be, and if everything's going to be OK, and a bit worried.

Next?

Probably, like, wave goodbye and then go in, lock the door, like if she's got an answerphone or something, turn it on, and then remember not to open the door to anyone else, or pick up the phone.

4. Parents going out for the evening

Probably um, like wish them good luck, and hope they enjoy themselves, and probably get on with what ever she's going, and feel again, quite happy that she's home alone and that doesn't have to, you know, be pestered about anything, and that, they're home late, so she can watch TV and stuff, and do what she wants.

How feel?

Probably like wondering where they are going to go, and if they're going to be, like, you know, back, not too late, and what's going to happen.

After TV, next?

Probably like, well, make sure she's not in bed too late, and um, like, get everything ready and go to bed, like, hope they'll be home soon or something.

3. Mum into Hospital

What Feeling?

Probably scared. Something might happen, something might go wrong, um, probably quite excited, cos she'll have something to talk about at school and everything, and she'll have other people around her. Well, I'd be, I'd feel quite scared, cos you wouldn't know what's going to happen, and probably quite happy say, because if there is something wrong with her, there's people to look after her, and make sure she's alright.

Next?

Um, probably go home, like, write a, get a "Get Well" card, get some flowers or something, like, whenever she can go and see her, see how she is and everything, if she's alright, and if it's doing well and working and everything..

APPENDIX 20 - EXAMPLE OF SAT TRANSCRIPT

5. Town

What Feeling?

Um, I think probably quite happy, that she can, you know, buy things for herself, and not have to buy whatever they want, but might feel quite scared cos like, it's a big place and there's a lot of people and she could get lost, or someone could, you know, take her away or something. Something might go wrong, she might feel a bit worried that her Dad might, you know, decide "Oh Look, there's something in the shop, I'll just quickly go and have a look" and she'll come out and find he's gone, and wouldn't know what to do next.

What would she do next?

Probably, um, go to all the shops that she knows, and where they are, and what like, make sure she's back not too late, and that she stays in the same place, even if he's not there, so he'll come back and probably find her, so she doesn't wander around and they get like lost for ages and ages.

7. New School

Scared. There might be people there who like bully her, and there might be nice people and everything, but she might feel grown up, like she was at a new school, and that she's like, on her own and everything, but she might feel happy, and a bit worried that something might go wrong, or she's not like good enough, or she might get told off, and everything.

Next?

Probably, um, go in, find someone she knows, if she does know anyone, and um try and make friends and do well in lessons and not get told off all the time.

What might she be told off for?

If she does something wrong, you know, think "Oh I'm so clever, I'll make fun of someone, or do something wrong", she'll get told off for doing that.

8 Work

How feeling?

Probably, feel like, why can't I go with him, I don't want to be left at home, then she might feel happy she's at home on her own, and she might wish that he'll come back soon and that she'll won't be at home too long, and that they'll all be alright.

Next?

Probably say goodbye, close the door, make sure she doesn't open it to anyone, don't worry too much

9 Uncle

How?

.....

She might be scared

Might just feel relaxed

Which one most likely to feel?

Next?



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Jackie Stavri
Catalogue Department
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14th April 1999

Dear Ms Stavri

re : 1998 BOUND THESES

The two boxes of theses are from the Sub-Department of Clinical Psychology and they are for cataloguing. This letter will be attached to both boxes to explain why they are coming to you.

If you have any questions, please contact me on ext. 7897.

Many thanks,

Hannah Westoby
Ext. 7897