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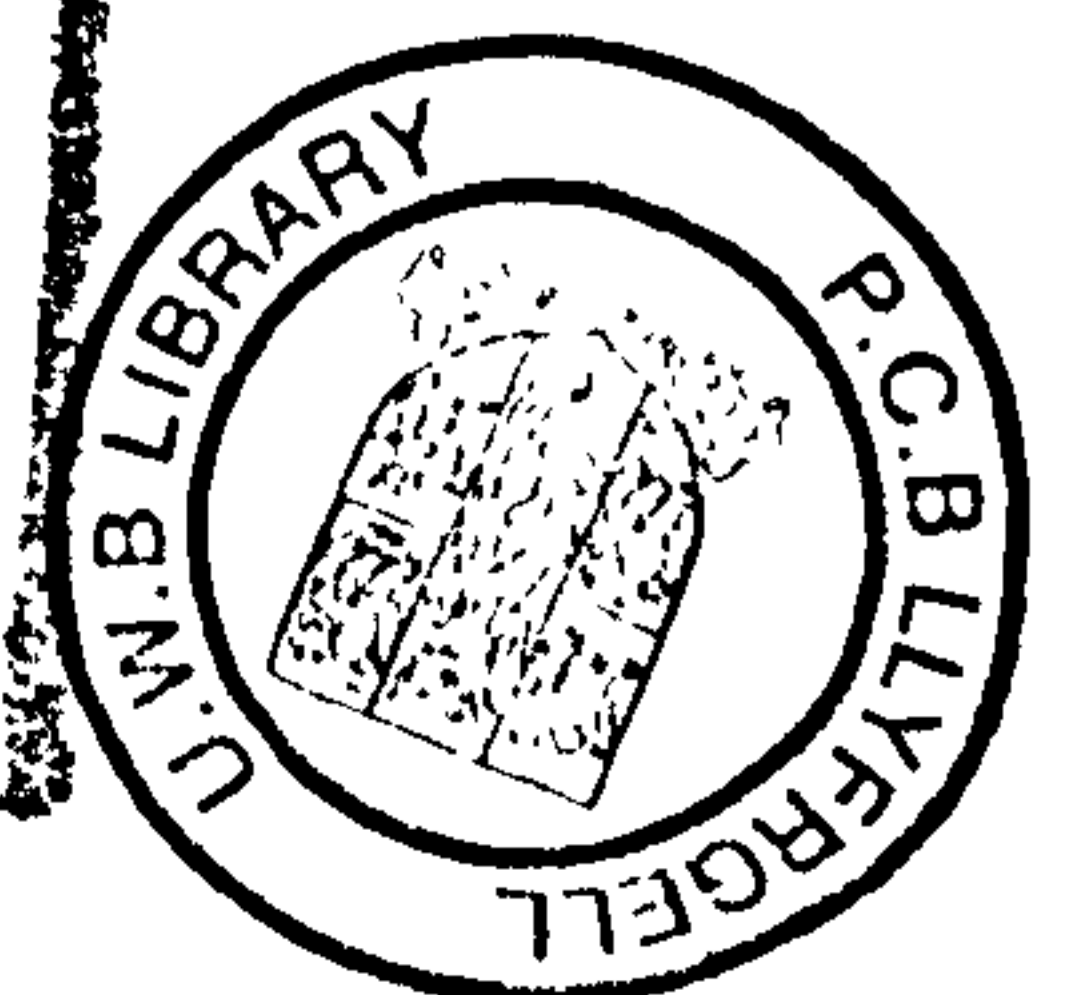
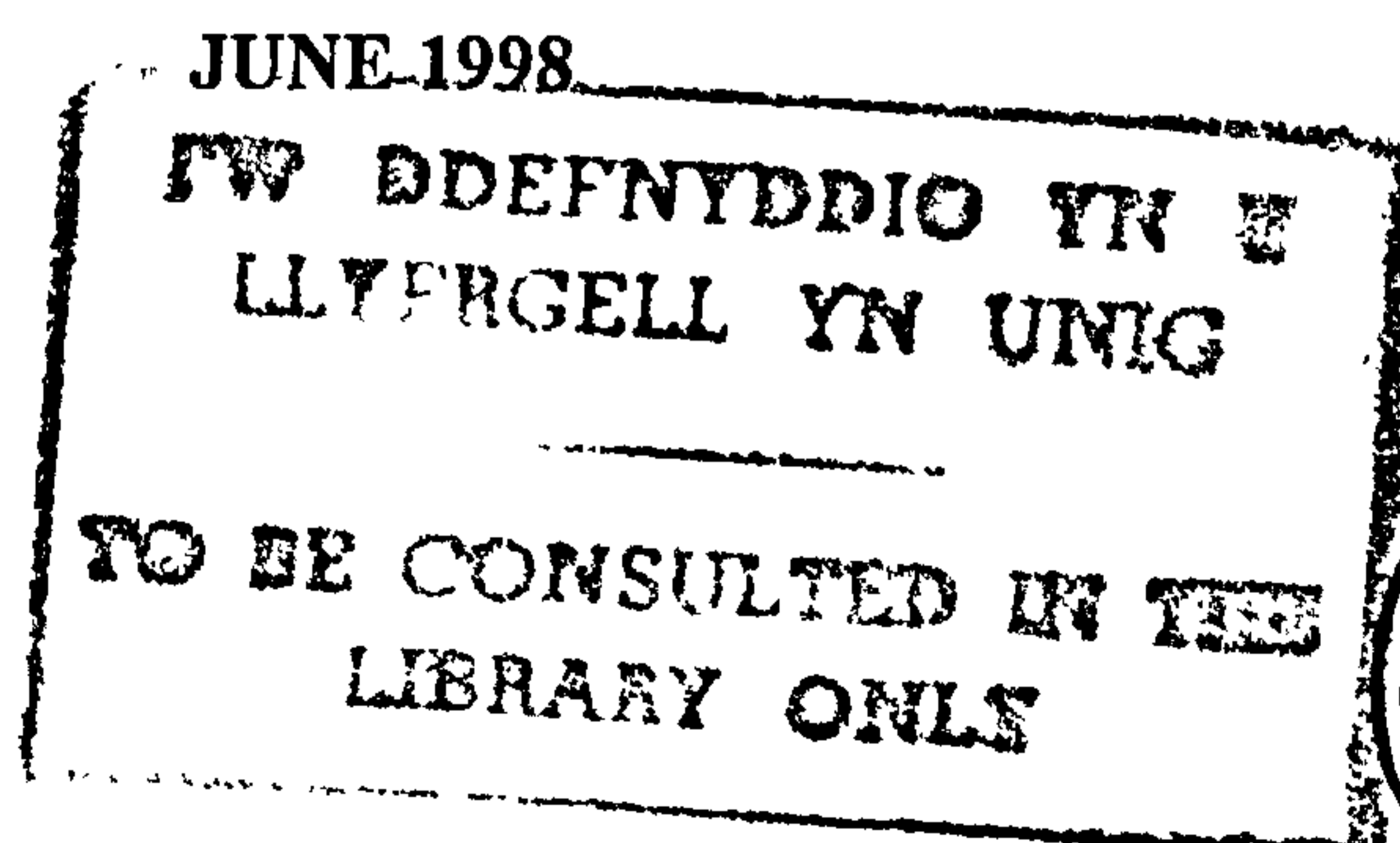
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**REPORTED AND OBSERVED DISRUPTIVE BEHAVIOURS IN THE
CHILDREN OF DEPRESSED MOTHERS PRIOR TO AND
FOLLOWING COGNITIVE-BEHAVIOUR THERAPY FOR MATERNAL
DEPRESSION.**

Mair Edwards

**THESIS SUBMITTED FOR
THE DEGREE OF DOCTORATE IN CLINICAL PSYCHOLOGY**

UNIVERSITY OF WALES, BANGOR



SUMMARY

The association between disruptive behaviours in children and depression in mothers is well-established (Cummings & Davies, 1994). Both are associated with social isolation, socio-economic deprivation, marital conflict, and over-general recall of memories. Maternal depression is also associated with poorer treatment outcome in parent-training programmes (Webster-Stratton & Herbert, 1995), although some parent-training intervention studies have reported improvements in maternal depression following intervention (e.g. Hutchings, 1996a, 1996b). Given some similarities between parent-training programmes and cognitive-behaviour therapy (CBT) techniques, this pilot study proposed to investigate the relationship between a CBT intervention for depressed mothers and its effects on the maternal reporting of disruptive behaviours in their children in comparison to an observational measure. The combination of measures used were Beck Depression Inventory-2nd Edition, Beck Anxiety Inventory, General Health Questionnaire-30, Eyberg Child Behaviour Inventory, Child Behaviour Checklist, Parenting Stress Index, Autobiographical Memory Test, Community Contacts Questionnaire, and The Brown Circles Task with Standardised Observation Codes –III B as the observational measure. Ten depressed mothers referred to an Adult Mental Health team for treatment, who also had children between the ages of 2 and 7 years who were reported to be exhibiting clinically significant disruptive behaviours (as measured by ECBI) participated in the study. Demographic data suggested that the sample were a ‘high risk’ group for the development of depression and disruptive behaviours. Following the CBT intervention both self-reported depressive symptoms and maternal report of child disruptive behaviours decreased significantly on all standardised measures. However, no significant differences were shown on the observational measure in either maternal or child behaviours and interactions, although child behaviours changed in the predicted direction. Supportive social networks were predictive of better outcome for maternal depression (as measured by BDI-II). The limitations of the study, and the clinical implications of the results are discussed.

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Yn ogystal, mae fy nyled yn fawr i'm teulu:

- i Dad a Mam, am eu cefnogaeth gyson, cymorth ymarferol, a'u ffydd ynof ar hyd y blynyddoedd.
- i'm rhieni yng nghyfraith am eu parodrwydd i ddod i'r adwy i ofalu am y plant - yn aml ar fyr rybudd.
- i'm gwr, Dewi, am fod mor barod i ysgwyddo'r baich adref, a bod yn ymgynghorydd cyfrifiadurol personol. Yn fwyaf arbennig hoffwn ddiolch iddo am fod yn ddylanwad mor bositif arnaf, ac am gadw ffydd ynof ar yr adegau pan welwn i ddim ond cymylau duon.
- i'm meibion, Iolo a Guto, am fod mor amyneddgar pan oeddwn yn diflannu i'm hystafell i weithio yn lle treulio amser gyda nhw, am wneud i mi chwerthin, ac am fy helpu i gofio beth sydd yn wirioneddol bwysig.

*“...Y mae hen ddihareb Rwsiaidd sy’n dweud,
‘Nid croesi cae yw byw.’
Cywir: croesi traeth ydyw.”*

Gwyn Thomas

INTRODUCTION

The association between childhood conduct disorders and maternal depression is well established (see Cummings and Davies, 1994). Wahler and Dumas (1984) found that depression is more common amongst mothers of children referred for conduct problems than amongst mothers of non-referred children, with Alpern and Lyons-Ruth (1993) reporting that over 50% of mothers of children with conduct disorders in their study were clinically depressed. Hutchings (1996a) found even higher levels of depression and mental health problems (65%) in mothers of children referred to a Child and Adolescent Mental Health Service (CAMHS) with disruptive behaviours.

Earlier studies (e.g. Bell & Harper, 1977; Patterson, 1982) had suggested a 'chicken and egg' scenario as regards maternal depression and conduct problems, suggesting either:

- i. that disruptive behaviours could arise as a consequence of a child dealing with an unresponsive mother.
- ii. that maternal depression could arise as a consequence of dealing with a 'difficult' child and its associated behaviours and cognitions.

An alternative suggestion has been made that maternal depression and disruptive behaviours are both independently influenced by multiple social factors – a stance supported by Fergusson and Lynskey (1993) who concluded,

“The weight of the evidence tends to suggest that the association between maternal depression and disruptive childhood behaviours arises largely or wholly because the social factors (social disadvantage, stress, marital problems) that give rise to increased risks of depressive symptoms in women are also independently associated with increased risks of childhood problem behaviours.”

(Fergusson & Lynskey, 1993, p.122)

Furthermore, depressed people appear to suffer greater numbers of severe environmental stressors than non-depressed people, possibly influenced by the person's difficulties in relationships with significant others such as family, friends, and colleagues (Hammen, 1992). Depressed parents also tend to have and maintain fewer social contacts leading to social isolation, which may have a negative impact on their children by reducing their opportunities to form extra-familial relationships and develop personal support networks (Zahn-Waxler, Denham, Iannotti & Cummings, 1992).

Fergusson and Lynskey (1993) conceded however that there was some evidence that prolonged episodes of chronic and severe depressive symptoms in mothers were clearly associated with childhood disruptive behaviours.

Lytton (1990) argues that, once established, it is likely that maternal depression and childhood conduct disorders have a reciprocal and negative influence on each other. Where both co-exist, it seems likely that the prognosis will be poorer than where they exist as single entities within a family, partly because the coping skills of the family are likely to be both limited by the depressed mother and over-stretched by the child's behaviours.

Referral process

Clients or patients who are referred to mental health care services pass through a number of 'filters' or 'gates' before reaching treatment. In a detailed population based study of the pathway to psychiatric care for adults, Goldberg and Huxley (1980) describe 5 levels representing different populations. Filters within the system determine movement from one level to the next, which determine whether the client's symptoms and presentation warrant entry to the next level of input. This can be represented as follows:

Table 1.1 Filters in health care system (based on Goldberg & Huxley, 1980)

LEVEL	POPULATION	FILTER
1	The community	
		Filter 1 – illness behaviour of the person.
2	Those attending primary care – irrespective of whether the GP has detected an ‘illness’	
		Filter 2 – identification of ‘illness’ by the GP
3	Those identified as being psychiatrically ill by the GP	
		Filter 3 – referral by the GP to psychiatric out-patient care
4	Those attending psychiatric services as out-patients	
		Filter 4 – referred by psychiatrist to receive in-patient care
5	Those admitted as in-patients for psychiatric care	

Goldberg and Huxley (1980) argue that the permeability of filters is only partly dependent on the severity of symptoms. Permeability may also be affected by the client’s understanding of symptoms (which may be culturally bound), the doctor’s ability to detect psychiatric disorders, and doctor and patient characteristics.

Children with psychological difficulties are also subject to 'filter' or 'gates'- which are again multiply determined. In reviewing the literature, Wolpert and Fredman (1996) suggest that the disparity between the large number of children in the community identified as having psychological problems (7-14% of the population) and those seen by mental health professionals (9-10% of those identified as having problems), is due to the selective permeability of the filters. Wolpert and Fredman (1996) concluded that filters are influenced by the cultural identity of their parents, socio-economic status of the family, family circumstances, the child's gender and age, and the type of problems presented by the child.

It is not known if or how the combination of a depressed mother and child with significant disruptive behaviours affects access to mental health professionals. It is likely however that the first filter, which is determined by the health/illness behaviour of the parent(s), rests on whether the parent(s) (and significant others) feel that the 'problems' lie within the parent or the child. This will determine who is presented to the GP as requiring further assistance.

In turn, a GP's response to a consultation will be influenced by several factors, including for example:

- knowledge about the family's history, including information from Health Visitors, Practice Nurse, etc.,
- whether the child appears to be very disruptive in the surgery,
- whether the mother appears to be very depressed,
- local access to and availability of services,
- financial implications of referral for GP fundholders.

These factors will determine whether a referral is made, and whether it is directed to Adult Mental Health (AMH) Services and/or Child and Adolescent Mental Health (CAMH) Services.

This study will concentrate on cases where mothers have been referred to AMH services for treatment of depression, who are also reporting disruptive behaviour problems in a child which is above the clinical cut-off scores on standardised measures of child behaviours, but where the child has not been referred or treated for such problems.

CHAPTER 2: DISRUPTIVE BEHAVIOUR IN CHILDREN

Childhood problems, often categorised into conduct disorders and emotional disorders, are common. The categories are not mutually exclusive, and children with disruptive behaviours often develop a wide range of emotional problems in adolescence and adulthood (Kazdin, 1985). Dealing with children's disruptive behaviours is often a completely exhausting and deskilling experience for parents (Webster-Stratton & Herbert, 1995).

Terminology

Although Kazdin (1983) suggests that most people can recognise a child with problematic behaviours (suggesting some commonality in presentation), the terminology varies. Terms such as conduct-, behaviour-, behaviour management, externalising-, and disruptive behaviour problems, and conduct- and/or oppositional defiant disorders are commonly encountered in the literature. Webster-Stratton and Herbert (1995) suggest that diagnostic ambiguity and comorbidity contribute to problems with terminology, and that the terms Conduct Disorder (CD), Oppositional Defiant Disorder (ODD) and Attention Deficit Disorder with Hyperactivity (ADHD) are often confused and/or used indiscriminately. (See Appendix A for a summary of DSMIV and ICD10 criteria for diagnosis of conduct disorders).

In this thesis the terms cited by authors will be used when discussing or quoting papers, and the author will use the term 'disruptive behaviours' which is defined in DSMIV as, "oppositional defiant and conduct disorder behaviours not meeting full criteria but where there is clinically significant impairment". The term 'disruptive behaviours' will therefore refer to externalising child behaviours such as defiance and oppositional behaviours; temper tantrums; physical and/or verbal aggression towards people, animals or objects; and inappropriate attention-seeking behaviours. The term 'disruptive behaviours' is also preferred since it describes a child's behaviour without labelling the child as having a 'disorder'.

Prevalence

Although epidemiological studies suggest that emotional disorders are more common than conduct disorders within community samples (Garralda & Bailey, 1986), children with conduct problems are twice as likely to be referred for specialist help than those with emotional problems (Subostsky & Berelowitz, 1990). It is thought that up to 10% of all children in Britain could be considered to have childhood conduct disorder (Stallard, 1993), and there are concerns that this percentage is rising. Even so, only a small percentage of children with disruptive behaviours (approximately 10%) are referred to and seen by specialist services such as Child and Adolescent or Family Mental Health Services (Hobbs, 1982).

Association of disruptive behaviours with later difficulties

If not treated, childhood conduct disorders predict severe difficulties in adolescence (e.g. school dropout, alcohol and drug abuse, criminal activity, and relationship problems; Kazdin, 1985), and in adulthood (e.g. persistent psychiatric, academic and social impairment; Reid, 1993).

The long-term cost of untreated and unresolved disruptive behaviours in children in terms of education, social welfare, mental health services, and the criminal justice system is therefore significant. Robins (1981) suggests that it may be the most costly mental health problem of all.

Factors associated with the onset, maintenance of disruptive behaviours and poor treatment outcome

Disruptive behaviours are associated with a multitude of factors that may increase the likelihood of onset and maintenance. These factors include child, parental, and environmental variables.

Child Variables

Factors such as the child's temperament, neurological difficulties, cognitive and social skills deficits, and genetic vulnerability are all suggested in the literature as causal or maintaining factors for disruptive behaviours.

i. Child temperament

Studies of reciprocal interactive effects show that a child's temperament influences patterns of parent-child interactions (Tarullo, DeMulder, Ronsaville, Brown, & Radke-Yarrow, 1995). From birth, personal characteristics (e.g. a 'placid', 'colicky', or 'happy' child, etc.) can influence the perceived 'easiness' of a child to parent. Children with 'difficult' temperaments (or asynchronous with parent) may evoke enduring negative emotions in parents more frequently than 'easy' children.

Bates (1990) found a strong correlation between child temperament factors (specifically lack of adaptability, and frequent and intensive negative child affect) with later aggressive and disruptive behaviours. In a longitudinal study, Bates, Bayles, Bennett, Ridge and Brown (1991) found that maternal reports of difficult behaviour in infants (at 6 and 12 months) were significant predictors of externalising behaviour problems in later childhood.

Studies of child temperament have been hampered however by difficulties in obtaining *objective* measures of *subjective* concepts (such as 'easy' and 'difficult' temperaments), and it is not clear to what extent these characteristics are influenced by early maternal handling.

ii. Neurological Difficulties

Neurological difficulties, and specifically factors associated with frontal lobe activity and the limbic system (e.g. deficits in verbal functioning, language comprehension, impulsivity, emotional regulation, and lower vagal tone) have been found to be associated with disruptive behaviours in children (Raine & Venebles, 1984). The suggestion is that deficits in the autonomic arousal system increase vulnerability to the development of disruptive behaviours. Infants and young children with such neurological difficulties, and who are then exposed to parental insensitivity, unavailability and hostility may experience physiological and emotional negative arousal (Tronick, 1989). This is thought to interfere with the child's emerging capacities to modulate and regulate arousal, increasing the risk of affective dysregulation in the child (Field, 1995a; Hammen, 1992). The arousal system may therefore be sensitised to other potentially stressful or challenging social contexts, with the result that infants and young children learn to avoid aversive states by either withdrawing or 'acting out'.

iii. Cognitive and Social Skills

Cognitive and Social skills deficits (e.g. distortion of social cues, problem-solving difficulties, lack of empathy, impulsivity, etc.) are also associated with disruptive behaviours (see Webster-Stratton & Herbert, 1995). Webster-Stratton and Herbert (1995) conclude that it is difficult to decide whether such

deficits are an underlying vulnerability or whether they arise as a consequence of, or are learnt in response to, negative experiences in social situations.

Similarly, children with disruptive behaviours are often poor academic achievers, but again it is unclear whether this is as a consequence of disruptive behaviours (e.g. as a result of poor attention in the learning environment) or due to specific learning difficulties.

The role of genetic factors (which may underlie factors such as neurological deficits and specific learning difficulties) have also been studied widely, but no firm conclusions can be drawn at present.

Parental and Environmental Variables

Vulnerability factors such as child temperament, neurological difficulties, cognitive and social skills deficits, and genetic 'make-up' are therefore associated with disruptive behaviours. Not all children with such vulnerability factors will exhibit disruptive behaviours however, and it is suggested that these vulnerabilities are most likely to be expressed in certain environments.

Environments that include poorer quality of parental management, parental mental health problems (especially maternal depression), socio-economic deprivation, lower levels of social support, and/or family conflict are considered to be the most likely to provide the necessary conditions for disruptive behaviours to thrive (Webster-Stratton & Herbert, 1995). Pre-school children, who have yet to develop relationships with other adults and peers, may therefore be particularly at risk, since their whole 'world' is under parental control. It is at the pre-school age that cases of disruptive behaviours are first established (Webster-Stratton & Herbert, 1995).

Parental and environmental factors will be discussed in more detail in Chapters 3 and 4.

Treatment for Child Conduct Disorder and factors associated with poor outcome

The Welsh Health Planning Forum (1993) suggested that treatment for significant behavioural problems or child conduct disorders should usually be by behaviourally based approaches. Most parenting skills training include components such as positive reinforcement, Time Out, and contingency contracting (Patterson, 1982; Webster-Stratton & Herbert, 1995).

McMahon and Forehand (1984) reported that parent-training packages lead to positive changes which are maintained for a number of years and which generalise to other aspects of parenting skills. However, other studies suggest that following intervention 50% of children still have clinically significant problems (Webster-Stratton & Hammond, 1990). Poor prognosis is associated with:

- i. Later treatment - in that interventions with older children have been shown to be less effective than interventions with younger children or interventions at an earlier stage (Kazdin, 1993; Patterson, Dishion, & Chamberlain, 1993).
- ii. Parental mental health problems, especially maternal depression which is associated with both drop-out from treatment and/or relapse at follow-up (McMahon, Forehand, Griest, & Wells, 1981). However some parent-training intervention studies have reported improvements in maternal depression associated with improvements in reports of disruptive behaviours in their children following child management/parent training interventions (Forehand, Wells, & Griest, 1980; Hutchings, 1996a, 1996b). (see Chapters 3 and 4).
- iii. Socio-economic disadvantage (see Chapter 4).

- iv. Social isolation (see Chapter 4).
- v. Inability to take up services offered (see Chapter 4: Autobiographical Memory).

The association of poorer outcome for disruptive behaviour management with parental mental health problems and its correlates suggests that targeting children with disruptive behaviour alone might not be as effective as combining treatments. O'Hara and Zekoski (1988) suggest that in order to significantly moderate the risk to children of depressed mothers it may be necessary to treat the mother's depression and simultaneously train her in different parenting skills.

CHAPTER 3: DEPRESSION IN WOMEN

Depressive symptoms are the most frequently diagnosed psychiatric disorders in adulthood (Richter, 1994). The symptoms are far-reaching in that they include changes in the behavioural, cognitive, somatic, psychomotoric, emotional and motivational states of depressed people, and their effects permeate to nearly all aspects of the depressed person's everyday life (Richter, 1994).

Epidemiological studies in the United States suggest that between 9-20% of the general population have significant symptoms of depression at any one time (cited in Gotlib & Hammen, 1992). Studies cited in DSMIV indicate that rates in men and women are highest in the 25-44 year old age group (coinciding with parenting), and depressive disorders occur twice as frequently in women as in men.

(See Appendix B for a summary of DSMIV and ICD10 criteria for diagnosis of Major Depressive Episodes and Disorder).

Depression in mothers

A review of the literature suggests that episodes of depression in mothers are relatively common with a rate of 10% suggested for women in the post-natal period (O'Hara & Zekoski, 1988) and similar rates reported for mothers of pre-school children (Cox, Murray, & Chapman, 1993). Although some distinction is drawn between post-natal, maternal, and 'normal' depression reviewing and comparing the literature on the effect of depression in women on children is problematic as studies often fail to define the type of depression under scrutiny. Where a definition is given, it is often vague and inadequate.

Dalton (1980) defines postnatal depression as the first psychiatric illness occurring within the first 6 months after childbirth that requires medical

intervention, provided that the woman has not experienced episodes of depression prior to childbirth. (If the woman *has* experienced previous episodes of depression then post-natal depression cannot be diagnosed). Three main types of post-natal depression are described – transient ‘baby blues’, post-natal depression (moderate to severe depressive disorder), and post-puerperal or post-partum psychosis (Dalton, 1980; Graham, 1989). Whilst there is good evidence that ‘baby blues’ and post-partum psychoses are associated with childbirth, it is less clear whether episodes of the second type of depression are related to childbirth *per se*.

Paykel (1980) has argued that women who develop post-natal depression have an underlying disposition to depression, and Lee (1997) reports that many women experiencing ‘post-natal’ depression have in fact suffered from depressive episodes throughout adulthood, and continue to do so as their child grows up. For example, Cox, Rooney, Thomas, & Wrate (1984) found that over 50% of their sample of post-natally depressed women had not recovered after 1 year. Similarly, Philipps and O’Hara (1991) followed up women who had experienced post-partum depression and found persisting high rates of depression four and half years later. In a cross-sectional survey, Cox et al. (1993) found that the rate of depression among mothers of toddlers was the same as that amongst new mothers.

In this study, maternal depression will therefore encompass all depression in mothers other than ‘baby blues’ and post-partum psychosis, since the author feels that this better reflects the concept than the term ‘post-natal’.

Factors associated with the development of Maternal Depression

Discrepancy between expectations and reality

One factor thought to influence the development of depressive symptoms in mothers is the discrepancy between women's expectations and the reality of motherhood (Woollett & Phoenix, 1991). Society has very high expectations of mothers generally, and women's expectations of motherhood are also very high (Marshall, 1991). However, as Ussher (1991) states:

“The idealised image of glowing Madonna gaining pleasure and fulfilment from her angelic offspring is far removed from the reality of many women's experience.”

(Ussher, 1991, p.258)

Difficulties may arise if a mother finds herself failing to live up to either society's or her own expectations of motherhood, or there are discrepancies between anticipated and actual infant behaviour.

For example, Littlewood and McHugh (1997) suggest that prolonged periods of infant distress (typified by frequent and longer crying episodes in babies and irritable and unpredictable behaviours in toddlers) that the mother can neither alleviate nor understand may raise self-doubts in the mother about her skills as a mother. Littlewood and McHugh (1997) report that mothers with difficult children perceive the problems, irrespective of the origins, to be a reflection of their own inadequacy or failing rather than a reflection of other factors.

Feelings of 'Loss'

The feeling of 'loss' is a concept closely associated with depression. Brown and Harris's (1978) seminal work on links between clinical depression, social circumstances and life events concluded that depression was associated with real or threatened losses. They found no evidence that childbirth and pregnancy were specifically related to depression, unless associated with other severe on-going

problems. Brown and Harris (1978) concluded that the experience of pregnancy and childbirth brought home feelings of hopelessness in women by making them particularly aware of the unsatisfactory nature of their position.

Oakley (1979) and Marshall (1991) suggest that mothers commonly experience the following losses either immediately after the birth of a child, or later:

- the temporary or permanent loss of employment.
- the loss of status - since in Western society status is derived from employment.
- the loss of independence - both personal and financial.
- the loss of privacy both during pregnancy and after the birth (often associated with traumatic experiences within hospitals).
- the loss of social support and social networks due to social isolation resulting from childcare and the employment-related nature of many social networks.
- the loss of the culturally valued idealised and romanticised vision of motherhood.
- the loss of 'self' – a loss of personal identity and individuality.

Marshall (1991) states that depression as a result of such losses would normally be seen as a reasonable and appropriate reaction – but that women who experience or express negative feelings towards their child or motherhood are immediately seen as an abnormal 'sub-class'.

Cognitive Theory of Depression

Whilst many women may experience similar life events and losses as listed previously, not all women will become depressed. Littlewood and McHugh (1997) suggest that cognitive theories are useful in understanding maternal depression as they focus on the ways in which different individuals interpret similar events.

The cognitive theory of depression as described by A.T. Beck (1989) suggests that there are three components to depression:

- negative automatic thoughts, which are thoughts that appear to arise ‘out of the blue’ and disrupt mood. In depressed people such thoughts are often described in terms of a cognitive triad – a negative view of the self, the world, and the future.
- systematic logical errors, which include arbitrary inferences, overgeneralization, selective abstraction, magnification or catastrophising of negative events, minimisation of positive events, personalisation, and dichotomous thinking.
- Depressogenic schemata, which are general, long-lasting attitudes or assumptions about the world according to which the individual organises both past and current experiences.

The array of negative thinking processes associated with depression as summarised above - for example, negative social cognition, altered appraisal processes, lowered self-esteem, reduced sense of control, and unrealistic expectations, are thought to be associated with an increased risk of maladaptive responses to the person’s child(ren) and thus may directly influence child-rearing practices (Cummings & Davies, 1994).

The effect of depression on maternal behaviours, interactions, and child-rearing practices will be discussed in Chapter 4.

Treatment of depression in mothers

Although distress in late pregnancy and early post-partum is widespread, very few women affected appear to actively seek help at this time (O'Hara, Zekoski, Phillips, & Wright, 1990). Littlewood and McHugh (1997) suggest that depression in mothers may be difficult to predict, measure and treat since the continued stigmatisation associated with mental health problems, compounded by cultural images of motherhood may make it difficult for mothers to admit their difficulties and request help.

Treatment for depression may include medication (either in primary or in secondary care); counselling (in primary or secondary care); psychotherapy (secondary care); and in severe cases in-patient treatment at a Psychiatric Unit.

Lee and Gotlib (1989) suggest that treating depression does not necessarily mean that parenting behaviours will fall within normal limits, and does not therefore decrease the risk of detrimental effects on the child. Eisenbruch (1983) in fact suggests that outpatient medication therapy may actually increase the risk to the child by keeping the depressogenic mother in the home environment.

Additionally, continued disruptive behaviours in the child may increase the likelihood of a relapse in maternal depression.

CHAPTER 4: FACTORS ASSOCIATED WITH MATERNAL DEPRESSION AND DISRUPTIVE BEHAVIOURS

As mentioned in the previous chapters, several parental and environmental factors are associated with the formation, maintenance, and response to treatment of both maternal depression and disruptive behaviours in children.

Maternal Mental Health Factors

Current research projects world-wide are investigating the specific ways in which maternal depression affects parenting behaviours. Although, many studies investigating these associations have failed to clearly define and describe the depressive symptoms of their participants, Campbell, Cohn and Meyers (1995) have concluded that chronicity and severity of depression (which may vary substantially between individuals) is an important consideration. The literature suggests that chronic and severe depression in mothers is associated with the disturbances of mother-child attachment, and deficits in parenting skills.

Mother-Child Attachment

Depression in mothers has been shown to be a negative influence on mother-infant attachment, especially if the maternal depressive behaviour is prolonged. Parental emotional unavailability and psychological insensitivity, which are highly correlated with depression, are strong and reliable predictors of insecure parent-child attachments (Ainsworth, Blehar, Water, & Wall, 1978; Cohn, Campbell, Matias, & Hopkins, 1990; Field, 1989).

The severity of depressive symptoms increases the likelihood of disturbances in attachment, with insecure attachments (specifically the insecure avoidant-resistant pattern) only found in children of parents diagnosed for major depression (see Cummings & Davies, 1994). Teti, Gelfand, Messinger, and

Isabella (1995) have further found that the most disturbed attachment style (disorganised-disoriented) is typified by behaviours in the child (e.g. sadness, lethargy, extreme panic) which mirror those seen in severe depressive disorders. The long-term effects of maternal depression appear to be most acute if severe depression coincides with the development and stabilisation of the mother-child attachment (i.e. 6-18 months).

In turn, disturbed mother-child attachments have been found to be associated with child behaviour and emotional difficulties including maladaptive functioning in other contexts, problems of emotional dysregulation, heightened sensitivity to stress, pervasive anxiety and distress, problems with interpersonal relationships, and the development of internalising and externalising disorders (see Cummings & Davies, 1994).

This would suggest that depression in mothers may have extensive and long-term effects on children through disturbances of the developing mother-child relationship.

Parenting skills

Parenting skills and parental interactions with children have been researched for many years in much detail. In summary, Webster-Stratton (1992) reports that such studies have found that many parents of children with disruptive behaviours:

- exhibit fewer positive behaviours,
- are more violent and critical in their use of discipline,
- are more permissive, erratic and inconsistent,
- are more likely to fail to monitor their children's behaviours,
- and are more likely to reinforce inappropriate behaviours and ignore, or punish prosocial behaviours

Similarly, children with disruptive behaviours exhibit:

- higher rates of deviant behaviour and noncompliance,
- fewer positive verbal and nonverbal behaviours in interactions with their parents
- more negative nonverbal gestures, expressions and tones of voice.

(Webster-Stratton & Herbert, 1995).

Patterson (1982) described this process as 'coercive' in that children learn to escape or avoid parental criticism by escalating their own negative behaviours, which in turn leads to increasingly aversive interactions with parents. As the pattern is repeated (often on an intermittent basis) a cycle of aversive parent/child interactions is established and maintained.

Parenting skills and maternal depression

Depression in mothers has been identified as a potential risk factor in the development of disruptive behaviours since depressed mothers often exhibit the parental behaviours listed above (Webster-Stratton & Herbert, 1995).

Even shortly after birth, coded video footage of mother-infant interactions show subtle behavioural differences between mother-child dyads where the mother is depressed as compared to dyads where the mother is not depressed. Differences include lower activity levels, less vocalisations, fewer positive and more negative faces, and decreased eye contact in both mother and child, and frequent infant protestations (Field, 1995a, 1995b). Frequent infant protestations, as mentioned in Chapter 3, are associated with increased self-doubt and lower self-esteem in mothers as regards their parenting skills (Littlewood & McHugh, 1997).

With older infants and children, depressed mothers tend to be inconsistent, lax and generally ineffective in their child management and discipline, and may avoid effortful discipline and conflict with even their pre-school children (Zahn-

Waxler, Ionnotti, Cummings, & Denham, 1990). As Cummings and Davies (1994) summarise:

“ Due to lethargy and irritability, depressed parents may be particularly inclined to fall into the negative reinforcement trap of maximising immediate rewards (e.g. submitting to demands of children, using ineffective power assertive techniques) and also minimising effort and energy expended in managing children (e.g. avoiding compromise with the child).”

(Cummings & Davies, 1994, p.81)

Repeated failures when disciplining their children may also lead to decreased self-esteem, lack of perceived control over situations, and lack of confidence in the mothers. Lower levels of perceived parental efficacy are associated with low parenting skills (Teti, Gelfand, & Pompa, 1990; Webster-Stratton & Hammond, 1988).

As well as the behaviours and emotions commonly associated with depression (e.g. apathy, lethargy, dysphoria) depression is also associated with high levels of irritability and aggression. Depressed mothers are therefore commonly described in the literature as being more negative, unsupportive, intrusive, critical, disengaged, unresponsive to child cues and lacking in warmth which is expressed in both verbal and physical interactions between mother and child (Cummings & Davies, 1994; Field, 1995a, 1995b).

Although depressed mothers typically touch their infants less, their touching behaviours are more negative (e.g. poking, punching, and pinching etc.) than that observed in non-depressed parents and other control groups (Webster-Stratton & Hammond, 1988). Such aggressive behaviour by the mother is likely however to elicit an immediate counter-attack from the child, and consequently escalate the aggression (Hops, 1995). Studies have shown that this may generalise to other situations if the negative maternal behaviours persist (Cohn et al., 1990; Field, Healy, Goldstein, & Guthertz, 1990).

Depressed mothers have also been found to give greater number of instructions to their children, which has been associated with increased noncompliance and/or disruptive behaviours (McMahon & Forehand, 1988)

If maternal depression persists, by early and late childhood identifiable behavioural problems emerge in children of depressed mothers both at home and school – for example hostile, demanding and/or antisocial behaviour, hyperactivity, and distractibility. Where maternal depression persists further the probability of child anti-social and disruptive behaviours increases and persists into adolescence leading eventually to the development of adulthood psychopathology (Loeber, 1990).

Autobiographical Memory and Parenting

Autobiographical memory is associated with both depression and specific parenting skills deficits.

Several studies (see Williams, 1996) have reported on the association between depression and overgenerality when recalling emotionally toned autobiographical memories (especially in response to positive cue-words) on the Autobiographical Memory Test (such as the versions in Appendix C). In reviewing the literature Williams (1996) also concludes that overgenerality of autobiographical memory is a trait marker of vulnerability to persistent depression. For example, in a longitudinal study Brittlebank, Scott, Williams and Ferrier (1993) found significant correlations between overgeneral responses to positive cue words between baseline and 3-month and 10-month testing. Brittlebank et al. (1993) also found less responsivity to antidepressant treatment in depressed participants with over-general memories and suggest that this may indicate a wider tendency to process information in an overly general way, thus exacerbating the mood-disturbing effects of adverse life events.

Although there is some suggestion in the literature that depressed people's appraisals are more accurate and realistic than those of non-depressed people (i.e. the world *really is* an awful place!), the effect of depression on mothers' appraisals and their recall of children's behaviours is ambiguous. There is some evidence to suggest that whilst depressed women are more likely to perceive their baby in terms of his or her being a 'difficult' baby or child (Whiffen, 1988) and to rate their child's behaviour more negatively than non-depressed observers in video-coding experiments (Field, Morrow, & Adelstein, 1993) they may not be accurate or realistic in their recall. Wahler and colleagues (e.g. Wahler & Dumas, 1989; Wahler & Sansbury, 1990) similarly found evidence that whilst mothers of children with conduct disorders focused on their children's deviant behaviours, their descriptions were over-general and lacking in detail. Poor parental ability to accurately observe, describe and monitor their child's behaviour is predictive of poor outcome in treatment programmes (Wahler, 1980).

Since depressed mothers have been found to be more likely to perceive their children's behaviours as maladjusted or inappropriate, they are also thought more likely to over-report problems on child behaviour inventories (Williams, Anderson, McGee, & Silva, 1990). Whether reality-based or not, Webster-Stratton and Hammond (1988) found that depressed mothers viewed their children as having significantly more behaviour problems than either spouses or nondepressed mothers. They also found that negative appraisals predicted critical and coercive parenting practices and increased frequency of physical punishment although objectively the children's behaviours were not more deviant than the control group. In contrast however, Webster-Stratton and Hammond (1988) and found that depressed mothers rated their own maternal behaviours less negatively than when rated by others.

Hutchings (1996a) made a link between the literature cited above regarding parental difficulty with observing and describing their children's behaviours with

the growing literature on autobiographical memory and problem-solving skills in adults.

Poor specificity in autobiographical memory is thought to impede a person's ability to solve problems effectively, and so impedes recovery from a depressive episode. Evans, Williams, O'Loughlin, & Howells (1992) found that the production of effective solutions in an interpersonal problem-solving task is inhibited by overgenerality of autobiographical memory (in that depressed people produced fewer and poorer quality solutions). Also associated with overgenerality of recall is the inability to picture the future in a specific way (Williams, Ellis, Tyers, Healy, Rose and MacLeod, 1996), and this may also affect problem-solving skills since the ability to recall past successful solutions and imagine the consequences of a chosen action is a pre-requisite of effective problem-solving. Williams et al. (1996) suggest that nonspecificity about the future may combine with a range of other aspects of judgement (for example, judgements about the probability of certain events occurring and the person's degree of control over events) which may affect mood disturbance.

The implication as regards depressed mothers is that they are more likely to over-generalise about their children's behaviours, and be less able to generate alternative solutions to family or child based problems. Hutchings (1996a) who developed the Parent-Child Autobiographical Memory Test (PCAMT) found that a low score on the PCAMT predicted failure to take up treatment in the first instance. Since the inability to generate specific memories is associated with vulnerability to depression and with poorer problem-solving skills (Evans, et al., 1992) the failure to take up services may be influenced by parental mental health problems or more generally, feelings of hopelessness that a solution to their problems might be possible.

Since autobiographical memory is not thought to be state-dependent this suggests that cognitive processes and styles remain relatively stable over time (Williams, 1996). However, autobiographical memory may change in response

to specific interventions with Brittlebank et al. (1993) suggesting that individuals who overgeneralise may benefit from the use of cognitive techniques directed towards enhancing the specificity of information processing, for example through the use of task assignments such as diary and chart keeping, which are components of cognitive behaviour therapy (CBT).

Environmental Factors

Socio-economic Deprivation

The association between socio-economic disadvantage and both physical and mental illness has been well established (Brown & Harris, 1978; Townsend & Davidson, 1988). It is also associated with the occurrence and maintenance of disruptive behaviours. Herbert (1995) reports that families from poorer and disadvantaged backgrounds are more likely to experience child management problems as compared to more advantaged families. Dumas and Wahler (1983) had previously concluded that children with conduct problems from disadvantaged or multi-stressed families did less well in treatment programmes than middle-income or families where the only problem was the child's disruptive behaviours.

Socio-economic deprivation as a result of unemployment, overcrowding, and poverty, and compounded by poorer health and increased contact with social and health services is associated with increased stress on family units (Rutter and Giller, 1983). Families with children with disruptive behaviours report far more stress of this kind than non-clinical families, with mothers especially reporting a greater degree of daily hassles and major crises (Webster-Stratton, 1990). Doyal (1995) concludes that such psychosocial stress makes it particularly difficult for mothers to recover from depression, and Gallimore, Weisner, Berheimer, Guthrie and Nihira (1993) suggest that factors such as maternal depression decrease a person's ability to deal effectively with, and accommodate, stressful situations thus exacerbating the impact of negative events on their children.

Rutter and Quinton (1977) used 6 factors to calculate an index of social disadvantage which was shown to be closely associated with the occurrence of child mental health problems. Their index included:

1. Father in semi-skilled or unskilled occupation.
2. Overcrowded home or large family.
3. Marital discord/broken home.
4. Mother with depression or neurosis.
5. The child having been 'in care' for at least one week.
6. The father having committed at least one proven criminal offence.

Each factor, if present, was given a score of 1. A score of 2+ was found to be significantly related to child psychiatric disorder (Rutter, 1976).

In their study, Dumas and Wahler (1983) also identified 6 factors to give an index of socio-economic disadvantage, including:

1. Family income.
2. Maternal Education.
3. Marital status.
4. Family size.
5. Source of referral.
6. Area of residence based on crime statistics.

Using a similar scoring method to Rutter and Quinton (1977), Dumas & Wahler (1983) found a score of 4+ to be predictive of poor treatment outcome.

In both indices, single parent status (i.e. not cohabiting with another adult) and/or marital conflict, and dependence on state benefits are identified as potential indicators. Church (1995) reports that 18% of mothers in Britain are single parents (11% either divorced or separated, and 7% who have never been married). The Child Poverty Action Group conclude that any family entirely dependent on state benefits is living below the poverty line, and report that in Britain 24% of two-parent families and 58% of single parent families are living below this standard (Key Poverty Statistics, CPAG, 1996).

Professionals and agencies working with disadvantaged families therefore need an awareness of the additional problems facing multi-stressed families in order to offer as effective an intervention as possible within the constraints of the environments. Additionally, since socio-economic disadvantage can only be properly addressed at a 'macro' or political level, individual professionals and agencies working with disadvantaged families have a duty to raise awareness of the additional problems facing multi-stressed families by collecting and providing relevant data to service purchasers .

Social Isolation

Maternal social isolation is associated with both depression in mothers (Brown & Harris, 1978; Thorpe, Golding, & Magillivary, 1991) and disruptive behaviours in children (Wahler & Dumas, 1984). It is also thought that maternal social isolation may in fact increase the impact of maternal depression on children since the children of depressed parents may find it more difficult to form and develop normal extra-familial social support networks which are thought to ameliorate the effects of family dysfunction, (Zahn-Waxler et al., 1992).

Additionally, social isolation and lack of support have been reported to be significant predictors of poor treatment outcome, and failure to maintain treatment effects in parent-training interventions (Wahler & Dumas, 1984; Webster-Stratton, 1985). Social isolation and specifically the lack of a confidant has been associated with poorer problem-solving skills and parenting practices (DeGarmo & Forgatch, 1997). Some child management or parent-training interventions have attempted to address this by incorporating adjunctive 'ally support training' into interventions in an attempt to decrease social isolation and increase positive treatment outcome but with little effect (Dadds & McHugh, 1992).

The term ‘social isolation’ may be rather misleading since it implies that it is the quantity or frequency of contact with others that is the main issue. Brown and Harris (1978) and Wahler, Leske and Rogers (1979) suggest however that it is the *quality* of contact with others (i.e. the existence of a confiding, supportive, non-critical relationship) that ‘protects’ women from becoming depressed when problems arise. This may be one reason why the ‘ally support training’ was not successful since it is difficult to ‘force’ a confiding relationship.

In developing the Community Interaction Checklist (CIC; Wahler et al., 1979), which is an instrument designed for repeated assessment of the level and quality of social support, Wahler et al. (1979) were able to differentiate between the concept of isolation (i.e. the quantity or frequency of social contact) and social support (i.e. the quality of support). They found that women with poor treatment outcomes had much more frequent contact with relatives than did low risk mothers, but that for the most part this contact was not viewed as supportive. Wahler and colleagues therefore coined the term ‘Insularity’ to describe this pattern, and defined it as:

“... a specific pattern of social contacts within the community that are characterised by a high level of negatively perceived social interchanges with relatives and /or helping agency representatives and by a low level of positively perceived supportive interchanges with friends.”

(Wahler & Dumas, 1984, p.387)

Using the CIC, Wahler and Dumas (1984) reported that insularity and socio-economic status were strong predictors of outcome on parent-training programmes at 12 months post-intervention. They also reported that ‘Insular’ mothers were more aversive, and used more aversive consequences with their children than ‘non-insular’ mothers (Wahler & Dumas, 1985).

Based on the CIC, Hutchings (1996a) designed and developed the Community Contacts Questionnaire (CCQ; see Appendix D) as a brief clinical measure of the quality of social contact and ‘insularity’. Hutchings (1996a) found indications of associations between social isolation (as measured by CCQ), maternal mental health (as measured on Beck Depression Inventory-IA, BDI-IA; Beck, Rush,

Shaw, & Emery, 1979), and treatment outcome. In a comparison between mothers of children referred to CAMH service with disruptive behaviours (n = 26), and mothers of non-referred children (n = 19), Hutchings, Midence, and Nash (1997) reported that the CCQ identified significantly more 'insular' mothers among the referred sample than among the control group. Similar results would be predicted for depressed mothers as compared to non-depressed mothers.

Marital Relationship and Conflict

Both maternal depression and disruptive behaviours in children are associated with marital conflict (see Cummings & Davies, 1994; Dadds, 1992; Rutter & Quinton, 1984). Although earlier studies had suggested that children, especially boys, from single-parent families were at a higher risk of developing disruptive behaviours, further research suggested that it was the amount and intensity of marital conflict and violence (often associated with separation and divorce) that are the most damaging factors (O'Leary & Emery, 1982).

Marital conflict is typified by overt expressions of anger including verbal and/or physical aggression, and by covert expressions of anger such as 'the silent treatment' (Webster-Stratton & Hammond, 1988; Field, 1989). It has been reported that depressed mothers in marital conflict respond more negatively towards their sons (Murray, 1992) and that boys may have an increased vulnerability to exposure of hostility and conflict, increasing their risk of developing externalising disorders as compared to girls (Webster-Stratton & Hammond, 1988).

Unfortunately parental depression increases the likelihood that marital conflict remains unresolved and unexplained since depressive symptoms (e.g. lethargy, withdrawal, and negative affect) may interfere with a parent's ability to resolve conflicts and reassure children. An impaired ability to explain the causes and

consequences of conflict to children, and even denial of anger and conflict, lead to increased child confusion and distress (Cummings & Davies, 1994).

Marital conflict has also been found to be associated with parents having more negative perceptions of the child's adjustment, being more inconsistent in their parenting, increasing punitive acts and decreasing rewards, and with decreased parental reasoning skills (Stonemen, Brody, & Burke, 1988). If marital conflict ends in divorce, parenting skills may be further reduced as divorce, which is often very stressful, seriously disrupts social support systems (Forgatch & DeGarmo, 1997).

Dadds (1992) identified marital difficulties as a major obstacle to the effective resolution of children's behavioural problems in child management interventions, and suggested that marital problems should be addressed concurrently with the disruptive behaviours.

CHAPTER 5: THE STUDY AND HYPOTHESES

In the previous chapters it has been argued that chronic or recurrent depression in women is associated with disruptive behaviours in children, and generally associated with poorer treatment outcomes on behaviour management programmes for disruptive behaviours.

However, some parent-training/behaviour management intervention studies have reported improvements in maternal depression associated with improvements in reports of disruptive behaviours in their children (e.g. Forehand et al., 1980; Hutchings, 1996a, 1996b). This suggests that there are aspects of some behavioural management or parent training programmes which are effective not only in reducing incidents of disruptive behaviours in children, but are also effective in reducing symptoms of depression in the mothers.

An examination of the elements included in the behaviour management programmes reported in Hutchings (1996a; 1996b) suggests that there are some elements that are common to cognitive behaviour therapy interventions for depression. For example:

- Diary and chart keeping which are used in parent-training to improve parental observation and attending skills, and which can be used in CBT to challenge over-generality and increase specificity.
- Homework tasks. Although the focus of the homework may be different, the process of planning and completing tasks is similar, and may improve the generalisation of new behaviours to other settings.
- Setting specific goals or targets, which requires the development of problem-solving skills, which again may be generalisable.
- Recording success. Although the method may be different (i.e. use of star charts with children), recognising and rewarding accomplishment is a core concept of increasing 'pleasure and mastery' in CBT.

These commonalities raise questions about what effect a CBT intervention may have on a mother's parenting skills, in the absence of any specific parent-training skills teaching.

It may be hypothesised that undertaking the tasks listed above, in either CBT or parent-training interventions, encourages clients to become more specific in their observations and recall of events, thus improving specificity of autobiographical memory (Brittlebank et al., 1993), and improving some of the core skills required for effective parenting (Wahler, 1980). As clients become more specific, common thinking errors (e.g. dichotomous thinking, selective abstraction, arbitrary inferences and overgeneralization) are likely to decrease, leading to changes in cognitions and behaviours. Furthermore, clients may develop alternative and new behavioural and cognitive strategies which generalise to all aspects of their lives, resulting in an associated decrease in depressive symptomology and an increase in self-esteem, self-confidence and motivation. Such changes in the behaviours and cognitions of the mother, which are specifically targeted in CBT interventions, may be sufficient to produce positive changes in the mother-child interaction, and so break the cycle of coerciveness which is thought to maintain non-compliant behaviours.

If this were the case, CBT would be an effective method of working with mothers experiencing both depression and disruptive behaviours in their children. Although Eisenbruch (1983) and Lee and Gotlib (1989) were pessimistic about the effect of treating depression on outcome in children, their focus was on the effect of pharmacotherapy and did not explicitly mention psychological interventions such as CBT.

Cognitive Behaviour Therapy for depression

Cognitive-behaviour therapy, as the name implies, is based both on cognitive restructuring techniques as first proposed by A.T. Beck, Rush, Shaw, and Emery (1979), and behavioural interventions. It therefore consists of a range of techniques that can be used to influence both depressive thoughts and behaviours – thus affecting the thought-affect-behaviour linkages. It is now generally accepted that CBT is an effective intervention for treating depressive disorders and reducing relapse (Williams, 1992).

The cognitive model of depression suggests that core beliefs about the world and ourselves are based on early experiences, but may be reinforced by later experiences. The activation of core beliefs by critical incidents leads to negative automatic thoughts that influence behaviour, cognitions, emotions, motivation and physiological aspects. These reactions further reinforce the core belief system.

CBT initially focuses on modifying these reactions – thus allowing later modification of aspects of the underlying belief system. Changing behaviours and cognitions during therapy (be it CBT or parent training) can therefore influence core assumptions, and thus modify reactions to new critical events.

The Study

This study proposed to investigate and explore the impact, if any, of using a CBT intervention with depressed mothers on:

- a) maternal reporting of child disruptive behaviours,
- b) observed mother and child behaviours and interactions.

In addition outcome in terms of measures of maternal mental health were examined, including self-report of depressive symptoms, autobiographical memory and maternal social isolation.

As discussed in Chapter 4, depressed mothers are thought to over-report disruptive behaviour problems, perceive their children's behaviours as maladjusted and inappropriate, and are poor at attending to and observing their children's behaviours. Patterson and Forgatch (1995) therefore strongly suggest that observational data provides a more valid measure of treatment outcome than self-report measures alone. An observational measure was therefore selected to allow comparison between reported and actual mother and child behaviours and interactions at pre- and post intervention assessment. The selected observation test was The Brown Circles Task (Tuteur, Ewigman, Peterson, and Hosokawa, 1995) coded using Standardised Observation Codes III-B (SOCIII-B; Cerezo, Keesler, Wahler, & Dunn, 1986) (see Appendix E).

Additionally outcome measures of social isolation and autobiographical memory were included since these have been shown to be important factors in the formation and maintenance of both maternal depression and disruptive behaviours in children.

Based on the literature cited previously, the following hypotheses were generated:

Hypothesis 1: CBT intervention for depression in mothers would be associated with a reduction in maternal reporting of disruptive behaviours in their children as measured by standardised measures of parental report of disruptive behaviours in children.

Hypothesis 2: Significant differences would be found between pre- and post intervention in the women's behaviours and interactions with their children as observed on the Brown Circles task. Specifically:

- the women's interactions would be less negative and more positive,
- the women would decrease the number of instruction given to the child.

Hypothesis 3: Significant differences would be found pre- and post intervention in the children's behaviours and interactions with their mothers as observed on the Brown Circles task. Specifically:

- the children's interactions would be less negative and more positive,
- the children would be less oppositional to and more compliant with their mothers' instructions,
- the children would show more 'On task' behaviour.

Hypothesis 4: Participants with the ability to generate specific memories at pre-intervention assessment, (i.e. participants with higher AMT scores at baseline), would show greater improvement on self-report measures of maternal mental health and standardised measures of disruptive behaviours in children.

Hypothesis 5: Mothers who were not socially isolated at baseline assessment (i.e. participants with higher scores on the CCQ) would show greater overall improvement on measures of maternal mental health and standardised measures of disruptive behaviours in children.

CHAPTER 6: METHODOLOGY

Study Design

The aim of this project was to explore the relationship between maternal depression, maternal reporting of disruptive behaviour in the children of those mothers, and observed behaviours and interactions – both prior to, and following a cognitive-behavioural intervention for depression. A case-study design, using repeated and pre- and post-intervention measures, was used.

Due to ethical and practical concerns it was not possible to compare results with a ‘no treatment’ or ‘waiting-list’ control group. Preventing depressed women with dependent children from receiving treatment for a period of two months contravened the AMH teams working practices. Furthermore, insufficient numbers of women would have been referred to the two selected Adult Mental Health teams in the time allowed for participants to be randomly assigned to treatment or control group.

Ethics and Consent from relevant agencies and other professionals

Ethics approval was sought from and granted by the University of Wales, Bangor School of Psychology Ethics Committee and the North Wales Health Authority Research Ethics Committee (West) (see Appendices F and G).

Consent from the relevant agencies and other professionals working with prospective participants was also sought and granted (see Appendix H).

Participants

Sixteen women, who had at least one child between the ages of 2 and 7 years were identified during the two months allocated for participant identification. All sixteen women had been referred initially by their GP¹ due to 'low mood' or depression and accepted for allocation of services by two Adult Community Mental Health Teams in North West Wales.

Of the sixteen women identified, 14 women agreed to complete the initial screening questionnaires. Of the 14 women who were screened, 11 women complied with the inclusion criteria² as described in the Procedure section.

Eleven women were therefore approached to participate in the treatment phase of the project, and completed the pre-treatment assessment. Due to physical health problems one participant was not able to continue with therapy, and was transferred to a colleague for longer-term support. Results from this participant are not included in analyses.

¹ One woman was a self-referral, but was accepted into the study as the referral had been recommended by her GP

² Three were excluded – 2 on the grounds of failing to comply with the inclusion criteria on one or both screening measures, and 1 due to severity of mental health problems which included some psychotic symptoms.

The Measures

Beck Depression Inventory-Second Edition (BDI-II; Beck, Steer & Brown, 1996).

The Beck Depression Inventory – Second Edition (BDI-II) is a 21-item self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. Each item consists of four statements ranked in order of severity of symptoms (range from 0 = no/least symptoms to 4 = most severe). It is scored by summing the ratings for the 21 items, with a maximum score of 63. The total score provides an estimate of the person's overall severity of depression. The suggested cut-off scores as suggested in the Manual are:

Total Scores	Range
0-13	Minimal
14-19	Mild
20-28	Moderate
29-63	Severe

The previous version of the BDI-II - the revised Beck Depression Inventory, (BDI; Beck & Steer, 1987) has been used extensively in studies of mothers with young children and is regarded as one of the best self-report measures of depression (Webster-Stratton & Spitzer, 1992).

The psychometric characteristics of the BDI-II are based on samples of participants from four different psychiatric outpatients clinics and one college-student group (N = 500 and 120 respectively). Coefficient alpha of the BDI-II is reported as .92 for the outpatients sample (higher than for the BDI-IA where mean coefficient alpha = .86). A test-retest correlation of .93 ($p < .001$, N = 26) is reported when the BDI-II was administered one week apart.

The BDI-II has also been compared to the BDI-IA. The correlation between the BDI-IA and BDI-II was .93 ($p < .001$), with the mean BDI-II score being 2.96 points greater than that of the BDI-IA. Following a calibration study, comparison tables of BDI-IA and BDI-II scores are included in the Manual.

The BDI-II was chosen in preference to the BDI-IA for this study since:

- items in the new version (especially those regarding changes in sleep pattern and changes in appetite) appeared to be more suitable for the female participants included in this study as compared to the previous version.
- subjectively, the lay-out of the BDI-II was considered to be clearer than the previous version.
- it was possible to convert scores from the previous version to the new version (and *vice versa*) – and thus compare results with other projects.

Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988)

The BAI is a 21-item scale that measures the severity of anxiety in adults and adolescents.

In this study it was used as a clinical ‘screening’ measure since anxiety is often found to co-exist with depression (Clark, 1989). It was therefore important, given the nature of referrals to this project, that women where the main presenting problems were anxiety-related rather than depressive could be identified and excluded, and that anxiety which was secondary in nature to the depressive symptoms could be addressed in therapy. The BAI was constructed to measure symptoms of anxiety which are minimally shared with those of depression. Revised scores from the BAI Manual (Beck & Steer, 1993) were used to determine ‘caseness’. BAI results were not used in any statistical analyses in this study.

General Health Questionnaire 30 (GHQ-30; Goldberg, 1972)

The General Health Questionnaire (GHQ) (of which there are several versions) is the most widely used screening measure for general psychiatric disorder in the UK. It was designed to be a self-administered screening test aimed at detecting psychiatric disorders among respondents in community and non-psychiatric clinical settings.

The GHQ focuses on disruptions to normal functioning rather than lifelong traits, and is therefore sensitive to changes in short-term functioning. It is sensitive to both depressive and anxiety related disorders.

Questionnaire items can be split into two categories:

- Inability to continue to carry out one's normal 'healthy' functions.
- Appearance of new phenomena of a distressing nature.

On each item participants are asked whether they have recently experienced a particular symptom or behaviour using a range of four responses (e.g. Better than usual, Same as usual, Less than usual, Much less than usual).

There are three ways of scoring the GHQ's four-point response scale:

- i. a Likert-type scale, which was not used in this study, where responses are scored as 0, 1, 2, or 3.
- ii. the 'standard' GHQ scoring method where responses are scored as 0, 0,1, or 1. Goldberg and Williams (1988) report Cronbach's alpha coefficient for test-retest reliability = .77, and split-half reliability = .92 for this scoring method on the GHQ-30.
- iii. the 'Chronic' GHQ scoring method. Goodchild and Duncan Jones (1985) have developed a scoring method to reflect the chronicity of symptoms. The scoring method takes into consideration whether the questionnaire item is negative or positive. For negative items a response of 'No more than usual' becomes a 1 score (so that the scoring becomes 0, 1, 1, or 1 for negatively worded items) whilst a response of 'No more than usual' becomes a 0 score

(i.e. 0, 0, 1, or 1) for positively worded items. This scoring method results in a more normally distributed range and the scale is reported to be a more sensitive indicator of mental health problems when used over time.

Goodchild and Duncan-Jones (1985) report a higher test-retest reliability (.83) for CGHQ-30 than the standard scoring method, and $\alpha = .89$.

For each of the above scoring method the total GHQ score is the sum of the item scores. For this project the GHQ and CGHQ scoring methods were used (maximum score = 30 for both scoring methods).

A total score of 4 or 5 is generally recommended as the threshold score for the GHQ-30, but it is suggested by Goldberg (1978) that this threshold should be raised to 8 when it is used with mothers of young children to reduce false positives. A threshold score of 8 has therefore been used in this project as an indication of 'caseness' in the GHQ scoring method, and a score of 12 used for the CGHQ scoring.

Autobiographical Memory Test (AMT; Williams & Broadbent, 1986) (see Appendix C)

The AMT is a widely used method of assessing personal event memory in people with emotional disturbance. High rates of generalised recall on the AMT has been found to be associated with clinical depression and failure to recover from depression (Brittlebank et al., 1993). They also suggest that overgenerality of memory is a trait marker and indicates a vulnerability to persistent depression.

Two cue-word lists, identical to those used in a study with non-depressed mothers by Scholey (1997), were used (see Appendix C). Both lists, matched on emotionality and word frequency (John, 1988; Scholey, 1997), consist of 5 positive items alternating with 5 negative items. Participants were presented with the ten cue words such as 'happy', 'sad', 'carefree', 'guilty', etc. and asked to

recall specific events or memories triggered by each word. Participants' response styles to the positive and negative cue-words were coded as either specific, extended or over-general .

For this study, the number of specific memories recalled without prompt within 30 seconds of being presented with a cue-word were used in analysis (maximum score = 10).

Community Contact Questionnaire 2 (CCQ2; Hutchings, 1996a) (Appendix D)

Hutchings (1996a) describes how the CCQ was devised based on the Community Interaction Checklist (CIC, Wahler et al., 1979; Wahler, 1980). The CIC is a detailed instrument to measure the quantity and quality of contact a person has with family, friends and other acquaintances. As the CIC was designed for repeated use to build a detailed picture of a person's contacts, it is not suitable for 'one-off' assessments.

Hutchings (1996a) recognised that the CIC could be adapted to give a general overview of the frequency and quality of contact with family, friends, welfare agencies/helping professionals, and 'other' contacts, whilst retaining its usefulness as a measure of social insularity. The CCQ was therefore developed as a brief measurement of social insularity to be used in either research or clinical settings.

More recent evaluation of the CCQ was suggestive that the information gathered about contact with welfare agencies/helping professionals and 'others' was less salient to the issue of social isolation than information about a person's contact with family and friends. A revised scoring method was suggested by Hutchings (October 1997, personal communication), and used in this study (see Appendix D).

Two scores are calculated for the CCQ yielding a categorical Insularity rating ('Insular' or 'Non-insular') and a Quality of Contact score (maximum score = 20).

The CCQ has not yet been thoroughly tested for reliability and validity, but in use it has face validity (Hutchings, 1996a). Normative data has been published for non-referred mothers of non-referred children (Hutchings, Midence, & Nash, 1997). CCQ norms gathered from a small sample ($n = 19$) of (non-referred) mothers of pre-school children suggests that 10% of non-depressed mothers³ are 'insular' (Hutchings, Midence, & Nash, 1997). The mean score obtained for the non-clinical sample cited above was 16.89 (sd 4.00) (Hutchings, Midence, & Nash, 1997).

Parenting-Stress Index Short Form (PSISF 6; Abidin, 1995)

The Parenting-Stress Index was developed to measure and assess stress associated with the role of being a parent of a child under the age of 12 years. The full version of the PSI contains 120 test items and contains questions about basic demographic information. Since demographic information was available through other assessment the Short Form version was used in this study.

The PSI Short Form consists of 36 items, rated on a Likert-type scale yielding scores for 3 sub-scales and a total parenting stress score. The three sub-scales are:

- Parental Distress (PD) which determines the distress a parent is experiencing in his or her role as a parent as a function of personal factors that are directly related to parenting.
- Parent-Child Dysfunctional Interaction (P-CDI) which focuses on the parent's perception that his or her child does not meet the parent's

³ Hutchings and Midence (May 1998, personal communication) report that all mothers in their 'norm' group scored below the GHQ-30 clinical cut-off score of 8 which is suggested for mothers of young children. Two women had scores > 5 (suggested cut-off score for general population).

expectations, and the interactions with his or her child are not reinforcing to him or her as a parent.

- **Difficult Child (DC)** which focuses on some of the basic behavioural characteristics of children that make them either easy or difficult to manage. These may be linked to the temperament of the child or to learned patterns of behaviour.

The PSI Total Stress score is a summation of the 3 sub-scales.

The normal range for the 3 sub-scale scores and Total Stress score is within the 15th to 85th percentiles. High scores are considered to be scores at or above the 85th percentile.

Additionally a Defensive Responding score may be calculated which assesses the extent to which the participant wishes to present him or her-self in a favourable light and to minimise the indications of problems or stress in the parent-child relationship.

A significant correlation of .94 is reported between PSI Short Form and the full-length PSI. Based on normative samples of 800 subjects, internal consistency reliability coefficient alpha reported by Abidin (1995) for PSI Short Form are: Parental Distress, .87; Parent-Child Dysfunctional Interaction, .80; Difficult Child, .85; Total Stress, .91.

Test-retest figures (N = 270) are reported as: Parental Distress, .85; Parent-Child Dysfunctional Interaction, .68; Difficult Child, .78; Total Stress, .84.

In this study, two sub-scales are used in analysis – PSI Parental Distress and PSI Difficult Child.

Eyberg Child Behaviour Inventory (ECBI; Eyberg, 1980)

The Eyberg Child Behaviour Inventory (ECBI) is a 36-item parental report of behaviour problems in children aged 2-16 years old. Each item consists of a short description of typical behaviour problems reported by parents of children with disruptive behaviours. Parents are asked to rate both the frequency of each behaviour to yield an 'Intensity Score', and also indicate whether or not each behaviour is personally a problem for them as the parent. Two sub-scores are therefore calculated.

- **Intensity Score.** This is calculated from the report of frequency of occurrence – ranging from 1 (never occurs) to 7 (always occurs). An Intensity score of 100 (SD 26.86) is reported for a 'normal' sample (Eyberg & Ross, 1978). An intensity score of 127 or over is an indication of a child with behaviour problems (Eyberg & Ross, 1978)
- **Problems Score.** This is calculated from the number of problems identified by the parents as being a problem for them. Problem scores of 4.14 (SD 5.39) are reported for a 'normal' sample (Eyberg & Ross, 1978). A problem score of 11 and over is considered to be an indication of a child with behaviour problems (Eyberg & Ross, 1978).

The ECBI has been shown to discriminate well between children with and without behaviour problems and is reported to be sensitive to treatment gain (Eyberg & Robinson, 1982; Eyberg & Ross, 1978). Boggs, Eyberg and Reynolds (1990) reported that both ECBI scores are correlated with both internalising and externalising scales of the Child Behaviour Checklist (CBCL).

ECBI test-retest reliability is reported as .86, with an internal consistency of .98 (Eyberg & Ross, 1978).

Child Behaviour Checklist (CBCL; Achenbach, 1991; 1992)
(Child Behaviour Checklist/4-18 and Child Behaviour Checklist/2-3)

The CBCL is a parental report of child behaviours. There are two version of the CBCL – one for children aged 2 and 3 years (CBCL2/2-3), and the other for children aged 4-18 (CBCL/4-18). Both were used in this project.

The CBCL/2-3 and CBCL/4-18 consist of 100 and 113 items respectively. Each item is coded on a three-point scale by the parent (0=not true; 1 = somewhat or sometimes true; 2 = very true or often true). Scores for both CBCL are grouped into sub-scales.

The sub-scales for the CBCL/2-3 are: Anxious/Depressed, Withdrawn, Sleep Problems, Somatic Problems, Aggressive Behavior, Destructive Behavior, and Other Problems. The Anxious/Depressed and Withdrawn scores form the Internalising Behaviour score, with the Aggressive and Destructive Behavior scores forming the Externalising Behaviour score. All subscales form the Total Score. T scores are calculated for Internalising, Externalising and Total scores and are similar for both genders.

The sub-scales for the CBCL/4-18 are: Withdrawn, Somatic Complaints, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behaviour, Aggressive Behaviour, Sex Problems, and Other Problems. The Withdrawn, Somatic Complaints and Anxious/Depressed scores form the Internalising score, with the Delinquent and Aggressive Behaviours forming the Externalising scores. The Total score is based on all items excluding those associated with symptoms of allergy and asthma. Separate T scores are calculated for Internalising, Externalising and Total scores according to the gender and age of the child. (Age categories are 4-11years and 12-18 years).

Both versions also include open-ended questions regarding the child's health, education and leisure interests. This information was not analysed in this study.

A mean test-retest reliability of .85 is reported for CBCL/2-3 and .89 for CBCL/4-18. As regards internal consistency, Cronbach's alpha of .93 is reported for both CBCL/2-3 and CBCL/4-18 External scores.

The main function of T scores is to facilitate comparisons of the degree of deviance in individual scores. A score of 70 on both CBCL/2-3 and CBCL/4-18 for example indicates that a child scored at approximately the 98th percentile of the relevant normative sample. Achenbach (1992) suggests that T scores for Externalising, Internalising and Total Problem may be used in statistical analyses and should yield results similar to those using the raw scores. T scores were used in preference to raw scores in this study to allow comparison between the two versions of the CBCL.

T scores in the range of 60-64 are considered to be within the clinical borderline range, whilst T scores greater than 64 are considered to be in the clinical range.

In this study, CBCL Externalising T was used in analyses, as this is the sub-scale most commonly used in the literature on disruptive behaviours.

The Brown Circles Observation Test (Tuteur, Ewigman, Peterson, & Hosokawa, 1995)

and

Standardised Observation Codes III-B (Cerezo, Kessler, Wahler, & Dunn, 1986) (Appendix E).

The Brown Circles Test is a brief clinical tool for the observational assessment of parent-child interactions. It was devised by Tuteur et al. (1995) to examine aspects of mother-child interactions in the context of screening for abusive parents, but Hutchings (March, 1997, personal communication) recognised its appropriateness for application in other settings.

The task involves asking parents to instruct their children to draw circles on one sheet of A4 paper using only a brown crayon/pencil for a 10 minutes period.

In the original instructions the researcher is asked to ensure that toys are within reach of the child. In this project the observation task was carried out at the child's home and the child therefore had access to his or her own toys. The mother was instructed that neither she nor her child should touch any toys/objects, and that the mother should not touch the crayon or paper.

The Brown Circles task may be coded 'live', but for this project, since post-intervention interviews were to be conducted by independent people not trained in its use, each observation period was recorded on videotape⁴ and subsequently coded using the Standardised Observation Codes III-B (SOCIII-B; Cerezo et al., 1986).

The interactional behaviours coded in the SOCIII-B are: Social Attention/Approach; Instruction, Compliance, and Opposition for both Mother and Child (e.g. Mother Approach, Child Instruction etc.). Each interaction may then be coded as aversive, neutral or positive according to the verbal and gestural content or the speaker's tone of voice (e.g. Mother Approach Positive, Child Instruction Negative, Mother Opposition Neutral, etc.).

'On Task' behaviour and Mother Participation were calculated using 15 seconds momentary time sampling.

The primary investigator and inter-rater validator were trained in the use of the codes by a member of Wahler's team. The inter-rater validator independently coded 25% of the tapes and was 'blind' to whether taped material was pre- or post-intervention.

⁴ A domestic Sony Hi-8 video camera with integral microphone was used. Tapes were transferred to VHS at which time a 15 second time code was added to facilitate the coding procedure.

Index of Socio-economic disadvantage

An index of socio-economic disadvantage was calculated based on Rutter and Quinton (1977) and Dumas and Wahler (1983) (see Chapter 4). The following six factors were used:

1. Family income – coded on the basis of whether the family had an earned income or were wholly or partially dependent on welfare benefit.
2. Maternal Education – coded on whether the mother had gained 5 or more G.C.E/G.C.S.E or the equivalent or not.
3. Marital status – coded for single parent-hood (separated/divorced) or severe marital conflict.
4. Family size – based on the number of children, with three or more children taken as the large family size category as suggested by Brown and Harris (1978).
5. Housing circumstances, poor quality /overcrowded/insecure. This was rated by the author on the basis of both responses to questions and observation of the home. “Overcrowded” included situations where it was necessary for the child to share a bedroom with an adult or with a sibling of the opposite sex. Poor quality was scored if participants expressed concern about the effect of, for example dampness, heating difficulties, or the state of the fabric of the building
6. Criminality. This was coded on the basis of areas recognised as having high crime and social problems rates or father having committed at least one proven criminal offence.

Each item was given a 1 or 0 score and summed to give an SED Index rating (maximum score = 6).

Procedure

Identification of mothers referred to Adult Mental Health Team with depression.

New allocations to the two Adult Mental Health teams involved in the project were examined for identification of female clients where the referral explicitly mentioned depression. Unless explicitly stated, further enquiries were made to see whether the referred woman had a child between the ages of 2 and 7 years⁵.

With the AMH teams' permission, women identified in this way were approached by either the primary investigator or the teams' Duty Officers and given a short bilingual information/consent letter (Appendix I) inviting them to complete two screening questionnaires – BDI-II and ECBI.

Screening referrals against inclusion criteria

The inclusion criteria were as follows:

- Referred by GP to AMH team for treatment of depression.
- At least one child between the ages of 2 and 7 years.
- BDI-II score of 13 or greater
- ECBI Intensity score of 127 or greater, and/or ECBI Problem score of 11 or greater.

The exclusion criteria was:

- History of serious mental illness (e.g. psychosis, bi-polar disorder, and/or obsessive-compulsive disorder).

⁵ This information was either sought from the referring surgery, or, in cases where the woman was known to the team, information was gathered from the team file.

- Cases where the presenting problem was anxiety rather than depression. Anxiety was measured using BAI (Beck et al., 1988).

Women who either declined to participate in the screening, or who did not satisfy the inclusion criteria, were referred back to the AMH team for allocation.

Letters for inclusion in the study

Women satisfying the inclusion/exclusion criteria were invited to participate in the study. A second set of bilingual (Welsh/English) letters, information sheets and consent forms giving details of the project were offered in each case (Appendix J).

Each participant was given at least one week to consider their decision before the primary investigator contacted them by telephone. Women declining to take part were referred back to the AMH team for allocation according to the normal route. Arrangements were made to visit women giving their consent at their home for baseline research interviews.

Baseline Research Interviews

In all cases the baseline research interview was conducted at the participant's home between 7 and 10 days after initial screening.

The interview consisted of:

- a) Initial Assessment interview (Appendix K)
- b) Questionnaires as detailed previously (BDI-II, BAI, GHQ-30, CCQ2, PSI, CBCL, and AMT).
- c) 10 minute video recording of mother-child interaction (Brown Circles Task).

In most cases all three aspects were covered within the one session. In two cases, two visits were necessary (one because of time limitations and the other because the ‘target’ child was not available during the first visit).

Therapeutic intervention

All women included in the study were offered 8 sessions of cognitive-behavioural therapy (CBT) (see later section for details).

Where possible participants were encouraged to attend sessions held at the nearest AMH team base, but due to the rural nature of the area and limited public transport, 4 of the 10 clients were unable to attend team centres and were therefore visited at home.

Participants were asked to complete a BDI-II prior to the mid-intervention session (i.e. immediately prior to the 5th session),

Post-intervention Research Interview

Post-intervention research interviews, administered by independent persons⁶ at the participants’ homes, were scheduled to occur one week after cessation of therapy sessions. Two participants (Participants 4 and 7) delayed this interview for 3 and 4 weeks respectively due to pressing family problems.

The interview consisted of:

- a) Questionnaires – BDI-II, BAI, GHQ-30, CCQ2, PSI, ECBI, CBCL, and AMT.
- b) a video recording of a mother-child interaction (Brown Circles Task).

⁶ Specifically four 1st and 2nd year Clinical Psychology trainees, a Consultant Clinical Psychologist, and a Psychology Research Assistant

- c) evaluation of the therapeutic intervention, noting which aspects had been most and least helpful (Appendix L).

Postal Follow-up questionnaires

6 weeks after the post-intervention research interviews, questionnaires (BDI-II, GHQ-30, and ECBI) were mailed to participants, requesting their return within 24 hours. All questionnaires were returned within a week of being mailed.

Analysis of Data

a) Brown Circles Task

Inter-rater reliability on the SOCIII codes for the Brown Circles task was calculated by dividing the number of agreements for each of the 26 individual codes on an interval by interval basis by the number of agreements plus disagreements and then multiplying the ratio by 100 to give a percentage (Kazdin, 1982), i.e.:

$$\% \text{ agreement} = \frac{\text{No. of agreements}}{\text{No. of agreements} + \text{No. of disagreements}} \times 100$$

- b) Data was analysed using SPSS for Windows - Release 7.5.

Debriefing Participants and AMH teams

Arrangements were made to visit all participants at their homes to discuss the results and implications of the project. AMH teams were invited to a formal presentation.

Therapeutic Intervention – Cognitive Behaviour Therapy

The CBT package was similar to that offered 'routinely' by AMH Psychology services and did not include elements specifically targeted at improving parenting skills. The CBT intervention was based on the model presented in Chapters 3 and 5 of the present thesis, following A. T. Beck's cognitive therapy as described by J. S. Beck (1995) and Williams (1992).

A prescriptive manual for each session was not used. Each case was formulated and individually tailored therapy (within the structure of the cognitive-behavioural model) offered.

Initial Assessment

As part of the data collection for the project, a semi-structured assessment interview was used to collect demographic and life history information, including information about, and the client's perception of past episodes of depression (see Appendix K).

Therapy Sessions

Following initial assessment, 8 sessions of CBT using behavioural and cognitive techniques such as activity monitoring and scheduling, assertiveness skills, relaxation skills, goal planning and problem-solving skills, distinguishing between thoughts and emotions, and 'catching', identifying and challenging negative automatic thoughts.

Throughout therapy, instructional material and relevant handouts from Powell's *The Mental Health Handbook* (1992) (specifically material from Section 3 - Managing Depression and Section 2- Assertiveness Training) were adapted as appropriate to suit the individual requirements of each client.

CHAPTER 7: RESULTS

For clarity, the results have been divided into sections as follow:

Description of the clinical sample at pre-intervention assessment, including:

1. Demographic variables.
2. Measures of maternal mental health.
3. Measures of reported child behaviours.
4. Measures of observed mother-child interactions (Brown Circles Task).

Outcome on measures of maternal mental health:

- i. BDI-II.
- ii. GHQ-30.

Hypothesis 1: Outcome on measures of maternal reports of child behaviours:

- i. ECBI Problem and Intensity.
- ii. CBCL External T.
- iii. PSI Difficult Child.
- iv. PSI Parental Distress.

Hypotheses 2 and 3: Outcome from observed mother and child behaviours and interactions (Brown Circles Task).

Hypothesis 4: Hypothesis regarding autobiographical memory (AMT).

Hypothesis 5: Hypothesis regarding social isolation (CCQ).

Description of the Sample and Maternal Mental Health

1. Demographic Information

Ten women completed the CBT clinical intervention.

a) Depressive episode

Nine of the 10 women had been referred directly by their GPs for assessment and, if appropriate, treatment of depression. One self-referred woman was also included in the clinical sample since her self-referral had been on the recommendation of her GP. Prior to inclusion into the project she had been assessed by the AMH team's Duty Officer as requiring treatment for depression.

Prior to the current referral 6 had been treated by medication (namely combinations of one or more of the following: Fluoxetine, Venlafaxine, Dothiepin Hydrochloride, Zopiclone, Trifluoperazine, and Diazepam) with little reported change in mood. One participant continued on medication during the study period. Four women had not been treated by medication¹.

All ten women met DSMIV criteria for Major Depressive Disorder, Recurrent, with one previously diagnosed as Major Depressive Disorder, Seasonal Pattern. Mean duration of depression as noted by GP referral letters and self-report was 5.80 months (SD 3.52; Range 3-12 months). On average, each participant had 1.9 previous referrals to the AMH team (SD 1.52; Range 0-4 previous episodes).

¹ The four women had either refused or been refused medication for the following reasons:
 1 - Prior history of over-dosing.
 2 - Breast-feeding.
 3 - Pregnancy, and a previous 'bad' experience when treated with Prozac the previous year.
 4 - Participant did not feel medication was the answer to her problems.

b) Anxiety symptoms

Of the 10 participants, 9 were found to have co-existing anxiety symptoms – 1 in the minimal range, 3 mild, 3 moderate, and 3 severe as measured on BAI (see Beck & Steer, 1993). No participant had specific phobia or suffered from panic attacks. The mean BAI score at pre-intervention assessment was 19.90 (SD 12.44). Although anxiety symptoms were severe in 3 cases, the main presenting symptoms were depressive rather than anxiety-related in nature in all cases included in the sample.

c) Age of mother

The mean age of mothers in the clinical sample was 29.6 years (SD 4.65; Range 24 – 39 years).

d) Children

Of the ten participants, 1 mother had 1 child, 6 women had 2 children each (one of whom was pregnant with her third child who was born during the study period), 1 woman had 3 children, and 2 women had 4 children each. The mean number of children in each family was 2.4 children (SD .97).

Each identified 'target' child was aged between 2 and 7 years (mean age 43.4 months; SD 15.3 months; Range 24-74 months). Each child had significant disruptive behaviours as measured on the ECBI (i.e. either ECBI Intensity scores > 127, and/or ECBI Problem Score > 11). All 10 'target' children had ECBI Problem scores greater than 11, and 4 had ECBI Intensity scores greater than 127. None of the women in the clinical sample had sought advice or help from outside agencies to deal with these behaviours.

e) Benefit status

Of the 10 women who received and completed the CBT intervention, 7 (70%) lived in families who were either wholly or partially dependent on benefits, and 2 (20%) were single parents and living on benefits.

f) Marital Relationship

At the time of initial assessment, 8 women were married or cohabiting with the father of their children, whilst 2 were either separated or divorced.

During therapy, 9 of the 10 women (90%) disclosed significant relationship problems with their partner (or an ex-partner with whom they continued to have contact). Three women (30%) had previously sought help from Relate to deal with marital problems. Three women (30%) reported marital violence and abuse. In one case the violence had resulted in a court injunction against the partner, and in the other two cases sufficient anxiety had been raised about family functioning as a result of marital violence for Child Protection case conferences to be called.

g) Maternal Education

Of the 10 participants, 8 had either left school before the age of 16 years, or had left school with none or fewer than 5 G.C.E/G.C.S.E (or the equivalent) qualifications. One participant had left school at age 16 years having gained more than 5 G.C.E/G.C.S.E. qualifications. A tenth participant had completed her education to degree level.

h) Housing

Five participants expressed concerns about the standard of their accommodation, either because of over-crowding, or because they felt that problems with dampness and the poor state of repair of the house was detrimental to a family member's health.

i) Area of residence – high crime and social problems.

Two participants lived in areas which have received assistance from the European Union due to social problems. Two other participants had close family contact with persons convicted for serious crimes.

Socio-economic Deprivation Index

Based on the above, a socio-economic deprivation index score was calculated (maximum score = 6). The mean score was 3.60 (SD 1.65). 5 women had scores of 4 or greater indicating multi-stressed environments.

The SED index score was significantly correlated with pre-intervention BDI-II score (Pearson $r = .711$, $p = .021$, $n = 10$).

2. Measures of Maternal Mental Health²

As can be seen in Table 7.1, the mean score on each measure of maternal mental health was above the clinical cut-off point at pre-intervention assessment.

Table 7.1 Summary of pre-intervention assessment mean scores on measures of maternal mental health, autobiographical memory, and social isolation.

MEASURES OF MATERNAL MENTAL HEALTH	Clinical cut-off	Mean	Standard deviation	Range of scores
BDI-II	13	35.20	11.49	13-50
GHQ-30	8	19.00	7.09	8-28
CGHQ-30	12	22.00	5.12	15-28
AMT	N/A	4.30	2.11	1-9
CCQ Quality	N/A	12.70	3.83	6-18
CCQ Insularity	7 of the 10 women were classified as 'Insular'			

BDI

Nine participants were in the severe range of depressive symptoms and 1 in the mild range on pre-intervention assessment.

GHQ-30 and CGHQ-30

The two methods of scoring the GHQ-30 (i.e. GHQ-30 and CGHQ-30) were significantly correlated (Pearson $r = .958$, $p < .001$, $n = 10$). All participants were above the suggested clinical cut-off scores on both scoring methods.

² BDI-II: Beck Depression Inventory – Second Edition.

GHQ-30: General Health Questionnaire 30

CGHQ-30: 'chronic' scoring method for GHQ-30

AMT: Autobiographical Memory Test

CCQ: Community Contacts Questionnaire (Quality and Insularity sub-scales)

AMT

The mean number of total responses (i.e. including extended, general and specific responses) to the 10 cue-words on the AMT was 8.20 (SD 1.48). The mean number of specific memories generated without prompt was 4.30 (2.11). The mean proportion of specific AMT responses to total responses was 53.4% (SD 25.4%).

These results can be compared with norms gathered from a sample of 12 non-referred mothers and non-referred children using an identical version of the AMT (Scholey, 1997).

For the non-referred sample, the mean number of total responses was 9.17 (SD .084). A one-sample t-test showed that the difference between the clinical and non-referred samples was approaching significance ($t = -2.079$, $df = 9$, $p = .067$). The mean number of specific memories without prompt reported in the non-referred sample was 7.17 (SD 1.80). A one-sample t-test showed that the difference between the clinical and non-referred sample was significant ($t = -4.300$, $df = 9$, $p = .002$).

In Scholey's sample the proportion of specific responses to total responses was reported as 78.13% as compared to 53.4% in this clinical sample. A one-sample t-test showed that this difference was significant ($t = -3.072$, $df = 9$, $p = .013$).

CCQ Quality and Insularity

CCQ norms gathered from a small sample ($n = 19$) of (non-referred) mothers of (non-referred) pre-school children suggested that 10% of non-depressed mothers³ are 'insular' (Hutchings, Midence, and Nash, 1997). In this study, 7 (70%) of the 10 participants were categorised as 'insular'.

At pre-intervention assessment the mean score for CCQ Quality (using the revised scoring method) was 12.70 (SD 3.8) for the clinical sample. The mean score obtained for the non-clinical sample cited above was 16.89 (SD 4.00) (Hutchings, personal communication, May 1998). Independent samples t-test showed that the difference in mean scores between the CBT and non-referred groups was significantly different ($t = -2.723$, $df = 27$, $p = .011$).

³ Hutchings and Midence (personal communications, May 1998) report that all mothers in their 'norm' group scored below the GHQ-30 clinical cut-off score of 8 which is suggested for mothers of young children. Two women had scores > 5 (suggested cut-off score for general population).

3. Measures of Reported Child Behaviours⁴

As can be seen in Table 7.2, mean scores on ECBI Problem, ECBI Intensity, PSI Parental Distress and PSI Difficult Child were greater than their respective clinical cut-off scores. The mean score on CBCL External T was within the 'borderline clinical' range.

Table 7.2 Summary of pre-intervention assessment mean scores on measures of reported child disruptive behaviour

MEASURES OF CHILD BEHAVIOURS	Clinical cut-off	Mean	Standard Deviation	Range of scores
ECBI Problem	11	14.30	3.86	11-23
ECBI Intensity	127	130.70	25.04	102-174
CBCL External T	60-64 (borderline) > 64 (clinical)	63.00	11.44	50-89
PSI Parental Distress	33	42.10	3.98	36-49
PSI Difficult Child	33	43.40	6.87	34-57

ECBI

Using Pearson correlation the two scales of the ECBI (Intensity and Problem) were significantly correlated ($r = .698$, $p = .025$, $n = 10$).

All participants scored above the ECBI Problem clinical cut-off score, but only 4 participants reported ECBI Intensity scores above the clinical cut-off.

⁴ ECBI: Eyberg Child Behaviour Inventory (Problem and Intensity sub-scales)
CBCL: Child Behaviour Checklist (Ext T = External T, Int T = Internal T, Total T)
PSI: Parenting Stress Index (PD = Parental Distress, DC = Difficult Child)

A one-sample t-test comparing these results with the non-clinical ‘norms’ reported in Eyberg & Ross (1978) showed that the group in this study had significantly greater mean scores on both ECBI Problem ($t = 3.877$, $df = 9$, $p = .004$) and ECBI Intensity ($t = 8.323$, $df = 9$, $p < .001$). However, in comparison to Eyberg and Ross’s clinical sample, mean ECBI Intensity scores were significantly lower ($t = -3.448$, $df = 9$, $p = .007$), and mean scores on ECBI Problem were also significantly lower ($t = -3.031$, $df = 9$, $p = .014$).

In terms of ‘caseness’ Hutchings (1996a) reported that 11 of the 13 (85%) participants who had clinically significant scores on ECBI Problem also had clinically significant scores on ECBI Intensity (i.e. they were considered to be ‘cases’ on both sub-scales) as compared to 4 out of 10 in this sample. Using chi-squared analysis, this difference appeared to be significant ($\chi^2 = 4.94$, $df = 1$, $p < .05$)⁵.

ECBI Problem was significantly correlated with CBCL External T (Pearson $r = .838$, $p = .002$, $n = 10$), and approaching significance with PSI Difficult Child (Pearson $r = .599$, $p = .068$, $n = 10$). ECBI Intensity was approaching a significant correlation with CBCL External T (Pearson $r = .625$, $p = .054$, $n = 10$).

CBCL External T

At pre-intervention assessment, 3 participants reported clinically significant disruptive behaviour problems in their children on this measure, and 3 participants were within the borderline clinical range.

⁵ However, expected frequencies in two cells was lower than 5 (4.52 and 3.48). Howells (1997) suggests that expected cell frequencies may fall below 5 without incurring a high probability of Type 1 errors, as long as the total sample size > 8 . However, the power of the test is reduced if expected cell frequencies are lower than 5.

CBCL External T was significantly correlated with ECBI Problem (as reported previously) and PSI Difficult Child (Pearson $r = .745$, $p = .013$, $n = 10$) and approaching significant correlation with ECBI Intensity.

PSI Parental Distress

All ten participants scored above the 85th percentile, indicating clinically significant scores (Abidin, 1995).

PSI Parental Distress was not significantly correlated ($p > .05$) with any other measure of disruptive behaviours in children.

PSI Difficult Child

All ten participants scored above the 85th percentile, indicating clinically significant scores (Abidin, 1995).

PSI Difficult Child was significantly correlated with CBCL External T (Pearson $r = .745$, $p = .013$, $n = 10$), and approaching significance with ECBI Problem (Pearson $r = .599$, $p = .068$, $n = 10$).

4. Measures of Observed Mother-Child Interactions (Brown Circles Task)

Validation

Inter-rater agreement on the SOCIII-B coding was calculated on an observation by observation basis. Mean inter-rater agreement (calculated in accordance with Kazdin, 1982) on the 26 separate codes (i.e. agreement on both interaction style and valence) was 88.8% (range 60% - 100%). Lowest agreements were found for Mother Approach Neutral (60% agreement), and Child Approach Neutral (67% agreement).

Inter-rater agreement on Mother Participation and Child 'On Task' which had been coded using 15 seconds momentary time sampling was 98% and 82% agreement respectively.

Results of SOCIII-B coding

Both mother and child behaviours and interactions were coded in two ways. The first coding described the behaviour/interaction type – approach, instructions, opposition, or compliance, and the second coding described the valence of each behaviour/interaction – either neutral, negative or positive.

The mean number, standard deviation, and percentage of overall behaviours/interactions spent in each type of mother and child behaviour and interaction is summarised in Table 7.3.

Table 7.3 Summary of mean number of occurrences and percentages of observed mother and child interactions and behaviours within a 10-minute period.

MOTHER			CHILD		
INTERACTIONAL CODE	MEAN NO. (SD)	Mean No. as % of Total Mother Interaction	INTERACTIONAL CODE	MEAN NO. (SD)	Mean No. as % of Total Child Interaction
Total Mother Interactions	96 (23.03)	100%	Total Child Interactions	82 (19.11)	100%

INTERACTION TYPE

Mother Approach	42.70 (14.18)	44.5	Child Approach	26.10 (12.78)	31.8
Mother Instruction	44.60 (23.81)	46.5	Child Instruction	9.20 (15.40)	11.2
Mother Opposition	7.90 (15.63)	8.2	Child Opposition	27.70 (20.35)	33.8
Mother Compliance	1.20 (1.62)	1.2	Child Compliance	18.10 (13.65)	22.1

VALENCE OF INTERACTION

Mother Negative	8.10 (9.13)	8.4	Child Negative	20.50 (23.23)	25.0
Mother Positive	18.40 (16.63)	19.2	Child Positive	8.30 (12.10)	10.1
Mother Neutral	69.50 (21.39)	72.4	Child Neutral	53.2 (22.84)	64.9

15 seconds Momentary Time Sampling

	% of observations		% of observations
Mother Participation ⁶	91.25% (12.43)	Child 'On Task'	46.25% (30.28)

Correlational analysis, and further details of pre-intervention observational data are presented in Appendix M.

⁶ % of time of Mother Participation and Child 'On Task' were calculated using 15 seconds momentary time sampling. Other observations were coded sequentially and reflect actual number of each observed behaviour.

Outcome on Maternal Mental Health measures

The results of the self-report measures are summarised in Table 7.4.

Table 7.4 Outcome on measures of maternal mental health

Measure	Mean Scores (Standard Deviation)				GLM: Repeated Measures
	Initial	Pre	Post	Follow-up	
BDI-II	36.50 (8.25)	35.20 (11.49)	13.00 (11.55)	10.20 (13.45)	F (3, 7) = 7.174, p = .015
GHQ-30	N/A	19.00 (7.09)	2.70 (5.36)	4.70 (7.67)	F (2, 8) = 11.155 p = .005
CGHQ-30	N/A	22.00 (5.12)	8.40 (6.90)	8.90 (8.56)	F (2, 8) = 7.758 p = .013

BDI-II

As reported in Table 7.4, BDI-II mean scores changed significantly over the study period. However, GLM: Repeated Measures analyses do not indicate where significant differences lie, although an univariate test suggested a cubic rather than a linear trend. Paired sample t-tests (as advocated by Bryman & Cramer, 1997) were used to identify where significant differences lay.

Using paired-sample t-tests and Pearson correlation it was shown that BDI-II scores at initial assessment and pre-intervention assessment were not significantly different ($t = .824$, $df = 9$, $p > .10$) and were significantly correlated ($r = .924$, $p < .001$, $n = 10$). Similarly, differences in mean scores between post-intervention and follow-up assessment were not significantly different ($t = 1.642$, $df = 9$, $p > .10$) and significantly correlated ($r = .918$, $p < .001$, $n = 10$). The difference in mean scores between pre- and post-intervention was significant ($t = 4.158$, $df = 9$, $p = .002$).

GHQ-30

As seen in Table 7.4 GHQ-30 mean scores changed significantly over the study period. Using paired sample t-tests the difference in mean scores between pre- and post-intervention was significant ($t = 4.540$, $df = 9$, $p = .001$). The difference between post-intervention and follow-up assessment was not significant ($t = -1.029$, $df = 9$, $p > .10$)

CGHQ-30

As with the other two measures of maternal mental health, CGHQ-30 mean scores differed significantly over the study period. Paired-sample t-tests showed that significant changes coincided with the therapy period ($t = 3.752$, $df = 9$, $p = .005$). Differences in mean scores between post-intervention assessment and follow-up were not significant ($t = -.451$, $df = 9$, $p > .10$).

Figure 7.1 presents the information presented above in a graph form (see overleaf).

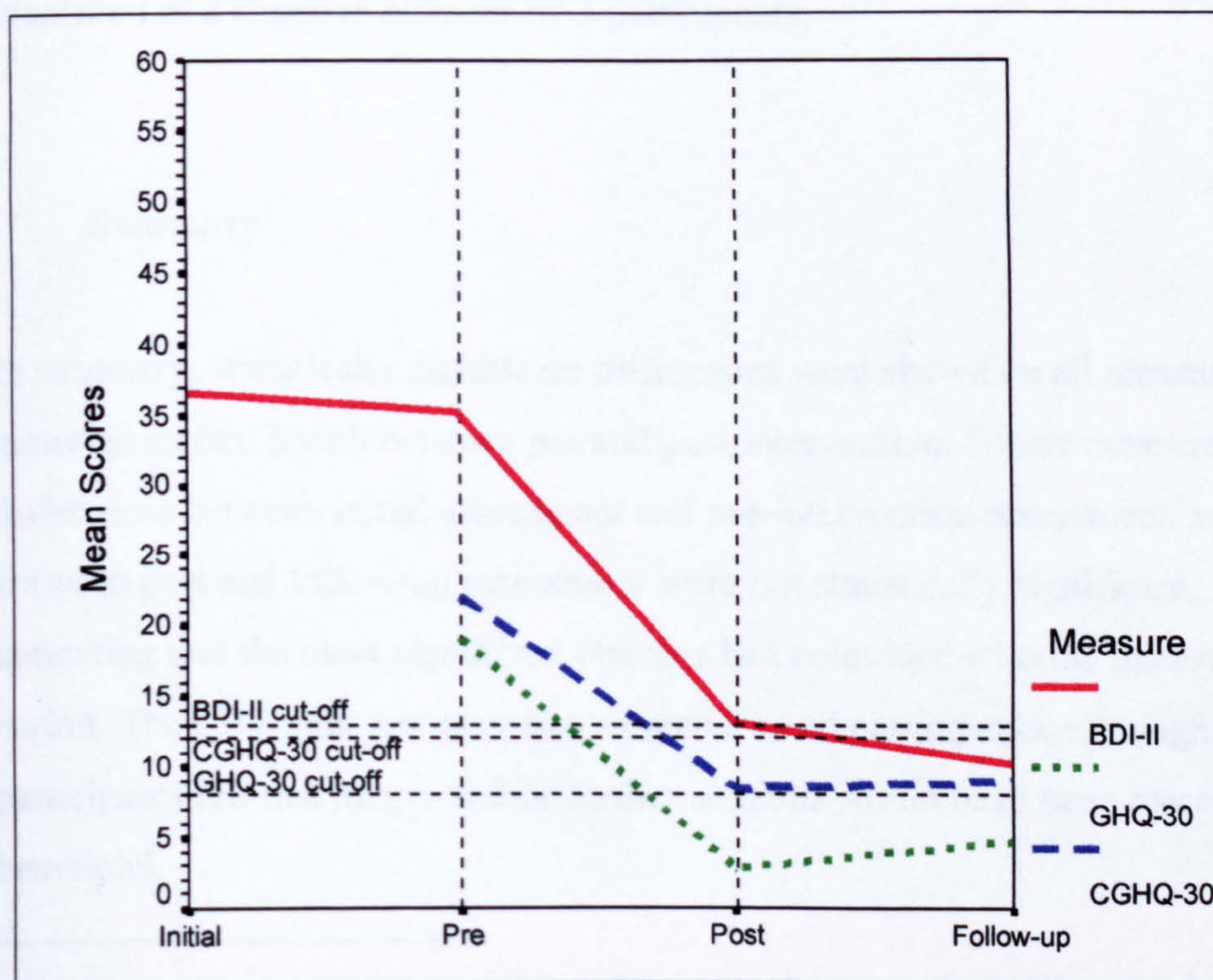
'Caseness'

As seen in Table 7.5, of the 10 'cases' at pre-intervention assessment, by post-intervention assessment 7 had moved into the non-clinical range on BDI-II and CGHQ-30 and 9 participants were in the non-clinical range on GHQ-30. By follow-up 6 participants remained within the 'non-clinical' range on all measures, and 7 were 'non-clinical' on BDI-II and GHQ-30.

Table 7.5 Clinical 'caseness' on measures of maternal mental health at pre, post and follow-up assessment

MEASURE	NUMBER OF CASES (n = 10)		
	PRE	POST	FOLLOW-UP
BDI-II	10	3	3
	9 Severe 1 Mild	2 Severe 1 Mild	2 Severe 1 Mild
	GHQ-30	10	1
CGHQ-30	10	3	4

Figure 7.1: Graph of mean BDI-II, GHQ-30 and CGHQ-30 scores at initial, pre, post and follow-up assessment.



Contact with AMH services

Following intervention, 3 participants continued to have contact with their respective AMH team Keyworker. By follow-up assessment 2 were reported to have minimal contact (i.e. monthly or less) with their respective Keyworkers. By the debriefing session held 3-4 months following follow-up assessment, one participant only had on-going (minimal) contact with AMH team services.

Evaluation of Therapy

Participants' comments regarding the therapeutic intervention are presented in more detail in Appendix N. Positive elements identified were the self-monitoring tasks and 'talking to someone'. The brevity of the intervention period was identified as a negative element by 3 participants.

Summary¹

In summary, statistically significant differences were shown on all measures of maternal mental health between pre and post intervention. Where measured, differences between initial assessment and pre-intervention assessment, and between post and follow-up assessment were not statistically significant, indicating that the most significant changes had coincided with the intervention period. The CBT intervention was acceptable to all participants, although some participants felt that longer and/or further sessions would have been more beneficial.

¹ Anxiety scores, as measured by BAI, also decreased between pre- and post-intervention assessment (Mean scores - 19.90 [SD 12.44] and 7.30 [SD 7.79] respectively; Paired-sample $t = 2.957$, $df = 9$, $p = .016$).

Hypothesis 1: CBT intervention for depression in mothers will be associated with a reduction in maternal reporting of disruptive behaviours in their children as measured by standardised measures of parental report of disruptive behaviours in children.

Five sub-scales from 3 measures of maternal reporting of child disruptive behaviours were used in analyses – ECBI Problem and Intensity sub-scales, CBCL External T, and PSI Parental Distress and Difficult Child. Results of pre- and post-intervention assessment are summarised in Table 7.6.

Table 7.6 Outcome on measures of reported child disruptive behaviours

Child Behaviour Measure	Mean Scores (SD)			Analyses	Mean Scores (SD)	Analyses
	INITIAL	PRE	POST	Paired-samples t-test (one-tailed)	Follow-up	GLM: Repeated Measures (one-tailed)
ECBI Problem	14.30 (3.86)	N/A	10.10 (8.56)	$t = 1.272$ (df 9) $p = .117$	8.20 (6.91)	$F(2, 8) = 4.153$, $p = .029$
ECBI Intensity	130.70 (25.04)	N/A	112.90 (29.86)	$t = 2.076$ df = 9 $p = .034$	101.50 (20.03)	$F(2, 8) = 20.277$, $p = .001$
CBCL External T	N/A	63.00 (11.44)	53.50 (7.53)	$t = 2.105$ df = 9 $p = .033$		
PSI Parental Distress	N/A	42.10 (3.98)	33.00 (9.04)	$t = 4.039$ df = 9 $p = .002$		
PSI Difficult Child	N/A	43.40 (6.87)	31.90 (10.58)	$t = 3.162$ df = 9 $p = .006$		

As predicted, mean scores decreased on all measures between pre- and post-intervention assessment. With the exception of ECBI Problem, one-tailed tests

were significant for all measures at post-intervention assessment (see Table 7.6). By follow-up assessment, significant differences (one-tailed tests) were also shown for ECBI Problem ($F [2,8] = 4.153, p = .029$). Figures 7.2 and 7.3 overleaf present the data in graph form.

At follow-up, using one-sample t-tests, ECBI Problem and Intensity did not differ significantly from the mean scores reported by Eyberg and Ross (1978) for a non-clinical sample (i.e. ECBI Problem mean score = 4.14, SD 5.39; ECBI Intensity mean score = 100, SD 26.86). Results for ECBI Problem were: $t = 1.858, df = 9, p > .10$; and for ECBI Intensity: $t = .237, df = 9, p > .10$.

‘Caseness’

In terms of ‘caseness’ a 50–70% reduction in maternal reporting of clinically significant disruptive behaviours was found, as can be seen in Table 7.7.

Table 7.7 Clinical ‘caseness’ at initial, pre, post, and follow-up assessment on measures of reported child disruptive behaviours.

MEASURE	Number of ‘Cases’		
	INITIAL	POST	Follow-up
ECBI Problem	10	4	3
ECBI Intensity	4	2	2
	PRE		
CBCL External T	3 clinical 3 borderline	3 borderline	N/A
PSI Parental Distress	10	5	N/A
PSI Difficult Child	10	4	N/A

Figure 7.2 Graph of mean ECBI Problem scores at initial, post and follow-up assessment

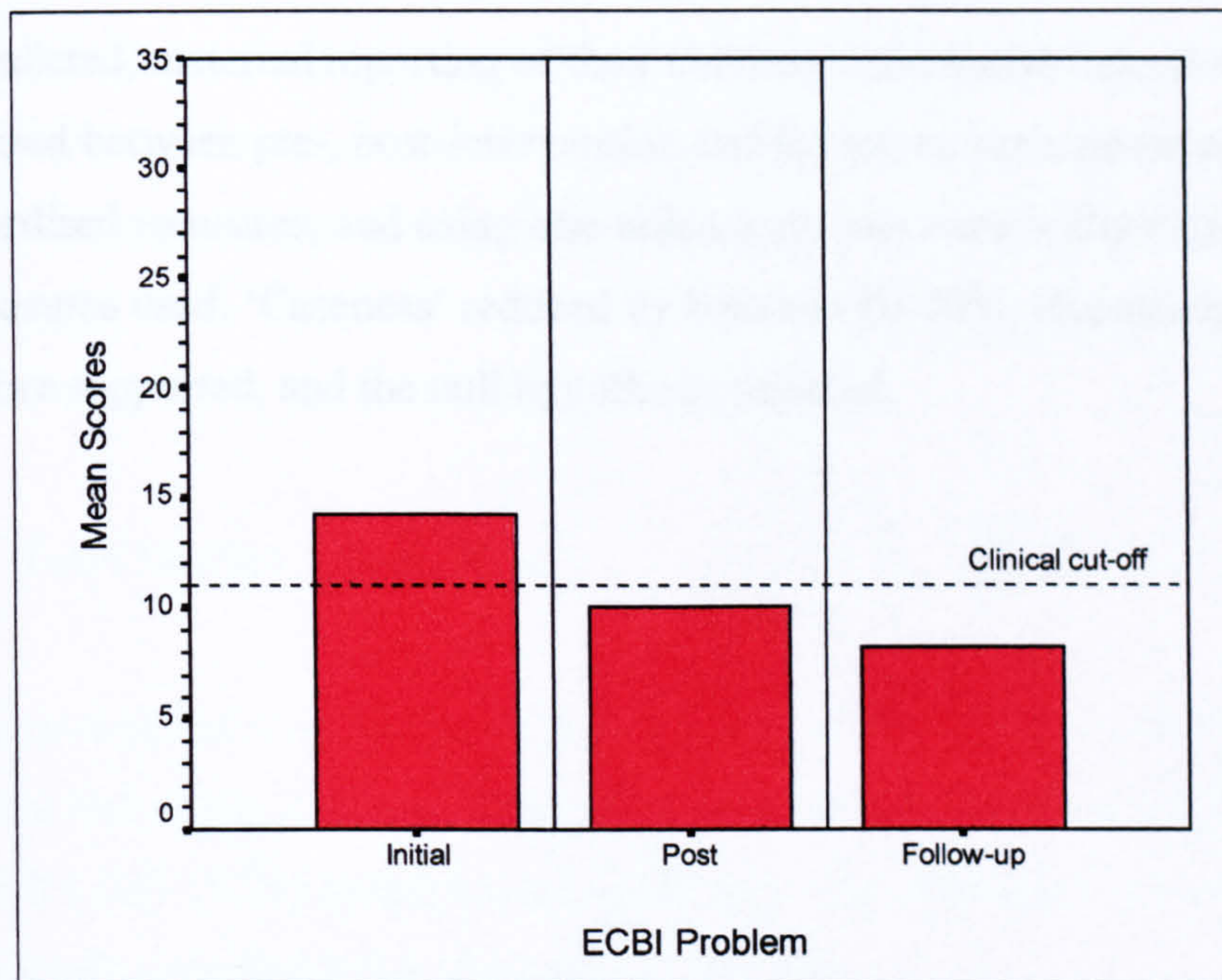
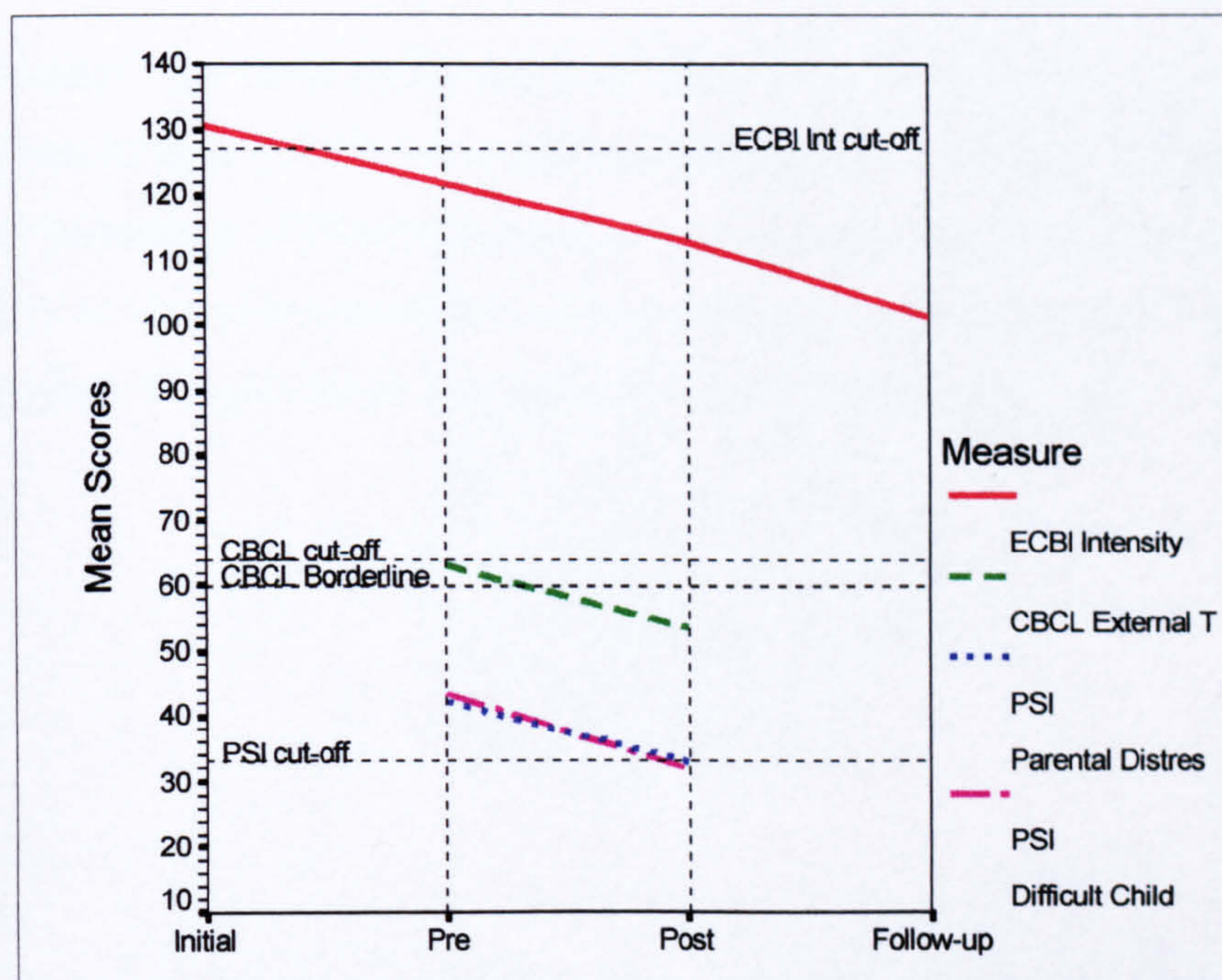


Figure 7.3 Mean scores at initial, pre, post, and follow-up assessment for ECBI Intensity, CBCL External T, and PSI Parental Distress and Difficult Child.



Summary of Reported Child Behaviour Measures

As predicted, maternal reporting of their children's disruptive behaviours decreased between pre-, post-intervention and follow-up assessment on all standardised measures, and using one-tailed tests was statistically significant for all measures used. 'Caseness' reduced by between 50-70%. Hypothesis 1 was therefore supported, and the null hypothesis rejected.

Hypothesis 2: Significant differences would be found between pre- and post-intervention in the women's behaviours and interactions with their children as observed on the Brown Circles task. Specifically:

- **the women's interactions would be less negative and more positive,**
- **the women would decrease the number of instructions given to the child.**

i. Total Mother Interactions

Mean number of total Mother Interactions during the 10 minute Brown Circles task at pre- and post-intervention assessment were 96.00 (SD 23.03) and 92.6 (SD 19.21) interactions respectively. The difference was not statistically significant ($t = .564, df = 9, p > .10$).

ii. Valence of mothers' interactions

The mother's interactions (be they self-initiated approaches, instructions, or responses to their child) were coded as either positive, neutral or negative. A higher percentage of Neutral interactions were observed as compared to either Positive or Negative interactions both at pre- and post-intervention assessment. The pie-charts in Figures 7.4 and 7.5 demonstrate this.

Figure 7.4 Pie-charts of valence of maternal behaviour and interactions at pre-intervention assessment.

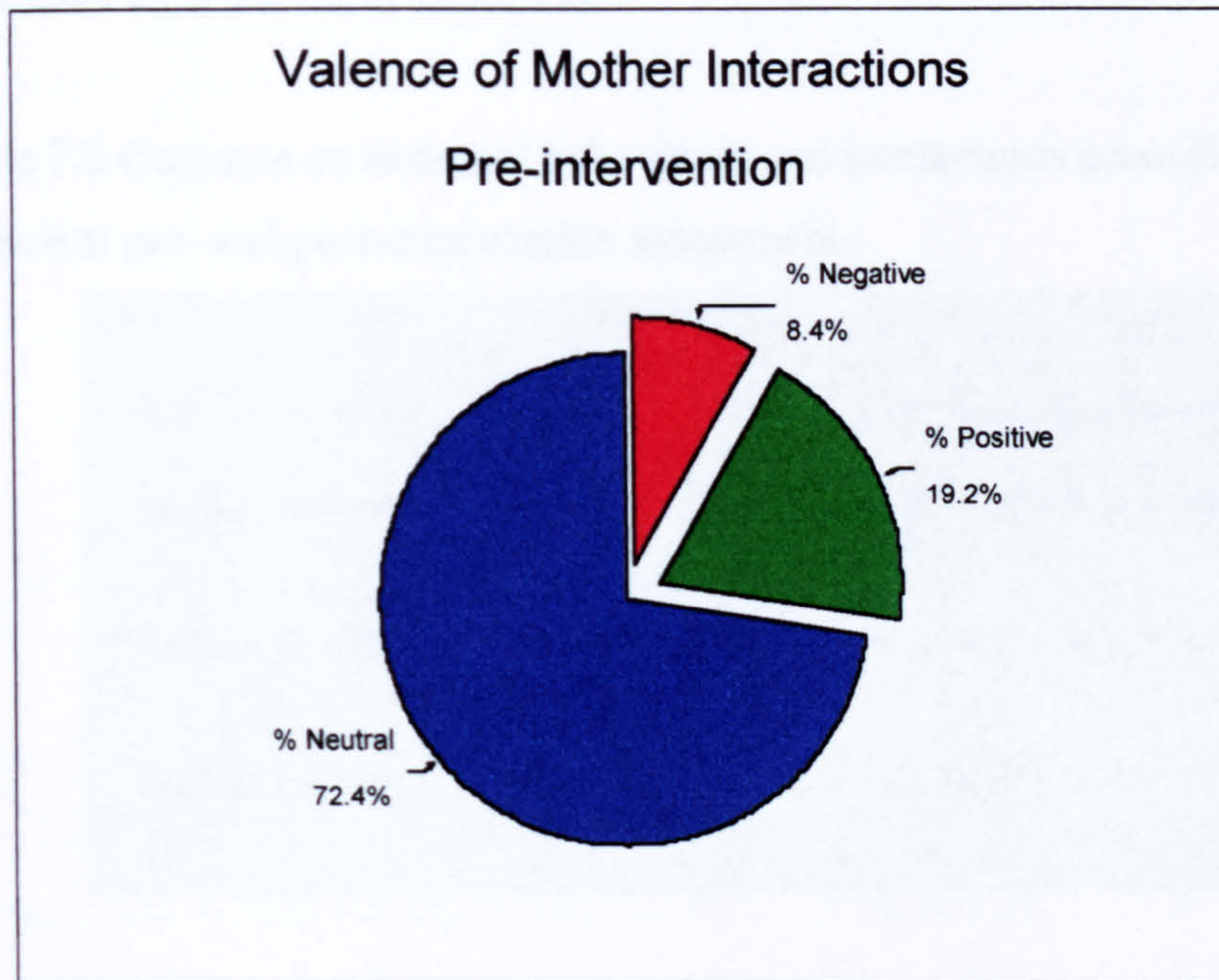
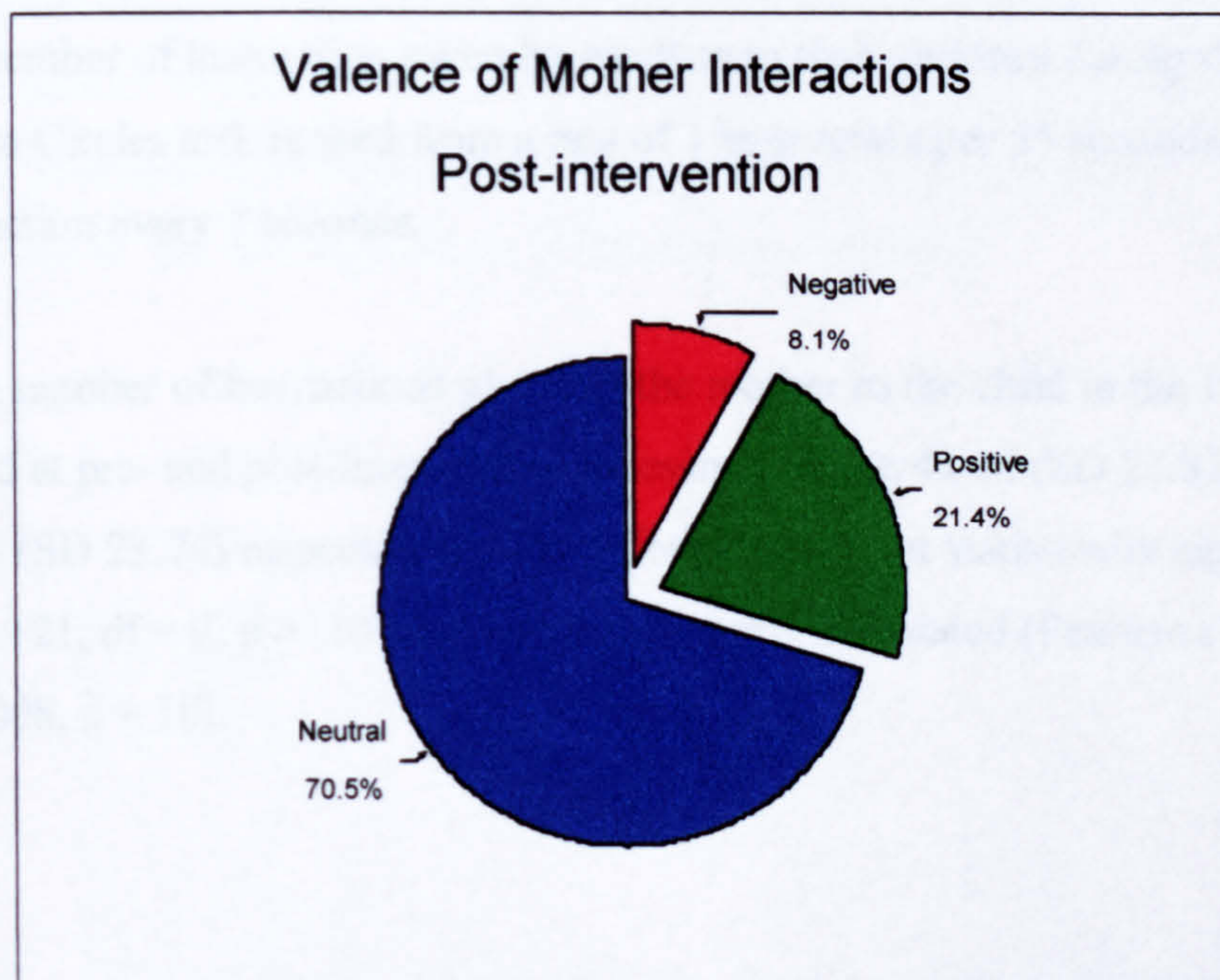


Figure 7.5 Pie-chart of valence of maternal behaviours and interactions at post-intervention assessment.



Using paired-samples t-tests differences between pre and post intervention observations of the valence of mother's interactions were not statistically significant as is shown in Table 7.8.

Table 7.8 Outcome on maternal behaviours and interactions according to valence at pre- and post-intervention assessment.

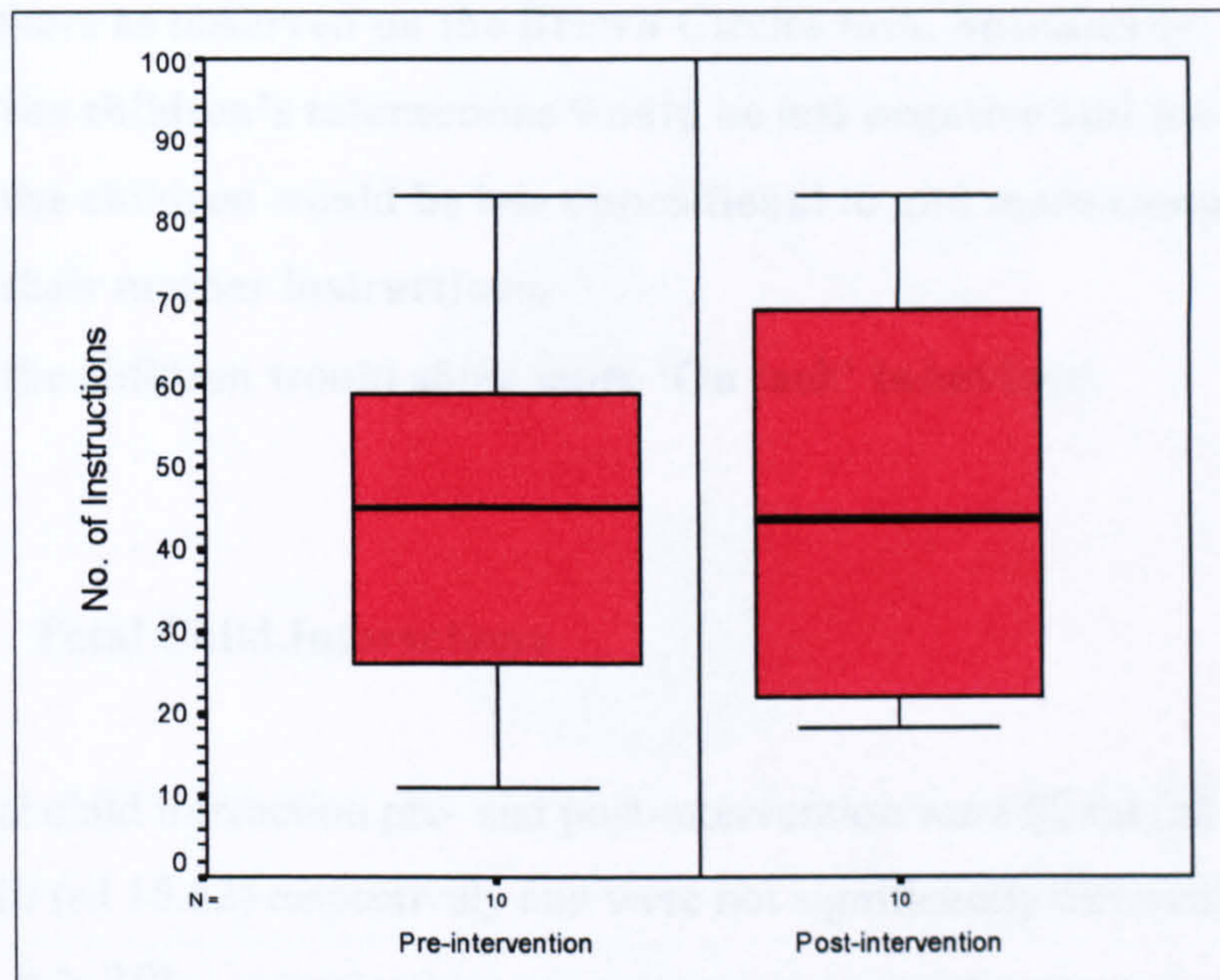
Observation Code	Mean (SD)		Paired samples t-test
	Pre	Post	
Mother Neutral	69.50 (21.39)	65.30 (15.93)	t = .554, df = 9, p > .10
Mother Negative	8.10 (9.13)	7.50 (9.35)	t = .198, df = 9, p > .10
Mother Positive	18.40 (16.63)	19.80 (8.44)	t = -.274, df = 9, p > .10

iii. Number of instructions given by mother

The number of instruction given by mothers to their children during the Brown Circles task ranged from a rate of 1 instruction per 55 seconds, to 1 instruction every 7 seconds.

Mean number of instructions given by the mother to the child in the 10 minute period at pre- and post-intervention assessment were 44.60 (SD 23.81) and 45.20 (SD 23.74) respectively. The difference was not statistically significant ($t = -.121$, $df = 9$, $p > .10$) and was significantly correlated (Pearson $r = .781$, $p = .008$, $n = 10$).

Figure 7.6 Box-plots of Number of Instruction given by Mothers in a 10 minute observation period at pre- and post-intervention



Summary for Hypothesis 2

No significant differences were found between pre- and post-intervention assessment of maternal behaviours and interactions with their children. The results presented here suggest stability in maternal behaviours and interactions. The null hypothesis is therefore not rejected.

Hypothesis 3: Significant differences would be found pre- and post-intervention in the children's behaviours and interactions with their mothers as observed on the Brown Circles task. Specifically:

- **the children's interactions would be less negative and more positive,**
- **the children would be less oppositional to and more compliant with their mother instructions,**
- **the children would show more 'On task' behaviour.**

i. Total Child Interactions

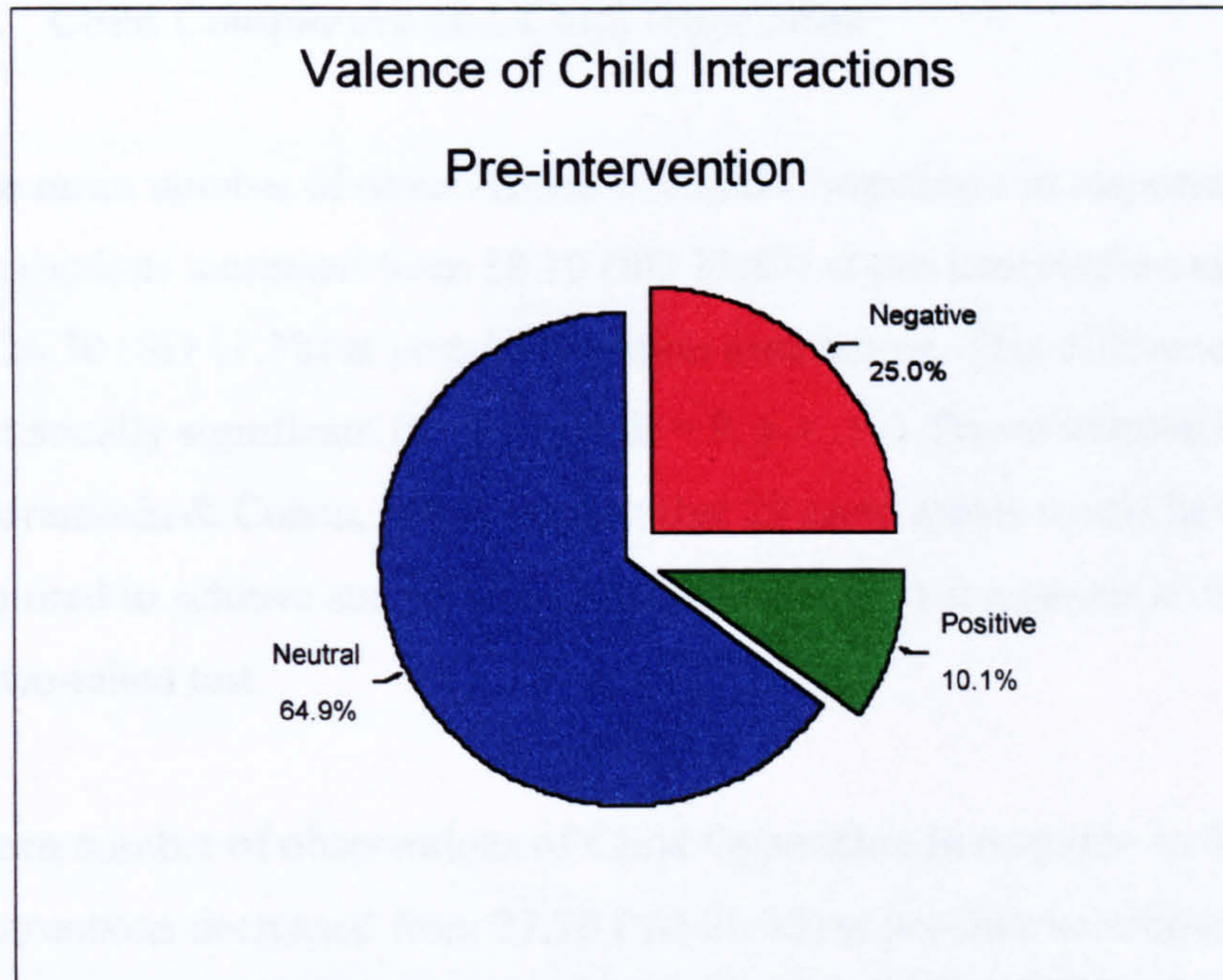
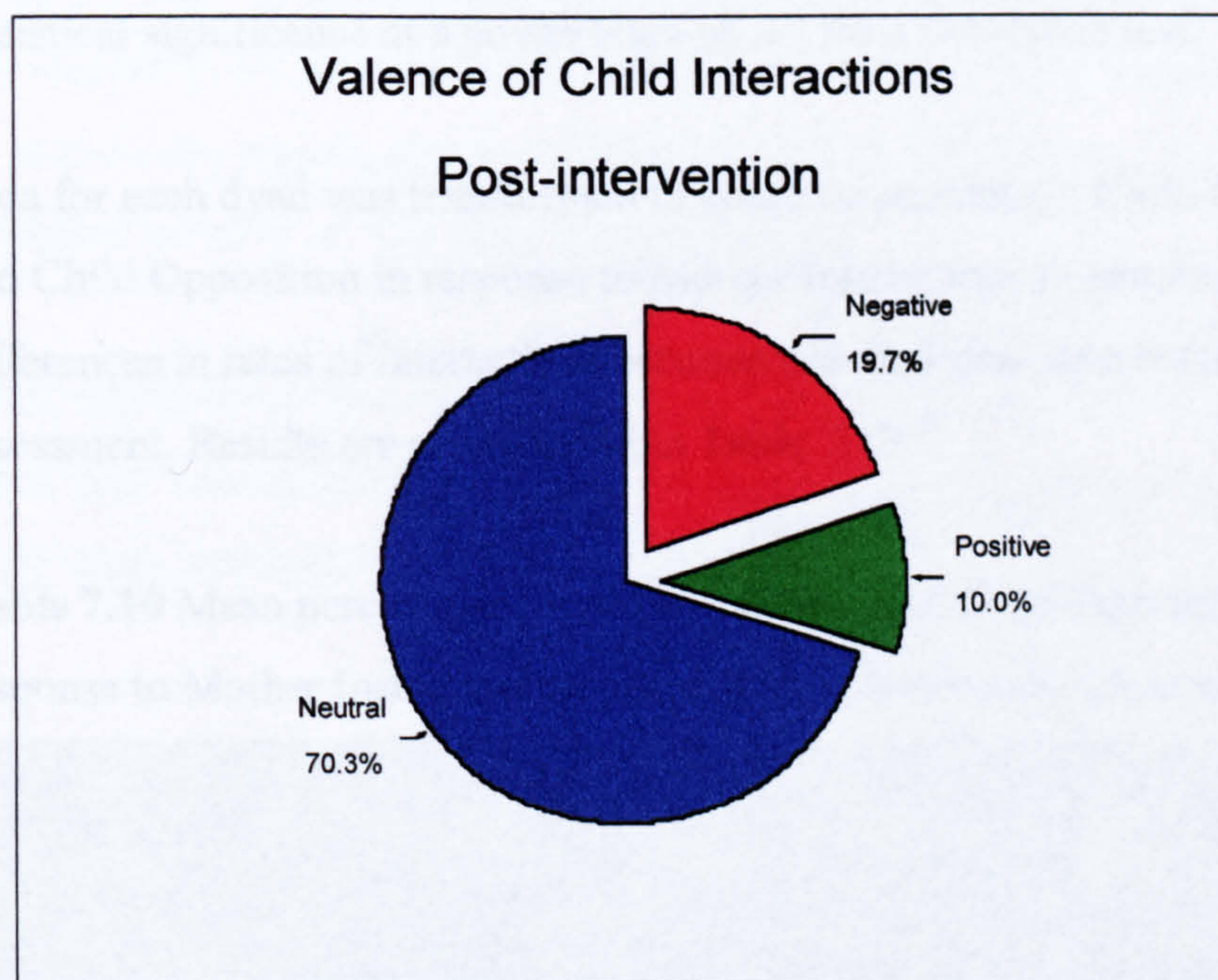
Total child interaction pre- and post-intervention were 82.00 (sd 19.11) and 82.10 (sd 15.62) respectively and were not significantly different ($t = -.020$, $df = 9$, $p > .10$).

ii. Valence of Children's interactions

As can be seen in Figures 7.7 and 7.8, differences between valences of child interactions as percentage of total interactions between pre- and post-intervention were minimal, and were not statistically significant. Results of Paired Samples t-test are presented in Table 7.9.

Table 7.9 Outcome on children's behaviours and interactions according to valence at pre- and post-intervention assessment.

Observation code	Mean (SD)		Paired-samples t test
	Pre	Post	
Child Neutral	53.20 (22.84)	57.70 (21.36)	$t = -.473$, $df = 9$, $p > .10$
Child Negative	20.50 (23.23)	16.20 (24.17)	$t = .535$, $df = 9$, $p > .10$
Child Positive	8.30 (12.10)	8.20 (7.21)	$t = -.165$, $df = 9$, $p > .10$

Figure 7.7 Valence of Child Interactions at Pre-intervention**Figure 7.8** Valence of Child Interactions at Post-intervention

iii. Child Compliance and Child Opposition

The mean number of observations of Child Compliance in response to Mother Instructions increased from 18.10 (SD 13.65) at pre-intervention assessment to 26.30 (SD 17.38) at post-intervention assessment. This difference was not statistically significant ($t = -1.119$, $df = 9$, $p > .10$). Power calculations (Borenstein & Cohen, 1988) suggest that 29 participants would have been required to achieve statistical significance ($p = .05$) at a power level of .80 for a two-tailed test.

Mean number of observations of Child Opposition in response to Mother Instructions decreased from 27.70 (SD 20.35) at pre-intervention assessment to 20.90 (SD 17.97) at post-intervention assessment. This difference was not statistically significant ($t = 1.149$, $df = 9$, $p > .10$). Power calculations (as above) suggest that 63 participants would have been required to achieve statistical significance at a power level of .80 for a two-tailed test.

Data for each dyad was transformed to compute percentage Child Compliance and Child Opposition in response to Mother Instructions to equate for differences in rates of interactions between pre- and post-intervention assessment. Results are summarised in Table 7.10.

Table 7.10 Mean percentage Child Compliance and Child Opposition in response to Mother Instruction at pre- and post-intervention assessment.

INTERACTION CODE	MEAN % (SD)		Paired-samples t-test
	PRE	POST	
Child Compliance	45.11 (28.12)	59.47 (23.70)	$t = -1.241$, $df = 9$, $p > .10$
Child Opposition	57.21 (27.76)	45.13 (23.33)	$t = 1.092$, $df = 9$, $p > .10$

A significant correlation was shown between Mother Instructions and Child Compliance at post-intervention (Pearson $r = .691$, $p = .027$, $n = 10$), but not at pre-intervention (Pearson $r = .562$, $p > .10$, $n = 10$).

Pearson r correlations were significant for Mother Instruction and Child Opposition at both pre- and post-intervention assessment (Pearson $r = .840$, $p = .002$, $n = 10$ and Pearson $r = .717$, $p = .020$, $n = 10$ respectively).

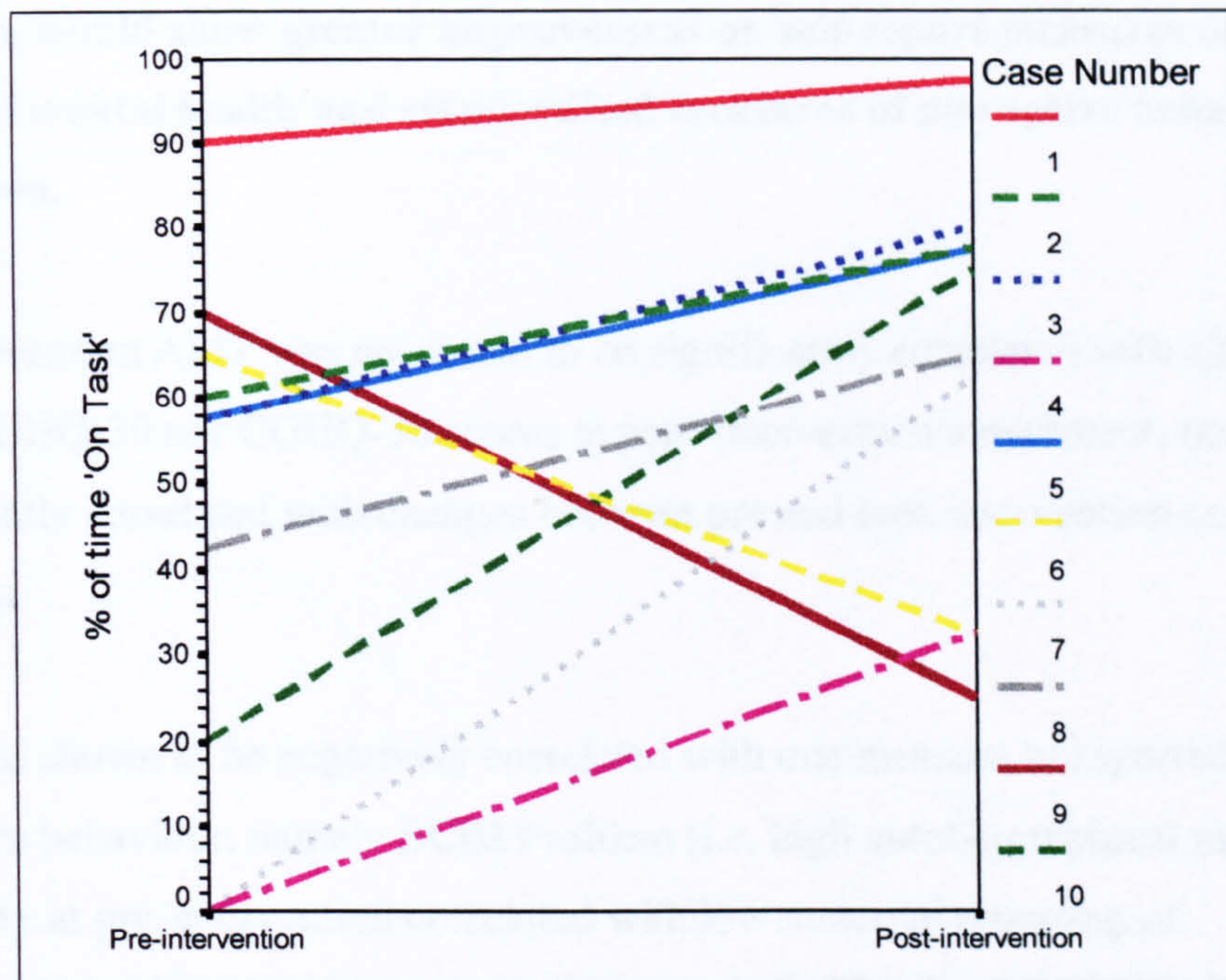
iv. 'On Task' Behaviour

'On Task' behaviour was measured using 15 seconds momentary time sampling over 10 minutes (40 observations). Individual scores were then converted to percentage time 'On Task'.

Mean 'On task' behaviour increased from 46.25 % (sd 30.28) at pre-intervention to 62.50% (sd 24.38) at post-intervention. This difference was not statistically significant ($t = -1.526$, $df = 9$, $p > .10$). Figure 7.9. presents individual patterns of 'On Task' behaviours.

Power calculations (Borenstein & Cohen, 1988) suggested that 23 participants would have been required for statistically significant results at a power level of .80 using two-tailed tests.

Figure 7.9 Individual 'On Task' behaviour at pre- and post-intervention assessment



Summary

In summary, no significant differences were shown on any observed child behaviours and interactions, although the changes were in the predicted direction. The null hypothesis was therefore not rejected for Hypothesis 3.

Hypothesis 4: Participants with the ability to generate specific memories at pre-intervention assessment, (i.e. participants with higher AMT scores at baseline), would show greater improvement on self-report measures of maternal mental health and standardised measures of disruptive behaviours in children.

Pre-intervention AMT was not found to be significantly correlated with either BDI-II, GHQ-30 nor CGHQ-30 scores at post-intervention assessment, nor significantly correlated with changes between pre and post intervention on these measures.

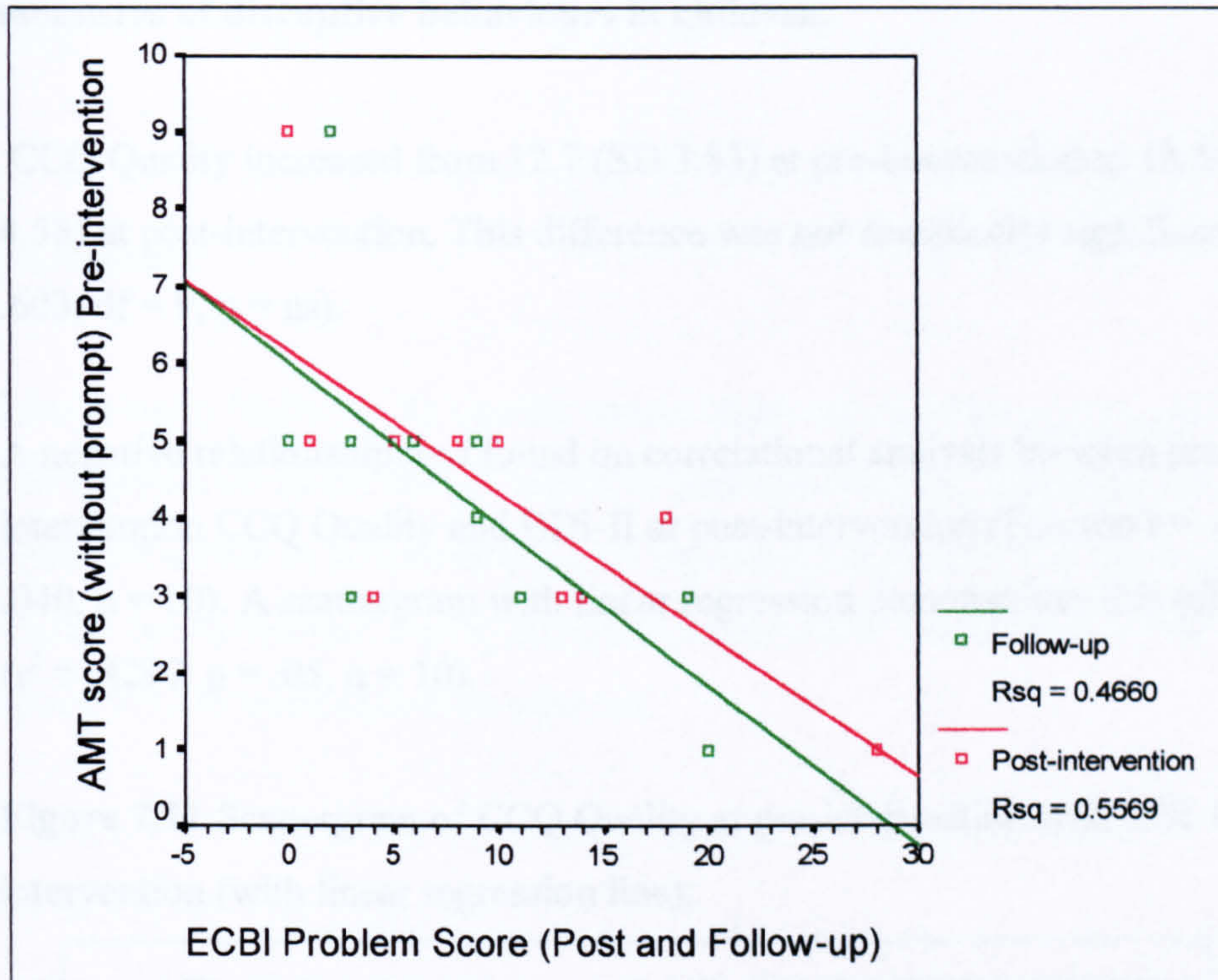
AMT was shown to be negatively correlated with one measure of reported child disruptive behaviour, namely ECBI Problem (i.e. high autobiographical memory specificity at pre-intervention correlated with low maternal reporting of disruptive behaviour problems at post-intervention). This is presented in Table 7.11.

Table 7. 11 Pearson correlation between pre-intervention AMT (without prompt) and post-intervention and follow-up ECBI Problem

PRE-INTERVENTION	ECBI Problem	
	POST-INTERVENTION	FOLLOW-UP
AMT (without prompt)	$r = -.742, p = .014, n = 10$	$r = -.706, p = .023, n = 10$

A scattergram with linear regression (see Figure 7.10) demonstrates the relationship between pre-intervention AMT without prompt scores and post-intervention and follow-up assessment ECBI Problem scores. The r^2 values are .5509 and .4981 respectively ($p = .05$).

Figure 7.10 Scattergram of pre-intervention AMT scores plotted against ECBI Problem scores at post-intervention and follow-up, with linear regression line.



Summary

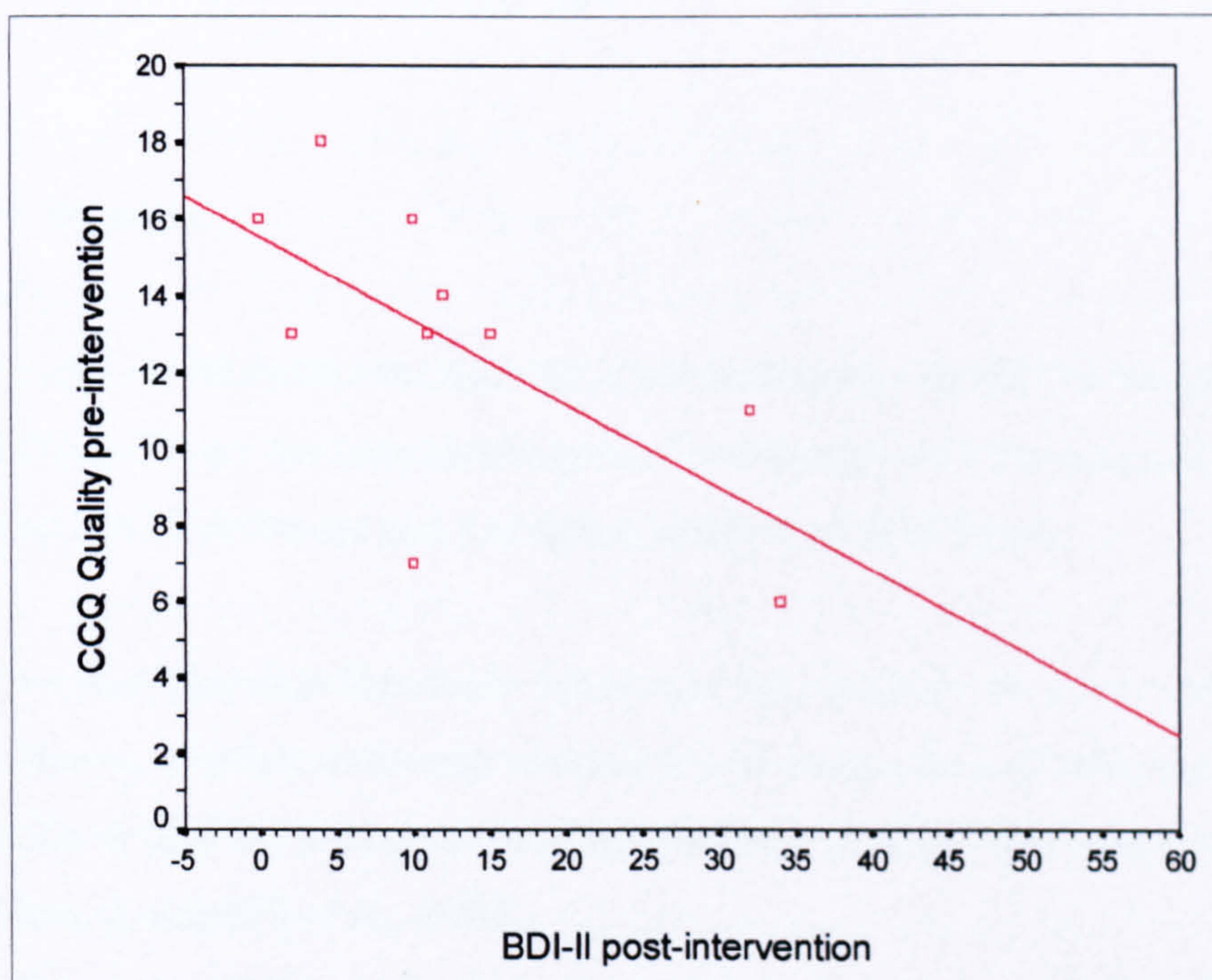
In summary, higher AMT scores at pre-intervention assessment were not found to be associated with greater improvement on measures of maternal mental health, but were associated with lower levels of maternal reporting of disruptive behaviours as measured by ECBI Problem. Partial support was found for Hypothesis 4, but the null hypothesis cannot be rejected.

Hypothesis 5: Mothers who were not socially isolated at baseline assessment (i.e. participants with higher scores on the CCQ) would show greater overall improvement on measures of maternal mental health and standardised measures of disruptive behaviours in children.

CCQ Quality increased from 12.7 (SD 3.83) at pre-intervention to 13.5 (SD 4.58) at post-intervention. This difference was not statistically significant ($t = -.603$, $df = 9$, $p = ns$).

A negative relationship was found on correlational analysis between pre-intervention CCQ Quality and BDI-II at post-intervention (Pearson $r = -.656$, $p = .040$, $n = 10$). A scattergram with linear regression demonstrates this relationship ($r^2 = .4297$, $p = .05$, $n = 10$).

Figure 7.11 Scattergram of CCQ Quality at pre-intervention with BDI-II at post-intervention (with linear regression line).



Using Pearson correlations, pre-intervention CCQ Quality was not found to correlate significantly with any other measure of maternal mental health or reported disruptive behaviours at post-intervention or follow-up ($r < .650$, $p > .10$).

Summary

In summary, higher CCQ Quality scores at pre-intervention were significantly associated with lower BDI-II scores at post-intervention. Higher CCQ scores were not shown to be associated with any other measure at post-intervention or follow-up assessment. Partial support was therefore found for Hypothesis 5, but the null hypothesis cannot be rejected.

CHAPTER 8: DISCUSSION

Given the risk factors stated in the literature (e.g. Brown and Harris, 1978; Herbert, 1995; Fergusson & Lynskey, 1993), the clinical sample in this study were a 'high risk' group for both depression and child management problems (see Chapter 1 and 4). A high proportion of the mothers were living in multi-stressed environments, and the sample were over-represented by participants from socio-economically deprived households (see Chapter 7, p.60).

In this small sample, the SED index score was significantly correlated with pre-intervention BDI-II score, but was not significantly correlated with any measure of reported disruptive behaviours. A high SED index score was not found to be predictive of poor outcome at post-intervention and follow-up assessment, although the literature would suggest that in the long-term participants from such multi-stressed environments would find it difficult to maintain reported treatment gains (Dumas & Wahler, 1983).

Depression

Both self-report measures of maternal mental health used in this study (BDI-II and GHQ-30) are well standardised, and commonly used in studies of maternal mental health problems and disruptive behaviours in children.

All ten participants in this study were reporting moderate to severe symptoms of depression, which was chronic or recurrent in nature, both of which are associated with the occurrence and maintenance of disruptive behaviour in children (Campbell et al., 1995).

CBT interventions are considered to be an effective treatment for depression (Williams, 1992) and therefore, in this study, the assessment of maternal mental health acted as a 'quality control' measure of the therapeutic intervention. As

reported in Chapter 3 there is some evidence that maternal depression may persist for several years if not treated (Brown & Harris, 1978; Cox et al., 1984; Cox et al., 1993; Philipps & O'Hara, 1991).

Seven of the 10 participants showed notable improvements in self-reported symptoms of mental health - moving from the severe range at initial assessment to the minimal range at follow-up (on BDI-II). As seen in Table 7.1 and Figure 7.1 the most significant decrease in self-reported symptoms occurred between pre- and post-intervention assessment, and coincided with the CBT intervention.

Of the 3 participants who showed less improvement, 2 continued to receive support from their respective AMH team Keyworkers, and 1 was referred for specific assertiveness training in a group setting. By the debriefing session (held approximately 4 months after follow-up) one participant continued to receive minimal contact with her key-worker, but the CBT intervention was considered successful as a possible admission to a Psychiatric Unit had been avoided.

On post-intervention assessment and in the debriefing session participants made positive comments about therapy overall, citing increased confidence and coping skills, improved relationships with partners and children, and changes in cognitions as examples of improved functioning (see Appendix N). In particular, talking to another person, and the self-monitoring aspects of therapy (activity monitoring/scheduling and problem-solving) were identified as most helpful. Three participants reported that they felt that the 8-session intervention had been too short, and 3 participants reported they would have valued the opportunity for their partners (or ex-partner) to be invited to at least one session to discuss specific relationship problems. Dadds (1992) has argued that marital discord can represent a "significant impediment" in child management treatment outcome, but that marital therapy can be successfully integrated into such programmes with positive effects on treatment outcome. Although CBT is usually viewed as an individual psychotherapy, the inclusion of depressed women's partners in the therapeutic process is worth considering further.

In summary, the results suggest that the CBT intervention offered in this study was an effective treatment for this sample of depressed mothers.

Child Disruptive Behaviours

Three standardised and commonly used parental report measures of disruptive behaviours were used in this project (ECBI, CBCL, and PSI). Whilst significantly correlated, the sub-scales used in this study appeared to measure slightly different aspects of disruptive behaviours as reported by mothers. ECBI Intensity and CBCL External T appeared to be the most 'objective' as they both measure the occurrence and frequency of 'difficult' behaviours. ECBI Problem, PSI Difficult Child, and PSI Parental Distress however appeared to be more sensitive to parental perception of disruptive behaviours and its effect on the depressed mothers.

Given the prevalence of maternal depression and disruptive behaviours and their degree of co-existence (see Introduction) it was to be expected that a significant number of mothers referred to Adult Mental Health Services with depression would be reporting disruptive behaviour problems in their children. In this study, of the 13 women who had BDI-II scores greater than 13 at the initial screening (i.e. were 'cases'), 12 (92%) were also reporting disruptive behaviour problems in the clinical range in at least one child (as measured on ECBI). Not one of the mothers had considered requesting help to deal with their child or children's disruptive behaviours. As discussed in Chapter 3, Littlewood and McHugh (1997) suggest that mothers of 'difficult' children tend to blame themselves, which may influence the 'filters' in the referral process as described by Goldberg and Huxley, 1980 (see p.3).

Although the mothers in this study had not sought help to deal with their children's behaviours, the pattern of maternal reporting on the standardised

measures suggests that they perceived their children's disruptive behaviours as problematic. However, mean scores for both ECBI Intensity, which measures the occurrence and frequency of disruptive behaviour, and ECBI Problem, which measures parental perception of behaviours as problematic, were significantly lower in this study's sample as compared to Eyberg and Ross's (1978) clinical sample, but significantly higher than mean scores reported for the 'normal' population. Comparison of mean ECBI Intensity scores with Hutchings (1996a) data similarly suggests that the children in this study were not displaying disruptive behaviours as severe as those reported for children referred to CAMH teams. However, the mothers reported that the level of disruptive behaviours were problematic for them which concurs with the view that depressed mothers are thought more likely to perceive their children's behaviours as maladjusted or inappropriate (Williams et al., 1990), although objectively they may not be rated as such by others (Webster-Stratton & Hammond, 1988; see Chapter 4).

Mean scores decreased on all measures of maternal reporting of child disruptive behaviours over the study period and achieved statistical significance for all measures on one-tailed tests by follow-up assessment. In contrast to the measures of maternal mental health, mean scores continued to decrease following the end of therapy (see Figure 7.2 and 7.3), suggesting a time-lag effect. In terms of 'caseness', disruptive behaviours as defined by maternal reports had decreased by between 50 and 70% by post-intervention assessment.

As predicted in Hypothesis 1, the CBT intervention appeared to be associated with a reduction in maternal reporting of disruptive behaviours in their children, although since a control group was not used, no firm conclusions may be drawn that this wouldn't also have occurred in a non-treated sample.

Observed Mother and Child behaviours and interactions on the Brown Circles Task with SOC-IIIB coding.

As an observation measure, the Brown Circles task is non-threatening and very easy to administer in a home setting. Any initial anxiety in mothers about being recorded on videotape appeared to dissipate quickly once the mother and child were involved in the task. No mother refused permission to be filmed.

Vision quality was good on all tapes, but audio quality was variable, and in some instances made coding difficult. This could have been improved had either a personal microphone or an 'omni' boundary microphone been used.

However, even with these problems, mean inter-rater reliability using the SOCIII-B codes was acceptable. Poorest agreement was found Mother Approach Neutral and Child Approach Neutral, which is understandable since in the event of uncertainty about which interaction code (i.e. Approach, Instruction, Compliance, or Opposition) or valence code (i.e. Neutral, Negative, Positive) to use, the 'fall-back' position would be interaction 'Approach' and valence 'Neutral'. Occasional discrepancies between coders in cases of disjointed utterances (e.g. incomplete sentences, repeated use of a child's name to draw their attention, etc.) also influenced agreement of these two codes.

Repeated use of the Brown Circles task is not thought to influence outcome. Although there may be some practice or familiarity effects with repeated use, the task is so tedious that this is likely to be counteracted by motivational factors.

The main impression gained when viewing the videos was the lack of affect expressed by mothers – an impression supported by the higher percentage of Mother Neutral behaviours and interactions recorded (see Table 7.8, and Figures 7.4 and 7.5). The mothers were therefore not so much irritable and negative, as lacking in emotion towards their child during the observed interactions. The

valence of maternal behaviours and interactions did not change significantly following therapy (see Table 7.8).

Previous studies have concluded that maternal depression is associated with high levels of instruction giving as compared to non-depressed mothers (McMahon & Forehand, 1988). In this small sample, pre- and post-intervention Mother Instruction was found to be significantly correlated (Pearson $r = .781$, $n = 10$, $p = .008$) and not significantly different ($t = .564$, $df = 9$, $p = ns$). Additionally, the mean number of total mother interactions was not significantly different between pre- and post-intervention assessment, and was approaching significance on correlation (Pearson $r = .606$, $n = 10$, $p = .063$). This suggests that the depressive episode was neither significantly affecting the rate of instruction giving, nor interaction rate.

The valence of child behaviours did not change significantly between pre- and post-intervention assessment, and no statistically significant changes were observed in types of behaviours and interactions (see Table 7.9, and Figures 7.7 and 7.8). However, mean Child Opposition decreased, and mean Child Compliance and 'On Task' behaviour increased between pre- and post-intervention assessment (see Table 7.10). Whilst not statistically significant, these differences were in the predicted direction, and as reported in the Results section, with a larger sample, may have become statistically significant.

In summary, no statistically significant differences were observed in either mother or child behaviours and interactions using the Brown Circles Task with SOCIII-B codes, and Hypotheses 2 and 3 are therefore not supported.

Autobiographical Memory

The two versions of the AMT selected for this study were identical to the versions used by Scholey (1997) with non-depressed mothers. The intention was

to administer the AMT at pre and post intervention assessments, but although the AMT was administered at the post-intervention assessment the author was concerned that aspects of its administration and scoring appeared to differ between interviewers, thus invalidating the results. In particular, insufficient verbatim had been recorded in some cases to objectively verify and distinguish between memories coded as specific or extended. An audio recording of the test would have prevented this problem from arising, and allowed inter-rater validity ratings to be calculated.

At pre-intervention assessment the depressed mothers in this sample were significantly more over-general in recall as compared to non-depressed mothers reported in Scholey (1997). The association between depression and low specificity on the AMT is well established (see Williams, 1996).

Although the AMT is not reported in the literature to correlate with measures of depression, a significant negative correlation was shown between AMT and PSI-Parental Distress in this study. This sub-scale consists of statements that are 'over-general' in nature. For example, items include phrases such as, "I often have the feeling ...", "... I feel that I am almost never able to ...", "... I usually expect not to ..." etc. Given the nature of the items it would seem likely that depressed persons with low AMT scores (i.e. higher 'over-generality') would tend to validate these negative and over-general items.

As a predictor of outcome, the ability to describe specific events and occasions in the mothers' own lives at pre-intervention (i.e. high AMT scores) was associated with the mothers perceiving a lesser number of problems in their children's behaviours at post-intervention and follow-up assessment (as measures on ECBI Problem - see Table 7.11 and Figure 7.10). As discussed in Chapter 3, Wahler (1980) concluded that poor parental ability to accurately observe, describe and monitor children's behaviours is predictive of poor outcome in treatment programmes, and it seems likely that parental attending and observing to their child is influenced by their autobiographical memory.

Wahler and Sansbury (1990) suggest that improving parental attending skills could improve treatment outcome. In future studies measuring AMT at pre- and post-intervention would be one method of indicating whether this had been achieved.

Social Isolation

Social Isolation or 'Insularity' was measured using the CCQ, which as stated earlier is still in the process of being tested for reliability (test-retest) and validity (comparison with the Community Interaction Checklist; CIC; Wahler, 1980). The results presented in this study must therefore be treated with caution.

However, in use, results from the CCQ identified that 70% of mothers in this study were 'insular' as compared to 10% of non-depressed mothers reported in Hutchings, Midence, and Nash, 1997. Furthermore, a significant difference was shown on CCQ Quality between the two groups. As discussed in Chapter 4, the presence of a close, confiding relationship is a protective factor against depression (see Brown and Harris, 1978).

In this study, mothers with supportive social networks (i.e. high CCQ scores) at the outset, were found to show better treatment outcome as regards depression (as measured on BDI-II). However, although Wahler and Dumas (1984) found that 'insularity' was predictive of poorer outcome in child management programmes, this association was not found in this study.

With further testing, the CCQ may become a useful clinical and research tool for identifying socially isolated parents.

Limitations of the study

The main limitations of this study were the small numbers of participants involved, and the lack of a (waiting list) control group. Given the number of measures included in the study, there is a danger that some correlations could have arisen by chance alone, and statistical power was affected. For the effects sizes observed on measures of reported child behaviours in this study, power calculations (Borenstein & Cohen, 1988) would suggest a sample size of at least 20 would be required for a 80% chance of detecting significant effects at the .05 level in two-tailed tests. Using similar criteria as regards the observed mother and child behaviours up to 60 participants would be required.

It has been noted earlier that one questionnaire (CCQ) is still in the process of being validated and tested for reliability and the SED index used was not a standardised measure. The results from these measures must therefore be treated with caution.

Although the CBT intervention offered in this study was intended to be very similar to that offered routinely in AMH teams, it may in practice have differed in some aspects. It is likely that the mothers in this study received a shorter-term, more intense and focussed intervention than would normally be the case.

Although parenting skills were not specifically addressed in therapy, some mothers during the debriefing session made comments suggesting that they felt they *had* received advice on child management, and reported improvements in their relationship with and control over their children. It is difficult to know whether or not these comments would have arisen following a routine CBT intervention, or whether participants, who were aware of the research interest, were biased in their responding. The measures used in the study, in conjunction with the observation and video recording of the mother and child, focussed attention on child behaviour issues, and may have led participants to comply with the perceived 'demands' of the study. The lack of observable change in

mother and child behaviours may therefore be indicative that reported improvements were due to the demand characteristics of the study, and not due to the intervention.

Kazdin (1997) criticises current research into child management programmes for the short time (a median of five months) between post-intervention assessment and follow-up (if indeed follow-ups are administered at all). In this study, a follow-up on some self-report measures was administered after 6 weeks, which is insufficient as regards investigating long-term outcome.

Given these limitations the results of this study must be treated with caution, and may only be used as an indication of areas that may be fruitful for further investigation rather than firm conclusions.

Clinical Implications and Conclusions

Based on reported measures alone, the results of this study would suggest that CBT for depressed mothers is associated with a reduction in self-reported symptoms of depression, and also associated with a reduction in maternal reporting of their children's disruptive behaviours.

In one sense an improvement in maternal perception of their own internal state and an improvement in their perception of their children's behaviours is a good clinical outcome. Patterson and colleagues (e.g. Patterson, 1982) for example describe how disruptive behaviours in children are maintained by coercive patterns of interactions between parents and children. Changes in perception, along with an increased ability to 'make sense' of their situations, improved self-esteem and self-confidence may be sufficient for positive changes to be maintained in some dyads. In comparison to studies on anti-depressant medication (see Eisenbruch, 1983) there was no indication in this study that CBT was harmful to the children in any way, and some indications of more positive maternal cognitions of their child or children.

However, Patterson and Forgatch (1995) suggest that parent ratings of child behaviours, although easy to obtain and intrinsically appealing, are not as valid as direct observations of parents and children before and after treatment. Although time-consuming, they suggest that observational data is the only method of demonstrating changes in comparison to reports of change, and are the only measures that can predict long-term outcome.

In this study no significant changes were shown in observable maternal and child behaviours and interactions, although child behaviours especially were changing in the predicted direction. It may be that the observational data was collected too soon after termination of therapy for significant changes in behaviours and interactions to be apparent. The Brown Circles task may have been better placed in the follow-up assessment rather than in the post-intervention period to allow for the time-lag between changes in maternal cognitions and behaviours and observable changes in the children's behaviours (if they occur).

Alternative explanations are that the coding system used was not sensitive to subtle changes in maternal and child behaviours, and that a 10-minute observation on one task was an insufficient sample of behaviour for accurate coding. However, if an observational measure is to be clinically useful it must be a 'snap-shot' that is easy to use, not too time-consuming, and sensitive to predicted behaviour changes. Further work is required to develop the Brown Circles task and the coding system to meet these criteria for use in a clinical setting.

Similarly, the intervention was not associated with changes in social isolation and 'insularity' as measured by CCQ. As predicted from the literature, women with good social support networks at pre-intervention assessment reported less depressive symptoms at post-intervention. However, at post-intervention assessment, the mothers, in general, continued to be 'insular', although in therapy the mothers had been encouraged to take up new activities which

included meeting people. This result is perhaps not surprising. As discussed in Chapter 4, 'insularity' is mainly determined by the quality of a person's contact with others rather than quantity. It would have been difficult for the participants to establish high quality, confiding relationships within the short time-span of the study period. However, in a clinical situation, improving the social networks of 'high-risk' mothers of young children may have long-term benefits. It could be addressed through collaboration on a community level with other agencies involved in providing services for pre-school children and their families, and with agencies that provide opportunities for adults to develop personal and vocational skills.

It was unfortunate that it was not possible to compare pre- and post-intervention AMT scores, since Brittlebank et al. (1993) predict that autobiographical memory specificity may improve over therapy due to the processes involved in diary and record keeping. The results in this study suggest that mothers who are more able to be specific report better outcome as regards their children's disruptive behaviours. In a clinical setting, the use of techniques to improve memory specificity may be associated with better treatment efficacy.

The participants in this study were a 'high risk' group for both depression and disruptive behaviours in their children due to high socio-economic deprivation and marital conflict. Although the SED index was not significantly correlated with any measure at post-intervention and follow-up assessment, it would seem likely that the women within the group with fewer environmental stresses might be more able to maintain treatment gains than more disadvantaged participants. Longer-term follow-ups are required to investigate this prediction. As discussed in Chapter 4, whilst Clinical Psychologists may not be able to directly influence client's social and economic environments, the profession has a duty to research and inform other agencies about the long-term consequences for individuals and society of socio-economic deprivation.

On the basis of this small sample, it appears likely that many mothers referred to AMH teams with depression have additional problems with their children, adult relationships, and social and physical environments, which may adversely affect treatment efficacy if not addressed. Since maternal depression and disruptive behaviours in children so often co-exist, and are thought to have a negative and reciprocal effect on one another, treating one without addressing the other is likely to be less effective than when treatments are combined.

Maternal depression and disruptive behaviours in children are both very common problems, and have a detrimental effect on family functioning, and ultimately society. It is therefore important that effective treatments are developed. There is a vast literature on the association between maternal depression and disruptive behaviours in children, but comparatively little research has focussed on the clinical issues. The treatment of choice for maternal depression is commonly CBT, and it is therefore important that we understand how the treatment affects the wider family system. Using a combination of measures not previously used together, this study has started the process of teasing out the relationship between a CBT intervention for maternal depression and its effect on disruptive behaviours in their children.

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APPENDIX A: ICD10 and DSMIV criteria of ‘conduct disorders’ in children.

Although The International Classification of Diseases (ICD10) and the Diagnostic and Statistical Manual of Mental Disorders (4th edition) (DSMIV) have slightly different definitions of Conduct Disorders both describe variations of childhood behavioural problems which exceed the ‘normal’ pattern in children of a similar age.

For example, the following is an extract from the International Classification of Diseases (ICD 10):

“Conduct disorders are characterised by a repetitive and persistent pattern of dissocial, aggressive or defiant conduct. Such behaviour when at its most extreme for the individual, should amount to major violations of age appropriate social expectations, and is therefore more severe than ordinary childish mischief or adolescent rebelliousness. Isolated dissocial or criminal acts are not in themselves grounds for the diagnosis, which implies an enduring pattern of behaviour.”

(ICD 10, 1992).

Examples of behaviours on which a diagnosis of Conduct Disorder is made according to ICD10 criteria include:

- excessive levels of fighting or bullying,
- cruelty to animals or other people,
- severe destructiveness to property,
- firesetting,
- stealing,
- repeated lying,
- truancy from school and running away from home,
- unusually frequent and severe temper tantrums,
- defiant and provocative behaviour,
- persistent severe disobedience.

Sub-categories of Conduct Disorder in ICD 10 are:

- Conduct Disorder confined to the family context.
- Unsocialized conduct disorder.
- Socialized conduct disorder.
- Oppositional defiant disorder.
- Other conduct disorders.
- Conduct disorder, unspecified.

The Diagnostic and Statistical Manual of Mental Disorders (4th edition) (DSMIV) has very similar categories of behaviour to ICD10. They include:

- Aggression towards people and animals (including bullying, threatening behaviour and intimidation, physical fighting, use of weapons, stealing while confronting victim – as in mugging, etc., and forcing someone into sexual activity).
- Destruction of property (including firesetting).
- Deceitfulness or theft (including breaking into someone's house or car, lying to obtain good goods etc., or stealing, e.g. shoplifting).
- Serious violations of rules (including staying out late against parents' wishes, running away from home, and truanting from school).

DSMIV makes a distinction between Childhood-onset type Conduct Disorder where symptoms appear prior to age 10 years and Adolescent-onset type Conduct Disorder where there were no symptoms prior to age 10 years. Distinctions are also drawn between severity of behaviours.

Children with Childhood-onset Conduct Disorder are thought to be at significantly greater risk of severe mental, criminal and social problems in adolescence and adulthood (White, Moffit, Earls, & Robins, 1990). Conduct Disorder as described in DSMIV is rarely 'diagnosed' before the age of 6 years.

DSM IV's Oppositional-Defiant Disorder (ODD), often found as a precursor to Conduct Disorder, has its onset before the age of 8 years. The behaviours

demonstrated are less severe than in Conduct Disorder (partly due to the age difference) and include:

- Often loses temper.
- Often argues with adults.
- Often actively defies or refuses to comply with adults' requests or rules.
- Often deliberately annoys people.
- Often blames other for his or her mistakes or behaviour.
- Is often touchy or easily annoyed by others.
- Is often angry and resentful.
- Is often spiteful or vindictive.

A further category in DSMIV is Disruptive Behavior Disorder Not Otherwise Specified, which categorises oppositional defiant and conduct disorder behaviours which do not meet the full criteria for the previous categories, but where there is clinically significant impairment.

APPENDIX B: DSMIV and ICD10 criteria for Depressive Disorders.

In the Diagnostic and Statistical Manual of Mental Disorders (4th edition) Depressive Disorders are included in the section on Mood Disorders. Depressive Disorders are further categorised into Major Depressive Disorder, Dysthymic Disorder, and Depressive Disorder Not Otherwise Specified, and are distinguished from Bipolar Disorders by the fact that there is no history of Manic, Mixed, or Hypomanic Disorder.

Major Depressive Disorder is characterised by one or more Major Depressive Episodes. People with Major Depressive Episodes often describe their mood as depressed, sad, hopeless, discouraged, or 'down in the dumps'. Some individuals emphasise somatic complaints and many report or exhibit increased irritability. People with Major Depressive Episodes almost always report loss of interest or pleasure in other people, activities, or hobbies.

Additional symptoms may be:

- Changes in appetite or weight.
- Changes in sleep patterns.
- Changes in psychomotor activity.
- Decreased energy, tiredness or fatigue.
- Feelings of worthlessness or guilt.
- Impaired ability to think, concentrate, or make decisions.
- Loss of sexual interest or desire.
- Recurrent thoughts of death or suicidal ideation, plans or attempts.

To meet DSMIV criteria, at least 5 of the above (including depression and loss of interest type mood), must be present. The symptoms must persist for most of the day, nearly every day, for at least 2 consecutive weeks, and must be accompanied by clinically significant distress or impairment in social, occupational, or other important areas of functioning.

ICD10 is very similar to DSMIV in most respects, but has loss of self-esteem as an additional symptom. Additionally it provides a method of classifying the severity of the depressive episode. For example, 4 out of 10 symptoms (which must include two out of depressed mood, loss of interest, and decreased energy) defines a Mild episode, whilst 8 symptoms out of 10 (which must include the three symptoms listed previously) defines a Severe episode.

Other specifiers in DSMIV are:

- In Remission – where there are no depressive symptoms following an episode, and functioning has returned to pre-morbid levels.
- Partial Remission – where depressive symptoms which are insufficient to meet full criteria persist for months or even years and are associated with some disability or distress.
- Chronic – where full criteria for a Major Depressive Episode have been met continuously for at least the past 2 years.
- Recurrent - the course may be variable, but the number of prior episodes predicts the likelihood of developing a subsequent Major Depressive Episode.
- Psychotic Features.
- Catatonic Features – commonly associated with the presence of motoric immobility or intense over-activity, rigidity, mutism, stereotyped movements, echolalia or echopraxia.
- Melancholic – typified by loss of pleasure in all, or almost all activities, lack of reactivity to usually pleasurable stimuli, early awakening and depression regularly worse in morning, psychomotor retardation or agitation, anorexia or weight loss, and excessive or inappropriate guilt.
- Atypical – typified by mood reactivity, and increased appetite/weight gain, hypersomnia, leaden paralysis and long-standing pattern of interpersonal rejection sensitivity.
- Postpartum onset can only be diagnosed if onset is within 4 weeks after delivery of a child. Generally symptoms do not differ from

symptomatology in nonpostpartum mood episodes, but may include psychotic features.

- Seasonal Pattern – where there has been a regular temporal relationship between the onset of depressive episode and a particular time of the year, with full remission also occurring at a characteristic time of the year.

Major Depressive Disorder is differentially diagnosed from Dysthymic Disorder (which has many similar symptoms, and often precedes a major episode) by its episodic nature. Dysthymic Disorder is characterised by chronic, less severe depressive symptoms that have been present for at least 2 years. Depressive Disorder Not Otherwise Specified may be appropriate for presentations of depressed mood with clinically significant impairment that do not meet criteria for duration or severity.

In DSMIV, Major Depressive Episode cannot be diagnosed if the symptoms:

- meet criteria for Mixed Episode (i.e. include mania),
- do not cause clinically significant distress or impairment in social, occupational, or other important areas of functioning,
- are caused by the direct physiological effect of substance abuse or general medical condition,
- are better accounted for by Bereavement.

If not treated a depressive episode typically lasts 6 months or longer, regardless of age at onset, although in some cases symptoms may persist (as described previously).

Major Depressive Disorder may begin at any age, with an average age at onset in the mid 20s. It is twice as common in females than males, and rates are higher for both men and women in the age range 25 to 44-year-old. The lifetime risk for women in community samples varies from 10-25%. It is 1.5-3 times more

common among first-degree biological relatives of persons with this disorder than among the general population. Major Depressive Disorder is also associated with high mortality since up to 15% of individuals with severe Major Depressive Disorder will commit suicide.

APPENDIX C - AUTOBIOGRAPHICAL MEMORY TEST

Administration Instructions

The interviewer reads out the following:

“I am interested in your memory for events that happened in your life. I am going to read you some words. For each word I want you to think of an event that happened to you which the word reminds you of. The event could have happened recently or when you were younger. It might be an important event or a trivial event.

Just one more thing: the memory you recall should be of a particular occasion. So if I said the word good it would not be O.K. to say “I always enjoy a good party” because that does not mention a specific event. But it would be O.K. to say “I had a good time at Jane’s party” because that is a specific event.

Let us try some words for practice:

Happy

Bold

Enjoy”

The time allowed is 30 seconds, and can include up to 2 prompts.

Further prompts: *“Can you think of a particular time?”* can be repeated. It is important if you are not tape recording the responses that you prompt for a specific response whilst recording a general response. If you do give a prompt to get a specific example, please make a note of it on the form.

When all the responses have been collected please ask the respondent to say how long ago each event occurred.

Autobiographical Memory Test – Version A

Name _____

Cue word	Latency (seconds)	Response (verbatim)	Time since event	S = Specific P = Prompt given
Helpless				
Excited				
Upset				
Calm				
Hurt				
Pleased				
Bad				
Proud				
Guilty				
Peaceful				

Total specific responses:	without prompt =	with prompt =
Total negative words:	without prompt =	with prompt =
Total positive words:	without prompt =	with prompt =

Autobiographical Memory Test – Version B

Name _____

Cue word	Latency (seconds)	Response (verbatim)	Time since event	S = Specific P = Prompt given
Hopeless				
Eager				
Rejected				
Hopeful				
Sad				
Smile				
Weakness				
Carefree				
Bored				
Pleasant				

Total specific responses:

Total negative words:

Total positive words:

without prompt =

without prompt =

without prompt =

with prompt =

with prompt =

with prompt =

APPENDIX D: Community Contact Questionnaire 2 (CCQ2; Hutchings, 1996a)

Research Id. No. _____

Name of child _____ Date completed _____

Completed by _____ Relation to child _____

This questionnaire asks you about the contact that you, the child's main carer, generally have with people outside your own home, that is, people you do not live with. Contact includes both seeing people and telephone contact. Please tick the box that describes most closely what happens to you. Thank you for completing this questionnaire.

A Relatives

1. How often do you have contact with a relative or relatives?

Daily	Twice weekly	Weekly	Monthly	Six monthly or less
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2. Do you feel that most of the contact that you have with your relatives is critical or supportive of your lifestyle in general?

Very critical	Critical	Mixed	Supportive	Very supportive
---------------	----------	-------	------------	-----------------

3. Do you feel that most of the contact that you have with your relatives is critical or supportive of your management of your child/children?

Very critical	Critical	Mixed	Supportive	Very supportive
---------------	----------	-------	------------	-----------------

B Friends

1. How often do you have contact with a friend or friends?

Daily	Twice weekly	Weekly	Monthly	Six monthly or less
-------	--------------	--------	---------	---------------------

2. Do you feel that most of the contact that you have with your friends is critical or supportive of your lifestyle in general?

Very critical	Critical	Mixed	Supportive	Very supportive
---------------	----------	-------	------------	-----------------

3. Do you feel that most of the contact that you have with your friends is critical or supportive of your management of your child/children?

Very critical	Critical	Mixed	Supportive	Very supportive
---------------	----------	-------	------------	-----------------

CCQ2 scoring method

1. Quality of Contact

Quality questions (A2 and 3, B2 and 3) are scored from 1 – 5, with very critical scoring 1 and very supportive scoring 5. Quality of contact is obtained by summing the scores from these four questions (minimum score = 4; maximum score = 20).

2. Insularity

- i. Identify whether one source of contact (either relatives or friends) occurs more frequently than the other by comparing responses to questions A1 and B1.
- ii. If one source of contact is more frequent than the other, look at responses to questions 2 and 3 for that source of contact only. If either of these questions has a score of 3 or below that person is categorised as insular.
- iii. If frequency of contact is the same for friends and relatives, look at each category in turn. If there is a score of 3 or below for at least one of questions 2 and 3 for both relatives and friends then that person is categorised as insular.

APPENDIX E: The Brown Circles Task (Tuteur, Ewigman, Peterson & Hosokawa, 1995) and Standardised Observational Assessment (SOCIII-B codes; Cerezo, Keesler, Wahler, & Dunn, 1986)

Standardised Instructions for The Brown Circles Task

“What I’m going to ask you to do next is to get (child’s name) to draw as many brown circles on one piece of paper as he/she can in ten minutes. You only get one piece of paper. The only rules are that you and (child’s name) don’t touch any toys in the room, and you must not touch the pencil or paper.”

Please note where the child was when mother was given instructions.

Please be aware of the need to produce good quality video footage for coding.

- Do not have a window or other light source behind the mother and child. If it’s a dark or gloomy room ask if you can switch on the light.
- Encourage the mother and child to sit by a table/coffee table so that you can see both mother and child easily on camera (this becomes difficult though if the child moves away from the setting!).
- Encourage the mother and child to speak clearly.
- Ask the mother to switch off any televisions or radios in the room.
- Encourage other family members to stay out of the room.
- Ask if you can use the mains rather than depend on battery power.
- When you’ve finished, rewind the last few seconds to make sure you’ve recorded!

APPENDIX F: ETHICS PROPOSAL

FORM B (Form B Only to be used for Research Projects Using Questionnaires/Interviews Only
For all other research projects please use Form A)

**GWYNEDD RESEARCH ETHICS COMMITTEE
APPLICATION FORM FOR ETHICAL APPROVAL**

All questions must be answered Answers should be <u>Typewritten</u>	15 Copies of <u>All</u> Documents must be enclosed
--	--

Please retain the order and form of all questions if a word processor is used.
Copies of Questionnaires/Interview Schedule should be attached.

<p>1 TITLE OF PROJECT</p> <p>Maternal Depression and Childhood Behaviour Problems - Does cognitive-behavioural therapy for depressed mothers have an impact on the behaviour of their offspring?</p>	
<p>2 Name of Researcher(s):</p>	<p>Mair Edwards</p>
<p>Appointment</p>	<p>Trainee Clinical Psychologist (North Wales Clinical Psychology Course)</p>
<p>Address for Correspondence</p>	<p>Llys Arddun Penisarwaun Caernarfon, LL55 3BW 01 286 871491</p>
<p>3 OBJECTIVES OF THE STUDY</p> <p>The study proposes to investigate the impact of cognitive-behavioural therapy (CBT) for the treatment of depression in mothers who also have a child with significant behavioural problems. It is hypothesised that both depressive symptomology in the mothers and problem behaviours in the child will decrease.</p>	

ANY QUESTIONS RELATING TO THE CONDUCT OF THE FINDINGS OF THE COMMITTEE SHOULD BE ADDRESSED TO THE CHAIRMAN, DR. D.R. PRICHARD, CONSULTANT PHYSICIAN, GWYNEDD ACUTE HOSPITALS TRUST, YSBYTY GWYNEDD, PENRHOSGARNEDD, BANGOR, GWYNEDD, LL57 2PW.

4 Outline of Study Design

Using a one-group pretest-posttest design, the study will investigate the effect of CBT on depressed women and their children. The results will provide information and outcome measures of:

- a) effectiveness of the CBT intervention offered to referred women with depression (also serving as a 'quality' measure of therapy).
- b) effect of the intervention on the women's report of their child's behavioural problems.
- c) the correlation between outcome measures of depression and mothers' reports of children's behaviours.
- d) the correlation between the above measures and direct observation of child behaviour both prior to and following intervention using a pre-determined task.
- e) objective measure of child compliance and mother-child interactions through observation.

Community Adult Mental Health teams will be requested to screen all new referrals of women referred for depression who also have one or more children under the age of 7 years. Women with a psychiatric history of serious mental illness (for example - psychotic illnesses, bi-polar disorder or obsessional symptoms) will be excluded. The women identified in this process will be given basic background information about the study, and asked to complete baseline measurements of depression (Beck's Depression Inventory, BDI), and a report measure of their child's behaviour (Eyberg's Child Behaviour Inventory; ECBI). Threshold scores for inclusion will be as follows:

BDI = 9 and over. Women with scores higher than 26 (i.e. severe depression) will need special consideration before being invited to participate.

ECBI = Intensity scores of 127 and over and/or Problem score of 11 and over will be required.

The initial assessment session will consist of a general assessment interview (based on the Personal Data and Health Questionnaire - Hutchings, 1996) along with Beck's Depression Inventory (BDI), Beck's Anxiety Inventory (BAI), General Health Questionnaire (GHQ-30), Autobiographical Memory Test (AMT), Community Contact Questionnaire (CCQ), Achenbach's Child Behaviour Checklist (CBCL) and an observational measure of mother-child interactions (Brown Circles test).

Participants will then be offered 8 x 1 hour sessions of CBT for depression over a period of approximately 10 weeks. The BDI and BAI will be re-administered to all participants prior to the 5th session.

At the end of therapy, all formal measures will be repeated in a follow-up session, and again 6-8 weeks after termination of therapy.

Statistical analysis of the results will, in the main, be correlational analysis (related t-test) and regression analysis.

5 Scientific Background to Study (give a brief account of relevant research in this area with references)

Please submit a full protocol in addition to the application form.

The correlation between maternal depression and childhood conduct disorders is well established (see Cummings and Davies, 1994), although there is no evidence of causality. Lytton (1990) argues that it is likely that once established maternal depression and childhood conduct disorders have a reciprocal and negative influence on each other.

Maternal depression is relatively common - with up to 10% of mothers suffering from depression in the post-natal period (O'Hara and Zekoski, 1988). However chronicity and severity of symptoms may vary, with Campbell, Cohn and Meyers (1995) suggesting that it is the chronicity of depression that has strongest impact on mother/child relationship and outcome.

Depression affects the behaviour, emotions and cognitions of the depressed person (Beck, 1976). Additionally, people with depression have been shown to have non-specific autobiographical memories which is thought to negatively influence problems-solving skills. It is suggested that deficits in problem-solving skills directly influence child-rearing practices (Cummings and Davies, 1994). Other research in this area is focusing on factors such as poor parental observation and attending skills (e.g. Wahler, 1980) and poor parental autobiographical memory associated with referral of children for behaviour management advice (Hutchings, 1996).

Up to 10% of all children in Britain can be considered to have a childhood conduct disorder (Stallard, 1993). However, only a small percentage of those with behavioural problems will be referred and seen by specialist child mental health services (Hobbs, 1982). If not treated, childhood conduct disorders predict severe difficulties in adolescence and adulthood - and the long-term cost of untreated and unresolved childhood conduct disorders (in education, social welfare, community and mental health services, and judicial and penal systems) is therefore significant (Robins, 1981) and could be as much as £1m per individual (Panorama, 1997).

Treatment for maternal depression may comprise medication, counselling/psychotherapy and/or psychiatric unit admission. However, treating maternal depression alone does not necessarily change the mother-child interactions sufficiently for mothers to behave differently towards their children. Eisenbruch (1983) suggested that out-patient medication therapy may actually increase the risk to the child by keeping the depressogenic mother in the home environment. Lee and Gotlib (1989, 1991) further suggest that treating depression and preventing relapse does not necessarily mean that parenting behaviours will fall within normal limits. There is also a risk that if the child continues to have behavioural problems the mother may be more likely to have further episodes of depression.

The literature cited previously considered the effects of anti-depressant medication and did not explicitly mention psychological interventions such as CBT. CBT has been shown to be effective in treating depressive disorders (e.g. Shapiro, Barkham, Rees, Hardy, Reynolds and Startup, 1994). There are currently no published studies on the effects of CBT for maternal depression on the children of depressed mothers.

CBT interventions focus on behaviours and cognitions, with an emphasis on identifying, challenging and replacing negative automatic thoughts, and encouraging an increase in the specificity of autobiographical memory and the generalisation of problem-solving skills. It is hypothesised that CBT intervention may, through this process, influence the mother-child interaction sufficiently for the resulting outcome to be more positive for both mother and child.

6 PREVIOUS RESEARCH EXPERIENCE (to include Curriculum Vitae)

- 1989 - 93: Undergraduate research projects including main project on Attitudes towards breast-feeding in 'new' mothers.
- 1994: In-house study of stress levels in staff working on Taliesin Ward, Hergest Unit
- 1995: Language Choice and Client Satisfaction in a Community Mental Health Service.
- 1996: Investigation into changes in self-concept - A Systematic case study.
- 1996: Elder abuse among clients of a Community Mental Health Team for Older Adults.
- 1997: Evaluation of the impact of introducing Paediatric Psychology services to newly diagnosed youngsters with diabetes and their parents.

Please also see appendix for C.V.

**7. COURSE BEING UNDERTAKEN AND EDUCATIONAL INSTITUTION
(if applicable)**

Doctorate in Clinical Psychology
North Wales Clinical Psychology Course
University of Wales, Bangor

8 ACADEMIC SUPERVISOR (if relevant)

Dr. Judy Hutchings
Consultant Clinical Psychologist and Director of the Bangor Project for
Children with Disruptive Behaviours.

9 CLINICAL SUPERVISOR (if relevant)

<u>Name</u>	<u>Contract Address</u>
-------------	-------------------------

Mr. Bruce Napier Head of Clinical Psychology Services (Mental Health) Bron Afon Bryn y Neuadd Llanfairfechan Gwynedd	
---	--

Tel. 01 248 682847

10 STEERING/ADVISORY GROUP ARRANGEMENTS

The project will be under the auspices of the Bangor Project for Children
with Disruptive Behaviours and will report to its steering group.

Consultations with the Development, Research and Training group in Ynys
Mon and Dwyfor Mental Health Team will continue.

11 SAMPLE**a)**

Please provide a detailed description of the study sample covering selection, number, age, stability viability if appropriate, inclusion and exclusion criteria.

Subjects will be selected from all women referred to Community Mental Health teams with depression and who also have a child of 7 years old or younger.

From these, all women who have a score of 9 or higher on the BDI, and with a child with an ECBI Intensity score greater than 127 and/or a Problem score of 11 and over will be included.

It is envisaged that up to 15 women will be included. Maternal age will not influence inclusion, but all women must have a child between the age of 2 and 7 years.

Exclusion criteria will include previous psychotic episodes, bipolar disorder, obsessional behaviours and/or inclusion in other on-going research which involves therapeutic input. Furthermore, a clinical judgement would be made following the detailed assessment interview, to exclude women for whom CBT would not appear to be the treatment of choice due for example to severity and/or complexity of presenting symptoms.

b)

How are subjects selected?

As above.

c) What is the likely harm/benefit for the subjects?

Identified participants will receive individual cognitive-behavioural therapy which has a proven efficacy in the treatment of depression.

Participants excluded from the study following screening (due to failure to comply with inclusion criteria) will be debriefed and every effort made to ensure that they are directed to appropriate services.

- d) Do you anticipate using patients/clients, students or colleagues as controls?
If YES, please give details.

YES/NO

- e) Please give details of any pilot/exploratory study you intend to conduct:

This study is effectively a pilot study.

- f) To your knowledge, are the subjects in this study involved in any other research investigation at the present time? If so, please give details.

No knowledge of such studies at present.

- g) If payments or rewards are to be made to subjects, give amount and details and indicate to which subjects payments apply.

Not applicable

12 DISCLOSURE OF PAYMENT/REWARD TO INVESTIGATORS

i Is any payment being made, to investigator or department/unit, in respect of this project? **YES/NO**

If NO.....go to question 13

If YES.....go to question 12.ii

ii Is the payment?

a) a block grant? **YES/NO**

b) based on the number of subjects recruited? **YES/NO**

If there is a block grant is the payment made in order to?

If YES state sum

- | | | |
|----------------------------------|---------------|--------|
| a) pay a salary (-ies) | YES/NO | £.... |
| b) fund equipment | YES/NO | £..... |
| c) fund technical/laboratory | YES/NO | £..... |
| d) reward time/effort involved | YES/NO | £..... |
| e) other reason: (state nature)? | YES/NO | |
| | | £..... |

Full details of costs are stated on a copy of the grant application attached.

If payment is based on number of subjects recruited (per capita/payment, state total sum payable for each subject completing the study) £.....

State number of subjects agreed

iii Are the subjects informed, as part of the consent procedure?

a) the name of the sponsor? **YES/NO**

b) that the investigator/department will be receiving payment **YES/NO**

iv Does the investigator(s) have any personal involvement (e.g. financial, share-holding etc.) in the sponsoring company?

13 INFORMED CONSENT

- a) How will written consent be obtained? Written/Verbal

A combined information sheet and consent form is essential and a copy should be attached. (A duplicate copy **MUST** be available for the subject).

Please see appendix for copies.

- b) In exceptional circumstances, if verbal consent only is to be obtained, state why.

i How will this be recorded?

ii How will it be witnessed?

- c) How will subjects be invited to participate?

Initial contact with participants will be made as follows:

Under usual circumstances, new referrals to the CMH team undergo a team screening/ assessment interview. During this interview either the Mental Health team's duty officer or the primary investigator would undertake the screening/assessment interview and invite appropriate referrals to participate in the initial screening (BDI and ECBI). (The primary investigator's involvement at the team screening stage will be dependent on the team's consent and approval in each individual case).

At the end of the screening interview, the two screening measures would be scored.

Women excluded from the intervention study would be debriefed at this point, and thanked for their participation. All new referrals excluded would be passed on for allocation according to usual team procedures.

Women meeting the inclusion criteria would be invited to participate in the intervention study, and given full details.

- d) **When the research has been explained to subjects, how much time will be allowed for them to consider and consult relatives and others before giving consent?**

The minimum time between initial screening and the first appointment will be 7 days.

- e) **Is the ability to withdraw at any time without detrimental effect to subsequent treatment and care indicated?**

Participants wishing to withdraw from the study may do so at any point, and (with the person's agreement) will be referred back to the Adult Mental Health team for allocation.

If it is felt at termination that there are outstanding issues which require further input, arrangement will be made for participants to be transferred to a team member. However, given the entry criteria it is not envisaged that this will occur often.

14 CONFIDENTIALITY AND ANONYMITY

- a) **How are confidentiality and anonymity to be ensured?**

Clinical session notes will be held according to CMH team regulations.

All research data will be coded according to a research number and will be held in locked filing cabinets.

Video footage of the Brown Circles Test will also be held in locked filing cabinets until coding has been completed.

- b) **Are you aware that you need to comply with the Data Protection Act?**

Yes. This will be adhered to.

- c) **If audio/video taped recordings are made, what is going to happen to them when the research is complete?**

Video tapes of parent-child interactions will be deleted at the end of the study unless specific consent is given by the participant for the tapes to be used in further research or the training of other professionals.

- d) **If relevant, how will consent for access to patients' records be obtained?**

As subjects will be receiving psychotherapy, consent to access team notes will be sought during assessment. If access to general medical/psychiatric notes is required, consent will be sought from the client and the RMO.

- e) **How is the research instrument to be administered and by whom?**

By primary investigator during initial assessment. However, to prevent bias, the follow-up data collection will be administered by a colleague, who will be blind to the results of the initial assessment.

- f) **How is the research instrument to be collected and by whom?**

By primary investigator, and the follow-up by a Clinical Psychology colleague, Clinical Psychology Trainee or Assistant Psychologist.

15 ACCESS/CONSENT OF OTHERS CLINICALLY INVOLVED

- a) **Has access been agreed? YES/NO**
If YES, where, when and by whom?

Dr. Sadie Francis, Consultant Psychiatrist (please see attached letter).
Dr. M Osborn, Consultant Psychiatrist - verbal agreement given 13.6.97
(formal letter delayed due to Dr. Osborn's annual leave, but will be available for Committee to view).
Dr G. Jones-Edwards, Locum Consultant Psychiatrist (please see attached letter).
Ynys Mon and Dwyfor Community Mental Health teams - awaiting formal letters of consent.

- b) Will the consent of clinical colleagues be obtained? YES/NO
If YES, which?

Dr. S. Francis, Consultant Psychiatrist
Dr. M. Osborne, Consultant Psychiatrist
Dr, G. Jones-Edwards, Consultant Psychiatrist (Locum)
Mon Community Mental Health teams - North and South
Dwyfor Community Mental Health team

- c) Is observation to be used as a method?
Please describe how?
Has consent been obtained and from whom?

A 10 minute video recording will be made of the woman and her child participating in the Brown Circles test. Consent for the test and recording will be obtained from participants. No other staff will be involved.

16 STATISTICAL ADVICE

If appropriate, have you had statistical advice in preparing the protocol/questionnaire? If so, from whom?

Statistical advice will be available from identified staff at the N.W.C.P.C

17 MULTI-CENTRE STUDIES

If this is a multi-centre study, have other Ethics Committees been approached?

Not applicable

18 RAISED EXPECTATIONS

Have you considered the possibility that you may be raising expectations or focusing attention of fears, worries, sensitive areas, providing new knowledge or be in conflict with other advice?

Please describe what steps are being taken to meet any needs that may arise and describe any arrangements for post interview/questionnaire counselling/contact.

Women involved in the study may become more aware/worried about their children's behaviour.

Should significant child related problems arise during the intervention, mothers would be given information about the Child and Family Mental Health Team and/or encouraged to seek specific help from the health visitor and GP. Under these circumstances the CBT intervention would continue for the full 8 sessions, but participants excluded from analysis if other psychological interventions given concurrently.

Similarly, if significant problems continued following intervention, participants would be informed about other treatments/advice etc. and if necessary arrangements made for referral.

19 What problems may hinder successful completion of the study?

Insufficient numbers of willing participants who comply with criteria for selection.

Refusal to complete outcome measures.

20 Anticipated timing and duration of study

Initial Data collection and therapy from September to January, with follow-up data collection up to March, 1998. Thesis to be submitted by July 1, 1998.

21 The information supplied is to the best of my knowledge and belief accurate, I clearly understand my obligations and the rights of the subject, particularly concerning freely-given informed consent.

Date of Submission:

Signature of Research Applicant

1/7/97

Mair Edwards

22 TO BE COMPLETED BY CONSULTANT IN CHARGE OR HEAD OF DEPARTMENT

I hereby endorse this research application with my approval

Signature [Handwritten Signature]

Name and Appointment

DR. JUDY HUTCHINGS,

CONSULTANT CLINICAL PSYCHOLOGIST AND DIRECTOR

OF BANGOR PROJECT FOR CHILDREN WITH

DISRUPTIVE BEHAVIOURS.

A REPORT/SUMMARY WILL BE REQUIRED BY THE GWYNEDD RESEARCH ETHICS COMMITTEE WITHIN THREE MONTHS OF COMPLETION OF THE RESEARCH

FINALLY

Please ensure that you have enclosed (15 copies), if appropriate

- questionnaires/interview schedules
- letters of explanation
- information sheets/consent forms for subjects

Send to:

Dr. D.R.Prichard
Research Ethics Committee
Gwynedd Acute Hospitals NHS Trust
Ysbyty Gwynedd
Bangor
Gwynedd
(Telephone No: 01248 384384 Ext. 4341)

APPENDIX G: ETHICS CONSENT:

- 1. SCHOOL OF PSYCHOLOGY, UNIVERSITY OF WALES, BANGOR.**

- 2. NORTH WALES HEALTH AUTHORITY RESEARCH ETHICS COMMITTEE (WEST).**

c.c. Judy Hutchings



June 30, 1997

Mair Edwards
Clinical Trainee
North Wales Clinical Psychology Course
School of Psychology
University of Wales
Bangor Gwynedd

Ysgol Seicolog
Prifysgol Cymru Bangor
Bangor, Gwynedd LL57 2DG
Ffôn: Bangor (01248) 382211
Ffôn Rhyngwladol: +44 1248 382211
Ffacs: (01248) 382599
Ffacs Rhyngwladol: +44 1248 382599

School of Psychology
University of Wales Bangor
Bangor, Gwynedd LL57 2DG
Tel: Bangor (01248) 382211
International Tel: +44 1248 382211
Fax: (01248) 382599
International Fax: +44 1248 382599

e-mail: pss029@bangor.ac.uk
<http://www.psych.bangor.ac.uk/>

Dear Colleague

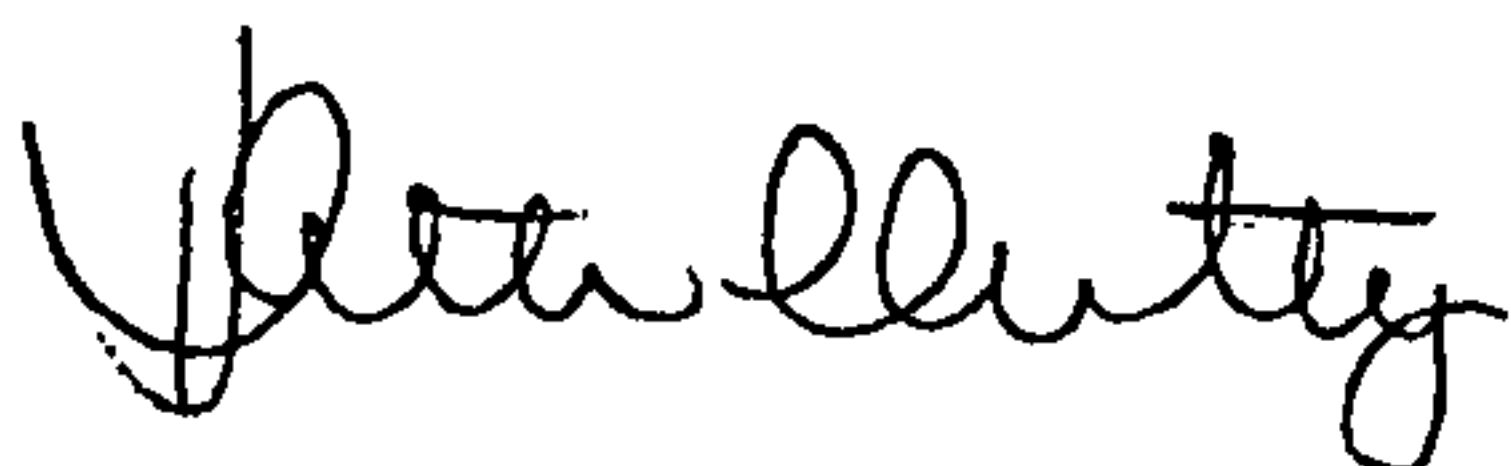
Maternal depression and childhood behaviour problem: does cognitive-behavioural therapy for depressed mothers have an impact on the behaviour of their offspring?

Your research proposal (referred to above and on the attached sheet) has been reviewed by the School of Psychology Research Ethics Committee and they are satisfied that the research proposed accords with the relevant ethical guidelines. If you wish to make any substantial modifications to the research project please inform the committee in writing before proceeding. Please also inform the committee as soon as possible if research participants experience any unanticipated harm as a result of participating in your research.

You should now forward the proposal to the Research Ethics Committee of Gwynedd Hospitals NHS Trust Research Ethics Committee West. They expect one of the investigators to make an oral presentation in support of the proposal at their meeting. You will be contacted by their committee with details as to the date and place of the meeting at which your proposal will be considered.

You may not proceed with the research project until you are notified of the approval of the GHA ethics committee.

Yours sincerely



Kath Chitty
Coordinator - School of Psychology Research Ethics Committee

University of Wales, Bangor

School of Psychology

Ethics Committee
Proposal cover sheet

Chief investigator/Supervisor: DR. JUDY HUTCHINGS
Associate investigator/Student: MAIR EDWARDS

Brief project title: Maternal Depression and Childhood Behaviour Problems
Date of submission: 28/5/97.

Form used to prepare submission:

School ethics committee outline

Gwynedd Health Authority

Other (please give details) _____

NB. All relevant paperwork (including consent forms and any translations) must be completed before submission to the School Ethics Committee.

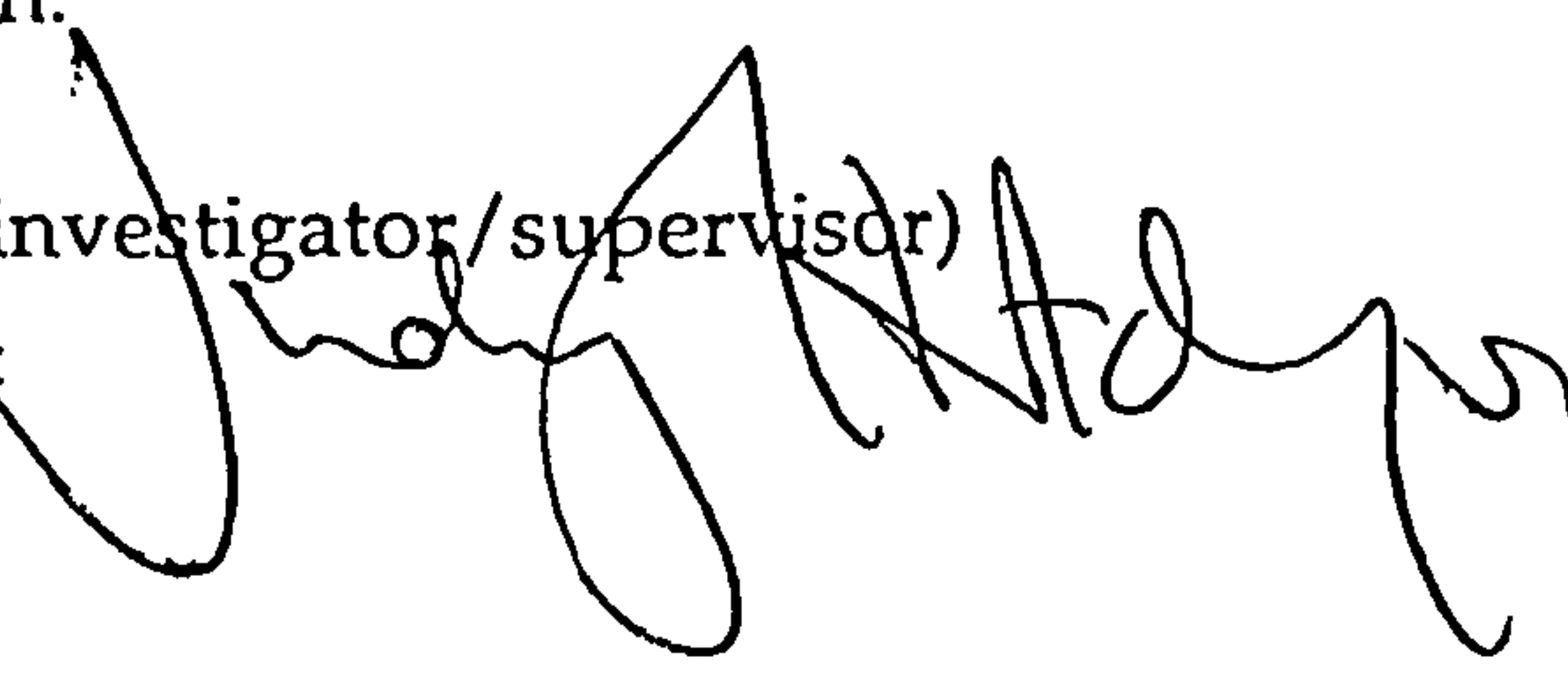
Declaration of ethical compliance

This research project will be carried out in accordance with the guidelines laid down by the British Psychological Society and the procedures determined by the School of Psychology at Bangor. I understand that I am responsible for the ethical conduct of the research.

(Chief investigator/supervisor)

Signed:

Date:



(Associate investigator/student)

Signed:

M. Edwards

Date:

28/5/97.

For School Use Only

Reviewer 1

M. Starkey

Approved

MJS

(Initials)

30/6/97

(Date)

Reviewer 2

Proposal No.

97/197

NORTH WALES HEALTH AUTHORITY
RESEARCH ETHICS COMMITTEE (WEST)

PWYLLGOR MOESEG YMCHWIL (GORLLEWINOL)
AWDURDOD IECHYD GOGLEDD CYMRU

Ffôn/Tel : (01248) 384877 (direct line)

Ffacs/Fax : (01248) 370629

Room 1/178
Ysbyty Gwynedd
Bangor
Gwynedd LL57 2PW

Certificate of Confirmation of Ethics Approval

Name of Lead Researcher : Mrs M Edwards

Date of Ethics Review : 17.7.97

Title of Study : Maternal depression and childhood behaviour problems - does cognitive-behavioural therapy for depressed mothers have an impact on the behaviour of their offspring?

I confirm that all requirements have now been received for the study mentioned above. The research therefore has this Committee's full ethics approval.

If, during the course of the study, there are protocol changes, serious adverse events, or major subject recruitment problems, you are required to notify the Committee as soon as possible .

It is also requested that you provide an annual interim report on the conduct and progress of the study, plus a final report within three months of completion .

The Committee wishes you well in your research.

Signed : 

Dr.D.R.Prichard , Chairman .

Date : 18.7.97

APPENDIX H: CONSENT FROM RELEVANT AGENCIES AND OTHER PROFESSIONALS.

- 1. Dwyfor Adult Mental Health Team.**
- 2. Ynys Môn Development, Research and Training Committee (Adult Mental Health Team).**
- 3. Consultant Psychiatrist, Dwyfor Adult Mental Health Team.**
- 4. Consultant Psychiatrist, Ynys Môn Adult Mental Health Team.**



Ymddiriedolaeth Iechyd Cymuned Gwynedd

Gwynedd Community Health Trust



Eich Cyf./Your Ref.:

PL/LP

Ein Cyf./Our Ref.:

*Mental Health Office,
Cilan,
Penlan Street,
Pwllheli,
Gwynedd
LL53 5DH*

Address removed for privacy

Annwyl Ms. Edwards,

*Roedd yn bleser gan Tim Iechyd Meddwl
Dwyfor glywed am eich prosiect ymchwil.
'Rydym wedi trafod y mater ac eisiau
cadarnhau croeso i chwi weithio gyda ni
a clientau yn Nwyfor.*

Gan edrych ymlaen at gyd-weithio a chi.

Yn gywir,

**PAT LINDSAY
GWEITHIWR CYMDEITHASOL
TIM IECHYD MEDDWL DWYFOR**

Dear Ms. Edwards,

*The Dwyfor Mental Health Team were
pleased to hear about your research
project. We have discussed the matter and
would like to confirm that we are happy
for you to work with us and with clients in
Dwyfor.*

Looking forward to working with you.

Yours sincerely,



CYNGOR SIR
YNYS MÔN
ISLE OF ANGLESEY
COUNTY COUNCIL

Ymddiriedolaeth Iechyd Cymuned Gwynedd

Gwynedd Community Health Trust



Eich Cyf./Your Ref.:

Ein Cyf./Our Ref.:

MJ/LR/DRAT

15th July, 1997,

HAFOD LAS
LLAWR Y DREF
LLANGEFNI
YNYS MON
LL77 7TS
Tel: 01248 750191/750292
Fax: 01248 750896

Mrs. Mair Edwards
Clinical Psychology Course
U.C.N.W.
BANGOR

Dear Mrs. Edwards,

Thank you for attending the Development, Research, and Training Committee at Hafod Las on the 8th July. I am pleased to inform you that your project has been approved by this committee. We consider that it will fit well within our own clinical demands. The committee would like to congratulate you on an impressive presentation, and to wish you luck with this piece of research.

Yours sincerely

DR. MIKE JACKSON
PRINCIPAL CLINICAL PSYCHOLOGIST
CHAIRMAN OF THE DEVELOPMENT, RESEARCH AND TRAINING
COMMITTEE.



Ymddiriedolaeth Iechyd Cymuned Gwynedd

Gwynedd Community Health Trust



Eich Cyf./Your Ref.:

Ein Cyf./Our Ref.: *GJE/bw*

Dwyfor Mental Health Team

Cilan

Penlan Street

PWLLHELI

Gwynedd

LL53 5DH

Ffôn/Tel (01758) 614647

Ffacs/Fax (01758) 614648

1 July 1997

CONFIDENTIAL

Address removed for privacy

Annwyl Mair

With regards to our conversation of the other day I am pleased to give my consent for you to involve some of the Dwyfor patients in your current programme of research.

Yn gywir

Dr Gwen Jones-Edwards

Locum Consultant Psychiatrist

Ymddiriedolaeth Iechyd Cymuned Gwynedd

Gwynedd Community Health Trust



ch cyf/Your ref:

n cyf/Our ref: SBF/ST/D

Mental Health Office

Craighyfyrd

Cambria Street

HOLYHEAD

Anglesey

LL65 1NH

Tel: (01407) 764231/760209

Fax: (01407) 762159

19th June, 1997.

PRIVATE & CONFIDENTIAL.

Address removed for privacy

Dear Mair,

Re: Project for mothers with children with disruptive behaviours.

Further to your letter detailing the research project, and our recent conversation, I am writing to confirm that I give you full support for your research and am happy for you to interview any patients of mine who fulfil your research criteria. I am happy too for you to have access to any of my medical records relating to these patients.

May I wish you well with your research.

Yours sincerely,

Dr. Sadie B. Francis,
Consultant Psychiatrist.

Cadeirydd/Chairman: Mr R Hefin Davies MBE

Prif Weithredwr/Chief Executive: Mr J F Mullen MSc, MHSM, Dip HSM



NHS
CYMRU
WALES

APPENDIX I: INFORMATION/CONSENT LETTER 1

I have read the information provided to me and I understand the purpose of the study and the procedures that I will be asked to follow. I have asked all my questions and I have received satisfactory answers. I understand that my participation in this study is voluntary and that I may withdraw at any time without any penalty or loss of benefits to which I am entitled. I understand that my participation in this study may be necessary for the completion of the study and that my participation is essential for the success of the study. I understand that my participation in this study may be necessary for the completion of the study and that my participation is essential for the success of the study.

Very truly yours,

 Name of Researcher
 Title of Researcher
 Department of Psychology

I agree to participate in the study.
 I understand that I will be asked to participate in the study and that my participation is voluntary.
 I understand that I may be asked to participate in the study and that my participation is voluntary.

Signature of Participant
 Signature of Investigator



CYNGOR SIR
YNYS MÔN
ISLE OF ANGLESEY
COUNTY COUNCIL

Ymddiriedolaeth Iechyd Cymuned Gwynedd

Gwynedd Community Health Trust



Eich Cyf./Your Ref.:

Ein Cyf./Our Ref.:

September, 1997

HAFOD LAS
LLAWR Y DREF
LLANGEFNI
YNYS MON
LL77 7TS
TEL: 01248 750191/750292
FAX: 01248 750896

Dear

As you are aware, you have been referred to the Community Mental Health Team to help you with some difficulties you are having.

We are currently looking at the effects that depression has on women and their families. As part of this study we are asking women like yourself to fill in two short questionnaires which will take approximately 15 minutes to complete.

We will also be contacting some women again to ask them to take part in a further study.

We would like to reassure you that if you do not wish to take part in this study, this will have no effect whatsoever on the care or treatment offered to you by the team.

Yours sincerely

Mair Edwards
Clinical Psychologist in Training

Dr. Judy Hutchings
Consultant Clinical Psychologist

.....
CONSENT

I agree to participate in this study.

I understand that I will be asked to complete two short questionnaires.

I understand that I may be approached to take part in a further study, but that participation in this study does not place me under any obligation to take part in any future studies.

Signature..... Date.....

Signature of Investigator.....

Ymddiriedolaeth Iechyd Cymuned Gwynedd
Gwynedd Community Health Trust



h cyf/Your ref: LIC1

a cyf/Our ref: Medi, 1997

Pencadlys yr Ymddiriedolaeth/
Trust Headquarters
Ysbyty Bryn y Neuadd
Llanfairfechan
Gwynedd LL33 0HH

Ffôn/Tel: 0248 682682
Ffacs/Fax: 0248 681832

Annwyl

Fel yr ydych yn gwybod, 'rydych wedi cael eich cyfeirio at y Tîm Iechyd Meddwl Cymunedol er mwyn eich helpu gyda rhai anawsterau.

Ar hyn o bryd, 'rydym yn astudio effaith iselder ysbryd ar ferched a'u teuluoedd. Fel rhan o'r astudiaeth yma 'rwyf yn gofyn i ferched fel chi lenwi dau holiadur gymerith oddeutu chwarter awr i'w cwblhau.

Byddaf hefyd yn cysylltu â rhai merched eilwaith i ofyn iddynt ystyried cymeryd rhan mewn astudiaeth bellach.

Hoffwn eich sicrhau nad oes unrhyw orfodaeth arnoch i gymeryd rhan yn yr astudiaeth yma. Os nad ydych yn dymuno cymeryd rhan ni fydd yn cael unrhyw effaith ar safon y gofal na'r driniaeth a gynigir i chi gan y tim.

Yn gywir

Mair Edwards
Seicolegydd Clinigol
dan Hyfforddiant

Dr. Judy Hutchings
Seicolegydd Clinigol
Ymgynghorol

.....
CYDSYNIAD

Yr wyf yn cydsynio i fod yn rhan o'r astudiaeth yma.

Yr wyf yn deall bydd gofyn i mi gwblhau dau holiadur byr.

Yr wyf yn deall bydd posibilrwydd bydd cynnig i mi fod yn rhan o astudiaeth bellach, ond nad oes unrhyw bwysau arnaf i wneud hynny os nad wyf yn dymuno.

Llofnod..... Dyddiad.....

Llofnod yr Ymchwilydd.....

APPENDIX J: INFORMATION AND CONSENT LETTER 2

- 1. Letter to participant.**
- 2. Information Sheet.**
- 3. Consent Form.**

CL2

September, 1997

Dear

Thank you for filling in the two questionnaires.

As I mentioned in the first letter, I am contacting some women again to look in more detail at the effect depression may have on women like yourself and their families. I also want to see how effective a particular kind of therapy (called cognitive-behavioural therapy or CBT) is for women in your particular circumstances.

CBT is one type of 'talking therapy'. During sessions the therapist encourages people who have problems such as depression to talk about their thoughts and feelings. When people start to feel 'a bit low' they tend to think about negative things all the time - and if this carries on for a period of time it can lead to depression. CBT works by encouraging depressed people to increase activity, to recognise, challenge and replace their negative thoughts with positive thoughts, and to use problem-solving skills more effectively.

If you agree to take part in this study, you will be asked to take part in the following:

Assessment session - This will include:

- a detailed conversation looking at your current situation and family history,
- the filling in of questionnaires,
- a 10 minute video recording of you and your child doing a simple task.

This session, which could be done in your own home, will take approximately 90 minutes. The video recording with your child could take place at a different time if this is easier for you.

Therapy sessions - 8 sessions (lasting 60 minutes each) of CBT - where we will work together to look at the problems you're facing and find ways for you to overcome them. These sessions

will take place either at the team base or at another convenient location (e.g. GP surgery).

In order to make sure we are not disturbed it would be better if these sessions did not take place at your home.

Two Follow-up sessions - (the first will be 2-3 weeks after the last therapy session, and the second 6-8 weeks after therapy) - During these session (which can be at your own home if you wish) you will asked to fill in a set of questionnaires again, and be recorded for 10 minutes on video with your child.

The follow-up sessions will be done by somebody different to the therapist. This makes sure that women who take part in the project can be honest about how they feel, and not feel awkward if they have to say that they don't feel better or they didn't like the therapist.

Please think very carefully before deciding whether you want to take part in this project or not. I have also given you an information sheet which gives much more detail about the study. Maybe you will find it useful to discuss this study with a member of your family or a close friend. If you don't understand something about the project please get in touch with me.

Even if you agree to take part in this study now, you can still refuse to carry on and ask to stop at any time. You can also ask to see someone else from the team. If at the end of our sessions together you still feel that you need to carry on seeing a therapist, I will arrange that another member of the team can carry on working with you.

If you have any questions about this study, please get in touch with me.

Yours sincerely

Mair Edwards
Clinical Psychologist in Training

Dr. Judy Hutchings
Consultant Clinical Psychologist

LLYTHYR CYDSYNIO 2

LIC2

Medi, 1997

Annwyl

Diolch i chi am lenwi'r ddau holiadur.

Fel y soniais yn y llythyr cyntaf, 'rwyf yn cysylltu eilwaith gyda rhai merched er mwyn edrych mewn manylder ar effaith iselder ysbryd ar ferched a'u teuluoedd. Rwyf hefyd eisiau gweld pa mor effeithiol yw math arbennig o therapi i famau. Enw'r therapi yw therapi ymwybyddiaeth ac ymddygiad - neu yn Saesneg "Cognitive-behavioural therapy" - ond rhan amlaf mae'n cael ei adnabod fel CBT.

Mewn termau syml iawn, mae CBT yn fath arbennig o therapi siarad. Yn ystod sesiynnau mae'r therapydd yn annog pobl sydd a phroblemau fel iselder ysbryd i drafod eu teimladau a'u meddyliau. Mae pobl sydd yn cychwyn teimlo'n isel yn dueddol o feddwl am bethau negyddol drwy'r amser - ac os ydi hyn yn parhau am gyfnod hir, mae'n gallu arwain at iselder ysbryd. Mae CBT yn annog pobl sy'n isel eu hysbryd i ail-sefydlu gweithgarwch, dysgu adnabod, herio a disodli meddyliau negyddol gyda rhai mwy cadarnhaol, a gwella sgiliau datrys problemau.

Os cytunwch i gymryd rhan yn yr astudiaeth yma bydd y gofyn arnoch fel a ganlyn:

Sesiwn asesu - Bydd y sesiwn yma yn cynnwys:

- cyfweiliad manwl fydd yn canolbwyntio ar eich anawsterau cyfredol a hanes teuluol bras,
- cwbwllhau nifer of holiaduron.
- fideo 10 munud o hyd ohonoch chi a'ch plentyn yn cwbwllhau tasg syml.

Gall y sesiwn yma gael ei gynnal yn eich cartref a bydd yn para tua 90 munud. Os byddai'n haws, gellid trefnu i recordio chi a'ch plentyn mewn sesiwn ar wahan yn ystod yr un wythnos.

LLYTHYR CYDSYNIO 2

Sesiynnau therapi - Cynhelir 8 sesiwn (awr yr un) o CBT lle byddwn yn cyd-weithio gan edrych mewn manylder ar eich anawsterau a dulliau o'u gorchfygu. Bydd y sesiynau yma yn cael eu cynnal yntau yng nghanolfan y Tim neu mewn man cyfleus arall (e.e. Canolfan Iechyd).

Yn gyffredinol, mae'n well peidio cynnal y sesiynnau hyn yn eich cartref er mwyn sicrhau ein bod yn cael llonydd i ganolbwyntio.

Dau Sesiwn cloriannu - (tua 2-3 wythnos, a 6-8 wythnos ar ol y sesiwn therapi olaf). Yn ystod y sesiwn yma bydd gofyn i chi ail-lenwi holiaduron a chael eich recordio ar fideo gyda'ch plentyn fel yn y sesiwn gyntaf. Os dymunwch, gellid cynnal y sesiwn yma yn eich cartref.

Bydd person arall yn cynnal y ddau sesiwn cloriannu. Mae hyn yn digwydd er mwyn gofalu eich bod yn gallu teimlo'n gwbl hyderus i ddweud yn hollol onest sut oeddech yn teimlo am y therapi a'r therapydd.

Hoffwn i chi ystyried y cais yma yn ofalus iawn cyn penderfynu cymryd rhan neu wrthod cymryd rhan yn yr astudiaeth yma. Amgaeaf daflen wybodaeth sydd yn manylu ar yr astudiaeth. Efallai byddai'n syniad da i chi drafod yr astudiaeth gydag aelod(au) o'ch teulu neu ffrind agos. Os oes ganddoch unrhyw gwestiynau cofiwch gysylltu a mi.

Hoffwn eich sicrhau fod ganddoch berffaith hawl a rhyddid i wrthod parhau â'r astudiaeth ar unrhyw adeg, a/neu ofyn i gael gweld aelod arall o'r tim iechyd meddwl. Yn ogystal, os oes anawsterau yn parhau ar ddiwedd yr astudiaeth gwnaf drefniadau i chi weld aelod arall o'r tim iechyd meddwl.

Yn gywir

Mair Edwards

Seicolegydd Clinigol
dan Hyfforddiant

Dr Judy Hutchings

Seicolegydd Clinigol
Ymgynghorol

INFORMATION SHEET

Investigation of the impact of cognitive-behavioural therapy (CBT) on women with depression and their families.

This information sheet tells you about this project in detail. It is a bit long - but it is important that you read it so that you understand what will happen if you decide to take part in the study.

Who is doing this study?

The person who will be doing most of the research and all of the therapy will be Mair Edwards. She is a Clinical Psychologist in Training on the North Wales Clinical Psychology Course at University of Wales, Bangor. This project is part of the work that Mair has to do as part of her training and Doctorate in Clinical Psychology degree.

Dr. Judy Hutchings, Consultant Clinical Psychologist will be supervising the research, and Mr. Bruce Napier, Head of Clinical Psychology Services (Mental Health) will be supervising the therapy.

Why is this project being done?

This research project is going to look to see if cognitive-behavioural therapy (CBT) makes things better for women who are depressed and their children. Other research has shown that many mothers who are depressed also say they have problems with their children's behaviour. We know that CBT is a good treatment for depression, but we don't know if it also helps mothers to deal better with behaviour problems in their children.

How will this project be done?

Women, like yourself, who have been referred to an Adult Mental Health team due to depression and who also have children between the ages of 2 and 7 years will be asked to fill in two short questionnaires. Then, up to 15 women will be invited to take part in the main study.

The main study will be as follows:

1. a detailed assessment interview,
2. 8 weekly hour-long sessions of CBT,
3. a follow-up interview at the end of therapy.
4. a further follow-up interview 6-8 weeks after the end of therapy

During the **assessment interview** women will be asked:

about current problems and general family history.

to fill in a set of questionnaires.

to be filmed on video for 10 minute video while they do a simple task with their child.

The assessment interview will take approximately 90 minutes.

Following this women who are depressed will be offered **8 hour-long sessions of CBT on a weekly basis**. CBT has been shown to be effective in the treatment of depression, and is considered to be one of the standard interventions offered by Mental Health teams routinely.

At the two **follow-up sessions**, the women taking part will be asked:

to fill in a set of questionnaires (like in the first session),

be video-recorded with their child for the second and third time.

These interviews will last approximately 45-60 minutes.

At the end of the study, when the researcher has had time to look at all the information, another informal session can be arranged to talk about the results.

What happens if I don't want to carry on with the study, or I don't get on with the therapist?

Women who take part in the study do so voluntarily. Participants may refuse to take part, or withdraw at any time without penalty and without affecting or jeopardising their future medical treatment or care.

Women who agree to take part in the study can withdraw at any point or time from the study and/or ask to be transferred to another team member. There will be no pressure on you to carry on, and if you do 'drop out' it won't have any effect on the kind of treatment you will get in the future.

Is the treatment likely to harm me in any way?

This is very unlikely - CBT has been shown to be a good treatment for depression. What might happen though is that some women may become more concerned about their children's behaviour, partly because the assessment session will have drawn attention to it. If this happens to you, you will be given information about what help is available.

If this happens, therapy would continue as planned, but the information gathered might not then be included in data analysis.

How confidential will the therapy be? Who will see information about me?

As with all people who are referred to Adult Community Mental Health teams, confidentiality is maintained within team. In reality, this means that only team members who are working with a person see the written case notes. The only other person who will know what is talked about in therapy will be the Senior Clinical Psychologist who gives supervision to the therapist. This is to make sure that the therapist is doing her job well. It is also considered to be good clinical practice for all therapists to receive supervision. You can of course see anything the therapist writes about you, including the letters she writes (such as progress and outcome reports to the person who referred you to the team and your G.P.).

However, if any person says they are going to hurt themselves or somebody else, then other people within the team will be asked to give special advice.

What about the information for the research? Who will see that?

Any information about you or any other woman taking part in the study will be made anonymous - so that you cannot be recognised. All information about you which is stored on computer will be stored according to the Data Protection Act (1984). The video material will be stored in locked filing cabinets during the study period. Following coding, all video taped material will be deleted unless you give your written permission for the material to be used in the training of other professionals.

How will I find out what the results of the study were?

All participants will be offered a 'debriefing' session at the end of the study period to discuss the overall results.

What do I do if I feel unhappy about this project? Who deals with complaints?

If you have any complaints about this research you should write to:

Professor C.F. Lowe,
Head of School,
School of Psychology,
University of Wales,
Bangor,
Gwynedd, LL57 2DG.

and to:

Mr. John Mullen,
The Chief Executive,
Gwynedd Community Health Trust,
Bryn y Neuadd,
Llanfairfechan,
Conwy.

What do I do if I want more information?

If you would like further information about this study, or have any questions, please feel free to contact me. My contact address is:

Mair Edwards
Trainee Clinical Psychologist
North Wales Clinical Psychology Course
School of Psychology
University of Wales, Bangor
Bangor
Gwynedd, LL57 2DG

Telephone messages may be left on 01 248 38****. Please leave your name and a telephone number where I can contact you.

TAFLEN WYBODAETH

Astudiaeth o effaith therapi ymwybyddiaeth ac ymddygiad (cognitive-behavioural therapy/ CBT) ar ferched ag iselder a'u teuluoedd.

Mae'r daflen wybodaeth yma yn cynnwys gwybodaeth fanwl am y prosiect. Mae'n daflen braidd yn hir - ond mae'n bwysig eich bod yn ei darllen fel eich bod yn deall beth yn union fydd yn digwydd os byddwch yn cytuno i fod yn rhan o'r astudiaeth.

Pwy sydd yn gyfrifol am yr astudieath yma?

Y person fydd yn gwneud y rhan fwyaf o'r gwaith ymchwil, a'r holl waith therapi fydd Mair Edwards. Mae Mair yn Seicolegydd Clinigol dan Hyfforddiant ar gwrs Seicoleg Clinigol Gogledd Cymru ym Mhrifysgol Cymru, Bangor. Mae'r prosiect yn rhan o'r gwaith mae Mair yn ei baratoi ar gyfer ei hyfforddiant a gradd Doethur mewn Seicoleg Clinigol.

Bydd Dr. Judy Hutchings, Seicolegydd Clinigol Ymgynhorol yn gorychwylio'r gwaith ymchwil, a Mr. Bruce Napier, Pennaeth Gwasanaethau Seicolegol (Iechyd Meddwl) yn gorychwylio'r gwaith clinigol.

Beth yw pwrpas y gwaith ymchwil yma?

Pwrpas yr astudiaeth yw edrych ar effaith therapi CBT ar ferched sydd wedi eu cyfeirio at dimau Cymunedol Iechyd Meddwl Oedolion yn dioddef o iselder ysbryd, ac ar eu plant. Mae gwaith ymchwil blaenorol wedi dangos bod nifer o famau sydd yn isel eu hysbryd yn dweud bod eu plant yn cam-ymddwyn hefyd. Rydan ni'n gwybod bod CBT yn driniaeth dda ar gyfer iselder ysbryd, ond hyd yn hyn, does neb yn gwybod os yw'r therapi hefyd yn helpu mamau i ddelio'n fwy effeithiol gyda phroblemau ymddygiad yn eu plant.

Sut fydd y prosiect yn cael ei drefnu?

Bydd cais ar i ferched sydd wedi eu cyfeirio at Dimau Iechyd Meddwl gydag iselder ysbryd, a sydd hefyd yn famau i blant rhwng 2 a 7 oed i gwblhau dau holiadur byr (Saesneg eu hiaith). Yna, bydd tua 15 o ferched yn cael gwahoddiad i fod yn rhan o'r brif astudiaeth.

Bydd y brif-astudiaeth yn cynnwys:

1. cyfweiliad asesu manwl,
2. 8 sesiwn wythnosol awr o hyd o CBT,
3. cyfweiliad cloriannu 2-3 wythnos ar ol terfyn therapi.
4. cyfweiliad cloriannu 6-8 wythnos ar ole terfyn therapi.

Yn ystod y cyfweiliad asesu manwl bydd gofyn i'r mamau:

drafod anawsterau cyfredol a rhoi braslun o hanes teuluol, gwblhau cyfres o holiaduron.

gytuno i gael eu ffilmio ar fideo am 10 munud yn cwblhau tasg syml gyda'u plant.

Amcangyfrifir bydd y sesiwn yma yn para tua 90 munud.

Yn dilyn yr asesiad, bydd gwahoddiad i'r merched ymgymeryd a 8 sesiwn awr o hyd yn wythnosol o CBT. Mae gwaith ymchwil wedi dangos bod CBT yn driniaeth effeithiol ar gyfer iselder, ac mae bellach yn cael ei ystyried yn driniaeth gyffredin a safonol.

Yn ystod y ddau sesiwn cloriannu, bydd gofyn i'r merched sydd yn rhan o'r astudiaeth:

gwblhau cyfres o holiaduron tebyg i'r rhai gwblhawyd yn ystod y sesiwn asesu,

gael eu recordio ar fideo gyda'u plentyn am yr ail a'r trydydd gwaith.

Amcangyfrifir bydd y sesiynnau yma yn para tua 45-60 munud.

Bydd modd trefnu sesiwn pellach i drafod yr astudiaeth yn dilyn dadansoddi'r canlyniadau.

Beth fydd yn digwydd os nad wyf am barhau gyda'r astudiaeth, neu os nad wyf yn hoffi'r therapydd?

Mae merched sydd yn cytuno i fod yn rhan o'r astudiaeth yn gwneud hynny'n gwbl wirfoddol. Nid oes unrhyw orfodaeth ar unrhyw un i yntau fod yn rhan o'r astudiaeth nac ei gwblhau. Gall unrhyw un wrthod ar unrhyw adeg heb i hynny effeithio ar driniaethau neu ofal meddygol yn y dyfodol.

Felly, mae perffaith ryddid i chi wrthod parhau a'r astudiaeth neu ofyn i gael gweld therapydd arall unrhyw adeg. Ni fydd unrhyw bwysau arnoch i barhau a'r astudiaeth, ac os ydych chi'n gwrthod cwblhau'r astudiaeth ni fydd hyn yn effeithio ar driniaethau yn y dyfodol.

Ydi'r driniaeth yn debygol o wneud niwed i mi?

Mae hyn yn anhebygol - mae CBT yn cael ei ystyried yn driniaeth dda ar gyfer iselder. Un sgil-ffaith posibl ydi bydd merched yn pryderu am ymddygiad eu plant yn dilyn tynnu sylw at broblemau ymddygiad yn ystod yr asesiad. Pe bai hyn yn digwydd i chi bydd cyngor ac annogaeth ar gael ar sut i gael cymorth a chyngor pellach. Mewn achosion o'r fath, bydd y therapi yn parhau, er efallai na fydd canlyniadau'r therapi yn cael eu cynnwys yng nghanlyniadau'r astudiaeth yn y pen draw.

Pa mor gyfrinachol fydd y therapi? Pwy fydd yn gweld gwybodaeth amdanaf?

Fel gyda phawb sydd yn cael eu cyfeirio at Dim Iechyd Meddwl, bydd cyfrinachedd o fewn y tim. Mewn difrif, mae hyn yn golygu mai dim ond aelodau o'r tim sydd yn gweithio gyda'r person sydd yn gweld nodiadau achos. Yr unig berson arall fydd yn gwybod am gynnwys sesiynau therapi fydd y Seicolegydd Clinigol profiadol fydd yn gorychwylio'r therapi. Mae gorychwylliaeth o'r fath yn sicrhau bod y therapydd yn cynnig therapi o'r radd uchaf. Yn ogystal, mae cynllun gorychwylliaeth yn cael ei ystyried yn ymarfer clinigol da i bob therapydd. Mae croeso i chi wrth gwrs weld unrhyw nodiadau sesiwn ysgrifenedig gan gynnwys gohebiaeth mae'r therapydd yn ei ysgrifennu (e.e. gohebiaeth at y person a'ch cyfeiriodd at y tim a'r Meddyg Teulu yn rhoi gwybodaeth am effeithiolrwydd y therapi).

Yr unig eithriad i gyfrinachedd ydi mewn achosion lle mae person yn bygwth brifo eu hunain neu eraill. Dan amodau o'r fath gall y therapydd drafod yr achos gyda chyd-weithwyr.

Beth am y wybodaeth ar gyfer y gwaith ymchwil? Pwy fydd yn gweld hwnnw?

Bydd pob gwybodaeth am unigolion yn cael ei gadw'n ddi-enw fel na ellir adnabod unigolion. Bydd holl wybodaeth ar gyfrifiaduron yn cael eu diogelu dan reolau Deddf Ammdiffyn Data (1984). Bydd deunyddiau fideo yn cael eu cadw dan glo yn ystod cyfnod yr astudiaeth. Yn dilyn dadansoddi, bydd yr holl ddeunydd fideo yn cael ei ddiddymu oni bai eich bod yn rhoi caniatad ysgrifenedig ychwanegol yn cytuno y gellir defnyddio'r fideo ar gyfer hyfforddi eraill.

Sut gaf wybod am ganlyniadau'r astudiaeth?

Bydd pawb sydd yn rhan o'r astudiaeth yn cael cynnig sesiwn drafod ar ddiwedd yr astudiaeth.

Os nad wyf yn hapus gyda'r astudiaeth beth ddylwn ei wneud? Pwy sydd yn delio a chwynion?

Os oes ganddoch unrhyw gwyn neu bryder am yr astudiaeth yma cysylltwch gyda:

Yr Athro C.F. Lowe,
Pennaeth Ysgol,
Ysgol Seicoleg,
Prifysgol Cymru Bangor,
Bangor,
Gwynedd, LL57 2DG.

a gyda:

Y Bon. John Mullen,
Prif Weithredwr,
Ymddiriedolaeth Iechyd Cymunedol Gwynedd,
Bryn y Neuadd,
Llanfairfechan,
Conwy.

Beth ddylwn ei wneud os am wybodaeth bellach?

Os hoffech fwy o wybodaeth am yr astudiaeth yma, neu os oes gennych unrhyw sylw neu gwestiwn, cysylltwch a mi. Y cyfeiriad ar gyfer cysylltu yw:

Mair Edwards
Seicolegydd Clinigol dan Hyffordiant
Cwrs Seicoleg Clinigol Gogledd Cymru
Ysgol Seicoleg
Prifysgol Cymru, Bangor
Bangor
Gwynedd, LL57 2DG

Gellir gadael neges ar y peiriant ateb drwy ffonio 01 248 38****. Os gwelwch yn dda, rhowch eich enw a rhif ffon lle medraf gysylltu a chi.

CONSENT FORM

Consent to be included in a study looking at the effects of depression on women and their families and the effectiveness of CBT

I have read the letter and the information sheet which give details about this study.

I have considered carefully whether or not I wish to take part in this study, and have had the opportunity to discuss the study with my family and/or friends. I have also had sufficient time to discuss and ask questions about this study with the researcher.

I understand that I will be asked to attend:

Initial assessment session - which will include:
questions about my current problems,
questions about general family history,
filling in a set of questionnaires,
and a 10 minute video recording of me and my child doing a simple task together.

Therapy sessions - 8 x 1-hour sessions of cognitive-behavioural therapy (CBT).

Two Follow-up sessions - (one 2-3 weeks after therapy ends, and another 6-8 weeks after therapy ends) which will include:

filling in a set of questionnaires,
and a 10 minute video recording of me and my child.

I understand that the video tape will be kept by the researcher in a locked cabinet until the end of the study. At the end of the study, the tape will be deleted unless I give written permission that the tape can be used for future research and training of other professionals.

Even though I am agreeing to take part in the study now, I understand I can stop at any time and ask to see another therapist. If at the end of the eighth session I feel that I need to carry on with therapy, the therapist/researcher will arrange for me to see another person from the team.

I understand that all the information I share with the therapist/researcher will be confidential and will not be shared with any person that isn't directly part of the project. I understand that any information which could identify me personally will be removed. I also understand that I have the right under the Data Protection Act (1984) to see any information about me held on the project computer.

I understand that anything I say to the therapist during therapy will be confidential, but that information written in the case file by the therapist may be seen by other members of the team if they are also working with me. I understand that I can see anything that the therapist writes down, including letters (for example to the G.P. and/or referrer), according to the rules of the Community Mental Health Team, and that confidentiality will be maintained within the team. If I say that I am going to hurt myself or someone else then the therapist can ask for specific advice from other professionals. I also understand that the therapist will discuss the clinical aspects of therapy with a Senior Clinical Psychologist, which is considered to be good clinical practice.

Signed.....

Date.....

I confirm that the nature of this study has been explained to this person and that she has given consent to be included in the study

Signed.....

Date.....

FFURFLEN CYDSYNIO

Cydsyniad i fod yn rhan o astudiaeth ar effaith iselder ysbryd ar ferched a'u teuluoedd, ac effeithiolrwydd CBT

'Rwyf wedi darllen y llythyr cyflwyno, a'r daflen wybodaeth sydd yn amlinellu'r astudiaeth yma.

'Rwyf wedi ystyried y cais i fod yn rhan o'r astudiaeth yma yn ofalus, ac wedi cael cyfle i drafod yr astudiaeth gyda'm teulu a/neu ffrindiau. 'Rwyf hefyd wedi cael amser digonol i drafod yr astudiaeth a'i oblygiadau gyda'r ymchwilydd.

Deallaf bydd gofyn i mi gymeryd rhan mewn:

Cyfweliad asesu fydd yn cynnwys:

cyfweliad manwl o anawsterau cyfredol a braslun o hanes teuluol,
llenwi holiaduron,
recordiad fideo 10 munud o hyd ohonof gyda'm plentyn yn cwblhau tasg syml.

Sesiynnau Therapi - 8 sesiwn awr o hyd o therapi ymwybyddiaeth ac ymddygiad (CBT).

Dau Sesiwn cloriannu (un 2-3 wythnos ar ol terfyn therapi, a'r llall 6-8 wythnos wedi terfyn) fydd yn cynnwys:
ail-lenwi holiaduron
recordiad fideo 10 munud o hyd ohonof gyda'm plentyn yn cwblhau tasg syml fel yn y cyfweliad cyntaf.

'Rwyf yn cael ar ddeall bydd y tap fideo yn cael ei gadw hyd nes bod y tap wedi ei ddadansoddi gan yr ymchwilydd. Yn dilyn hyn, bydd cynnwys y tap yn cael ei ddileu oni bai fy mod yn rhoi caniatad ysgrifenedig penodol a phellach y gellid defnyddio'r tap ar gyfer gwaith ymchwil/hyfforddi pellach.

Er fy mod yn cytuno i fod yn rhan o'r astudiaeth ar hyn o bryd, 'rwyf yn deall na fydd gorfodaeth o unrhyw fath arnaf i gwblhau'r astudiaeth. 'Rwyf hefyd yn deall bod gennyf yr hawl i derfynu therapi ar unrhyw amser a/neu ofyn i gael fy ngweld gan therapydd arall neu aelod arall o'r tim. Os byddaf yn teimlo ar ddiwedd yr wythfed sesiwn bod arnaf angen therapi neu driniaeth bellach, bydd y therapydd/ymchwilydd yn trefnu hyn ar fy rhan.

'Rwyf yn cael arddeall fod yr holl wybodaeth a gesglir yn yr holiaduron yn gwbl gyfrinachol, ac na fydd yr wybodaeth yn cael ei rannu ag unrhyw berson nad yw'n rhan annatod o'r tim ymchwil. Bydd manylion personol fyddai yn galluogi eraill i fy adnabod yn cael eu dileu. Sylweddolaf bod gennyf hawl dan Ddeddf Amddiffyn Data (1984) i weld unrhyw wybodaeth amdanaf sydd yn cael ei gadw ar gyfrifiadur yr astudiaeth.

'Rwyf yn deall bydd gwybodaeth sydd yn yn deillio o'r sesiynnau therapi yn cael eu cadw yn ol gofynion a rheolau y tim Iechyd Meddwl Cymunedol, ac y bydd cyfrinachedd o fewn y tim. 'Rwyf yn deall bod hawl gennyf i weld nodiadau mae'r therapydd yn ei ysgrifennu, gan gynnwys llythyrau (e.e. i'r cyferiydd a/neu'r Meddyg Teulu). 'Rwyf yn deall bydd y therapydd/ymchwilydd yn trafod manylion clinigol y therapi gyda Seicolegydd Clinigol Cymwysiedig a phrofiadol, fel sy'n gymwys yn ol arfer clinigol da.

Arwyddwyd.....
Dyddiad.....

Cadarnhaf bod natur yr astudiaeth yma wedi ei drafod a'i egluro gyda'r person uchod, a'i bod wedi cytuno i fod yn rhan o'r astudiaeth.

Arwyddwyd.....
Dyddiad.....

APPENDIX K: INITIAL ASSESSMENT INTERVIEW SCHEDULE**FIRST INTERVIEW ASSESSMENT****Date:****Name:****Address:****Telephone:** Day
Evening**Occupation:****Date of birth:****G.P.:****Health Visitor:****Address:****Telephone:****INTRODUCTION**

Who am I?

What is my role?

How much time is available?

Limits of Confidentiality.**OUTLINE OF PRESENTING PROBLEMS.**

Physical symptoms	Mental symptoms
Behavioural symptoms	Precipitating stresses
First/worst/last	Referral/ Medication

BACKGROUND INFORMATION

Partner Name:

Partner's age:

Partner's occupation:

How long together?

Previous long-term relationships?

Children:

Age:

Date of Birth:

(father)

1

2

3

4

Any problems in pregnancy, on birth, in post-natal period?

Have the children had any serious illnesses/hospitalisations?

FAMILY BACKGROUND

Genogram

Any other family members with physical or mental illnesses?

How is relationship within family in general?

Religion?

Cultural background?

HOME CIRCUMSTANCES:

Who lives in house?

How many bedrooms? (Who shares with who?)

Work and financial situation? On benefits? Can they claim transport back?

Education (up to what age and what level. Any qualifications since leaving school?)

Employment History (Where and when. Why did they leave? Did they/do they like their work?)

Hobbies (What do they do in their spare time? Alone or with others? What did they used to do that they don't do now?)

Medical history

(any serious illnesses/hospitalisations in past? Miscarriages/terminations?)

DETAILS OF PROBLEM

Frequency, duration and severity:

Any suicidal ideations? Psychotic symptoms?

Previous episodes? (Any history of self-harm?)

Previous interventions:

Did they see anybody from the AMH team? If so, who?

When?

Personal coping strategies:

Other, related problems:

Their theory about the problem:

How would they know when they're better?

What do they expect from me?

What are they expecting from therapy?

POSITIVE FACTORS

Achievements/Skills/What they enjoy

Hopes for future

WHAT WILL HAPPEN NEXT

Next appointment?

How often?

Duration?

How to get in touch in between sessions

Any other information?

Anything else they want to know?

APPENDIX L:**Evaluation of Therapy**

The following are just a few questions about your experiences during therapy. Please feel free to be honest. Your responses (which can be anonymous) will not be disclosed to any person not directly associated with the research project. They will not be part of your clinical file, and will not affect future treatment in any way.

1. Do you think or feel that anything has changed in your life since beginning therapy? If so, what?

2. Thinking back over the 8 sessions – what part of therapy did you find most helpful, and which was least helpful. Why?

Most helpful:

Least helpful:

3. Any other thoughts about the therapy you received:

APPENDIX M: Brown Circles Task: Exploration of relationships between mother and child interactions and behaviours.

1. Relationships between maternal behaviours.

Mother Neutral was significantly correlated with Mother Instruction ($r = .825, p = .003$). No significant correlations were found between either Mother Negative or Mother Positive and any other mother behaviour.

2. Relationships between observed maternal and child behaviours.

Mother Neutral was significantly correlated with Child Opposition ($r = .769, p = .009, n = 10$). No significant correlations were found between either Mother Negative or Mother Positive and any child behaviour.

Mother Instruction was significantly correlated with Child Opposition ($r = .840, p = .002$) and Child Neutral ($r = .739, p = .015$). Mother Opposition was highly correlated with Child Instruction ($r = .995, p = .000$) and Child Negative ($r = .850, p = .002$). Mother Compliance was significantly correlated with Child Positive ($r = .850, p = .023$).

3. Relationships between child behaviours

Child Neutral was significantly correlated with Child Compliance ($r = .840, p = .002$) and negatively correlated with Child Negative ($r = -.645, p = .044$). Child Negative was correlated with Child Instruction ($r = .832, p = .003$), and negatively correlated with 'On Task' behaviour ($r = -.774, p = .009$) and Child Neutral (as above). Neither Child Positive nor Child Opposition were significantly correlated with any other child behaviour.

4. Relationships between measures of Maternal Mental Health, and measures of reported disruptive behaviours and observed behaviours.

Significant correlations were found between measures of maternal mental health and observed mother and child behaviours.

Table M.1 Pearson correlation coefficients between Maternal Mental Health and Child Behaviour Measures, and Observed behaviours.

Maternal Mental Health Measure (pre-intervention)	Child Behaviour Measure/Observation (pre-intervention)	Correlation r n = 10	Significance p
BDI –II	Child Positive	-.667	.035
	'On task'	-.694	.026
	Mother Neutral	.712	.021
CCQ Quality	Child Instruction	-.694	.026
	Child Negative	-.657	.039

As regards observational data, BDI-II was significantly correlated with the number of neutral interaction by the mother, and negatively correlated with the number of positive interactions by the child (i.e. high depression score were associated with low number of positive interactions by child).

Conversely PSI Parental Distress was positively correlated with positive child interactions.

BDI-II was negatively correlated with the child's 'On task' behaviour (i.e. high depression scores were associated with the child not being 'on task'). CCQ2 Quality was negatively correlated with Child Instruction and Child Negative.

5. Relationships between measures of disruptive behaviours and observed behaviours.

Table M.2 Pearson correlation coefficients between Child Behaviour Measures and Observed Mother and Child Behaviours.

Child Behaviour Measures	Observed Behaviours	Correlation r	Significance p
ECBI Problem	Child Instruction	.700	.024
	Mother Opposition	.700	.042
CBCL External T	Child Instruction	.773	.009
	Child Negative	.725	.018
	Mother Opposition	.754	.012
PSI Parental Distress	Child Positive	.663	.037
PSI Difficult Child	Child Instruction	.749	.013
	Child Negative	.671	.033
	Child Neutral	-.732	.016
	Mother Instruction	-.672	.033
	Mother Neutral	-.673	.033
	Mother Opposition	.725	.018

One of the main points to emerge from this analysis is that the number of instructions given by the child was significantly correlated with ECBI Problem, CBCL External T, and PSI Difficult Child, and that Child Negative was correlated significantly with the CBCL External T and PSI Difficult Child.

Similarly, Mother Opposition (which can only arise in response to Child Instruction) was correlated with ECBI Problem, CBCL External T, and PSI Difficult Child.

Individual Results

Interesting differences emerged when examining individual profiles. Two mothers (Cases 1 and 4) emerged as using a higher percentage of Mother Positive interactions (53% and 48% respectively) in comparison to the other eight mothers, and neither gave any examples of Mother Negative interactions or behaviours. Case 1 had the most compliant child (90% 'On Task' behaviour) and Case 4 had the least compliant child (no 'On Task' behaviour i.e. the child did not draw any circles). During therapy it emerged that both women assiduously avoided conflict whenever possible, and found it very difficult to assert themselves within their family situations. Another mother (Case 2) admitted that she never asked her child to do anything if she thought the child might refuse as she "couldn't cope" with her daughter's tantrums. During pre-intervention assessment it was noted that this mother neither encouraged nor pressured her child (who was 'On Task' for 60% of the time) to continue with the task when the child left the task situation.

Similarly, Child Neutral was the most common valence (65%) for child interactions, followed by Child Negative (25%) and Child Positive (10%). Child 4 had the highest percentage of Child Negative behaviours at 80% of all interactions. Child 1 had the highest percentage of Child Positive behaviours (44%).

Behaviour or Interaction 'Type' at pre-intervention

Regardless of valence, the two main categories of mothers' behaviours and interactions to emerge were Mother Approach (44.6%) and Mother Instruction (46.3%). For the children, the two most common categories were Child Approach (32.1%) and Child Opposition (34.2%).

Mother Instruction (which ranged from 1 instruction per 7 seconds to 1 instruction every 55 seconds) had to be followed by either Child Compliance or

Child Opposition. At pre-intervention, on average children were more likely to oppose an instruction given by the mother rather than comply (62% mean opposition as compared to 41% compliance), although this also varied. Rate of Child Opposition ranged from 14-100% and Child Compliance from 0-86%.

Children also gave their mother's instructions (usually negative in valence and requesting the mother to do the circles for them). Mean percentage of Child Instruction was quite low (11.3%) but ranged from no instructions given by the child to a rate of 1 instruction given to the mother every 12 seconds (Child 4) Child Instruction was positively and significantly correlated with ECBI Problem and PSI Difficult Child. Although mean Child Instruction rate was low, its presence appeared to be associated with parental perceptions of a difficult child.

APPENDIX N: Responses to Evaluation of Therapy Questionnaire

Responses to Question 1: Do you think or feel that anything has changed in your life since beginning therapy? If so, what?

Participants reported increased awareness, typified by comments such as,

“I’m more aware of what’s happening.” (Participant 1),

and

“My memory has improved also.” (Participant 2).

Participants reported changes in their cognitions of events. Typical comments were,

“I’ve got better, I think more positive thoughts” (Participant 6),

“The way I think about things is more positive” (Participant 2),

and

“...Trying to concentrate on what we have achieved rather than looking at the bad things” (Participant 1).

They also reported positive changes in their perception of their responsibility towards others, and in behaviours in response to other people, for example:

“The guilt I was feeling – it wasn’t real – it wasn’t my fault. She [the therapist] helped me understand it all.” (Participant 10),

and

“I do things now that please me. Not trying to think what the other person is thinking. Staying away from people that make me feel not so good.” (Participant 2).

An increase in coping skills and confidence was reported by 5 participants, for example,

“I’m not as anxious as before. Cope better. Handle situations better” (Participant 2),

“Able to cope lot more.” (Participant 3),

and

“Feel more confident about what I’m doing.” (Participant 10).

Participants reported positive changes in their relationships with partners and other adults. Examples are:

“I no longer put up with being bullied by family members and realise that most of their criticism towards me is unjust.” (Participant 4)

and

“Yes, been able to talk to husband a lot more where before I couldn’t” (Participant 7).

Three participants however commented that they would have valued the opportunity for the therapist to meet their partners (or in one case her ex-partner), as they felt this would have improved their relationship difficulties further.

“ ... would have like to do some work on relationship – if [therapist had] met my partner ... as a couple”. (Participant 10).

Although no specific parent-training work was undertaken during therapy, 5 participants commented on a change in their relationship with their children, for example:

“I’m thinking more about the children – they’re acting the way they should be at their age.” (Participant 1).

“Way I deal with the kids has changed a bit.” (Participant 3).

“Yes, ways of dealing in situashion [sic] with ***** [child].” (Participant 8).

Responses to Question 2: Thinking back over the 8 sessions – what part of therapy did you find most helpful, and which was least helpful. Why?

The following elements of therapy were identified as most helpful:

1. Talking about problems. Typical comments were:

“ ... talking to someone.” (Participant 4).

“ ... being able to talk to someone who knew things about my situation.” (Participant 7).

2. Activity monitoring/scheduling.

“The more constructive things such as looking at what you have done. By writing things down I could see that I do do things and I shouldn't feeling [sic] inferior to people who I thought did a lot more things than me.” (Participant 1).

“ ... write down daily activities – made difference to see what doing every day, also goal setting.” (Participant 3).

This opinion about the benefits of activity scheduling/monitoring was voiced by 6 participants. Participant 4 in particular identified “form filling” as the least useful part of therapy.

The most critical or negative comments made about therapy were regarding the time-limited nature of the therapy. Three participants in particular felt that 8 sessions had not been sufficient, and this issue was also raised during the debriefing sessions. Typical comments were:

“Probably not quite long enough.” (Participant 1).

“More than 8 sessions would have been more usefull [sic].”
(Participant 4).

“Should have been longer, should not have a time-limit.” (Participant 10).

Participant 8 also felt that the hour session should have been extended to an hour and a half.