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The personal and parental characteristics of preschool children referred to a child and family mental health service and their relation to treatment outcome.

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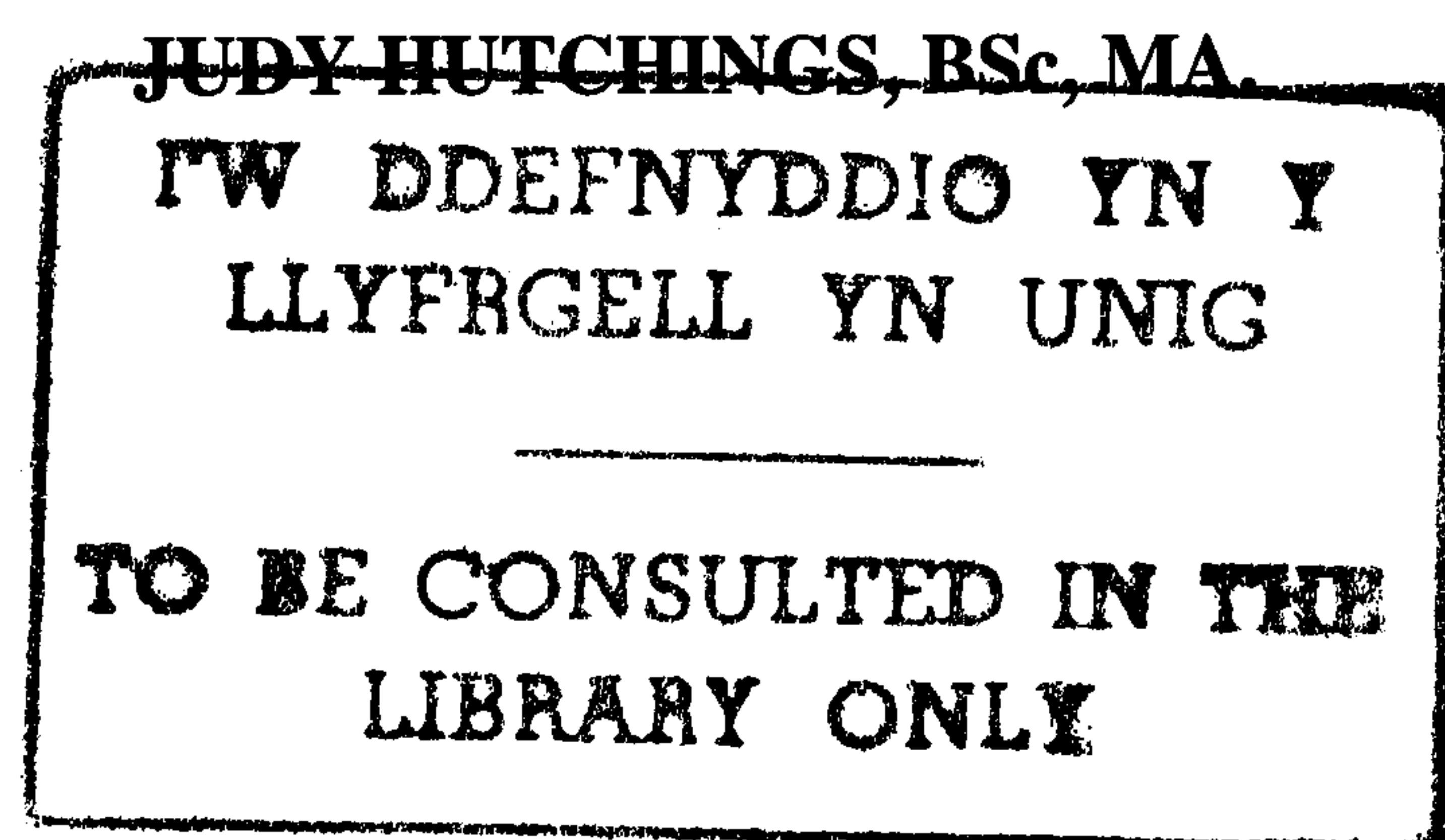
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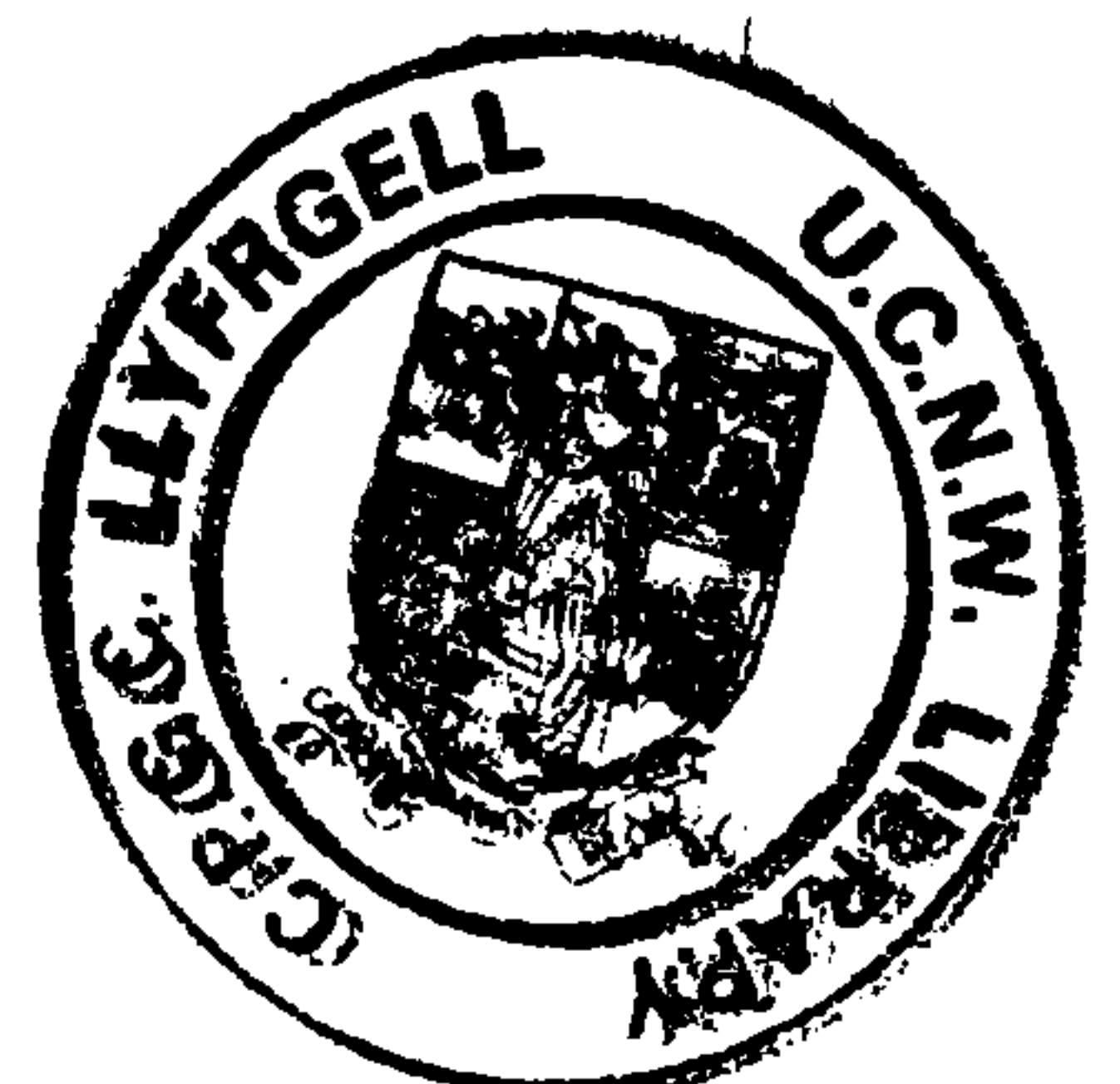
Title: The personal and parental characteristics of preschool children referred to a child and family mental health service and their relation to treatment outcome.



**Thesis submitted in part fulfilment of the
requirements for the degree of Doctor of Clinical Psychology**

**UNIVERSITY OF WALES
BANGOR**

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Judy Hutchings, March 1996.

Summary

Mothers of thirty pre-school children who had been referred to a child and family mental health service were invited to participate in the study. Twenty six (87%) consented and were interviewed before treatment and six months later. Data were collected regarding the difficulties experienced by the children, the characteristics of their mothers and their general family circumstances. In addition to a number of well established measures, the Eyberg Child Behavior Inventory, the General Health Questionnaire and the Beck Depression Inventory, three new measures were developed for the study, the Parent Child Autobiographical Memory Test (PCAMT), a measure of parental ability to recall specific incidents in their child's life, the Community Contacts Questionnaire (CCQ), a measure of the mothers social isolation and a measure of Socio-Economic Disadvantage (SED5).

The results confirmed expectations that the majority of pre-school referrals to the service were children with disruptive behaviour problems (58%) and the majority of their mothers (65%) were experiencing mental health problems. Significantly more of the referred families were socio-economically disadvantaged than was the case for the population as a whole.

Treated children showed improvements in their behaviour problem scores and their mothers also showed improvements in their own mental health. A low PCAMT score was associated with failure to take up treatment and with socio-economic deprivation. No clear association was demonstrated between treatment outcome and any of the baseline measures.

The limitations and clinical implications of this naturalistic study are discussed and suggestions made for further research. In particular the PCAMT needs further investigation to establish whether the finding that it is associated with failure to take up treatment can be replicated and whether it is related to other aspects of parental observation and attending skills in relation to their child.

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Index

Chapter 1. Child behavioural problems an overview of the literature.	1
Chapter 2. Socio-economic disadvantage, social isolation and parental observing and attending skills.	10
Chapter 3. Autobiographical memory	21
Chapter 4. Description of the study and statement of the hypotheses	28
Chapter 5. Method	32
- Procedures	32
- Measures	36
- Sample description	46
Chapter 6. Results -	48
1. the relationship between the baseline measures	49
2. hypotheses concerned with the sample description (nos. 1 - 4)	51
3. a) comparison between those who did and did not have treatment	56
b) correlations between pre and post treatment measures	
with themselves	60
c) relationships between the follow-up measures	61
4. hypotheses that predicted therapeutic change would occur	
(nos. 5 - 6)	62
5. correlations between baseline and outcome measures	74
6. hypotheses concerned with the prediction of outcome (nos. 7 - 14)	77
Chapter 7. Discussion	89
References	102
Index to appendices	112

Appendices

Appendix I Rationale for sample selection, sample inclusion criteria and breakdown of referrals in each category.	114
Appendix II Letter to parents of referred children, description of study and consent form.	117
Appendix III Letter to referrer of child informing them of the study.	123
Appendix IV Details of the non-participants.	124
Appendix V Child Health and Development Questionnaire and scoring criteria for the socio-economic deprivation index, SED5.	125
Appendix VI Details of the information provided by the one father who attended a research interview and reasons for the exclusion of his data from the analysis.	128
Appendix VII Therapist use of behavioural strategies questionnaire and table of responses	129
Appendix VIII Follow up interview request to mothers of treated and untreated children.	132
Appendix IX Community Interaction Checklist.	134
Appendix X Community Contacts Questionnaire, CCQ scoring criteria and reliability and validity data.	137
Appendix XI Parent child autobiographical memory (PCAMT) response sheet, administration instructions, scoring sheet and reliability/validity data.	147
Appendix XII Parent Satisfaction and Outcome Questionnaire (Service user feedback questionnaire)	156
Appendix XIII Research follow-up interview.	160

Appendix XIV Therapist treatment dose and outcome questionnaire.	161
Appendix XV Source of referrals of sample and treatment take up	162
Appendix XVI The diagnosis of conduct disorder and details of the two main diagnostic frameworks, DSM IV and ICD-10.	163
Appendix XVII Problems identified in the referral letter.	174
Appendix XVIII Comparison between those children who were seen and those who were not.	176
Appendix XIX Scoring criteria for the calculation of the ECBI change index.	185

Chapter 1. Child Behaviour Problems - An Overview.

Introduction

Childhood conduct disorders are increasingly prevalent, involving up to 10% of all children in Britain and the USA (Rutter, Cox, Tuplin, Berger and Yule, 1975). They are the most common reason for referral to children's mental health services (Offord, Boyle and Szatmari, 1987), the most frequent problem domain in clinical practice (Kazdin, Siegel and Bass, 1990) and are most frequently identified amongst children living in conditions of socio-economic disadvantage (West and Farrington, 1973; Farrington, 1979; 1995). Furthermore less than 10% of children with such problems get referred to specialist services (Hobbs, 1982). The effective treatment of such problems is important because, if unresolved, they predict later difficulties that are costly for both individuals and society (Kazdin, 1993).

By contrast with other childhood problems such as fears, which tend to be age specific, conduct problems, particularly those that become established at a young age, are relatively stable over time (Webster-Stratton, 1991; Reid, 1993). Greenberg, Speltz and DeKlyen (1993) summarise the situation as follows, "*most chronically antisocial and delinquent adolescents first displayed disruptive behaviour during the pre-school and early school years.*" Greenberg, Speltz and DeKlyen, (1993, p. 193).

These early onset difficulties predict frequent and severe behaviour problems in adolescence and beyond, (Loeber and Dishion, 1983; Jenkins, Owen, Bax and Hart, 1984; Egeland, Kalkoske, Gottesman and Erickson, 1990; Loeber 1990). Difficulties include school dropout, alcoholism, drug abuse, criminality and relationship difficulties (Kazdin, 1985). Furthermore, unlike adolescent onset conduct disorder, which is less severe and markedly less aggressive, children with early onset conduct problems are twice as likely to have continuing difficulties in adulthood (Hinshaw,

Lahey and Hart, 1993) including persistent psychiatric, academic and social impairment (Reid, 1993). In the absence of effective treatment, therefore, the long term outlook for children with early onset conduct problems is poor (Webster-Stratton, 1990a).

As children with conduct problems become older their activities increasingly involve dangerous, aggressive and overtly violent behaviour in which other people are hurt, raped, physically assaulted or even killed (Kazdin, 1993). In financial terms there are long term costs to the education, social welfare, community and mental health services and to the judicial and penal systems. Attempts have been made to measure these costs but this has proved to be a difficult task (National Centre for Education in Maternal and Child Health, 1992), nevertheless the costs to society are so enormous that conduct disorder may be the most costly mental health problem of all (Robins, 1981).

Parental mental ill health, particularly maternal depression, is closely associated with early childhood problems of the conduct disorder type (Kazdin, 1990) and is more common among the mothers of children referred for conduct problems than among mothers of similar aged non-referred children (Wahler and Dumas, 1984). Over 50% of the mothers of children with conduct disorders were found by Alpern and Lyons-Ruth (1993) to be clinically depressed.

The relationship that has been identified between conduct problems and parental depression has led to the suggestion that the presence of maternal depression may contribute to the development of childhood conduct disorder (Patterson, 1982) but this is a 'chicken and egg' problem since parental psychopathology may equally be the result or cause of child behaviour problems (Bell and Harper, 1977; Parke, 1978). Child behaviour problems, such as disruptive sleep patterns, which have been

demonstrated to occur in 20% of 1 to 2 year olds and over 10% of 3 to 4 year olds (Douglas, 1989), cause considerable stress for parents and may result in adult coping difficulties which contribute to a range of possible mental health problems.

Fergusson and Lynskey (1993) suggest that the association between maternal mental health problems and childhood behaviour problems may arise largely because the social factors (e.g. social disadvantage, stress and marital problems) that give rise to depressive problems in women are independently associated with increased risk of child behaviour problems. Whatever the initial causal factors for either problem it seems likely, as Lytton (1990) has argued, that once established, child difficulties and maternal depression may influence each other in a continuous pattern of reciprocal influence.

Another area of difficulty, in relation to maternal depression, is the lack of correspondence between the child's behaviour and the perception of that behaviour by their depressed mother. Webster Stratton and Hammond (1988) have shown that depressed mothers have a significantly greater tendency to perceive their child's behaviour as problematic and their child as disturbed than either their non-depressed husbands or other non-depressed mothers.

Treatment approaches with conduct problems.

Although many approaches have been used, there is an overwhelming case for the use of behaviourally based approaches with the parents of referred children as identified by the Welsh Health Planning Forum

"parents will need guidance on the most appropriate ways of dealing with conduct disorders, often using techniques from behaviour therapy". Welsh Health Planning Forum, Mental Health Protocol for Investment in Health Gain (1993, p. 53).

Behavioural approaches have been extensively researched and their therapeutic effectiveness is well established (O'Dell, 1974; Herbert, 1981; 1991; Kazdin, 1987; Webster-Stratton and Herbert, 1994). The rationale for focusing on providing guidance to parents being that the parents of children with conduct problems lack certain fundamental parenting skills (Patterson, 1982). Patterson has developed a social interactional model which he sets out in his important book "Coercive Family Process" to account for the development and maintenance of aggressive and non-compliant behaviour that has its roots in early parent-child interactions. Patterson argues that these parents deal ineffectively with everyday disciplinary confrontations which leads to an increase in coercive interactions between themselves and their children. Children learn their own aversive responses which turn off parental demands. Parental lack of ability to provide contingent reinforcement and to model successful problem solving further handicaps their children when they move into other social environments such as school. Furthermore the problematic child behaviours cause further disruptions to the parenting process. This is the fundamental principal underlying most parent training programmes and their effectiveness has been frequently demonstrated (Patterson, 1975; McMahon and Forehand, 1984). McMahon and Forehand show evidence of positive changes being maintained for a number of years after treatment and of the generalisation of skills learned to other problems in the same child and to other children in the family.

Behavioural parent training approaches have many elements in common. Treatment is based on social learning theory and utilises the concepts of positive reinforcement, time out and contingency contracting (Kazdin, 1993). The short term outcome following management advice or training for parents is very good (Webster-Stratton, Kolpacoff and Hollingsworth, 1989). It has also proved to be an acceptable treatment to the service users (Webster-Stratton, 1989) but, although significant changes have frequently been demonstrated, not all children respond. Longer term follow up

suggests that up to 50% of children continue to have clinically significant problems and, as yet, few studies have looked at how to overcome the factors known to militate against successful outcome (Webster-Stratton, 1990a). The initial optimism, therefore, with which parent training approaches were greeted, has now been tempered by recognition of the difficulty of maintaining treatment gains for some children. It is, consequently, in the area of early prediction and prevention that research is currently focused since fully developed conduct disorder is extremely resistant to treatment (Reid, 1993).

Factors associated with poor treatment outcomes.

(i) Later treatment.

Early intervention and longer duration of treatment correlate positively with outcome (Kazdin, 1993) and Patterson, Dishion and Chamberlain (1993) have demonstrated reducing treatment success rates with increasing child age. This is not surprising since treatment depends on the parent being a major source of influence on the child which could be expected to decrease as the child gets older.

(ii) Socio-economic disadvantage.

As well as being associated with the occurrence of conduct problems (Farrington, 1979; 1995) socio-economic disadvantage has also been shown to predict poor outcome (Dumas and Wahler, 1983) and is discussed further in chapter two.

(iii) Social isolation.

Lack of effective social support for the child's main carer is also associated with poor treatment outcomes. Some of the most interesting work in this area has been done by Wahler and colleagues (Wahler, 1980; Wahler and Dumas, 1984). Wahler and Dumas use the term insularity to describe the pattern of social contacts which typifies mothers whose children fail to maintain treatment gains. Insularity is defined as

"a specific pattern of social contacts within the community that are characterised by a high level of negatively perceived social exchanges with relatives and/or helping agency representatives and by a low level of positively perceived supportive interchanges with friends" (Wahler and Dumas, 1984, p 387). Wahler's work, including his method of measuring insularity, is described in more detail in chapter two. The measure devised by the author on the basis of Wahler's work to investigate parental social isolation/social support is described in chapter five.

(iv) Parental mental health problems.

Whilst the association between maternal mental health problems and childhood conduct problems is well established, the literature on whether such problems interfere with treatment progress for the parents of such children who participate in programmes is unclear.

Some writers suggest that maternal depression has a negative influence on outcome since it reduces the mother's accuracy in her tracking of her child's behaviour (Brody and Forehand, 1986) and, as Wahler (1980) has demonstrated, poor maternal descriptive and monitoring skills are highly predictive of poor outcome for conduct problem children whose parents participate in parent training programmes. Possibly for this reason some parent training programmes undertake careful selection procedures and exclude children whose parents have significant mental health problems (Anastopolous and Barkley, 1989). Others, such as Eyberg and Boggs (1989), include parents with mental health problems, treating this as a variable to be assessed, rather than as an exclusion criterion.

Some studies suggest not only that gains can be made for the child, despite maternal depression, but also that the depression itself may improve as a result of parent training. Forehand, Wells and Griest (1980) report a decrease in depression among

mothers who completed a programme designed to increase child management skills. Hutchings (1996) also demonstrates statistically significant changes in the mental health of a group of mothers of children with behavioural problems following attendance at a parent training group. The explanation for this improvement is not clear and could be because components of parent training programmes indirectly improved the mother's mental health, as a result of her developing skills in parenting, or because some of the components of the treatment programme directly influence the depression. At the present time the influence of parental mental health on treatment outcome and on parental health of participation in such programmes is unclear.

(v) Poor parental attending and observation skills.

Poor parental ability to accurately observe and describe their child's behaviour (Wahler, 1980) is, as previously stated, predictive of poor outcome in parenting programmes. Wahler also demonstrated that the mothers with poor observational skills who succeeded in such programmes also developed more accurate observational skills. One difficulty in making use of Wahler's work in clinical settings is that the measurement of these critical parenting skills is difficult and time consuming. In considering how a parent's ability to accurately encode of their child's behaviour might more easily be assessed, the author noted that the literature on autobiographical memory was concerned with the specificity of recall of events in the subject's life.

There is growing interest, particularly in the field of adult mental health problems, in autobiographical memory (Williams and Dritschel, 1988). Autobiographical memory refers to the person's recall of specific events that have occurred in their own life and difficulty in recalling specific events in response to prompt words is found in people with depression. Furthermore poor autobiographical memory is also associated with poor problem solving abilities (Evans, Williams, O'Loughlin and Howells, 1992).

Parental ability to describe their child's behaviour in specific terms and to recall specific events in their own life may be two aspects of a common process and performance on autobiographical memory tasks may predict the outcome of parent training programmes. The literature associated with parental observation of child behaviour is reviewed in greater detail in chapter two and the literature on Autobiographical Memory in chapter three. It was decided that one aspect of the present study would be to investigate the possibility that a version of the Autobiographical Memory Test, that focused on parental recall of incidents in their child's life, might be a useful clinical tool. Chapter five describes the measure selected or developed for the present study.

(vi) Consumer resistance.

The views of service recipients have been of interest to behaviour analysts generally (Wolf, 1978) and to parent trainers in particular for some years (McMahon and Forehand, 1983; Bernal, 1984). The effectiveness of parent training is particularly dependant on the acceptability of the service provided to the parent since it affects their willingness to follow advice and to stick to agreed management strategies (Herbert, 1995). Patterson and Forgatch (1985) have shown that therapist behaviours that were perceived as directive increased the likelihood of parental resistance and lack of co-operation while non-directive therapist behaviours such as 'facilitate' and 'support' led to a reliable decrease in client non-compliance. Webster-Stratton and Herbert (1994) have started to define the therapist behaviours that enable a collaborative relationship with clients.

Hutchings and Pope (1993) suggest that acceptability of the service to the service recipient may be a necessary but not sufficient requirement of successful outcome. They demonstrate that a measure of satisfaction is not the same as a measure of outcome even when service users reported positively on both. Similarly Kalman

(1983) has argued that although clients are more satisfied with what they perceive to be a more acceptable treatment this may not be more effective.

Conclusion.

The present situation in relation to the treatment of conduct problems can be summarised as follows:-

1. Conduct problems are the most frequently referred problems to child mental health services.
2. Treatment of these problems is most effective if they are identified and treated whilst the child is young.
3. Although parent training is the treatment approach of choice there are a number of factors associated with treatment dropout (McMahon, Forehand, Griest and Wells, 1981) and treatment failure (Kazdin, 1987). These include problem severity, socio-economic disadvantage, parental mental health difficulties, parental social isolation, poor parental ability to accurately describe their child's behaviour and the unacceptability of the treatment to the parent.

Chapter 2. Socio-economic disadvantage, social isolation and parental observation skills.

Introduction.

Chapter one identified a range of factors that are associated with poor outcome following parent training. Apart from the more obvious and problem specific ones, such as the length of time that the problem has been established and the severity of the problem, the other factors associated with poor outcomes are as yet poorly understood, either in terms of why they affect outcome or how to overcome their effects. In view of the widespread occurrence of conduct problems there is surprisingly little research into factors associated with treatment failure and most of the work that has been done is from the USA. Some of the best and most systematic work in this field comes from Wahler and colleagues (Wahler and Cormier, 1970; Wahler, 1980; Wahler and Sansbury, 1990) at the Child Behavior Institute, University of Tennessee who have spent the last twenty years investigating parent training and the factors associated with poor treatment outcome.

Socio-economic disadvantage.

Socio-economic disadvantage has long been recognised as a factor in delinquency (West and Farrington, 1973, Farrington, 1979, Farrington, 1995). Poor and disadvantaged families are more likely to experience child management problems than more advantaged families (Herbert, 1995). This fits with the general finding that a variety of mental and physical health problems differentially affect socio-economically disadvantaged people (Townsend and Davidson, 1988). Rutter and Quinton (1977) reported on a large study of child psychiatric disorder. They used six factors to calculate an index of social disadvantage which was shown to be closely associated with the occurrence of child psychiatric 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 was given a score of 1 or 0 and a score of 2+ was found to be significantly related to child psychiatric disorder (Rutter, 1976).

Not only were disadvantaged families more likely to have children with problems but, as Dumas and Wahler (1983) identified for children with conduct problems, they also did less well in treatment programmes. In assessing socio-economic disadvantage, Dumas and Wahler made use of a semi-structured interview developed by Wahler and Cormier (1970). This was scored by Dumas and Wahler to give an index of socio-economic disadvantage similar to that developed by Rutter and Quinton (1977). The six factors used by Dumas and Wahler included:

1. Family income,
2. Maternal education,
3. Marital status,
4. Family size,
5. Source of referral, self or welfare agency
6. Area of residence based on crime statistics.

Using the Rutter and Quinton (1977) scoring method of one point for each problem they found a score of 4+ to be predictive of poor treatment outcome.

Those families whom Dumas and Wahler (1983) termed multistressed did comparatively less well than self referred middle income families for whom their child's behaviour problem was the only major difficulty that they had, singly stressed families (Dumas, 1984). In theoretical terms Seligman's (1975) learned helplessness

model may be relevant to our understanding of what happens to mothers within such families. Since they have little or no control over many aspects of their lives it may be harder for them to recognise that their child's behaviour is something over which they may attain some control and they may also be distracted from their efforts to help their children by the other difficulties in their lives.

It would be too simplistic to view poverty as the cause of child behaviour problems since not all disadvantaged families have children with conduct problems and, whilst demonstrating that socio-economic disadvantage was a significant factor, Dumas and Wahler (1983) also studied social isolation and showed that both had an influence on treatment. Their measure of isolation, or insularity as they termed it, utilised the Community Interaction Checklist (CIC; Wahler, Leske and Rogers, 1979). Their results, based on data from sixty-eight mother-child pairs, showed that whilst socially advantaged and non-insular mothers were highly likely to succeed in parenting programmes, those mothers that were either socially disadvantaged or insular had only a one in two probability of treatment success and mothers who were both socially disadvantaged and insular were almost certain to fail.

In terms of the work of most mental health agencies, apart from acting as an advocate on behalf of disadvantaged families, there is little that can be done directly about socio-economic disadvantage other than to ensure that such information is catalogued and, where possible, supplied to those Government Agencies who are responsible for policy related to matters of welfare, housing, education, employment and health.

Social support and social isolation.

The importance of social support as a protective factor has been known for many years and probably first gained widespread recognition following the publication by Brown and Harris (1975) of their study of depression among South London mothers.

Brown and Harris made ratings of the quality of social relationships of the women whom they interviewed. They found that the existence of a confiding relationship was a protective factor against depression when problems arose. It was not necessary for the confiding relationship to be with a partner or spouse, it was still effective even if the relationship with a partner was not viewed as supportive.

In relation to parenting, Crockenberg (1981) found that the amount of social support mothers received when their babies were three months old was a significant predictor of the quality of mother-child attachment nine months later. The beneficial effects of social support were most marked for mothers who had difficult babies.

Wahler et al.'s (1979) measure of social support, the Community Interaction Checklist (CIC) has multiple categories and is used to prompt parents to recall all of the social contacts that they have had with people with whom they do not live during the preceding twenty-four hours. Their responses are coded according to the nature of the person with whom the contact occurs, friend, helping agency or relative and in terms of the valence of the contact from plus three, very positive, through to minus three, very negative. Wahler et al's findings showed that whilst low risk mothers reported an average of almost ten daily social contacts, high risk mothers reported less than three. By comparison with high risk mothers, low risk mothers were more likely to generate their own social contacts whereas the majority of contacts that high risk mothers had were initiated by others. More than half of the social contacts of low risk mothers were with friends and they also tended to turn to their friends for help in dealing with problems. High risk mothers were relatively friendless and much more likely to turn to formal help sources. They also reported a much higher rate of contact with helping agencies than the low risk mothers,

In terms of family support, one of the more surprising aspects of the finding of Wahler et al. (1979) was that high risk mothers had a much greater number of contacts with relatives than did low risk mothers. However they did not, for the most part, see this contact as supportive and tended to rate the valence of these contacts negatively.

Wahler (1980) used the CIC to identify a group of 18 insular mothers. He also assessed the behaviour of mothers with their children during the observation sessions using a detailed observational assessment procedure, the Standardised Observational Codes, SOC, (Wahler, House and Stambough, 1976)¹ Each time that the child was observed the CIC data were also collected from each mother. This occurred on 19 separate occasions, covering baseline, treatment and follow-up phases. Maternal use of aversive reactions to their children decreased during treatment but increased again at follow-up. What was of most interest was that there was a significant relationship between high and low friendship days and the extent of aversive maternal reactions towards their children. In other words, the extent of coercive or negative exchanges that the parent had with adults in the preceding twenty-four hours significantly influenced their behaviour towards their child during the observation session. Furthermore the improvements seen during treatment continued on high friendship days but not on low friendship days. The social interactions reported by insular mothers with adults appear similar to those characteristics of the parent child interactions that have come to be known as "coercive" (Patterson and Reid 1970: Patterson, 1982) and described earlier.

The identification of insularity or lack of social support is clearly an important factor to consider when providing help to parents of conduct disordered children. However

¹ These codes have subsequently been revised and the most recent version is SOC Revision 111-B (Cerezo, Keesler, Dunn and Wahler, 1986)

what is also of interest is how this impinges on the parenting task and why these parents fail to benefit from treatment. Wahler and Afton (1980) compared fifteen mother/child pairs who were given behavioural training for coercive problems. On the basis of their responses to the CIC, seven were classified as non-insular and eight as insular. Both groups improved in their child interactions during parent training. The non-insular mothers maintained this improvement during four months of follow-up but the gains made by insular mothers were not maintained at follow-up. Wahler and Afton identified differences in the mothers descriptions of child problems between the two groups both during and after therapy. Although baseline descriptions of their children made by non-insular mothers were global and blame oriented this changed during therapy to descriptions with little blame. Insular mothers, by contrast, showed no change in their blame oriented descriptions between baseline and treatment and although their behaviour towards their children changed during treatment this was not maintained at follow-up.

It is important to identify the key features of these attributions of blame that are so characteristic of insular mothers and on the basis of Wahler and Afton's (1980) findings these would appear to be that they are global and sparse in detail. This has prompted a number of careful studies by Wahler and colleagues (Wahler and Dumas, 1984; Wahler and Hann, 1984; Wahler and Dumas, 1989; Wahler and Sansbury, 1990) in which they have analysed the processes involved in parental attending and observation skills in relation to their child. It is on these that the next section focuses.

Parental observation and attending skills.

Parenting young children involves monitoring their behaviour on an almost continuous basis and dealing with behavioural disturbances on average three to four times every hour. Furthermore mothers generally seek to control their children by commanding or disapproving once every three to four minutes (Johnson, Wahl,

Martin and Johansson, 1973). Clinical studies show that children with behavioural difficulties get a higher level of parental attention, both positive and negative, than their better behaved counterparts, however, their parents are more inconsistent and therefore more likely to reinforce deviant behaviour and punish pro-social behaviour (Wahl, Johnson, Johansson and Martin, 1974).

It seems likely that the explanation for this inconsistency is the previously mentioned finding that most mothers of children with behavioural problems are poor at observation, tending to make global, blame-oriented judgements which are rather sparse in detail (Wahler and Afton, 1980). Furthermore, whilst some mothers change their observational style when given parent training, those who fail on such programmes do not change their reports about their children. As Wahler and Hann (1984) demonstrated, mothers who maintained treatment improvements offered more detailed descriptions with little blame during training compared to their baseline descriptions, whereas mothers who showed no change in their blame oriented descriptions failed to maintain treatment gains.

In an attempt to identify influences on parental descriptions of child behaviour Wahler and Hann (1984) investigated the relation between maternal observation skills and other stressors in the mother's life. Their intervention specifically focused on an attempt to change mothers' verbal reports of their children's behaviour. All mothers had conduct problem children and were classified as singly stressed (their child's problem being their main difficulty) or multiply stressed (having other problems in addition to the child related difficulties). Mothers' reports were measured through conversations between mothers and therapists and between mothers, their friends and their relatives. Interchanges were classified as either global or specific. A specific description had to contain at least one concrete action phrase, e.g.. 'he hit me' and this had to be phrased as a single happening as opposed to 'always' or 'usually'. During the

intervention phase therapists attempted to shape the speaker's expanded use of description with a range of responses aimed at prompting missing contextual information

Wahler and Hann (1984) found that multistressed mothers offered less complex reports about their problem children than did singly stressed mothers and also that the friends and kinsfolk of multistressed mothers virtually never sought more information, they tended to describe a similar problem of their own. This meant that multistressed mothers did not have problem solving discussions. Wahler and Dumas (1989) developed this work to try to see how dysfunctional mother-child interactions and environmental stressors were associated. They argue that poor parenting is not necessarily due to an absence of parenting skills but may be a stress induced deficiency in maternal attending.

Whilst simplistic behavioural analyses had viewed the problem purely as a parenting deficit, it has become clear that any explanation has to account for why most mothers change their behaviour during treatment but that some do not maintain this at follow-up. Wahler and Dumas (1989) suggest that this is because the behaviour of some of the mothers is under the control of contingencies imposed by the treatment programme and not related to their child's behaviour per se. In other words their behaviour is influenced not only by the immediate discriminative stimuli that they exchange with their child but also by the broader context within which they function.

Training in child management is insufficient to ensure long term changes in parent-child interactions for all mothers because of the failure of some mothers to monitor the other environmental events that repeatedly set them up to act towards their children in ways likely to support their deviance. Wahler and Dumas (1989) suggest that there are two classes of events, stimulus events, the immediate discriminative

stimuli provided by the children, such as temper tantrums or non-compliance, and setting events, the many contingencies that involve parents in interactions with their environment such as the parents history of interaction with the child, the quality of the marital relationship or the pattern of daily community contacts. It is these other problems or stresses, the setting events, that distract the mother from paying attention to her child thereby resulting in a stress related attending problem, the monitoring deficit that has been so clearly identified.

Although stress has only relatively recently become a topic of interest among researchers in the field of parent training (Webster-Stratton, 1990b) there is a vast literature on the effects of stress and it is not difficult to imagine that the high attentional demands on parents would easily be disrupted by stress. Exposure to stress is associated with a narrowing of attention (Baddeley, 1972) and people under stress often misjudge probable outcomes or overlook the long term consequences of their decisions (Jarvis 1982). Mothers need both management skills and the ability to discriminate when to use them in order to fulfil child rearing responsibilities. Stress, caused by the child or other events, may lead to a narrowing of the range of environmental cues to which the parent pays attention, resulting in inaccurate description of both the child's behaviour and that of others and indiscriminate responding towards both the child and others.

Taken together, the many studies by Wahler and colleagues (Wahler and Dumas, 1984; Wahler and Hann, 1984; Wahler and Dumas, 1989; Wahler and Sansbury, 1990) describe a troubled, multi-stressed mother who is focused on deviant child behaviour and yet at the same time inclined to overlook the details of this behaviour. Such mothers are quick to classify their child's behaviour as deviant and to respond aversively to it. They have trait-like or relatively inflexible parenting styles and their observational descriptions are global and lacking in detail. Their children's responses,

whether deviant or not, have only a limited influence on what they say and do. By contrast, mothers who attend to the complex range of stimuli present during child care are characterised by state-like patterns of attending. They make flexible responses to the demands of the situation. Although the causal aspects of this are unclear, the maintenance of the problem seems to lie with the mother's observational style. Global observational style is pronounced in troubled mothers who describe their interchanges in a manner that prohibits detailed inspection of what is taking place.

Furthermore not only is the multistressed mother poor at developing a relationship with her child and at dealing with her child's problem behaviour, she also fails to respond to treatment programmes and probably also has relationship difficulties in other aspects of her life. Such a mother needs to develop her observational skills in relation to what Wahler (1995) has called her broader ecosystem, enabling her to identify the broader setting events surrounding her as well as becoming better at observing her child. In any event it is clear that observation and attending skills are a vital part of effective parenting and need to be assessed in any parent training programme.

Although to date no one, as far as the author is aware, has tried to relate the interpersonal observational skills of conduct problem children to those of their parents it is also distressing, but perhaps not surprising, to note that a number of studies of such children have shown that they are also bad at interpreting cues from other people (Dodge, Murphy and Buchsbaum, 1984). In particular they appear to distort social cues in peer interactions and to impute hostile intent to neutral situations (Mitich and Dodge, 1984). Furthermore, youngsters with conduct problems are also poor at effective problem solving (Slaby and Guerra, 1988).

One of the methods used to identify maternal observational skills was devised by Wahler and Sansbury (1990) who compared the ratings of both professional observers and mothers of conduct problem children of a twenty minute video tape of the mother's own child. The mothers and professionals differed markedly in their coding tactics and this was particularly the case with problem behaviour which mothers appeared to significantly undercode. Mothers' descriptions of problem behaviour were also global, e.g.. 'he was being mean' and their explanations were personalised, e.g.. 'he didn't seem to like me.' By contrast, the coding performance of the professionals was equally consistent for the two categories of child behaviour. Unfortunately both this and other methods, such as recording and analysing parental interview data (Wahler and Hann, 1984), that are used to assess parental monitoring skills are, as Sansbury and Wahler (1992) point out, time consuming and difficult:

"Studies of maternal monitoring, as we have defined the term, have rarely been conducted- probably because the measurement process is difficult and laborious."

Sansbury and Wahler (1992) p 576. Since maternal monitoring, despite its central role in relation to outcome, is so seldom investigated in research studies it is probably not surprising that it is not measured at all in normal clinical practice.

One of the aims of the present study was therefore to investigate the possibility of developing a brief measure of parental description of their child which might be of use in parent training studies and it was in this connection the literature on autobiographical memory was examined. This literature is reviewed in the next chapter.

Chapter Three. Autobiographical Memory.

Introduction.

Autobiographical memory, that is a person's personal memory for events and other information about themselves, their personal history memory, is a topic of increasing interest amongst both academic memory researchers (Neisser, 1982) and researchers interested in clinical populations and seeking ways of providing better therapeutic help to them (Williams and Dritschel, 1988).

In terms of clinical populations, autobiographical memory has been investigated in amnesic and brain damaged patients, elderly people and people with a variety of emotional difficulties and their performances compared with those of normal people (Williams and Dritschel, 1988, Dritschel, Williams, Baddeley and Nimmo-Smith, 1992). The differences found, particularly with depressed and deliberate self harm/overdose patients, have attracted considerable attention because of the potential therapeutic implications arising both from improved understanding of depression itself and because such understanding suggests new treatment approaches that might be of therapeutic value (Williams, 1996).

Although specific and generic memory are the terms most frequently used in the autobiographical literature, other terms are also used. Specific memories are sometimes referred to as episodic memories, memories of an episode or event as differentiated from semantic memories, that is information that has been repeatedly experienced, such as one's name (Dritschel et al., 1992). Generic memories are also referred to as categorical memories when they refer to a memory response which gives a summary of many events, or a 'category' of such events (Williams and Dritschel, 1992).

The measurement of autobiographical memory.

The most frequently used measure is the Autobiographical Memory Test (AMT) (Williams and Ditschel, 1988) which involves giving the person words such as happy, safe, angry, sorry, etc. to cue their memories for specific events. The subject is asked to recall a specific event of which the word reminds them and the need for their response to describe a specific event is emphasised. There is now a sizeable body of literature making use of this procedure which is quick, straightforward and presents no scoring difficulties. Williams and Ditschel report inter-rater reliability for the general/specific distinction to be between .87 - .93. The present study includes a version of the AMT in which parents are asked to recall events in their children's lives and further details of this procedures are described in chapter five.

Although most of the recently published work on autobiographical memory has made use of the AMT, probably because of its simplicity of use, standardised presentation and high levels of agreement amongst scorers, there have also been attempts to measure autobiographical memory in other ways. Ditschel et al. (1992) used normal subjects to investigate their recall of both episodic personal information (single events), semantic personal information (such as the name of former friends) and non-personal information (such as the names of former Prime Ministers). Information on all three types of memory was gathered in response to questions covering four time periods from the past. Ditschel et al. found that time eroded all types of memory but despite this each of the three memory classes investigated was shown to be independent of the other two and this held good across the time span data.

Other measures have been developed that involve rating the content of clinical interviews for specificity. Ditschel, Burnside, Williams and Shapiro (submitted) used Ditschel's, 1991) method of identifying autobiographical memory in natural discourse. This involved analysing eight, four minute, sections of clinical interviews

which were independently rated for specificity of descriptions. Similarly, Truax and Carkhuff (1967) undertook independent ratings of specificity. They rated the content of verbal interactions in group psychotherapy and argue that specificity is an important variable to consider in relation to therapy outcome.

The research findings

Autobiographical memory is an aspect of memory that requires study in its own right since there is evidence that autobiographical memory for specific events is different from other memory processes. Ditschel et al. (1992) found that questions asking for personal event recall in one time period were most closely related to personal event recall from other time periods and the same finding held true across time periods for personal information recall and for general information recall. (This finding held good across the different time spans from which the data were collected).

In terms of clinical groups the finding that depressed and deliberate self harm/overdose patients are over-general in their memories of both positive and negative events has been consistently reported (Williams and Broadbent, 1986; Williams and Ditschel, 1988; Williams and Scott, 1988). These clinical groups are significantly more likely to respond with generic statements, such as "going to the pub" than controls who are more likely to make a specific response like "when I went to the pub last Saturday with Susan" this latter being the type of response specifically requested in the instructions. Furthermore in a study involving overdose patients, additional cueing of recall by suggesting an activity, such as going for a walk, made no difference to this process (Williams and Ditschel, 1988).

A number of studies have shown that specificity of recall predicts therapy outcome. Truax and Carkhuff (1967) found that independent ratings of specificity for patients participating in group psychotherapy were correlated with patients' scores on a scale

measuring patients self exploration and insight. They suggest that inability to be specific in discussing events and feelings is unhelpful to the therapy process. In similar vein, Brittlebank, Scott, Williams and Ferrier (1993) demonstrated that overgeneral recall predicted outcome at three and seven months follow-up for a sample of hospitalised depressed patients. Patients with overgeneral recall were more likely to be depressed at these follow-up points. Dritschel et al. (submitted) also found that patients that produced categoric memories rather than specific ones had poorer treatment outcomes. In their study patients received two different eight week therapy blocks in random order. Decreases in the production of categoric memory occurred over treatment and were positively associated with reductions in patients' scores on the Beck Depression Inventory.

The relationship between autobiographical memory and problem solving

Evans et al. (1992) studied autobiographical memory and problem solving in matched groups of parasuicide and surgical hospital patients using the Means-Ends Problem Solving Task (Platt, Spivack and Bloom, 1975). The parasuicide group produced significantly more overgeneral memories and were also significantly poorer at problem solving than the control group, they produced both less solutions and poorer quality ones and poor problem solving and overgeneral memory were correlated.

The association between autobiographical memory and treatment outcome is of interest to many researchers in this field. Williams (1992) suggests a number of reasons why overgeneral memory could be expected to have a negative effect on problem solving which in turn could affect therapy outcome. He suggest that it could inhibit re-interpretation and re-schematization of the past, make diary keeping difficult and provide an inadequate data for effective problem solving.

The durability of autobiographical memory style

Over-general recall appears to be a stable tendency. Evidence for this comes from a number of studies of depressed and suicidal patients. Williams and Dritschel, (1988) found that overgeneral memory amongst people who were hospitalised following a suicide attempt was not due to the influence of transient mood levels and their subjects still responded in the same way when tested between three and fourteen months after their suicidal crisis.

Brittlebank et al. (1993) confirmed the finding that depressed people have overgeneral recall and also found that overgeneral recall was still present at follow-up, even in those patients who had improved in their mood. On the basis of these findings Williams (1992) has argued that overgeneral recall appears to be a trait-like phenomenon and not state dependent.

The theoretical explanation of autobiographical memory processes

Understanding any memory process requires an explanation of both causes and mechanisms. Causes are factors, internal or external to the person, that contribute to the effects and mechanisms refer to the cognitive processes that account for the encoding, storing and retrieval of the information and are acted on by the "causes" to produce the effect.

Dritschel et al. (1992) have demonstrated that the recall of episodic personal information is a specific memory phenomenon in its own right, separate from personal and semantic retrieval. They interpret their findings in terms of different retrieval processes needed for these different sets of information. On the basis of this and other research findings previously discussed, Williams (1996) suggests that the overgeneral recall difficulties experienced by depressed and suicidal patients arise primarily from memory retrieval problems. In considering ways in which retrieval

might be affected, Williams draws on the work of Norman and Bobrow (1979) who suggest that both encoding and retrieving involve being able to construct suitable intermediate descriptions that allow one access to memories. This memory for specific events depends on an intermediate step of categoric memory production. Williams and Dritschel (1988) believe that a specific memory is encoded by only a limited amount of the possible information. This incomplete list of features or properties is a partial image used to encode or retrieve any information and provides an initial entry point for the retrieval of the memory. This description acts as an index for the specific memory and these partial or intermediate levels of descriptions are used for both encoding and recall.

Shallice (1988) suggests that accessing event memories may require higher attentional demands and Dritschel et al. (submitted) suggest that emotionally disturbed people may be more preoccupied with concerns from recent stressful events. Depressed and suicidal patients do not have a problem in generating an intermediate description or context but they cannot then use these cues to get to specific memories. The result is that emotionally disturbed patients get stuck at the intermediate description stage of the retrieval process.

Problem solving difficulties come about because the same mechanism underlies both the ability to retrieve effective mnemonic cues for specific recall of past events and the generating of mnemonic cues for future problem solution (Evans et al., 1992). Poor problem solvers are attempting to use an inadequate data-base, with only categoric memories, from which to generate specific solutions.

Despite Wahler and Dumas's (1984) emphasis on encoding and Williams (1996) emphasis on retrieval there is much in common between the two sets of findings since they both find the phenomenon that they are measuring sufficiently enduring to

describe it as trait-like pattern of responding that is unrelated to immediate environmental cues (Wahler, 1995). Indeed it may not be important, or necessary, to decide between an encoding or retrieval theory since all encoding involves some retrieval (how to categorise and store the events) and all retrieval involves encoding (which environmental stimuli are relevant to help cue memory). Norman and Bobrow's (1979) Descriptions Theory concerns both encoding and retrieval. If they are correct it is likely that any individual who has deficits in one aspect of memory will have deficits in the other. One testable hypothesis which can be derived from this position is that patients who respond more slowly to therapy of any sort would be those who have most difficulty in being specific across the range of their autobiographical memory and secondly that improvement in the problem would also be associated with better ability to retrieve specific memories (Williams, 1992).

The research question of interest in relation to autobiographical memory and parental observation skills is to what extent the two lines of research are measuring the same phenomenon, since, if they are, this would suggest that a common process underlies them both. Investigation of the relationship between autobiographical memory and parental observational skills was not something that could be addressed within the context of the present study but it was possible to investigate whether the parental autobiographical memory for their child predicted treatment outcome in the way that Wahler and colleagues (Wahler and Afton, 1980; Wahler and Dumas, 1984; Wahler and Hann, 1984; Wahler and Dumas, 1989; Wahler and Sansbury, 1990) have repeatedly found parental ability to describe their child's behaviour to do.

Chapter 4. Description of the study and statement of hypotheses.

The study

This was a naturalistic study, examining a continuous sample of pre-school children referred to a Child and Family Mental Health Service and the outcome of the interventions typically provided by the staff from that agency. It was prompted by discussion of the Strategic Intent and Direction for the NHS in Wales (Welsh Health Planning Forum, 1989) which spelled out the need for health services to be a) health gain focused, b) people centred and c) resource effective. Health gain was assessed by a comparison of before and after measures of clinical symptoms. The extent to which the service was people centred was assessed by parental reports on their satisfaction with the service received. Resource effectiveness was evaluated by assessment of outcome against measures known to influence therapy effectiveness with this client group. The study used a repeated measures outcome design.

The professional and administrative staff of the Agency within which the study took place were keen to obtain feedback about the service which they provided to pre-school children and their families. It was their view that, in line with national referral patterns, the most frequent referrals within this age range were of conduct or behaviour management problems and, despite the different specialisms and theoretical orientations among the staff, the treatment offered by all of them to this client group was primarily behaviourally based advice to the parents. The components of these treatments are discussed in more detail in chapter five. In the light of the preceding literature demonstrating the need for early intervention and highlighting issues associated with treatment effectiveness the study focused on referrals of pre-school children. Appendix I sets out the reasons for the selection of this group.

The study involved asking parents of referred children to participate in a one hour research interview at the time of the child's referral. Following this the child and family were offered treatment. Six months later each participant was asked to undertake a second research interview in which most of the original measures were repeated and in addition satisfaction and outcome measures were collected. The total data collection period spanned one year. The data were collected between July 1994 and June 1995.

The study can best be understood by reference to the following stages which are covered in detail in chapter five.

1. Identification of pre-school children referred to the Agency.
2. Screening referrals against inclusion criteria.
3. Letter to parents of identified children asking them to consent to the research interview.
4. Baseline research interviews.
5. Therapeutic intervention from the child mental health agency .
6. Follow-up research interview.

Data collected included a variety of measures concerning the children, their families and their circumstances. Amongst these were measures of the child's problems, parental mental health, parental social support network, parental autobiographical memory for their child, information on the child's health and developmental, measures of socio-economic status, parental report on treatment outcome and satisfaction with the service provided and a therapist rating of treatment outcome.

The hypotheses investigated in the present study.

A number of hypotheses were identified in the light of the previously reviewed literature and these are grouped into three categories:

A) those concerned with the characteristics of the children referred to the agency and of their parents,

B) those concerned with whether therapeutic change occurred, and

C) those concerned with the possible predictive power of any of the measures taken in relation to treatment outcome.

A. Four hypotheses concerned the characteristics of the referred children and their families.

Hypothesis 1. The majority of pre-school referrals to the Child and Family Guidance Service would be children with conduct difficulties.

Hypothesis 2. More than 50% of the referred children would have a parent with a significant mental health problem.

Hypothesis 3. The parents of referred children would be poorer at describing specific instances of their children's behaviour than parents of children of a similar age who had not been referred to a similar agency.

Hypothesis 4. There will be a higher level of socio-economic disadvantage among the referred children and their families than among the population as a whole.

B. Two hypotheses concerned anticipated improvements for both children and their parents as a result of treatment

Hypothesis 5. The intervention would lead to a reduction in the child's difficulties.

Hypothesis 6. The mental health status of those parents whose children improve will also improve.

C. Eight hypotheses concerned factors which might be expected to influence outcome.

Hypothesis 7. Outcome would be predicted by the severity of the child's problem at the time of referral.

Hypothesis 8. Outcome would be influenced by the extent of the parents social support network (parental insularity).

Hypothesis 9. Outcome would be influenced by the extent of family socio-economic disadvantage.

Hypothesis 10. Children whose parents were good at generating specific examples of their child's behaviour at the time of referral would be more likely to benefit from therapy than those whose parents did not have this ability.

Hypothesis 11. Parents who demonstrated poor ability to generate specific examples of their child's behaviour at the time of referral and whose children showed an improvement are likely to demonstrate improved skills in the specific recall of their child's behaviour at follow-up.

Hypothesis 12. Treatment outcome will be influenced by the severity of any parental mental health problem at the time of referral.

Hypothesis 13. Parental satisfaction with the service provided is a necessary condition for treatment gain.

Hypothesis 14. Parental satisfaction and treatment outcome will not be correlated.

Chapter 5. Method - Procedures, Measures, Sample Description

Procedures

1. Identification of pre-school children referred to the agency

The sample used in this study was drawn from children aged at least two but under five years of age who were referred to a Child and Family Mental Health Agency. The sample was a continuous one, considering all referrals received during a six month period (July - December 1994). On the basis of analysis of the referral pattern prior to the start of the study it was calculated that there would be approximately 40-50 referrals during the six month period available for initial data collection. Forty-two referrals of children within this age range were received by the agency during the designated period.

2. Screening referrals against inclusion criteria.

The author screened all referrals against the inclusion criteria. The following categories of referrals were excluded;-

- i. children who were referred by their parents (self-referrals)
- ii. children who had previously been seen by someone from the service and had been re-referred,
- iii. referrals not accepted by the agency
- iv. referrals accepted for therapy by the author.

Of the forty-two referrals received, thirty met the research criterion. An analysis of the forty-two referrals and the reasons for the exclusion of twelve from the study are included in appendix I with the summary of reasons for selecting this particular sample.

3. Letter to parents of identified children.

Parents of thirty children received a letter acknowledging the referral of their child to the agency and inviting them to participate in the initial research interview. The letter explained that an evaluation of the service was being undertaken. The letter enclosed a description of the study and asked the parent/s to consent to being interviewed by the researcher. A copy of the letter, study description and consent form is included in appendix II. At the same time the referrer was informed of the invitation to the child's parent/s to participate in the research interviews, appendix III.

Where it seemed appropriate from the referral information, i. e. where it was apparent that there was a father present in the home, the initial letter was addressed to both parents however all of the consent forms were returned by the children's natural mothers. The initial letter offered a home visit but also contained the option to be seen in a clinic. No one requested a clinic based appointment and all children and their families were seen in their own homes.

Twenty-six parents consented to the research interview. This represented a response rate of 87% of the referrals meeting research criteria which was a very high rate for response to a letter (Moser and Kalton, 1971). The arrival of the letter shortly after the receipt by the agency of the referral may have contributed to this high response rate and have been an indication of parental concern about their child. All four non-respondents also declined the offer of treatment so the research sample included all children whose families subsequently received a clinical service. The only data available on the four non-participants was that contained in the initial referral letters. Further details of these four children are included in appendix IV.

The initial letter and associated forms were all bilingual as the study was undertaken in an area where the majority of the population were first language Welsh speakers.

Although the author is a Welsh speaker, both the research interviews and questionnaires were completed in English and this presented no problem since all of the mothers were fluent English speakers. Use of standardised measures would have presented a greater problem if the research had involved the participation of the children as few questionnaires have been standardised in Welsh. Many Welsh speaking children only acquire fluency in English gradually throughout their childhood and some are monolingual Welsh speakers until starting school (Lyon, in press).

4. Baseline Research Interviews

The initial research interview commenced with a brief explanation of the study, reiterating the confidentiality and anonymity guarantees. This was followed by the semi-structured interview, the Child Health and Development Questionnaire, Appendix V. This included a check on the referral information regarding the date of birth of the child and asked about problems during the pregnancy, problems at the time of the birth, any serious health problems and any current health problems which the child had. Parents were asked to describe the child's development so far and to give a verbal description of the current problems. The questionnaire also covered details of who else was resident in the household and the employment and income status of the family.

During the initial interview the author also asked who, if anyone, took prime responsibility for the care of the child. For 25 of the 26 children this was clearly a responsibility undertaken primarily by the mother. Only one couple described shared care and this father was the only one to attend a research interview. However he clearly viewed the problem as his wife's and, although a complete data set was collected from him, this was subsequently excluded from the analysis. The reasons for the exclusion of his data are included in appendix VI.

5. Details of the therapeutic interventions received by the children and families.

Treatment was offered by a member of the agency staff and all children and families who took up the option of treatment were seen by either a clinical child psychologist (56% of the children) or a specialist mental health social worker (44% of the children). In total seven therapists worked with the children and families that were seen. Apart from the identified need to focus on early prevention with children with conduct problems, this was also the client group for whom therapists in the agency were in most agreement regarding the most appropriate form of therapy and, despite their differences in terms of theoretical orientations and disciplines, their descriptions of their work with these families suggested a common approach to these problems. This is not surprising given the extensive literature demonstrating that behavioural parent training is the treatment of choice for such children and their families (Herbert, 1981; Kazdin, 1993; Webster-Stratton and Herbert, 1994). Whilst there were differing emphases among the staff on matters such as record keeping, behavioural rehearsal, etc. and differing interpretations of what constituted behavioural management advice it was felt that there were sufficient common elements in their approaches to justify the view that broadly speaking these children had similar treatments.

In order to ascertain that there was a common basis to their practice, the therapists who worked with the referred children completed a questionnaire identifying those components of behavioural family interventions that they used regularly in their work with such families. The questionnaire asked ten questions and replies were received from all seven therapist who were involved in the treatment of the children who were the subjects of this study. The mean use of the ten behavioural treatment components included in the questionnaire was 8.1 with a range from 7 to 10. All therapists reported use of five items, asking parents to keep records, providing star charts and record sheets, giving direct feedback to parents, discussing contingency management

and giving specific advice on the management of problem behaviour. The questionnaire and a table of responses is included in appendix VII.

6. Follow-up Research Interview

After 6 months, the parents were again contacted by letter and invited to participate in a follow-up interview. This invitation was sent to all of the mothers who had completed the initial interview even though the author was aware that only sixteen of the twenty-six referred children had received treatment. Two different follow-up letters were sent, one to those mothers whose children had been seen for treatment and one to those mothers who had declined to take up the treatment option, these two letters are included in appendix VIII. All twenty-six mothers completed the research follow-up interview in which they were again asked to complete the majority of the baseline measures and those who had received a service also completed an outcome and satisfaction questionnaire. An assessment of outcome was also made by the therapist.

The measures

(a) the standardised instruments.

1. The Eyberg Child Behaviour Inventory (ECBI), (Eyberg, 1980),

The ECBI is based on recorded data compiled over two years and is a list of the most typical problems reported by parents of conduct problem children. It asks the parent to rate their child's behaviour against thirty-five possible problems. For each problem the parent rates how often the behaviour occurs on a scale from one to seven and then separately whether this is a problem for the parent. The frequency scores are summed into an intensity measure and the number of problems is summed into a total problem score.

The ECBI was selected because it is easy to complete, is a well used parental report measure and is designed for use with children and young people between the ages of two and sixteen. It is, however, mostly used with children at the younger end of this age range. An intensity score of 127 and over or a problem score of 11 and over is an indication of a conduct problem child (Eyberg and Ross, 1978). The scale has been shown to discriminate well between conduct disordered and non-disordered children and to be a sensitive measure of treatment gain (Eyberg and Ross, 1978, Eyberg and Robinson, 1982). It has been used by many researchers in this field (Eyberg and Boggs, 1989; Spacarrelli, Cotler and Penman, 1992).

2. The General Health Questionnaire, thirty item version (GHQ 30).

The GHQ (Goldberg, 1972) was designed as a self administered screening test aimed at detecting mental health problems among respondents in community settings and non-psychiatric clinic settings (Goldberg and Huxley, 1980). The 30 item version has been most widely validated (Goldberg and Williams, 1988). The respondent is asked to respond to the thirty items by rating how their health has been in the last few weeks on a four point scale whose items include such statements as "better than usual", "same as usual", etc.. The GHQ was selected because, whilst there has been a considerable amount of work suggesting a link between maternal depression and childhood conduct disorder, other work has looked at mental health and distress more broadly and the use of both the GHQ and a measure of depression allowed exploration of these two issues and the relationship between them. The GHQ 30 is easy to complete and is a well standardised measure (Goldberg, 1978; Goldberg and Williams, 1988).

3. The Beck Depression Inventory.

The Beck Depression Inventory (BDI), (Beck, Ward, Mendelson, Mock and Erbaugh, 1961; Beck, 1972; Beck, Steer and Garbin, 1988) was selected because it is easy to

complete and is well standardised measure. It contains 21 four statement items concerning categories of symptoms and attitudes describing behavioural manifestations of depression. Statements are ranked from 0 to 3 and the respondent is asked to select the one which best describes the way that they have been feeling during the past week. The BDI correlates significantly with clinicians' ratings of depression and with objective behavioural measures of depression. Split half reliability tests have produced a reliability coefficient of .93. The BDI 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 and Spitzer, 1991).

b) The measures developed for the study.

4. The Child Health and Development Questionnaire.

This questionnaire provided the basis of the semi-structured interview which introduced the initial research assessment. This was based on Herbert (1993). It provided a check on the referral information and asked about the mother's pregnancy, the delivery, the child's developmental history and any health problems in the past or at the time. It also included questions about the other residents in the child's home, whether it was a single or two parent home and the family's means of financial support. The primary purpose of this questionnaire was to obtain information for sample description purposes and it also generated the information that enabled the calculation of the Index of Socio-economic Disadvantage (SED5). A copy of this questionnaire is included in Appendix V.

As previously discussed socio-economic disadvantage has been shown to be predictive of treatment outcome and having reviewed the criteria used by Rutter and Quinton (1977) and those of Dumas and Wahler (1983) the following five factors were used in the present study:

1. Employment status of primary provider, welfare benefit or employed

2. Marital status, single parent or married/cohabiting,
3. Number of children,
4. Housing circumstances, poor quality privately rented/overcrowded
5. Area of residence, high/low crime.

Each of the five items was given a 1 or 0 score and this was summed into an Index of Socio-economic Disadvantage (SED5). Scoring criteria are included in Appendix V.

This list was based more closely on the Dumas and Wahler (1983) factors than those of Rutter and Quinton (1977), since Dumas and Wahler's index was predictive of treatment outcome whereas Rutter and Quinton's was concerned with factors associated with the occurrence of child psychiatric disorders. Due to an oversight data on maternal educational status was not collected.

5. The Community Contacts Questionnaire (CCQ).

Much of the work on the relation between social isolation and conduct problems has made use of the Community Interaction Checklist (CIC, Wahler et al., 1979: Wahler, 1980, appendix IX). The CIC asks people to report on all the contacts that they have had with people with whom they do not live during the preceding twenty-four hours. The CIC records each contact and whether the person was a friend, relative or helping agency. It also asks whether the contact was initiated by the respondent or the other person. Details of where and for how long the contact took place and whether it was face to face or by phone are recorded. The nature of the interaction is identified in terms of the topics discussed, which are prompted from a list of ten items including problems with the children, finances, borrowing things, shared activities, etc.. Each contact is rated by the respondent on a scale from plus three to minus three in terms of how good or bad the contact was (the interaction valence).

The CIC is a detailed instrument and in view of its importance as a predictor variable in relation to treatment outcome for conduct problem children, the initial intention had been to use it in the present study. It was therefore piloted locally, by the author, on two families. It became immediately clear that it was not suitable in its existing form because in the studies reported by Wahler and colleagues (Wahler et al., 1979; Wahler, 1980; Wahler and Afton, 1980; Dumas and Wahler, 1983) CIC data was collected on a number of occasions, generally every time a baseline observation of the parent and child occurred. In some studies as many as nineteen data points were available for each respondent.

It was fortunate that the limitations of this instrument for a study where there was only one baseline data collection point became so rapidly apparent. The first person on whom it was completed had had the annual visit from her husband's family on the previous day and, since this was clearly not a typical day, the author then tried to get the respondent to recall her contacts on the preceding Friday, the interview was taking place on a Monday, it was felt that, like the Sunday, the Saturday might not be entirely typical. This was not successful and the respondent was uncertain about whom they had seen and what they had done that day. Clearly the accuracy of specific recall of all contacts in a twenty-four hour period could be expected to decline with the passage of time since the event. Furthermore another limitation in the CIC was identified, the interviewee had part-time employment and the codings of types of contacts did not include a category that was suitable for use in respect of work colleagues. Difficulties associated with how typical the preceding twenty-four hours had been were also encountered in the other pilot interview and it was decided to make use of the dimensions of social contact included in the CIC but to change the format to that of a rating scale which asked the respondent to answer in terms of their typical pattern of social contacts.

This questionnaire was named the Community Contacts Questionnaire (CCQ) and is included in Appendix X. The CCQ has four sections for recording information about contacts with relatives, friends, welfare agencies/helping professionals and other people. For each of these categories the respondent is asked to rate how often they have contact, from daily to less than six monthly, to note the topics regularly discussed with this group of people and rate the quality of their contacts with them on a six point scale concerned with how supportive these relationships are. They also rate whether this category of people are supportive or critical of their lifestyle in general and of their management of their children in particular. Finally, the respondent is asked to give a global rating of amount and quality of their social contacts generally²

The CCQ was scored for the presence or absence of insularity in a way that, as closely as possible, resembled the Dumas and Wahler (1983) criteria that a mother had less than one third of her social contact with friends and at least one third of her social contacts were rated as neutral or negative in valence. In addition an insularity score was calculated on the basis of the quality of contact with friends and relations. Details of the scoring criteria are included in appendix X.

The CCQ was used only at the initial interview, due to the inclusion of another measure, the outcome and satisfaction questionnaire, in the follow-up interview. This meant that the opportunity for assessment of its reliability and validity was limited. Nevertheless an attempt was made to assess its reliability and this is reported in chapter 6, section 5 and in greater detail in appendix X where the issue of its validity

² Due to the late decision to develop an alternative instrument to the CIC, the CCQ was used without prior piloting. Despite the problems associated with the use of an unvalidated instrument it was felt that, since the CIC was predictive of treatment outcome for this client group, it was better to develop a version of it that could be used for one-off interviews than to consider using other measures of social isolation that have not been used to the same extent in relation to the difficulties of parenting children with conduct problems. With hindsight it is clear that the development of a new instrument, such as the CIC, required a study in its own right.

is also considered. Nevertheless, the main criterion for validity was taken as being the extent to which the new measure performed, as the Wahler Insularity Index does, in terms of predicting outcome, in other words, would it do the same job?

6. The Parent Child Autobiographical Memory Test.

As discussed in chapters two and three, there are enormous difficulties in obtaining data on parental attending and observation skills and following a review of the autobiographical memory literature, it was decided to develop an autobiographical memory measure which assessed parental recall of incidents in the life of their child. This was called the Parent-Child Autobiographical Memory Test (PCAMT) and was devised by the author and based on the cue-word AMT of Williams and Broadbent (1986) both in terms of its construction and its administration. The PCAMT asks parents to recall specific events in the life of their child, in response to negative and positive prompt words.

The PCAMT consists of ten words taken from Brittlebank et al. (1993), five of which are positive in emotionality (pleasant) and five negative in emotionality (unpleasant). These words were balanced both for the overall emotionality and for word frequency, see table 5.1. for the word list with emotionality and word frequency ratings.

Table 5.1. List of ten words used in the PCAMT with their frequency and emotionality ratings.

positive words	frequency	emotionality	negative words	frequency	emotionality
excited	21	5.87	helpless	21	5.49
calm	14	4.61	upset	16	5.75
pleased	30	4.66	hurt	31	5.47
proud	52	4.98	bad	52	4.58
peaceful	22	4.71	guilty	24	5.85
MEAN	27.8	4.97		28.8	5.43

The instructions were quite specific and administered in a standardised way:

"I am interested in your memory for events that happened in (name of child)'s life. I am going to read you some words. For each word, I want you to think of an event that happened to (child) which the word reminds you of. The event could have happened recently (yesterday, last week) or when (child) was 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 "(child) is always good at bedtime" because that does not mention a specific event. But it would be O. K. to say "(child) was good when I put him to bed last night" because that is a specific event.

Let us try some words for practice: happy, bold, enjoy. "

The time allowed for a response was 30 seconds which could include prompts in response to generic replies "*Can you think of a particular time?*"

A copy of the response sheet, administration instructions and scoring sheet is included in appendix XI.

Responses to the ten words were recorded verbatim and, in any case of uncertainty, a further response was prompted. Scoring involved a count of the number of words for which the first response within thirty seconds was rated as specific.

The inter-rater reliability for the coding of maternal responses as specific and without prompt was assessed. The responses were scored by an independent blind rater and then compared with the scores given by the person who had administered the test. This yielded a Kappa of .87. Where there were differences in scoring, the scores used were those marked by the interviewer who was present at the time the responses were made and recorded the responses longhand.

7. The Parental Satisfaction and Outcome Questionnaire (PSOQ).

The acceptability and usefulness of the service was assessed using a questionnaire, Appendix XII, which provided information about the attenders views on outcome and their satisfaction with the group as two separate dimensions. This was based on a previously developed questionnaire (Hutchings and Pope, 1993) and asked a number of specific questions about therapy outcome as well as about satisfaction with the service received.

8. Research Follow-up Interview.

As with the initial interview, the follow-up interview was conducted using a semi-structured interview format based on the Research Follow-up Interview Guide,

Appendix XIII. This asked for information on whether a service had been received from the Agency, what events of significance had occurred since the initial interview and about the current situation in relation to the referral problem.

9. Therapist Outcome Questionnaire.

The therapist who treated the child completed a questionnaire (appendix XIV) rating the success of the intervention so far and giving a measure of treatment dose.

10. The nature of the problem was also coded on the basis of the primary problem described in the initial referrer letter, this letter was also coded for type of referrer i.e. profession of the person making the referral.

The following lists show which of these measures were completed at each of the two research interviews.

Measures taken at the initial interview.

1. The Child Health and Development Questionnaire
2. The ECBI
3. The GHQ 30
4. The BDI
5. The Parent-Child Autobiographical Memory Test
6. The Community Contacts Questionnaire

The measures taken at the follow-up interview.

1. The Research Follow-up Interview.
2. The ECBI
3. The GHQ 30
4. The BDI

5. The Parent-Child Autobiographical Memory Test

6. The Parental Satisfaction and Outcome Questionnaire

Sample description

The sample included 12 girls and 14 boys, their mean age was 44 months. The mean age of their mothers was 27.9 years. Apart from siblings and parents, only one family had another adult resident in the house. Eighteen of the homes had two resident children including the referred child (70%), five of the referred children were only children, two came from homes with three children and one with four children.

All children were living with their natural mother. Ten of the mothers were single parents, 15 children were living with both natural parents and one child lived with her natural mother and a stepfather.

Information was gathered on the employment status of the primary provider in the household. Twelve of the referred children lived in homes that were entirely dependent on state benefit for their income. Of the remaining fourteen, twelve were in employment rated as social class 3b and below (manual workers) and two in office, secretarial or administrative employment. The following table shows the distribution of waged and unwaged families by comparison with the number of resident parents.

Table 5.2. Source of income and number of resident parents.

	State Benefit	Waged	Total
Two parents	2	14	16
One parent	10	0	10
Total	12	14	26

The source of income for the family and the number of resident parents were significantly related (Chi square 18.96, $p < .0001$). This is not surprising and as can be seen since all the single parents were unwaged whereas the majority (88%) of the two parent homes had a wage earner.

Eight of the twenty-six mothers reported health problems during pregnancy (30.8%) and ten reported problems during the delivery (38.5%). Ten mothers reported their child to have had serious health problems (38.5%) and six reported them to have current health problems (23.1%). This data is not easy to interpret since the responses of the mothers of non-referred children are not available for comparison and there was no independent check from medical records.

Despite the fact that only sixteen of the twenty-six parents took up the offer of a service from the agency, mothers of 26 children completed all baseline questionnaires and, six months later, all follow-up questionnaires. All twenty-six had been offered a treatment appointment between the two research interviews.

The vast majority of referrals, 92%, were from health sources and these were split almost equally between Health Visitors and Doctors. Although not relevant to the hypotheses which are the subject of the present study, the referral source data is of interest to the agency not least because children referred from some sources were much less likely to take up the option of being seen by the agency staff. Details of referral source and take up of treatment are included in appendix XV.

CHAPTER SIX: RESULTS

Introduction

In view of the large number of both measures taken and hypotheses, the results are presented in the following way:

1. Report on the relationship between the measures taken at the baseline interview for the full sample (26Ss).
2. Consideration of the hypotheses concerned with sample description (nos. 1 - 4) based on the full sample (26Ss).
3. Comparisons between measures and groups
 - a) Comparison between those who did and did not take up the treatment option (16 treated Ss, 10 untreated Ss)
 - b) Pre- and post-treatment correlations for each measure that was used at both initial and follow-up interviews (16 treated Ss).
 - c) Relationship between the measures taken at follow-up (16 treated Ss).
4. Consideration of the hypotheses predicting therapeutic change (nos. 5 and 6) as a result of treatment (16 treated Ss)
5. Correlations between the initial data collected and the outcome as assessed by the ECBI scales (16 treated Ss).
6. Consideration of the hypotheses concerned with the prediction of outcome (nos. 7 - 14) (16 treated Ss).

RESULTS: SECTION ONE.

Relationships between the criterion measures taken during the initial interview.

Much of the baseline data, age of child and mother, with whom the child lived, pregnancy and other problems, etc. was collected for the purpose of the sample description and has already been presented in chapter five. However, before considering the hypotheses concerned with sample description, those measures taken at the initial interview that were of interest in terms of these hypotheses were analysed for possible relationships with each other and the results are presented below.

Table 6.1 Pearson correlation coefficients between criterion measures obtained during the initial interviews (26 subjects).

	ECBI-I	ECBI-TP	GHQ	BDI	PCAMT	CCQ2	SED5
ECBI-I	1.000	.861***	.272	.187	.129	.225	-.142
ECBI-TP		1.000	.526**	.475*	-.003	.067	.172
GHQ			1.000	.778***	-.080	-.135	.198
BDI				1.000	.180	-.279	.219
PCAMT					1.000	-.103	-.448*
CCQ2						1.000	-.148
SED5							1.000

Significance levels: * .05 ** .005 ***.0001

Key

ECBI-I Eyberg Child Behavior Inventory - Intensity

ECBI-TP Eyberg Child Behavior Inventory - Total Problem

GHQ General Health Questionnaire

BDI Beck Depression Inventory

PCAMT Parent-Child Autobiographical Memory Test

CCQ2 Community Contacts Questionnaire

SED5 Socio-economic Deprivation Scale

Not surprisingly the two ECBI scales were highly correlated with each other ($r = .861$, $p < .0001$) suggesting that they are, for the most part, measuring the same thing. However, whilst the ECBI-I measure does not correlate with any of the other measures, the ECBI-TP score³ also correlates with both of the parental mental health scales, the GHQ ($r = .526$, $p = .0051$) and the BDI ($r = .475$, $p = .0133$).

The two mental health measures, the GHQ and the BDI are also highly correlated with each other ($r = .778$, $p < .0001$). The CCQ2, the social isolation score also show some evidence of association with GHQ and the BDI but this does not, with this sample size, reach significance (GHQ, $r = -.311$, $p = .1224$; BDI, $r = -.331$, $p = .0988$).

The parent child autobiographical memory score correlated significantly with the SED5 index ($r = -.448$, $p = .0209$). This means that a low PCAMT score (few specific memories) was associated with a high level of socio-economic deprivation.

³ The ECBI TP score asks the parent to rate whether the behaviour is a problem for them and is therefore a better indicator of how the parent is feeling about the child than the Intensity score.

RESULTS: SECTION TWO.

Hypotheses concerned with the characteristics of the referred children and their families (nos. 1 to 4)

Hypothesis 1. The majority of pre-school children referred to the service would have conduct difficulties.

The problems associated with the diagnosis of conduct problems in children are well reviewed by Kazdin (1988). There are two main classificatory systems, the ICD 10 (World Health Organisation, 1992) and the DSM IV (American Psychiatric Association, 1994), and the categories and criteria which they employ are summarised in Appendix XVI.

For the purpose of the present study however, since the children had been referred, in 92% of cases by Health Care Professionals, mainly Doctors, it was assumed that the child had a difficulty that warranted treatment. The method used for deciding whether the child had a conduct problem was analysis of the initial referral letter and parental response to the ECBI. The data available were not sufficient to enable classification in terms of ICD 10 or DSM IV criteria.

Initial ECBI scores

On the basis of the ECBI⁴ completed by the mothers at the initial research interview, thirteen children were identified as having significant conduct problems, twelve from the ECBI-I scale and twelve from the ECBI-TP scores. Of these, eleven rated as having conduct problems on both scales and two on the basis of scores on either one scale or the other, making a total of 13 children.

⁴ The clinical cut-off scores used on the Eyberg scales were I = 127 and over, TP = 11 and over.

Referral letters

These were categorised both in terms of absence or presence of reference to conduct problems and by the primary referral problem. Fifteen referral letters included conduct problems as the main reason for referral and, of the remaining eleven, management advice was requested for nine. The main referral problems for these eleven children were difficulties associated with bowel control (five), emotional difficulties (five) and one referral for inappropriate parental expectations. All of the referrals concerned with toileting problems ruled out organic causes and all requested management advice on how to obtain compliance from the child. Of the five children with emotional difficulties, non-compliance was also mentioned in three cases. In only two cases was there no reference to behavioural or compliance problems in the referral letter, both of these were children who had become withdrawn following parental separation.

Three referrer-identified conduct problems were not identified by their mothers on the ECBI. One child was identified by the ECBI as having a conduct problem but not by the referrer whose primary request was for help with a toileting problem but also noted that the child became very frustrated and angry when not understood. Table 6.2 summarises the information from the referral letters and the initial ECBI scores

Table 6.2 The identification of conduct problems by referrers and mothers.

	Cases
Conduct problem, Referrers and Eyberg	12
Conduct problem referrers letter only	3
Conduct problem Eyberg only	1

Total conduct problems	16
------------------------	----

Appendix XVII contains further details of the information contained in the referral letters, including both the primary referral problems and reference to non-compliance or management advice.

Using the above criteria, 58% of the sample had an identified conduct problem as the main problem. If the criterion of any reference in the referral letter to compliance problems, or the need for behavioural management advice in relation to specific problems, were used this rises to 92% of the sample. These data provide confirmation for hypothesis 1 that the majority of children would have conduct problems.

Hypothesis 2. More than fifty percent of the referred children would have a parent with a significant mental health problem.

This was assessed by two measures, the GHQ and the BDI.⁵ The GHQ 30 scores at baseline showed 15 (58%) of mothers to have significant mental health problems and the BDI results showed 14 (54%) of mothers to have problems of a clinically significant degree. There was a considerable overlap in the distributions of these scores which between them identified seventeen mothers.

Table 6.3 Baseline maternal mental health problems as identified by GHQ and BDI

	Number
Above clinical cutoff on BDI and GHQ	12
Above clinical cut off on GHQ only	3
Above clinical cut-off on BDI only	2

⁵ The clinical cut-off points used in this analysis were those recommended in the published manuals, for the GHQ a score of 5+ and for the BDI a score of 10+

No mental health problem identified	9
Total	26

This represented 65% of the sample and provides confirmation for hypothesis two that the majority of mothers of the referred children would have mental health problems.

Hypothesis 3. The parents of referred children would be poorer at describing specific instances of their child's behaviour than parents of children of a similar age who have not been referred to such an agency.

This hypothesis was assessed using the PCAMT data. The mean number of specific responses to words without prompt was 3.5 (SD = 2.404). This was tested using a one-way anova and found to be significantly below the mean of 5.5 (SD = 2.502) obtained by Nightingale (1995) from a sample of twenty-two mothers of similarly aged children who had not been referred to a child mental health service, ($F_{1,46} = 7.944$, $p = .0071$). The mean age of Nightingale's sample was 40.364 months (SD = 8.6333) as compared with the present sample of 44.192 months (SD = 8.212). Nightingale's sample consisted of maternal reports on thirteen females and nine males as compared with 12 females and 14 males in the present study. These data can be taken as confirmation of Hypothesis three that the parents of referred children would be less good at describing specific incidents in their children's lives than the parents of similar aged but non-referred children.

Hypothesis 4. There would be a higher level of socio-economic disadvantage among the families of referred children than in the population as a whole.

The SED5 index used in the present study is described in chapter 5 and in greater detail in Appendix V. In relation to this hypothesis the two factors, being a single

parent resident with a child and being dependent on state benefit are taken as the indicators for which comparable national and local statistics are available. The figures among the referred sample were as follows:

Single parent status, that is not cohabiting with another adult, applied to ten (38.5%) of the twenty-six mothers of referred children. This compares with the figure for the whole of Britain, published by the National Statistical Office, that 18%, approximately one in five of mothers with dependent children, are lone mothers, of whom 11% are divorced or separated and 7% single parents who had never been married (Church, 1995). The children in the present sample therefore were twice as likely to be living with a single parent than the national average.

Being dependent on state benefit applied to twelve of the families, (46%) of the sample, most of whom, ten, were also the single parents referred to above. The Child Poverty Action Group who analyse Government Statistical Reports and produce summaries of relevant statistics consider that 24% of families with two parents are living below the poverty line and this would apply to any family entirely dependent on state benefit, for single parent families this rise to 58% (Key Poverty Statistics, CPAG, 1996). In the present sample all of the single parents were entirely dependent on state benefit (100%) but only two of the 16 two parent families (8%).

This confirms both that single parent families are over represented in this sample but also that they are an economically disadvantaged group by comparison with single parents generally.

RESULTS: SECTION THREE.

- a) comparison between those who took up the offer of treatment and those who did not (16 treated Ss, 10 untreated Ss)**
- b) correlations between each of the pre and post treatment measures with themselves for the treated sample (16 Ss) and**
- c) the correlations between post treatment measures for the sixteen treated children.**

Comparison of treated and untreated children

There were no predictions in relation to who would not attend for treatment as compared with those who would although some of the measures which were predicted to show a relationship with poor treatment outcome differentiated between those who did and did not attend for treatment. There were, however, a number of predictions in relation to treatment failure for which these results are of interest.

Ten families (38%) declined the offer of treatment and this initially suggested the possibility of a comparison group. The full data set showing comparisons between these two groups (16 treated, 10 not treated) on all measures is included in appendix XVIII.

The main differences between the treated and untreated groups were as follows:

1. The presence of identifiable conduct problems.

Probably the most important difference was that there were significantly more children with identified conduct problems in the treatment group, thirteen out of sixteen (81%) as compared with only three in the non-treatment group (30%) (Chi Square df 1, = 6.829, $p = .0009$).

2. Source of referral

Referrals from different referral sources were not equally likely to take up the opportunity for treatment. Children referred by Health Visitors were significantly more likely to attend than those referred by Doctors. Eight of the ten children referred by health visitors (80%) became cases as compared with only five out of thirteen children referred by Doctors (38%) (Chi square 3.969, $p = .0464$).

3. Age of referred child.

Treated children (mean 47 months, SD 7.412) were significantly older than untreated children (mean 39.7 months, SD 7.704), ($F_{1,24} = 5.795$, $p = .0241$).

4. Parent Child Autobiographical Memory (PCAMT) score.

The parents of children who were not treated had significantly lower scores on the PCAMT, a mean of 1.6 (SD = 1.506) as compared with a mean of 4.688 (SD = 2.089) for the treated group ($F_{1,25} = 16.402$, $p = .0005$), mean diff -3.008. Furthermore there was almost no overlap in the distributions between the treated and untreated children.

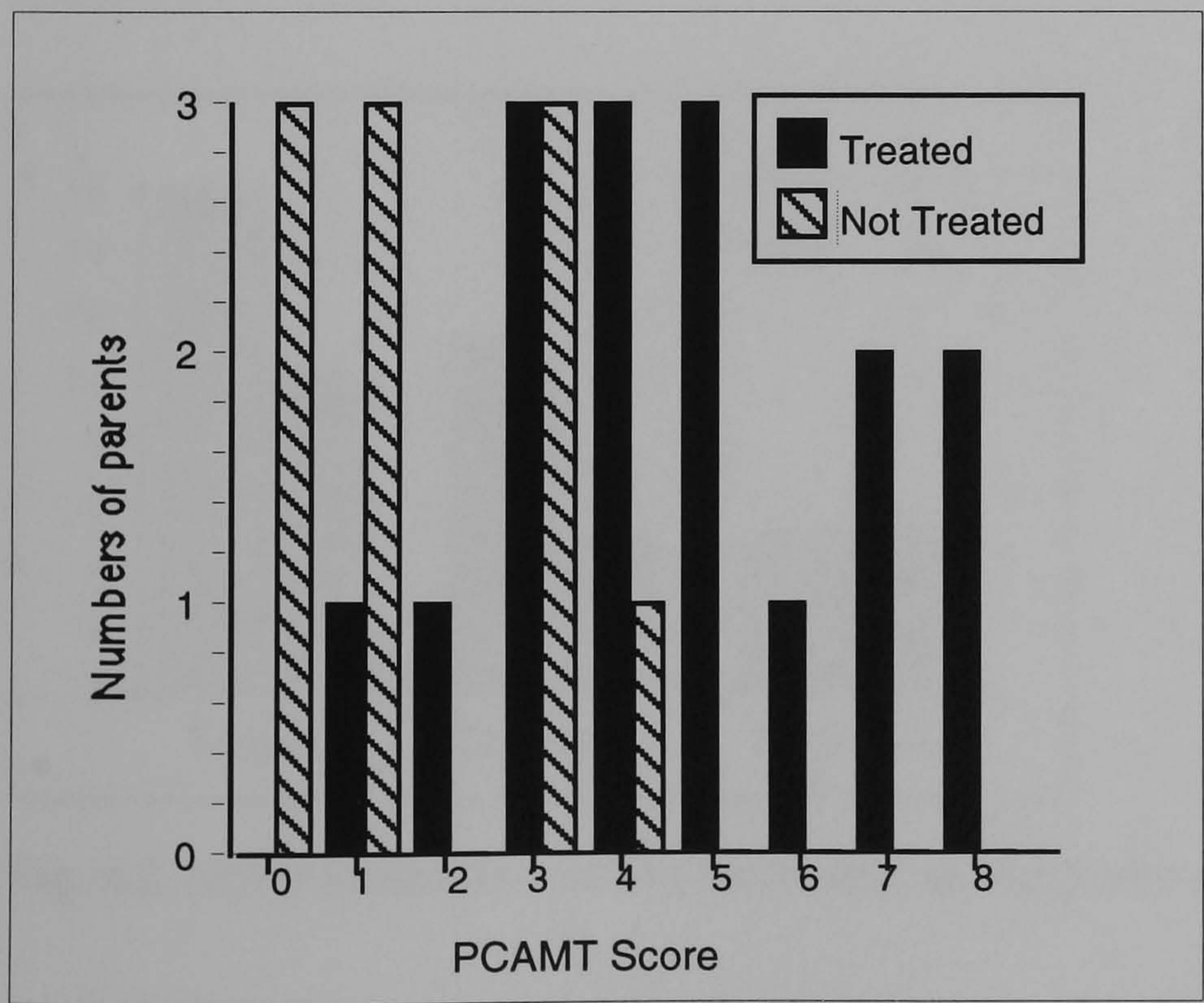


Fig. 6.1 Scores of treated and untreated groups on PCAMT.

Although the mean for the referred group was, as previously reported, significantly different from that of a comparable group of non-referred children, the difference disappeared when those who declined treatment for their children were removed from the analysis. Those mothers and children who attended for treatment when compared with Nightingale's (1995) sample were not significantly different ($F_{1,36} = 1.118, p = .2974$).

5. Socio-economic deprivation.

Although a comparison of the two groups on the socio-economic deprivation index, SED5, did not achieve statistical significance ($F_{1,24} = 2.415, p = .1333$), a comparison between treated and untreated groups on the basis of a score of 2+ on the SED5 scale, shows that the more deprived families are less represented in the treatment group than they are in the non-treatment group. Overall they comprise ten (38.6%) of the sample but they represent half (50%) of the group that did not attend for treatment and less than one third (31.25%) of the treatment group ($\text{Chi Square df } 1 = .914, p = .339$). These data are represented graphically below (Fig. 6.2).

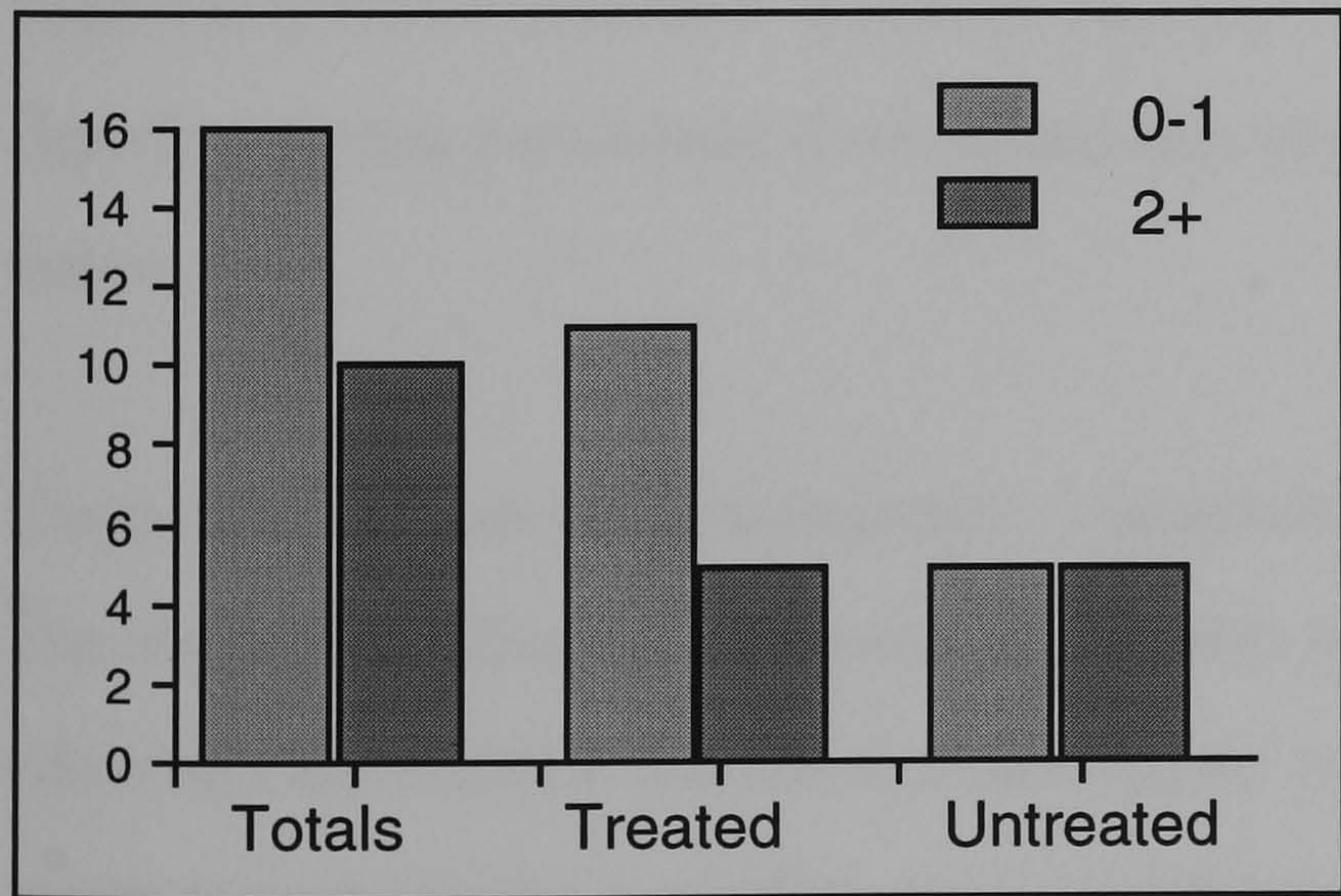


Fig. 6.2 SED5 scores (0-1 or 2+) for treated and untreated groups.

When only one indicator of socio-economic deprivation was used the figures rise to 80% of the non-treatment group as compared with only 44% of the treatment group. (Chi square 3.313, $p = .0687$). These data are represented graphically below (Fig. 6.3).

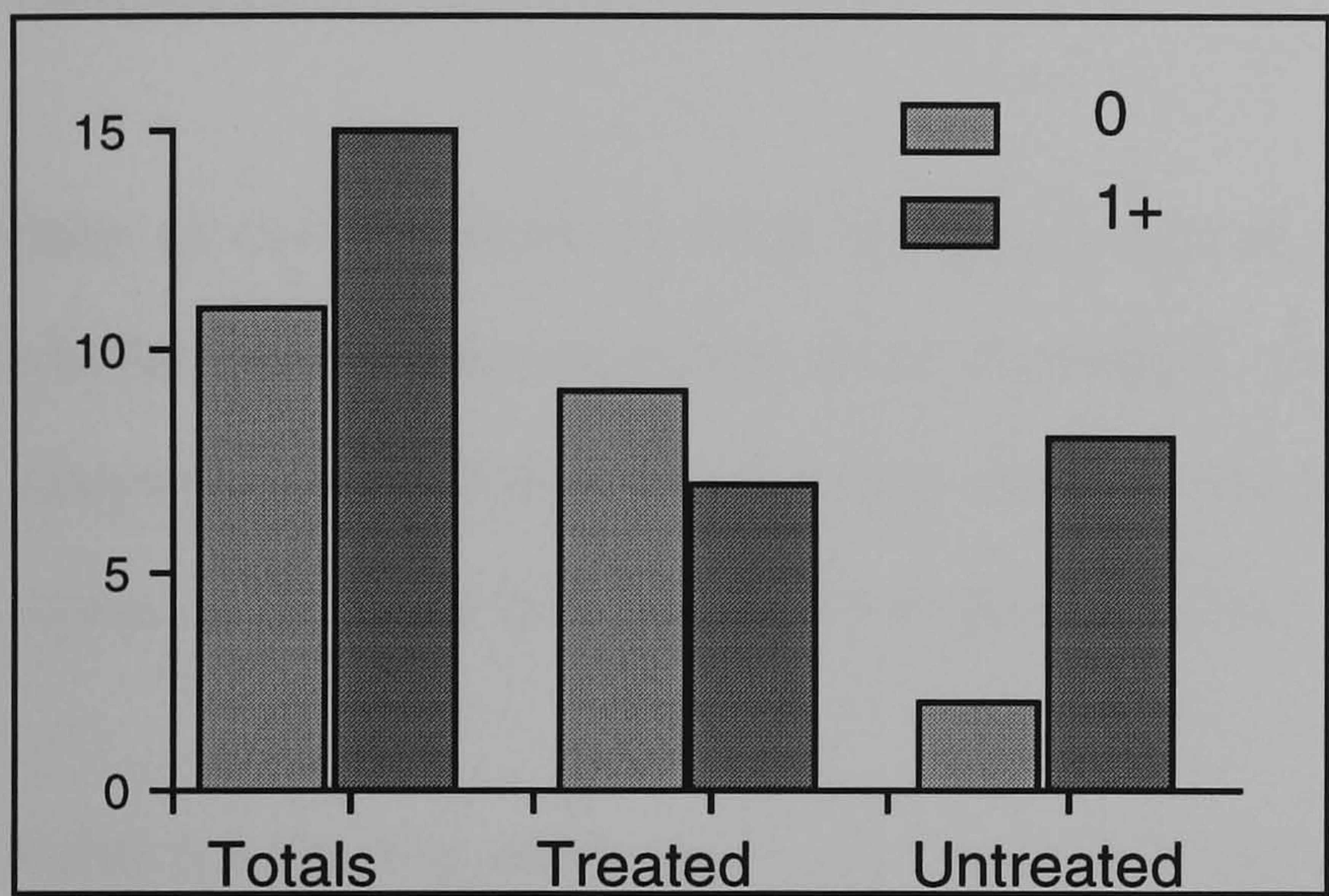


Fig. 6.3 SED5 scores (0 or 1+) for treated and untreated groups.

As previously noted the SED5 was significantly correlated with the PCAMT ($r = -.448$, $p = .0209$) which was also associated with failure to take up the offer of treatment ($F_{1,24} = 16.402$, $p = .0005$). This was not predicted but is potentially an important finding particularly if non-attendance were to be considered as a treatment failure.

Comparison of treated/untreated groups - conclusion

The two groups differed significantly on a number of important dimensions and when taken together indicate that the untreated group was sufficiently unlike the treated group to rule out the possibility of a comparison between the two groups at the follow-up stage.

These findings will be considered further in the discussion but, apart from the calculation of test-retest reliability for the PCAMT, the data from the untreated group received no further consideration.

b) correlations of the measures used at both pre- and post-treatment phases with themselves (16 Ss treated sample)

Prior to consideration of what changes occurred between the two interviews and whether any of the measures were associated with these changes, the data were analysed to see whether the baseline scores on particular scales predicted follow-up scores on the same scale for the 16 treated children.

Table 6.4 Correlations between pre and post measures for each of the scales.

	Pre/post correl.	p value
ECBI - I	.533	.0320
ECBI - TP	.051	.8535
GHQ	.193	.4804
BDI	.201	.4619
PCAMT	.535	.0312

(16 subjects)

The pre- and post-treatment scores on the ECBI - I scale and the pre and post-treatment PCAMT scores are each significantly correlated with themselves but the ECBI - TP scale, the GHQ and the BDI showed no relation between their pre- and post-treatment scores.

(c) correlations between the measures taken at the follow-up interviews (treated group, 16 Ss).

In view of the significant correlations between several of the measures at baseline it was decided to investigate the relation between the measures taken at follow-up, prior to considering the outcome hypotheses.

Table 6.5 The relation between the follow-up measures for the treated group, sixteen children.

	ECBI - I	ECBI - TP	GHQ	BDI	PCAMT
ECBI - I	1.000	.593*	.226	.063	-.158
ECBI - TP		1.000	.558*	.597*	.031
GHQ			1.000	.717**	-.135
BDI				1.000	-.079
PCAMT					1.000

Significance levels beyond : *.05, ** .01

Even within this smaller sample the two Eyberg scales still correlate significantly with each other, ($r = .593$, $p = .0138$), as do the GHQ and the BDI ($r = .717$, $p = .0012$) and the Eyberg TP score continues to correlate with the GHQ ($r = .558$, $p = .0231$) and BDI ($r = .597$, $p = .0131$). This pattern of significant correlations replicates those obtaining between these measures at baseline. The autobiographical memory scale shows no relation to any other follow-up measure.

RESULTS: SECTION FOUR

The predictions that therapeutic change would occur, hypotheses 5 and 6 (16 treated subjects).

Hypothesis 5. The intervention would lead to a reduction on the child's difficulty.

Three measures were available for the assessment of outcome, the follow-up ECBI scores, the parental outcome ratings and the therapist outcome ratings.

The comparison of the initial and follow-up mean scores on the ECBI-I and ECBI-TP is shown in table 6.6.

Table 6.6 Pre and post ECBI -I and TP means

Initial int mean	136.5	13.25
Follow up int mean	114.563	7.312
t-score	2.509	2.055

There was a significant difference between initial and follow-up scores on the ECBI-I measure when compared using a t test (ECBI - I, mean diff 21.935, df 15, $p = .0241$). There was a similar trend with the TP scores which came close to significance (ECBI -TP, mean difference 5.938, df 15, $p = .0577$). These scores both indicate improvement.

These results are shown graphically both for the whole group and in terms of the scores of individuals.

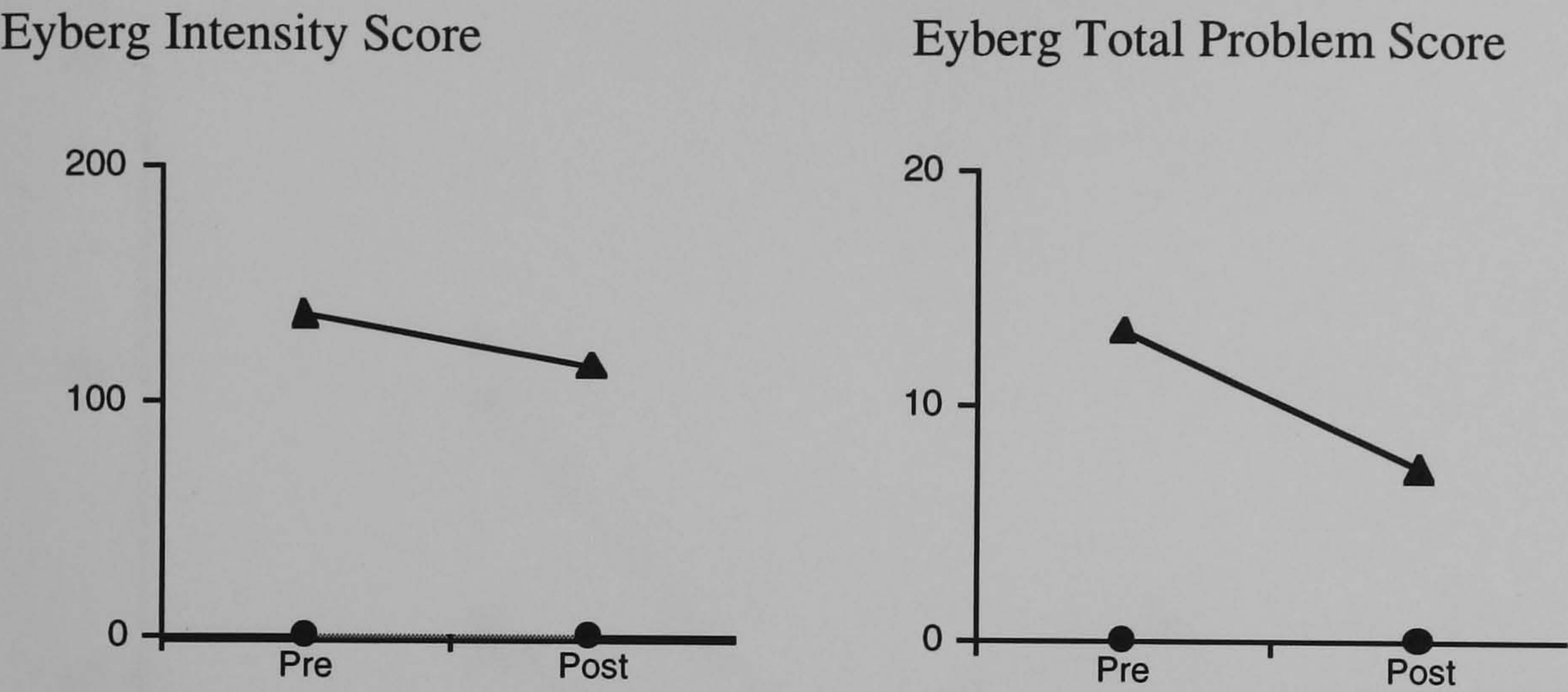


Fig 6.4 ECBI mean scores, pre and post Intensity and Total Problem scores

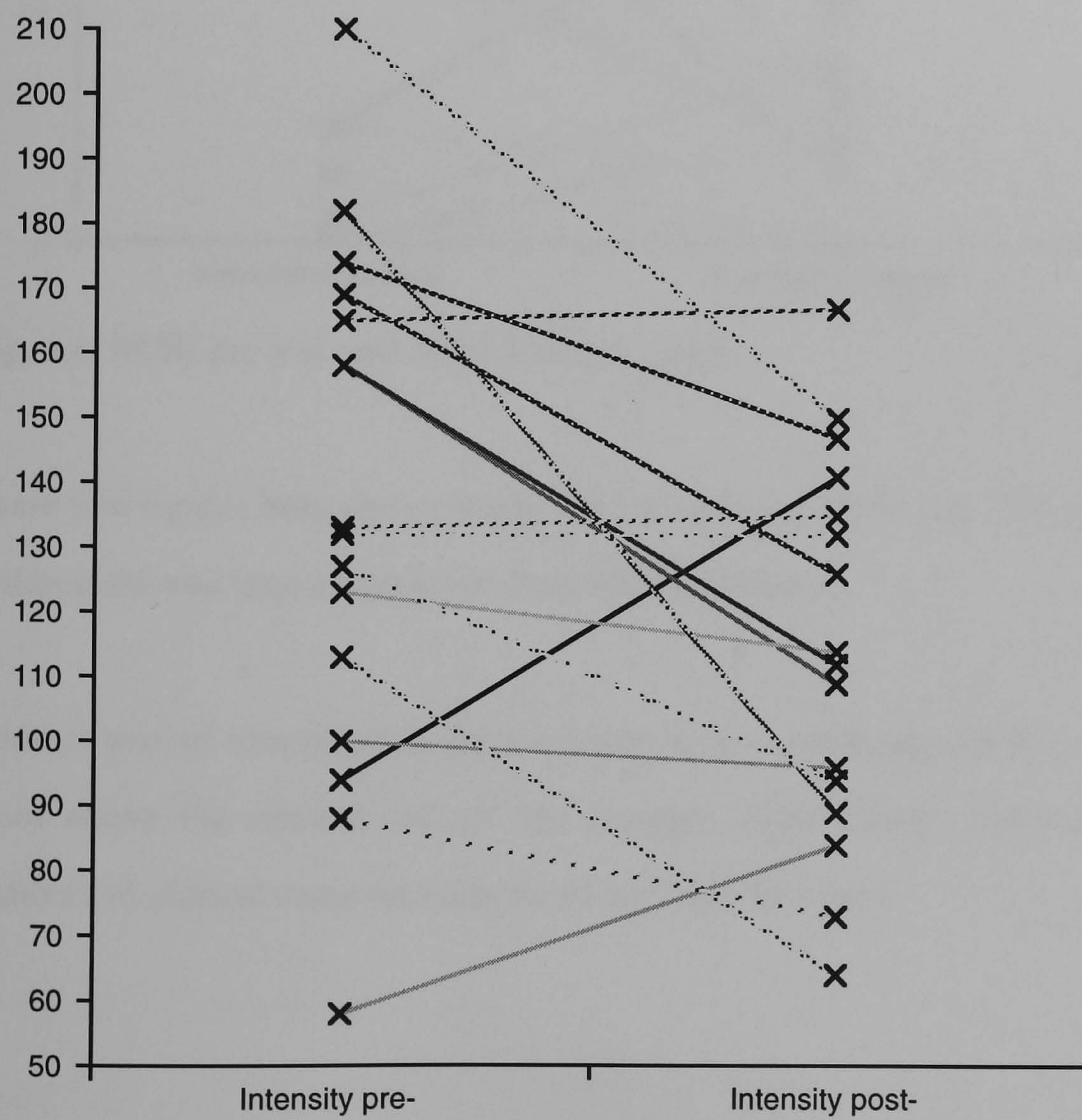


Fig. 6.5 ECBI pre and post Intensity Scores

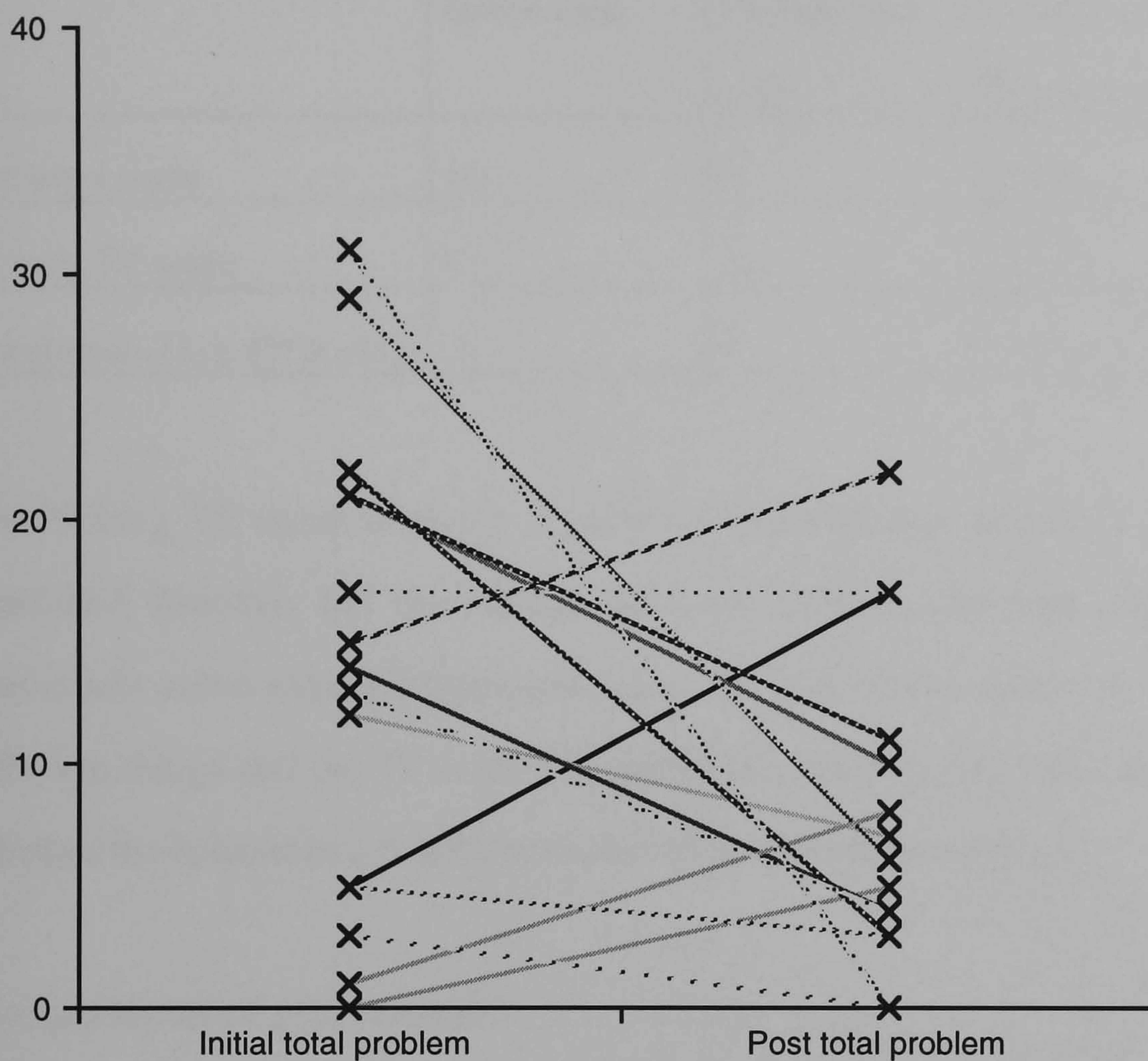


Fig. 6.6 ECBI pre and post Total Problem scores.

These two figures both show clearly that the majority (69% and 75% respectively) of children showed improvements on both ECBI measures.

Another way of investigating improvement is by considering whether the number of cases above the clinical cut off has changed significantly. Table 6.7 shows the numbers of clinical cases for both the ECBI I and TP scales.

Table 6.7 Clinical cases on the ECBI scales at initial and follow-up interviews

	Initial case	Follow-up case	Chi Square (case/non-case)	p value
Eyberg I scale	10	6	2.021	.1573
Eyberg TP scale	10	4	4.571	.0325
Total cases (I or TP scale)	11	6	3.137	.0765

The Eyberg TP result shows a significant improvement and the I scale is in the predicted direction but the change does not achieve statistical significance. As previously noted although these two scales are highly correlated they are measuring different things and the TP scale is arguably of greater interest because it focuses on whether the behaviour is a problem rather than how often it occurs.

Parental report of improvement

Parental ratings of outcome in relation to the referred problem are shown in figure 6.7. Twelve of the sixteen mothers rated the child as "a lot better", three as "a little better" and one reported 'no change". Overall 94% of clients reported an improvement.

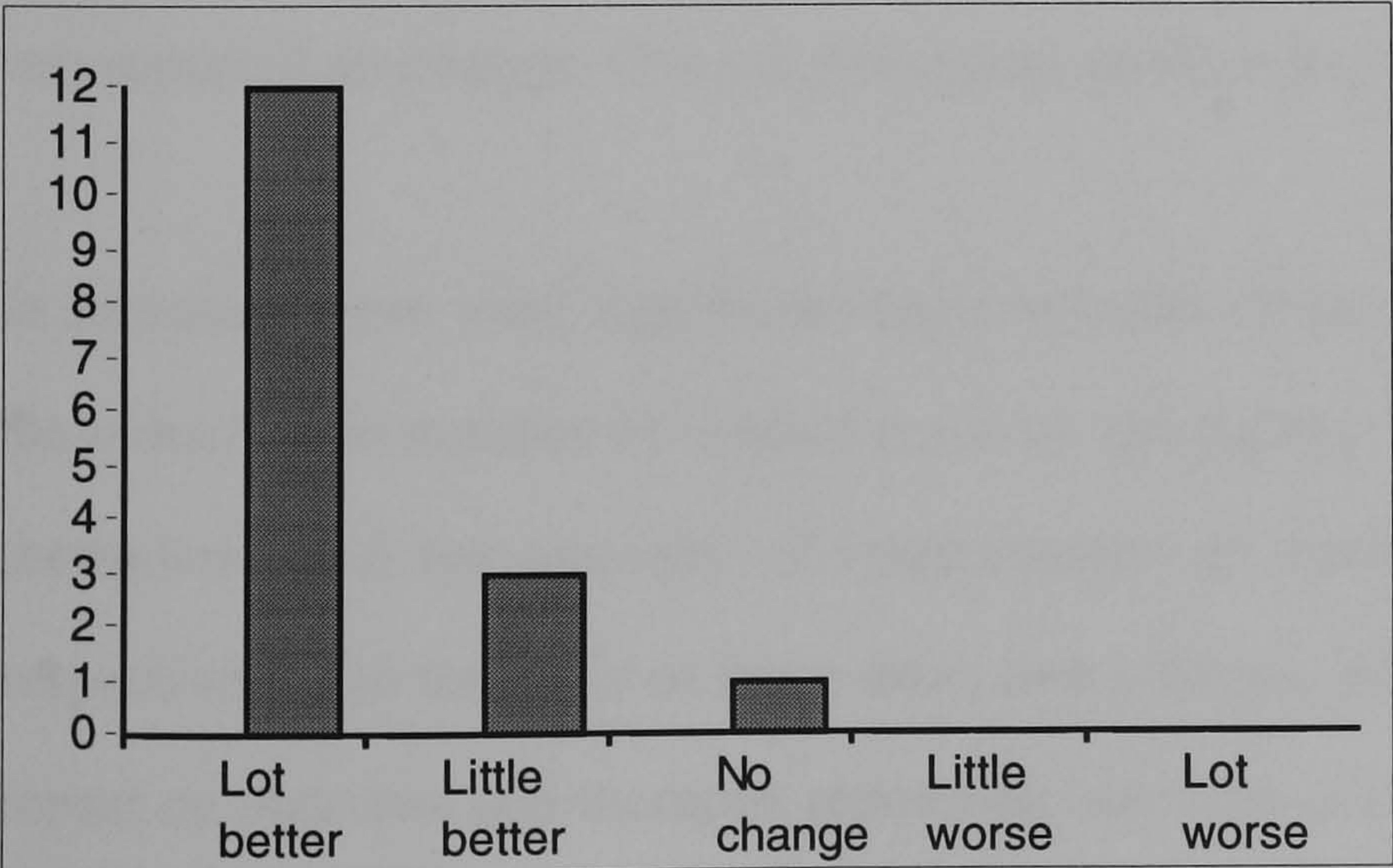


Fig. 6.7 Parental ratings of outcome

The fact that none of the parents reported the problem having got worse is a little surprising since, although there was a significant improvement in the Eyberg scores, there were, as inspection of figure 6.5 above shows, three children who had higher scores at follow-up including two for whom the Eyberg intensity score had increased by 47 and 26 points respectively. However closer inspection of the data revealed that in both of these cases the initial ECBI scores were well within the non-clinical range, with scores of 94 and 58 respectively despite the fact that in both cases the referrer had identified the conduct problem as the main referral problem. It is possible that, at follow-up these parents had become more accurate in their assessment of their child and recognised what was appropriate and inappropriate behaviour and therefore saw an improvement despite the increased scores that they recorded. However, positive reports from service users are very frequently found and a number of factors influence them that are unrelated to outcome (Hutchings and Pope, 1993).

Therapist assessment of outcome.

It is important to note, before considering these data that the data source for therapist outcome ratings is unclear and could be based on either their observations of the child, parental report or both. Figure 6.8 shows the therapist assessment of outcome and, like the client reports, no therapist reported any increase in the problem although two reported no change. Overall, therapists rated an improvement in 88% of cases.

In summary there were significant improvements on the ECBI Intensity scores, and in the reduction in number of clinical cases on the Eyberg TP scale and both parents and therapists rated the majority of interventions as having improved, 94% and 88% respectively. On the basis of these three data sources, follow-up ECBI scores, parental report on outcome and therapist reports on outcome, it is considered that hypothesis 5 is confirmed.

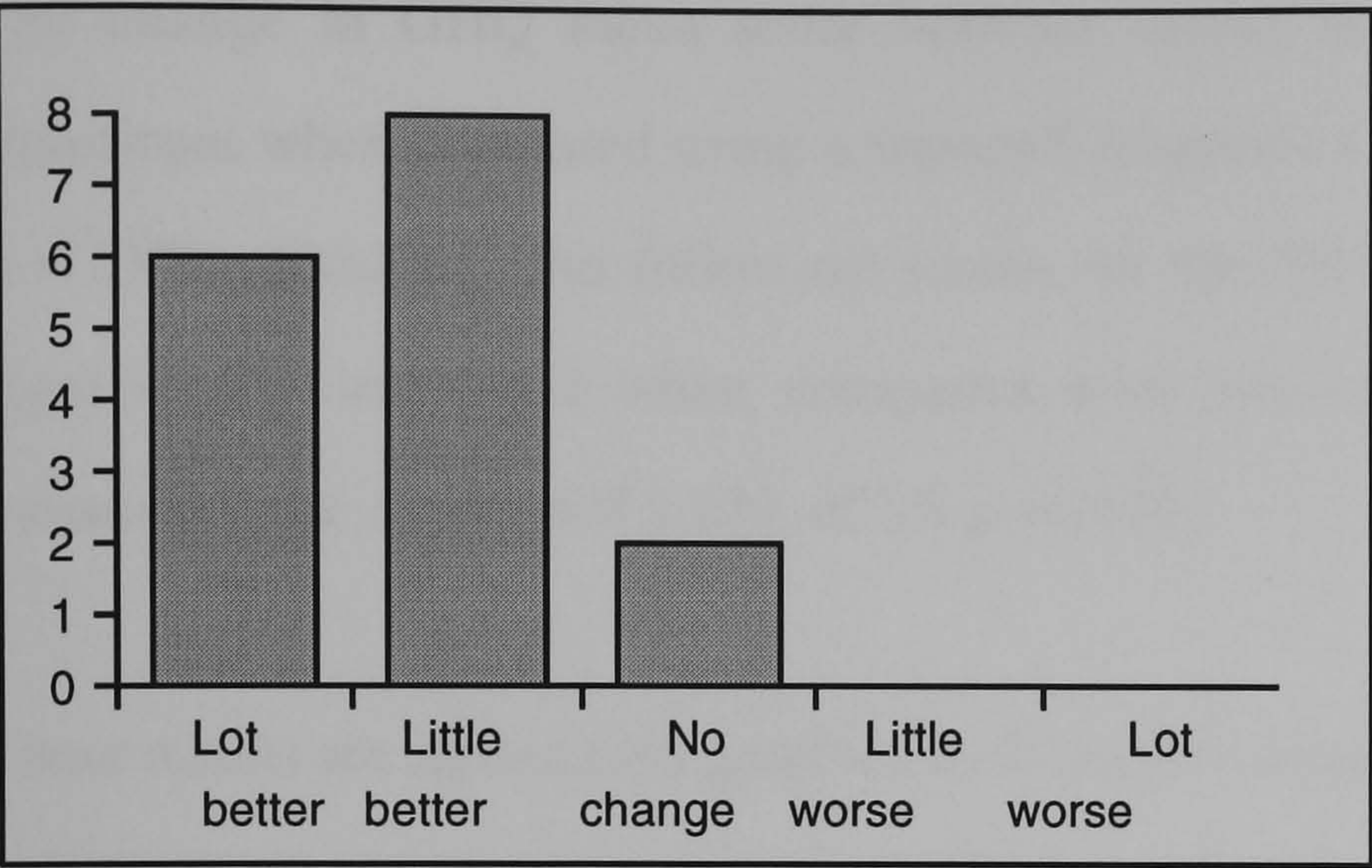


Fig. 6.8 Therapist outcome assessment.

Hypothesis 6. The mental health status of parents whose children improve will also improve.

Analysis of the data in relation to this hypothesis is difficult because there were two measures of parental mental health and three measures of outcome for the children. In addition, since all of the measures of child problems showed improvements for most children, the question of how this related to changes in parental mental health scores was difficult to establish. The initial question to be considered therefore was whether parental mental health scores had improved regardless of child problem scores. This is considered in the following table which shows pre and post means for the two parental mental health scales.

Table 6.8 GHQ and BDI pre and post interview means

	GHQ	BDI
Initial int mean	11.625	8.4
Follow up int mean	2.812	3.5
t score	4.312	3.739
p value	.0002	.0010

The change in GHQ mean score between initial interview and follow-up was significant when compared using a repeated measures t test. (mean diff 8.812, df 15, $p = .003$). Similarly the follow-up scores on the BDI for the treated group were significantly improved when compared with baseline scores using a repeated measures t test. (mean diff 8.250, df 15, $p = .0102$).

These results are represented graphically in the following figure

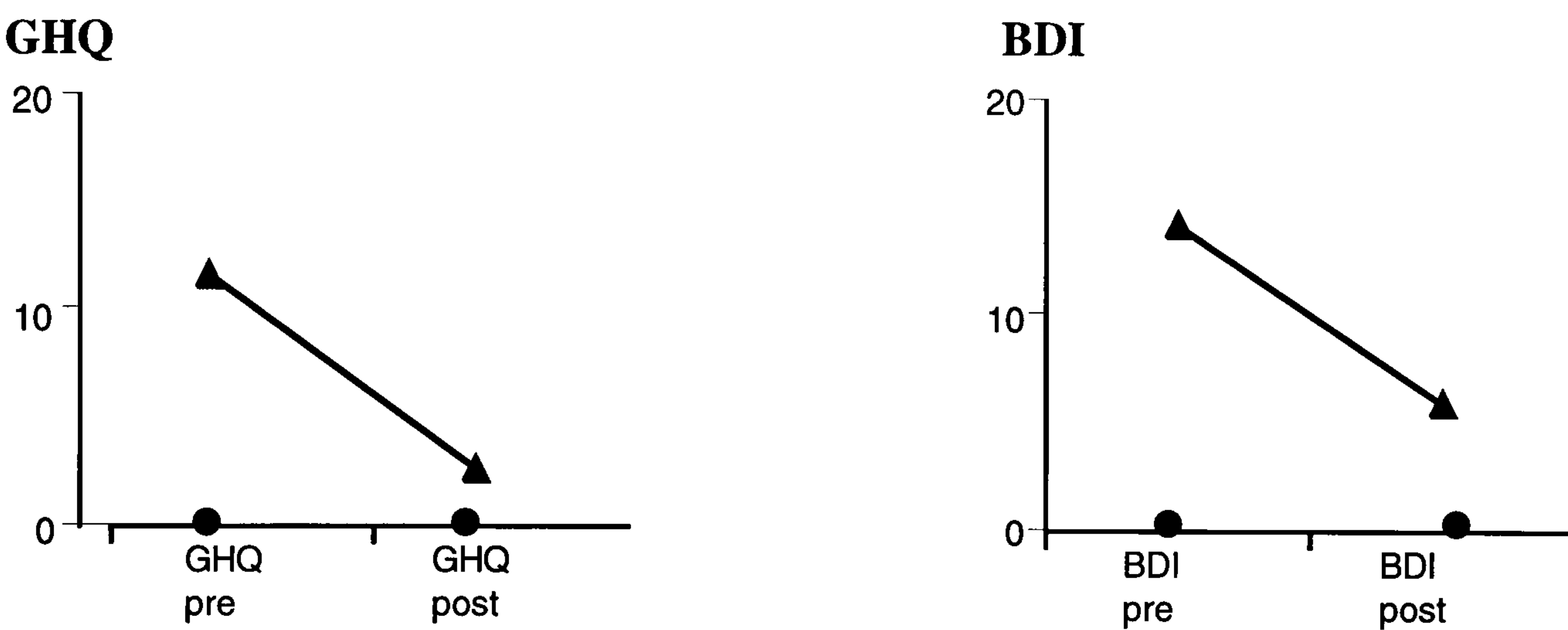


Fig. 6.9 GHQ Scores pre- and post- treatment BDI pre- and post- treatment

As with ECBI scores, another way of assessing mental health improvement is in terms of the number of "cases" at baseline and follow-up.

Table 6.9 Cases (GHQ or BDI) at initial interview and follow-up

	Initial case	Follow-up case	Chi Square	p value
GHQ	10	4	4.571	.0325
BDI	11	5	4.5	.0339
Total cases (GHQ or BDI)	12	6	4.571	.0325

The change in number of BDI cases and GHQ cases identified by one or other measure were all statistically significant. Figure 6.10 shows the pre and post scores for the individual respondents:

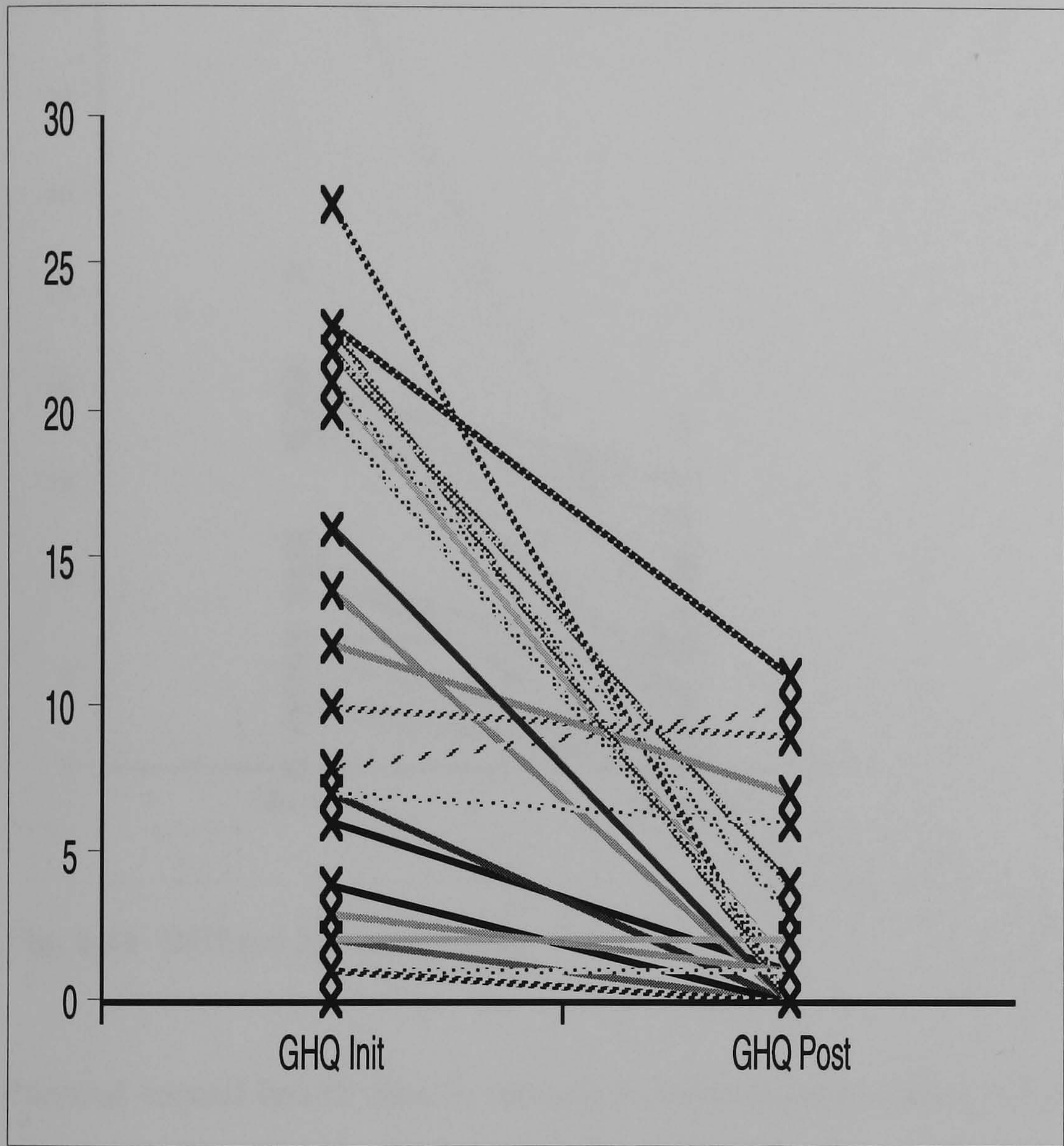


Fig. 6.10 GHQ Individual pre and post scores

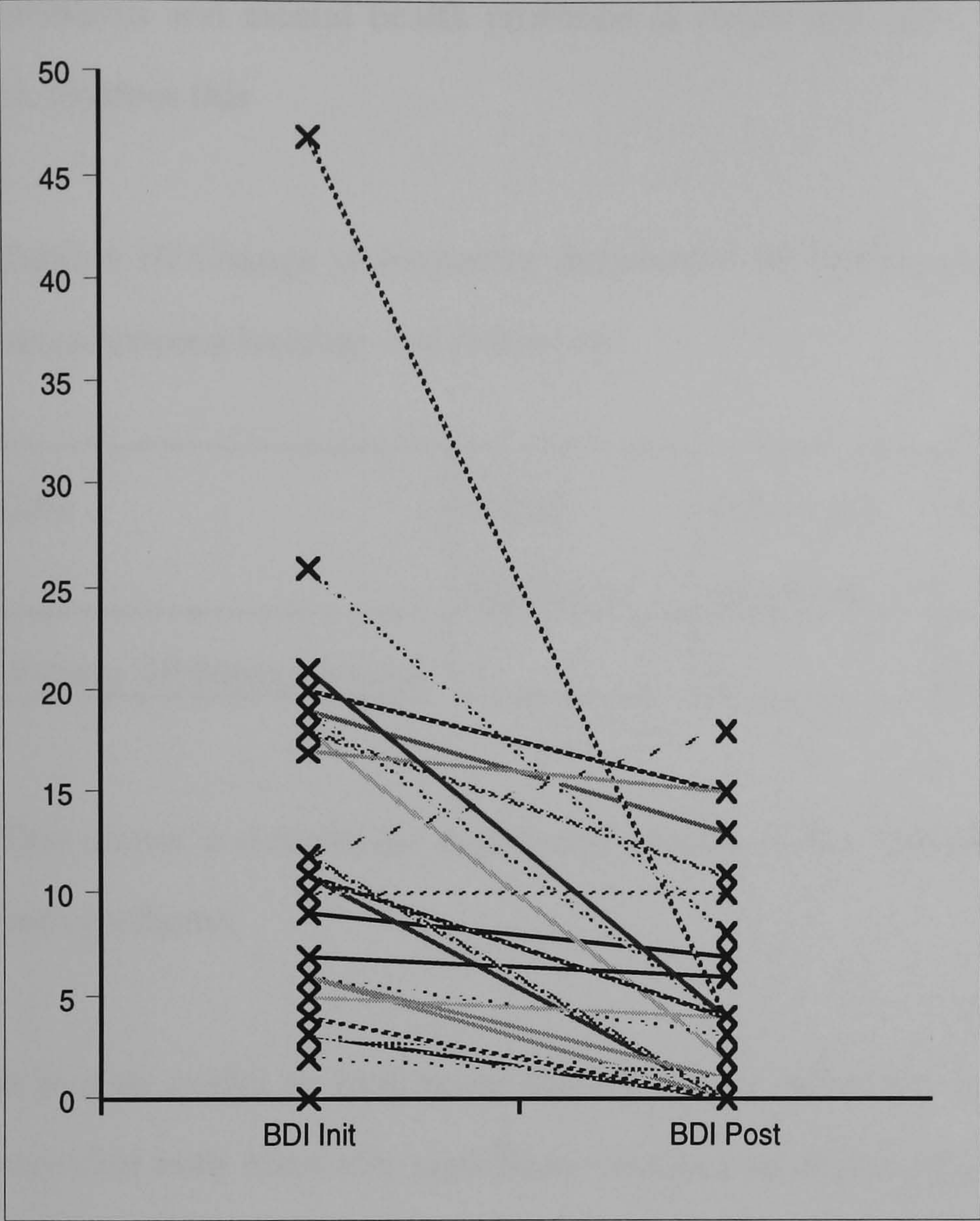


Fig. 6.11 BDI pre and post scores

Parental mental health clearly showed significant improvements but hypothesis 6 is concerned with whether there was an association between parental mental health gain and child improvement. Some evidence for this hypothesis comes from the fact that in addition to both ECBI, GHQ and BDI scores all improving, both GHQ and BDI correlating significantly with ECBI TP score at outset for the 26 and at follow-up for the 16, as already reported (results, section 1 and results, section 3). This suggests that changes in one score are reflected in changes in the other score.

Another problem is that some mothers did not have mental health problems at the outset. One way to consider this hypothesis is to look at the distribution of behaviour

problems and mental health problems at outset and follow-up. The following table (6.10) does this

Table 6.10 Change in frequency distribution of Eyberg and Mental Health Problem cases between baseline and follow-up

Case	Initial interview	Follow-up interview	Chi Square	p value
Eyberg TP/Mental Health	9	2	6.788	.0092

This shows a statistically significant change in the distribution of those cases with both problems.

It is also useful to look more closely at the individual scores of the 9 cases that recorded both clinically significant conduct problems and significant mental health problems at the initial interview and this is done in figure 6.12.

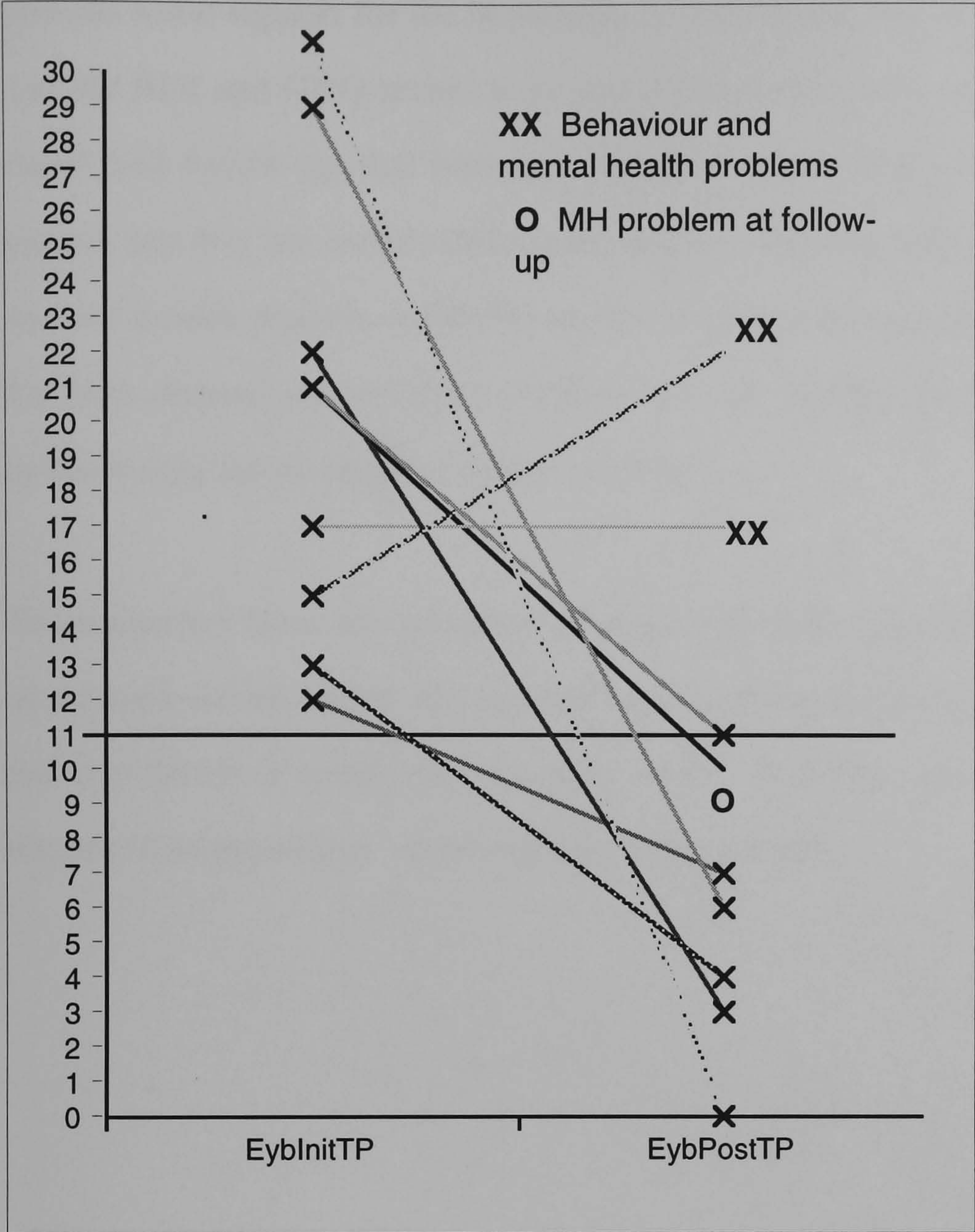


Fig. 6.12. Pre and post ECBI TP scores for the nine mother/child combinations that had both clinically significant conduct problems and clinically significant mental health problems at initial interview.

This shows the ECBI clinical cut-off and identifies the three mothers who still had mental health problems at follow-up, two of whom still also reported that their child had behaviour problems. One child had improved despite his mother still having a mental health problem.

Due to the small sample size only tentative conclusions can be drawn about the relationship between these two measures but it is considered that the results do

provide some support for the hypothesis in view of the fact that the ECBI TP scores and the BDI and GHQ scores were correlated significantly with each other at both outset and follow-up, that both had improved considerably for the majority of the sample and that six mother/child combinations who had both problems at the outset showed neither problem at follow-up, two mothers still reported significant problems for both themselves and their children and one mother reported a mental health problem only but no longer a conduct problem.

Taken together these data are strongly suggestive of the hypothesis that improvements in parental mental health and child behaviour problems are associated and therefore this hypothesis is tentatively accepted. Better evidence from which to confirm or disprove this hypothesis would require a larger sample.

RESULTS: SECTION FIVE.

Correlations between the initial data collected and outcome as assessed by the ECBI.

The ECBI scales were taken as the primary measures by which outcome was assessed and data have already been presented that demonstrate both statistically significant improvements and changes from the clinical to the non-clinical range for the treated children.

There are problems associated with using the actual follow-up scores on the ECBI as the outcome measures since they do not show, for individual cases, whether there has been an improvement. This thesis is concerned with clinical problems and clinicians are interested in the improvement or not for the single case. It was decided to include ECBI change scores in the analysis, that is the difference between initial and follow-up scores, and to also calculate an ECBI change index.

The ECBI change index made use of the following scale. Details of the scoring categories used to calculate this index are included in appendix XIX.

The outcome change categories.

5. Large improvement	4. Moderate improvement	3. No change	2. Small deterioration	1. Large deterioration
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The following table shows the correlations between the criterion baseline measures and follow-up and change ECBI scores for the 16 treated Ss.

Table 6.11 correlations between baseline measures and ECBI follow-up measures

	ECBI-I F/U	ECBI-TP F/U	ECBI-I change	ECBI - TP change	ECBI change index
ECBI-I Initial	.533* (p=.0320)	.012	-.694 (p=.0020)	-.038	.551 (p=.0256)
ECBI-TP Initial	.429 (p=.0977)	.051	-.688 (p=.0023)	-.013	.620 (p=.0023)
GHQ Initial	.170	.128	-.321 (p=.2300)	.096	.319 (p=.2332)
BDI Initial	-.003	.237 (p=.3836)	-.319 (p=.230)	.217 (p=.4258)	.183
PCAMT Initial	-.080	-.060	.048	-.062	-.012
SED5	-.053	.226 (p=.4072)	.346 (p=.1936)	.245 (p=.36770)	-.213 (p=.4363)
Insularity CCQ2	-.171	-.256 (p=.3452)	-.366 (p=.1658)	-.24 (p=.3765)	.329 (p=.2182)

Only one correlation was significant, this was between the pre and post ECBI I scale, $r = .533$, $p = .0320$, (the correlations between the initial ECBI scores and the three ECBI change scores were ignored since the second score contains an element of the first).

Although not achieving statistical significance there would appear to be a suggestion that higher SED5, socio-economic deprivation scores were associated with poorer

outcomes since all the correlations were in the predicted directions and, if replicated, correlations of this level would be significant for a larger sample. The correlations for all of the ECBI scales are in the expected direction since the figures are mostly of reductions in ECBI scores from baseline whereas the change index, which is based on a scale of 1-5, gives a larger positive score to the bigger change and a lower positive score to a negative change and does as would be expected correlate negatively with the SED5.

Similar findings are shown for the CCQ2 which is a scale rating the extent of positive social support. Again, although not significant, all correlations lie in the predicted directions, in this case negatively with all scores except the change index since the CCQ2 is a positive measure predicted to be associated with successful outcome.

RESULTS: SECTION SIX

Report on the hypotheses concerned with prediction, hypotheses 7 - 14.

These hypotheses concern the relationships between the measures taken prior to treatment and the outcome measures. This would normally be investigated by means of a regression analysis but this was not possible in the present study due to the small sample size, sixteen in the treatment group, and the number of variables with potentially predictive power which were being assessed against the outcome measures. Inclusion of all of these variables would have reduced the degrees of freedom to the point where analysis by this means would not be meaningful.

Treatment dose.

Before considering these seven hypotheses, data obtained from the therapists report on treatment dose was analysed. Of the 16 treated children, one child, 6%, was seen once, a further two, 12%, were seen between two and four times and the remainder, 13 children, 82%, seen five or more times within the six month period. There was a waiting list in operation within the agency and most of the children had been offered their initial appointment approximately three months after the initial research interview and been in treatment for about three months at the time of the follow-up interview. All were still registered as open cases implying that they would be seen again. Since the majority, 82%, had received over five appointments, the treatment dose data was not considered further, the number who had been seen less frequently being too small for statistical comparison purposes.

Hypothesis 7. Outcome will be predicted by the severity of the child's problem at the time of referral

This was assessed by looking at the correlation between baseline and follow-up scores on the ECBI. There was no correlation between the pre- and post-ECBI TP scores ($r =$

.051, $p = .8535$) nor was there any suggestion of a direct relationship although there was a significant relationship between pre- and post-ECBI I scores ($r = .533$, $p = .0320$). If the ECBI I scale was taken as the outcome measure, clearly the baseline did contribute to the prediction of outcome. However, as previously indicated, the parental rating of the number of problems, the ECBI-TP scale, is of greater interest since this reflects the extent to which the parent perceives the child's behaviour as problematic, and there was no relationship between the pre and post-ECBI-TP scores..

It can be argued that the Total Problem score is the more appropriate of the two scales to be used as an outcome measure because parents cope with a wide range of problem behaviours from all children. The parental perception of these behaviours and response to them is of primary interest, particularly since the vast majority of the behaviours of "problem" children (80%) are non-problematic (Gardner, 1987) and as previously discussed (Webster-Stratton and Hammond, 1988), there is evidence that some mothers, especially those who are depressed, are more inclined to label children's behaviour as problematic than are other people observing the same child.

The individual graphs of pre- and post-scores for both of the ECBI scales have already been presented in relation to Hypothesis 4, figures 6.5 and 6.6 and further inspection of the ECBI-TP results shows that the three highest baseline scorers record follow-up results in the lower half of the distribution and three of the four increased ECBI-TP scores come from children whose initial problem scores were below the clinical cut-off point.

This hypothesis has some confirmation therefore in terms of ECBI intensity scores but not in terms of the ECBI-TP score.

Hypothesis 8. Outcome would be influenced by the extent of the parent's social support network (parental insularity).

Details of Wahler's criteria for the identification of insularity and the way in which these were applied to the CCQ data are included in appendix X. Insularity was calculated both as an insularity index, I, by which 10 (38.5%) of the original sample of 26 and 8 (50%) of the treated sample of 16 were classified, and as a score, CCQ2, based on responses to two, five point items from each of two scales on the CCQ, concerning the extent of support or criticism from friends and relatives for the persons lifestyle in general and child management in particular.

On the basis of the correlational data presented in section 5 of the results and replicated below, no statistically significant predictive relationships were found between the CCQ2 score and either the final ECBI scores or the ECBI change measures, although all of these correlations were in the predicted direction and at a level that would have been of statistical significance if replicated with a slightly larger sample.

Table 6.12 Relationship between baseline CCQ2 scores and outcome measures.

	ECBI-I F/U	ECBI-TP F/U	ECBI-I change	ECBI - TP change	ECBI changeindex
Insularity CCQ2	-.171 (p= .5336)	-.256 (p =.3452)	-.366 (p=.1658)	-.240 (p=.3765)	.329 (p=.2182)

These data suggest a relationship between lower social support scores and poorer outcomes which would justify further assessment using a larger sample. Of the 10

mothers who were rated as Insular, 8 were included in the treatment group, representing half the 16 treated children. Insular and non-insular families were compared on all the ECBI outcome measures but no significant relationship was found between the insularity index and outcome.

The CCQ2 showed some indication of a negative association with the initial GHQ and BDI scores, CCQ2/GHQ ($r = -.311$, $p = .1224$), CCQ2/BDI ($r = -.331$, $p = .0988$) and Insularity as a category was associated significantly with the BDI ($F_{1,24} = 9.905$, $p = .0044$) although when tested against the GHQ the result fell short of statistical significance ($F_{1,24} = 2.325$, $p = .1404$). Taken together, this suggests that a poor rating of social support was more likely from people who were experiencing mental health problems.

The hypothesis that parental insularity is predictive of treatment outcome for children with conduct problems is not confirmed in the present study although all of the correlations were in the predicted directions. Furthermore, in the light of the calculations presented in Appendix XI, the CCQ appeared to have both face validity and some reliability and should be used again with a larger sample as a brief, one off, version of the CIC would be a valuable tool for therapists. Some CCQ data is currently being collected from a non-clinical sample and the next step would be to evaluate the CCQ against the CIC.

Hypothesis 9. Outcome would be influenced by the extent of family socio-economic disadvantage.

No significant relationship emerged between the SED5 score and the overall outcome although, as reported in results, section five, and replicated below, all of the

correlations with the outcome measures were in the predicted direction and were at a level that if repeated with a larger sample would be of statistical significance.

Table 6.13 Relationship between baseline SED5 scores and outcome measures.

	ECBI-I F/U	ECBI-TP F/U	ECBI-I change	ECBI - TP change	ECBI changeindex
SED5	-.053 (p=.8484)	.226 (p=.4072)	.346 (p=.1936)	.245 (p=.36770)	-.213 (p=.4363)

This hypothesis is not confirmed although there are indications that this is a measure of interest in relation to the outcome of treatment for such children and families and this needs replication with a larger sample. Furthermore it should be recalled that those referred families that were experiencing socio-economic deprivation were more likely to be included in the sample that declined treatment.

Hypothesis 10. Children whose parents were good at generating specific examples of their child's behaviour at the time of referral would be more likely to benefit from therapy than those whose parents did not have this ability.

As previously reported in results section five and replicated below there was no correlation between initial PCAMT scores and final ECBI scores. Furthermore unlike the SED5 and CCQ2 scales there is no indication from these results that a bigger sample would show any relationship.

Table 6.14 Relationship between baseline PCAMT scores and outcome measures.

	ECBI-I F/U	ECBI-TP F/U	ECBI-I change	ECBI - TP change	ECBI changeindex
PCAMT Initial	-.080	-.060	.048	-.062	-.012

It should be recalled that the PCAMT scores differentiated significantly between those who did and did not take up treatment, with those who did not accept the offer of treatment having significantly lower scores ($F_{1,24} = 16.402$, $p = .0005$). Furthermore those who did take up treatment did not differ significantly from Nightingale's sample of mothers of non-referred children ($F_{1,36} = 1.118$, $p = .2974$). The mean for the non-referred group was 5.231 (SD = 2.422) and for the treatment group was 4.688 (SD = 2.089).

Hypothesis 10 is therefore not confirmed, however it should be borne in mind that the majority of low scorers did not present for treatment. This is an issue that will be taken up in the discussion since if failure to take up treatment had been included as a poor treatment outcome this would give quite a different picture.

Hypothesis 11. Parents who demonstrated poor ability to generate specific examples of their child's behaviour at the time of referral and whose children improved are likely to demonstrate improved skills in the specific recall of their child's behaviour at follow-up.

Before considering results of direct relevance to this hypothesis it should be recalled that:

- i) the PCAMT had a high correlation between the two assessments ($r = .535$, $p = .0312$)
- ii) the majority of low PCAMT scorers did not take up the treatment option and
- iii) the PCAMT scores of treatment group were not significantly different from the results obtained from a sample of mothers of non-referred children.
- iv) most of the sample improved on most measures

In order to look more carefully at what might be happening within the group that received treatment, it was decided to look at the five lowest PCAMT scorers, those with scores of 3 or less to see whether any change in PCAMT score appeared to be related to changes in the ECBI scores. The results were as follows:

One mother increased her PCAMT score by three points at follow-up but reported her child as much worse on the ECBI.

One mother showed a three point increase and reported a moderate improvement in her child on the ECBI.

One mother increased her PCAMT score by 5 points and her child was reported as much better on the ECBI.

One mother showed a decline of 2 in her PCAMT score but reported her child as unchanged on the ECBI.

One mother had a decline of two points in her PCAMT score and reported her child as much better on the ECBI

Represented in terms of a table these results are shown below:

Table 6.15 Outcomes for children whose mothers had low PCAMT scores at baseline.

	PCAMT increase	PCAMT decrease	Total
Child improvement	2	1	3
Child same/worse	1	1	2
Total	3	2	5

As this table shows there is no evidence of a relationship between improved PCAMT scores and treatment outcome and on the basis of these results this hypothesis is not confirmed.

Hypothesis 12. Treatment outcome will be influenced by the severity of any parental mental health problem at the time of referral.

The results of interest in this area have already been touched on in relation to hypothesis 5 which reported significant improvements in the mental health of the mothers, however the correlations between the two mental health scales, the GHQ and the BDI at baseline and the two ECBI follow-up scores are not statistically significant neither are they with the two ECBI change scores. GHQ initial score correlated with ECBI-I and ECBI-TP, as shown in table 6.16 below:

Table 6.16 Correlations between initial GHQ and BDI scores and the ECBI follow-up scores

		Correlation r =	p value
Pre-GHQ	Post ECBI-I	.170	.5359
	Post ECBI-TP	.128	.6423
	ECBI-I change score	-.321	.23
	ECBI-TP change score	.096	.7281
Pre-BDI	Post ECBI-I	-.0029	.9916
	Post ECBI-TP	.237	.3836
	ECBI-I change score	-.319	.2337
	ECBI-TP change score	.217	.4258

This hypothesis is not confirmed.

Hypothesis 13. Satisfaction with the service provided is a necessary condition for treatment gain.

The data for consideration in respect of this hypothesis are the parental satisfaction ratings and the various outcome ratings, the final ECBI scores and ECBI improvement ratings. As previously described, most children made considerable gains in terms of ECBI scores and most parents reported improvements. Parental satisfaction ratings were also, for the most part favourable, with twelve mothers reporting themselves to be very satisfied with the service, five satisfied and three undecided as shown in figure 6.13. No-one reported dissatisfaction.

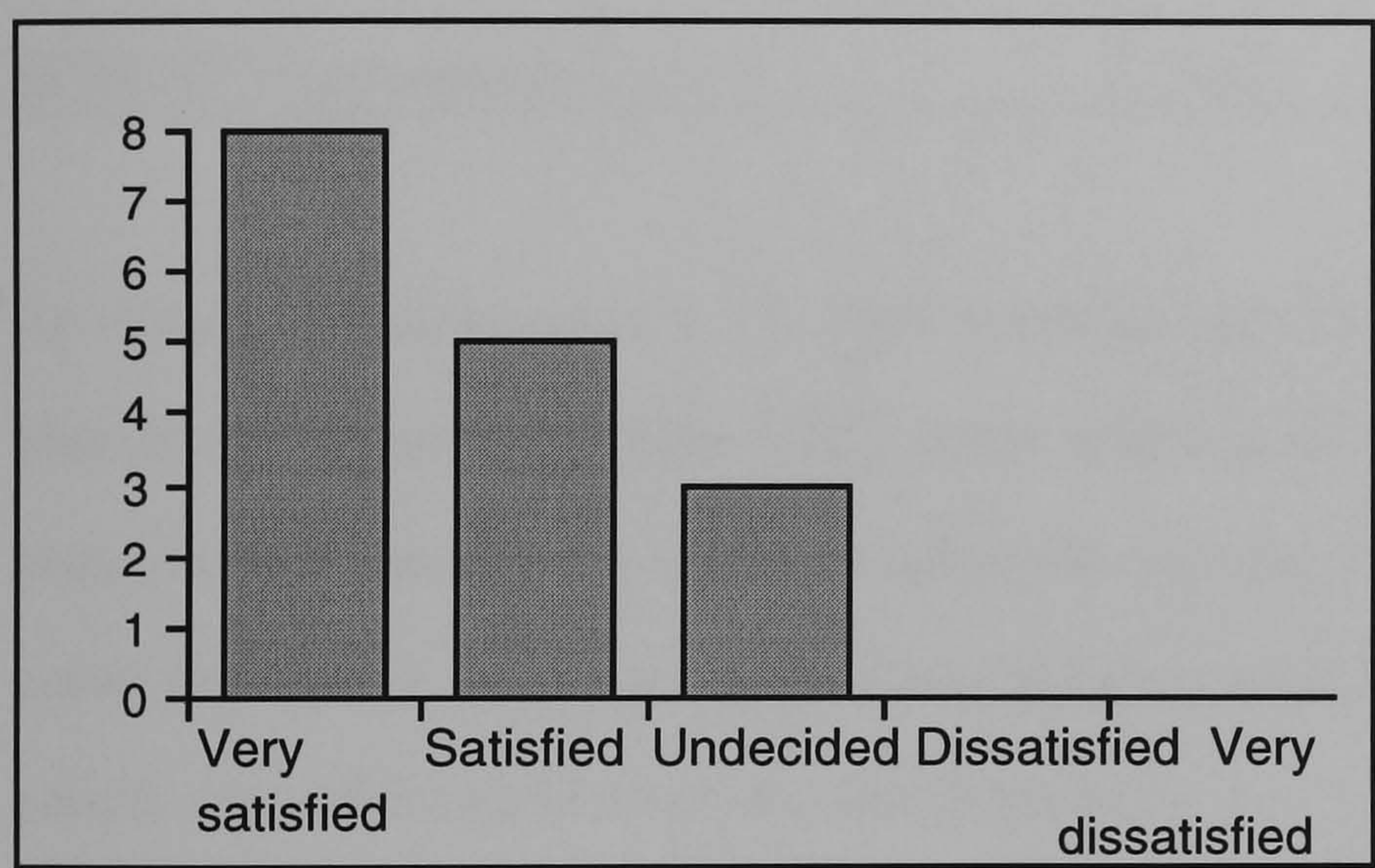


Figure 6.13 Parental Satisfaction

The following correlation matrix is relevant to both this hypothesis and to hypothesis 14 which follows.

Table 6.17 Correlations between the outcome and satisfaction measures.

	Client satisfaction	Client outcome	Therapist outcome
Client satisfaction	1.000		
Client outcome	.358	1.000	
Therapist outcome	-.031	.041	1.000
ECBI-I post score	-.183	-.094	-.007
ECBI-TP postscore	-.249	-.077	-.266
ECBI-I improvement	-.441 (p = .0882)	-.043	-.322
ECBI-TP improvement	-.277	-.322	-.252

As demonstrated in table 6.17, there were no significant correlations between the outcome rating and any of the ECBI scales although the correlation between the ECBI improvement rating and client satisfaction approaches significance. However, as noted previously, it is not really meaningful to look for a relationship when most people are satisfied and most children improve.

It is also of interest to look at the three mothers who were undecided about the service that they had received and these were considered individually. Two of these mothers had children with high initial ECBI I scores, 165 and 133 and both were reported as slightly worse at follow-up. The third child was not seen by the mother as having a behavioural difficulty at the outset, with a very low initial ECBI-I score of 88. The referrer, on the other hand, clearly saw this as a conduct problem. "He had all his mother's attention until his brother was born, he needs more discipline but always gets the upper hand. Please help to get things better before he start school and becomes more boisterous and manipulative". This child's ECBI-I score had dropped by a couple of points at follow-up but it was possible that this mother still had a different

perception of the problem than the referrer and had not really accepted the need for the service requested by the referrer. In any event closer analysis of these three children does suggest that those who are less satisfied are also less likely to report improvements, since two of the only four who showed a deterioration on the ECBI at follow-up are included among these three whose mothers were uncertain about their satisfaction with the service received.

Although some evidence therefore is supportive of this hypothesis the available data does not allow confirmation of this hypothesis.

Hypothesis 14. Parental satisfaction and treatment outcome will not be correlated.

Figure 6.7 in section four of the results showed the distribution of client responses to a question about improvements in the child and the results in relation to satisfaction are shown in figure 6.13 in relation to hypothesis 13. The correlation coefficients for all the measures of interest in the consideration of this hypothesis are reported in relation to the discussion of hypothesis 13 in table 6.17.

It is clear from the above table that there are no significant relationships between parental reports of satisfaction and parental or other reports on outcome, providing some support for this hypothesis. However, the large proportion of people who reported satisfaction with the service and a good treatment outcome makes it unlikely that these two measures could be shown to be related in this sample.

CHAPTER SEVEN: DISCUSSION:

Principal findings.

Consistent with expectations, the results confirmed that the majority of pre-school children referred to the child mental health agency had conduct problems. It was the primary referral problem for 58% of the children in this sample and the need for management advice was also mentioned in a further 34% of the referral letters. Of those children whose parents took up the offer of treatment (62% of the sample studied) 81% had conduct problems as the primary referral problem.

The majority (65%) of the mothers of referred children had significant mental health problems. Single parent status and dependence on state benefit as the sole source of income were twice as likely to be found in this sample than among families in general.

Treated children showed significant improvements and their parents also showed improved mental health scores and the data was suggestive of an association between these two changes. There was limited evidence to suggest that severity of problem predicted outcome. The majority (81%) of parents were satisfied with the service received and 94% reported improvements in relation to the referral problem. Therapists also reported improvements in 88% of cases.

No clear association was demonstrated between treatment outcome and social isolation or socio-economic disadvantage, although correlations were in the predicted direction and suggestive of an association.

The PCAMT scores of the referred sample were significantly lower than scores from a comparable non-clinical sample and, within the referred sample, a low PCAMT score

was significantly associated with a higher SED5, socio-economic disadvantage, score and with failure to take up the offer of treatment but PCAMT scores did not predict outcome for the treated group.

Four people did not consent to the research interview but they also declined the offer of a service so the sample of twenty-six studied included all children within the age band who were treated during this period i.e. the sample was fully representative.

The remainder of this chapter considers the limitations of the study and issues associated with the individual measures. It also considers theoretical and other outstanding issues and concludes with discussion of possible future research directions and the clinical implications of the results.

Limitations.

A number of disadvantages arise from the fact that this was a naturalistic study:

i) It made use of a continuous sample of children referred to a child and family mental health service. This meant that there was no control over the nature of the problems for which the children were referred but it had the advantage of being a representative sample.

ii) The treatment was not standardised and, although evidence was gathered in terms of the approach and strategies used by the staff generally with this group of clients, the precise components of the treatment are not known and may have been different for different children and families.

iii) The staff knew which families were being studied and this may have influenced their behaviour in respect of those cases. It is difficult to hide this from therapy staff since, even if the file notes did not distinguish the child, it would not be possible to

do such a study without the consent of the staff. This would mean that they would, in general, know which children were potential candidates for the project and the fact that they had taken part in the research interview could well be the first thing that the parent would tell the therapist.

iv) Due to the waiting list in operation most children were first seen almost three months after the initial interview and treatment was still ongoing for all families in the treatment group.

v) No experimental control was possible.

The study had a number of other limitations:

i) Due to the time available for data collection the sample size was small, twenty-six families and, in terms of the assessment of outcome, was further reduced as a consequence of ten families declining the offer of treatment.

ii) The study made use of two new questionnaires, the PCAMT and the CCQ as well as a new index of socio-economic disadvantage, the SED5. The assessment of the reliability and validity of the PCAMT and CCQ is only addressed to a limited extent by the study.

iii) At the planning stage it had been intended to investigate the relationship between various baseline and outcome measures using a regression analysis however, in view of the number of measures involved and the small treatment sample, this was not feasible.

iv) The main data source was the report of the child's natural mother, although the referral letter and a report from the therapist were also included. The study would

have been improved if some observational data regarding the child had been included. The attempt to get follow-up data from the referrers was not successful since many had not seen the child since referral.

v) The untreated group proved to be quite different from the treatment group on a number of measures and, as a consequence, no use was made of their follow-up data.

Further discussion of individual results

i) The ECBI

Although significantly correlated with each other at both initial interview and follow-up stages, the two ECBI scales produced different results from one another in that the initial Intensity scale scores predicted outcome scores on the same scale whereas the initial Total Problem score did not predict outcome. There are a number of problems in interpreting scores from such scales and Webster-Stratton and Hammond (1988) have noted that maternal depression is associated with higher ratings of child behaviour problems. In this case it seemed that the TP scale was more influenced by maternal mental health since it was significantly correlated with both the GHQ and BDI at outset and at follow-up. However, despite the correlation between the pre- and post-interview Intensity scale scores, the Total Problem scale may be a better measure of outcome since it records whether the mother views the behaviour as a problem rather than merely its frequency of occurrence. This difference found in the relation of the two scales to both outcome and mental health scores is not something that the author has seen reported in the literature and is worthy of further study.

ECBI change scores, improvement or otherwise, were included in the data analysis in order to maximise the number of different ways that the results could be considered. However this did not add significantly to the understanding of the relationships between the criterion and outcome measures.

A major failing resulting from the use of the ECBI as the main outcome measure is its focus on problems since, as Gardner (1992) in an excellent review of the literature on parent child interactions, points out, even for conduct problem children less than 20% of their interactions with their mothers involve some degree of conflict. In her (1994) observational study of the quality of joint activity between mothers and their conduct problem children, Gardner reports that the mothers of conduct problem children initiate a smaller proportion of activities with their children, make fewer contributions to sustaining their child's activity and are less responsive to their child's contribution. This excellent work is an important development in helping to shift the focus onto how to increase positive interactions between mothers and their conduct problem children and needs to be translated into measures that will record progress on such tasks as an outcome measure.

ii) The two mental health scales, the GHQ and the BDI.

Although these two measures were highly correlated with each other they each identified some mothers that were not identified by the other scale and, on this basis, the use of both scales is justified, particularly since they are both quite quick to complete. They were included at opposite ends of each interview, approximately one hour apart, to reduce the possibility that completing one would influence responses to the other. Responses to both scales demonstrated significant improvements between the initial and the follow-up interviews and it appeared that this was associated with improvements for the child. These results support other findings (Forehand et al., 1980; Hutchings et al., 1995) suggesting that interventions aimed at reducing children's conduct problems also improve the mothers' mental health and the presence of maternal mental health problems should not therefore exclude a child and parent from such a treatment programme.

iii) Insularity

This was measured on the CCQ and scored as an insularity index, I, and on a scale, the CCQ2 score, derived from two responses to each of two sub-scales. There were indications of an association between the CCQ and the two mental health scores and similarly between the CCQ2, taken at baseline, and the outcome scores but these were not significant for this small sample.

This was a new instrument and it was unfortunate that, due to its late inclusion, no test - retest data was collected on it. Attempts were made, appendix X, to consider the issues of its reliability and validity but these need taking further. In the light of the importance of insularity in the literature on treatment outcome (Wahler and Dumas, 1982), the development of a new instrument, such as the CCQ, required a study in its own right. The results suggest that it may be comparable to the CIC (Wahler, 1980) and in view of its relative ease of administration it should be assessed further. Data are currently being collected from a sample of mothers of comparably aged but non-referred children.

iv) The PCAMT.

This was also a new measure devised for the study but in this case test-retest data were collected and it also had the benefit of the many studies of autobiographical memory which had established a methodology for its investigation and reliability and validity data (Brittlebank et al., 1993). Reliability and validity issues in relation to the PCAMT are discussed in appendix XI. The interesting findings in relation to this measure were, firstly that it had a high test-retest correlation confirming previous findings (Williams, 1992) that it is a stable trait-like measure and secondly the association between low PCAMT scores and the failure to take up the offer of treatment.

There are a number of possible explanations for this latter finding. It may be a problem of timing, since the children whose mothers declined treatment were on average 7 months younger than those who were seen, the problems were also less likely to be seen as conduct problems, per se, with the referral being focused on a specific problem such as toileting or feeding. These mothers may not at that stage themselves have identified a problem in need of treatment.

Another possibility is suggested by the work of Evans et al. (1992) who demonstrate an association between low autobiographical memory scores and poor problem solving skills. It is possible that these mothers did not perceive the child's difficulties as a problem that they could do anything about. This is worthy of further investigation, as is the investigation of how the PCAMT and the AMT would compare for the same person, i.e. to what extent would the PCAMT and the AMT measure the same process. Scorer reliability might be improved by tape-recording the responses to the PCAMT. Nevertheless there was substantial agreement between the two scorers.

It should also be noted that, whilst the PCAMT shows no significant relationship with treatment outcome, this is not surprising since the scores of the mothers of treated children were not significantly lower than the scores of similar aged but non-referred children. If treatment outcome had included failure to accept help for the child these results would have looked quite different.

In terms of the theoretical accounts of the memory processes that underpin the study of autobiographical memory it was of interest to note, as reported in appendix XI, that one word on the PCAMT presented difficulties for respondents because, it appeared to prompt recall of a generic memory which was given before the respondent could stop themselves. This applied even to those mothers who were good at producing specific memories. The word was "peaceful" and the responses almost all concerned when the

child was in bed and asleep. This appears to provide some evidence for Norman and Bobrow's (1979) Descriptions Model which suggests that specific memories are accessed through generic memories. In this case the generic memory was so strong that the respondents apparently gave it before they were aware of doing so.

Further work is needed to identify the relevance of the PCAMT to the problems under discussion.

v) Socio-economic disadvantage, the SED5 index.

This index was similar but not identical to that developed by Wahler and Cormier (1970) and, as previously reported, the SED5 was significantly correlated with the PCAMT with a low PCAMT score being associated with a high socio-economic disadvantage score. Furthermore, like the PCAMT but to a lesser degree, it appeared to be associated with failure to take up the offer of treatment. For those who received treatment, the SED5 showed a consistent set of correlations in relation to outcome which, although not statistically significant, were suggestive of a relationship. The association between the SED5 and the PCAMT is discussed further in terms of the theoretical issues raised by this finding.

One important issue in relation to disadvantage concerns the maintenance of treatment effects. The effects of disadvantage have been well researched in terms of their association with the development of problems (Farrington, 1995) but it is also important to recall that, as Dumas and Wahler (1983) found, such families often do not maintain the treatment gains made at the time. Wahler and Dumas (1989) argue for longer term support to multistressed families:

"we think it unlikely that multistressed mothers will be able to significantly reduce their contextual stressors, because a sizeable portion of these are tied to socio-economic issues. Therefore we would put our 'clinical money' on social support

conditions in which troubled mothers continually review their day-to-day problems with appropriately intrusive listeners" Wahler and Dumas (1989) p127.

Studies such as the present one, which demonstrate clear short term improvement, need to follow-up the children over longer periods of time to get a more accurate indication of outcome and of the real needs of the children and families with these difficulties.

vi) Parental reports on outcome and of satisfaction.

Most parents reported positive outcomes and satisfaction with the service nevertheless, from analysis of the responses of the three mothers who were undecided as to their views about the service, it did seem that this may be associated with a less favourable outcome. It is clear from the literature (Herbert, 1995) that if parents are to be helped to change their management of their children they need to feel happy about the service that they are receiving and this is a matter that need continuous monitoring by therapists. It had been proposed that a positive response to the service was a necessary but not sufficient requirement for progress but the data did not enable any firm conclusions on this matter.

Theoretical and other issues

i) The identification of children at risk of developing conduct problems.

This study focused on children between two and four years of age, however maternal reports of infant difficultness at age six months and of infant resistance to control at one year of age predict significant conduct disorder at age six and eight (Lee and Bates, 1985; Bates, Masslin and Frankel, 1985; Bates, Bayles, Bennett, Ridge and Brown, 1991) and conduct problems at these ages also predict later difficulties (Greenberg et al., 1993).

It may be that this difficultness, the precursor of conduct problems, was what was being identified by the Doctors who referred those children in the present study whose mothers did not accept help. Such a hypothesis could only be tested out by means of a longitudinal study which made use of the same measures.

ii) Maternal attending and autobiographical memory.

Almost all of the mothers who had low PCAMT scores did not attend for treatment and this applied to them individually and as a group as was shown in results, section 3a. It was also the case in the present study that a low PCAMT score was significantly correlated with a higher level of socio-economic disadvantage.

This finding mirrors those of Wahler and Hann (1984) and Wahler and Dumas (1989) who found that maternal attending deficits were associated with being multistressed, that is were found among their socio-economically disadvantaged mothers. The fact that poor PCAMT scores were related to socio-economic disadvantage suggests that the PCAMT is measuring something similar to that measured by Wahler and colleagues, which was one of the theoretical questions that prompted the development and use of the PCAMT in the present study.

The effect of stress on attention has been known for a long time (Baddeley, 1972) and is well documented by Webster-Stratton (1990b) who has identified a number of ways in which stress can act as a disrupter of parental perceptions and family interactions. McCubbin and Patterson (1983) suggest that the different stresses can create a pile up effect. An explanation of maternal attending deficits in terms of environmental stressors is not in conflict with the finding of durability of these processes since, as Wahler and Dumas (1989) point out many of the problems faced by multistressed families are relatively constant environmental factors.

Clinical implications.

Another aspect of the present study is that the case has been made for behavioural advice to parents as the most effective form of treatment for children with conduct problems. In the present study, however, almost half of the referred children, although offered treatment, did not take up the service offered. The most important potential clinical implication of this study arises from the association between failure to accept treatment and a low PCAMT score. The children whose mothers declined treatment were also more likely to have problems that had a single focus than a more generalised conduct problem. If these children have problems that persist and develop into full blown conduct problems this would suggest use of the PCAMT as a screening device for the identification of children at risk of developing mental health problems. This would require investigation by means of a prospective study.

The association between low PCAMT scores and high socio-economic deprivation is also important since, to the author knowledge, it is the first demonstration of such an association and suggests that the PCAMT may well be measuring a similar process to the maternal attending deficit (Wahler and Hann, 1984; Wahler and Sansbury, 1990) which is predictive of poor treatment outcome for the families of children with conduct problems. If further work confirmed this finding, the PCAMT could provide a quick clinical measure to identify families in treatment who are at risk of failure. These families could then be offered a longer term support package to help them to maintain any treatment gains.

Another aspect of the present findings for child mental health services to consider is that socio-economically disadvantaged families are less likely to take up the option of treatment. Services must consider how to ensure accessibility for those families who are socio-economically disadvantaged, probably depend on public transport, may have trouble in finding fares to clinic appointments, etc..

The replication, in this study, of findings that the parents of children referred to such services are themselves likely to have mental health problems and that the focus of treatment on the child seems to improve both the child's and the parent's problems has a number of clinical implications:

- i) Parents should be assessed for the existence of such problems since they may need additional help but the existence of a mental health problem should not exclude them from parent training programmes,
- ii) Parents referred to adult mental health services should be asked specifically about their children's behaviour since parenting issues may be contributing to their mental health difficulties and they may benefit from specific help with such problems,
- iii) Use of the GHQ and BDI should become routine in child mental health work since they are quick and easy to complete and provide relevant baseline and outcome measures.

The ECBI is a well established tool for use in relation to children's behavioural problems and should be used routinely to provide baseline and outcome measures. Particular note should be taken of the Total Problem score since in the present study TP scores were associated with parental reports of their own mental health and also may be a better indication of how the parent feels about their child than the Intensity score.

The CCQ results were suggestive of an association between social isolation and poor treatment outcome and, although this will require replication with data from a larger sample, this study suggests that social support is something about which clinicians should enquire. The CCQ may be a quick and efficient way of assessing this.

Concluding comments.

It is not surprising that no simple relationship between treatment outcome and the many variables assessed has been found in this study. In terms of both the numbers of subjects and the length of follow-up, it can only be considered as a pilot investigation into factors contributing to the effective treatment of conduct problems in young children. Better statistical analysis of the variables and their interactions requires larger numbers of subjects so as to give greater power to the analysis and enable identification of relatively weak, but nevertheless important, effects.

In relation to clinical practice, more work needs to be done to identify how to assess individual differences both in terms of patterns of baseline characteristics and of responses to treatment. The complexity of the circumstances of each referred child and their family attests to the need for an individualised treatment approach to such problems and more particularly to an assessment of the particular circumstances of each child and family in order to provide a service to meet their individual needs. Each factor that is shown to have an effect, however weak, is another variable for consideration in clinical practice where, for any particular client, it may have greater relevance.

The results of the study are encouraging, statistically significant improvements were found in both child conduct problems and parental mental health despite the small sample size and probable variations in the actual treatment provided, moreover the service users were satisfied with the service received.

A number of important theoretical issues have been discussed and suggestions made for further lines of investigation.

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Index to Appendices

Appendix I	Rationale for sample selection, sample inclusion criteria and breakdown of referrals in each category.	114
Appendix II	Letter to parents of referred children, description of study and consent form.	117
Appendix III	Letter to referrer of child informing them of the study.	123
Appendix IV	Details of the non-participants.	124
Appendix V	Child Health and Development Questionnaire and scoring criteria for the socio-economic deprivation index, SED5.	125
Appendix VI	Details of the information provided by the one father who attended a research interview and reasons for the exclusion of his data from the analysis.	128
Appendix VII	Therapist use of behavioural strategies questionnaire and table of responses.	129
Appendix VIII	Follow up interview request to mothers of treated and untreated children.	132
Appendix IX	Community Interaction Checklist.	134
Appendix X	Community Contacts Questionnaire, CCQ scoring criteria and reliability and validity data.	137
Appendix XI	Parent child autobiographical memory (PCAMT) response sheet, administration instructions, scoring sheet and reliability/validity data.	147
Appendix XII	Parent Satisfaction and Outcome Questionnaire (Service user feedback questionnaire).	156

Appendix XIII Research follow-up interview. 160

Appendix XIV Therapist treatment dose and outcome questionnaire. 161

Appendix XV Source of referrals of sample and treatment take-up. 162

Appendix XVI The diagnosis of conduct disorder and details of the two main diagnostic frameworks, DSM IV and ICD-10. 163

Appendix XVII Problems identified in the referral letter. 174

Appendix XVIII Comparison between those children who were seen and those who were not. 176

Appendix XIX Scoring criteria for the calculation of the ECBI change index. 185

Appendix I

Rationale for sample selection and sample inclusion criteria.

The reasons for the selection of this sample were as follows :-

1. Referrals within this age range were predominantly of children with problems of the conduct disorder type.
2. If untreated these problems are likely to develop into serious adolescent conduct disorder and a range of adult problems of the personality disorder type.
3. It is not possible or appropriate to consider children below the age of two to have a conduct problem and the principal measure to be used to assess conduct disorder, the ECBI, has a floor of two years. Furthermore most clinicians would be reluctant to use such a label for a child under this age.
4. The team members provided a similar service to this group of referred children. Despite their different backgrounds, training and disciplines (Child Psychiatry, Clinical Child Psychology and Social Work) team members felt that they all worked in a similar way with this group of referrals by providing behavioural management advice to the parents (see Appendix VII).
5. The service was focused on the parent, the age range of the children meant that, in terms of outcome assessment, the parent was the service recipient. In work with older children this is a much more complex issue and the perceptions and needs of the child and the parent/s may be quite different.
6. Within the time scale available for this work it would be possible to obtain a sample of sufficient size to enable statistical analysis of the outcome data and assessment of the effects, if any, of the predictive measures on outcome.

Sample inclusion criteria.

All children aged between two and four years who were referred to the Agency during a six month period were considered for inclusion in the sample.

The following categories of referrals were excluded from the sample:

Self referrals, a small part of the Agency's work with this age group, were excluded because the initial intention had been to compare parental and referrer ratings of outcome and satisfaction with the service received. This plan was subsequently abandoned because of a poor response rate from the referrers and/or responses from referrers saying that they had not seen the child since referring them. Over this period four referrals (10%) were self-referrals.

Re-referrals were excluded since it was felt that previous experience with the service might contaminate the parental ratings regarding the success of the current intervention and their satisfaction with it. There was only one re-referral (2%) in the sample.

Referrals taken by the author. As far as possible during the study period the author was not considered as a potential therapist for referred children. However the author was considered the most appropriate therapist for two referrals (5%) which were therefore excluded from the study.

Inappropriate referrals. A further five referrals were not accepted by the agency, being deemed not appropriate. This was either because the request was for a service that could be better provided by another agency or because it was a request for a service not provided by the agency. This represented 12% of the referrals over the period. Of 42 referrals therefore, 30 children (71%) met the research criteria.

Table I.i Breakdown of the forty-two referrals received during the period and the number meeting research criteria.

Referral Classification	No.	Percentage
Self-referral	4	10
Re-referral	1	2
Referral taken by author	2	5
Referral not accepted by agency	5	12
Referral meeting research criteria	30	71
TOTALS	42	100

Appendix II

Child and Family Guidance Service - Pre-school Service Evaluation

Dear

As you know (name of child) has recently been referred to the above service by (name of referrer).

The staff of the Child and Family Guidance Service are looking at how useful people find the service and, as part of this, one of our staff would like to visit you for approximately one hour before your first appointment to collect some information about the problems that you are having with (name of child). We would then like to visit you again after about 6 months to see if things have improved and to find out what you thought of the service that you received. The attached information sheet describes this research and asks for your consent to these two interviews.

We hope that you will agree to be interviewed and if so Mrs. Judy Hutchings will call on you on (date) at (time). Please return the enclosed slip in the reply paid envelope if you are willing to be interviewed Please also let us know if you prefer to be seen somewhere other than in your own home. Mrs. Hutchings will look forward to meeting you on the (date).

Yours sincerely,

Secretary to Judy Hutchings

Child and Family Guidance Pre-school Service Evaluation Project, a description of the proposed study and consent form.

This leaflet describes the study which we are undertaking and in which you are being asked to take part. A consent form is also attached.

We want to find out more about the children under 5 years old who are referred to our service and the effect that their problems have on their families. We also want to know how successful we are at helping with these problems and what you, the service users, think of the service that you receive. To do this we want to interview as many as possible of the parents of children under the age of 5 that are referred to us over a six month period from June to December 1994.

If you are willing to help you will be interviewed for about an hour both now and again about 6 months later for a further hour. During these two interviews you will be asked questions about your child, his/her problems and how they affect your life.

The researcher is Judy Hutchings, Principal Clinical Psychologist in the Child and Family Guidance Service. She is undertaking this research under the supervision of the Clinical Psychology Department of the University .

The two interviews would not last longer than an hour each and would be undertaken in your own home or at another place of convenience to you. The information provided will be **completely confidential** and the results will only be made available to the members of the child guidance team in a report on the group as a whole not as individuals.

Your decision to take part or not in this study will not affect the service that you receive. However it is the hope of all of the members of the Child and Family Guidance Service that you will agree to take part so that the results will truly represent the views of all the parents of young children who use our service and enable us to improve the service that we offer.

If you would like more information about the study before being seen please contact Judy Hutchings. We hope that you will agree to help us to find out more about the children we are asked to see and how effective our service is.

Child and Family Guidance Service

Review of the service offered to pre-school children and their families

Consent form

I, _____, parent
of _____, hereby consent to
take part in the study to review the Child Guidance Service to pre-school children. I
understand that this involves two one hour interviews and the information provided by
myself will remain **confidential** to the researcher and only be reported as part of the
findings for the whole group.

I understand that participation in this study is entirely voluntary and I am free to take
part or withdraw at any time without this affecting my child's future treatment in any
way.

Name _____

Signature _____ Date _____

Please return in the enclosed reply paid envelope to Judy Hutchings, Child and Family
Guidance Service,

In the case of any complaints concerning the conduct of this research, these should be
addressed to the Chief Executive, _____ Community Health Trust, , or to Professor _____,
Head of Department, Psychology Department, University of _____, ..

**Atodiad 2 - Llythyr cyntaf at riant/rieni plentyn a gyfeiriwyd.
Gwasanaeth Cynorthwyol Plant a Theuluoedd - Gwerthusiad o'r
Gwasanaeth Cyn-Ysgol**

Annwyl

Fel y gwyddoch cyfeiriwyd (enw'r plentyn) at y gwasanaeth uchod gan (enw'r cyfeiriwr).

Mae staff y Gwasanaeth Cynorthwyol Plant a Theuluoedd yn ceisio gweld pa mor ddefnyddiol yw'r gwasanaeth i bobl, ac fel rhan o hyn, hoffai un o'n staff, Mrs. Judy Hutchings, ymweld â chi am ryw awr cyn eich apwyntiad cyntaf er mwyn casglu gwybodaeth am y problemau yr ydych yn eu cael gyda (enw'r plentyn). Yna byddai'n hoffi ymweld â chi ar ôl rhyw 6 mis er mwyn gweld os yw pethau wedi gwella ac i gael eich barn am y gwasanaeth a ddarparwyd ar eich cyfer. Ar y daflen wybodaeth gysylltiedig ceir disgrifiad o'r ymchwil hwn a gofynnir am eich caniatâd ar gyfer y ddau gyfweiliad hyn.

Gobeithiwn y byddwch yn cytuno i gael eich cyfweld ac os felly bydd Mrs. Judy Hutchings yn galw arnoch chi ar (dyddiad) am (amser). A fyddech gystal â'n hysbysu pa un ai a ydych yn fodlon cymryd rhan yn yr astudiaeth hon ai peidio drwy ddychwelyd y slip amgaeedig yn yr amlen barod amgaeedig os gwelwch yn dda. A fyddech yn ein hysbysu hefyd os fyddai'n well gennych gael eich gweld rywle arall. Os ydych yn fodlon cael eich gweld bydd Mrs. Judy Hutchings yn edrych ymlaen at eich cyfarfod ar y (dyddiad).

Yr eiddoch yn gywir,

Ysgrifenyddes Judy Hutchings

Atodiad 2 - Arolwg o Wasanaeth Cyn-Ysgol Gwasanaeth Cynorthwyol Plant a Theuleoedd disgrifiad o'r astudiaeth arfaethedig a'r ffurflen ganiatâd.

Yn y daflen hon disgrifir yr astudiaeth a wneir gennym ac y gofynnir i chi gymryd rhan ynddi. Amgaeir ffurflen ganiatâd hefyd. 'Rydym eisiau gwybod mwy am y plant o dan 5 mlwydd oed a gyfeirir at ein gwasanaeth a'r effaith a gaiff eu problemau hwy ar eu teuluoedd. 'Rydym hefyd eisiau gwybod pa mor llwyddiannus yw ein hymdrechion ni i helpu gyda'r problemau hyn ynghyd â'ch barn chi, defnyddiwr y gwasanaeth, am y gwasanaeth a ddarperir ar eich cyfer. Er mwyn gwneud hyn hoffem gweld cymaint â phosibl o rieni plant dan 5 oed a welir mewn cyfnod o chwe mis o _____ hyd at _____.

Os ydych yn fodlon helpu cynhelir cyfweliad â chi am ryw awr cyn y rhoir unrhyw driniaeth i'ch plentyn ac eto, os ydych yn fodlon, ymhen 6 mis yn ddiweddarach am awr arall. Yn ystod y cyfweiliadau hyn gofynnir cwestiynau i chi am eich plentyn, ei b/phroblemau ef/hi a'r modd y maent yn effeithio ar eich bywyd chi. Yn yr ail gyfweliad gofynnir i chi hefyd am eich barn ynglyn â'r gwasanaeth a ddarparwyd ar eich cyfer.

Yr ymchwilydd yw Judy Hutchings, Prif Seicolegydd Clinigol yn y Gwasanaeth Cynorthwyol Plant a Theuluoedd. Mae hi'n ymgymryd â'r ymchwil hwn o dan oruchwyliaeth Adran Seicoleg Clinigol Coleg. Gellir cysylltu â hi yn y cyfeiriad isod, os hofech ragor o wybodaeth.

Ni bydd y ddau gyfweliad yn parhau am fwy nag awr yr un a chynhelir hwy yn eich cartref eich hun neu mewn man arall sy'n gyfleus i chi. Cedwir y wybodaeth a roir yn **hollol gyfrinachol** a bydd y canlyniadau ar gael i aelodau'r tîm cynorthwyno plant ar ffurf adroddiad ar y grwp cyfan ac nid ar unigolion.

Ni fydd eich pendergyniad i gymryd rhan ai peidio yn yr astudiaeth hon yn effeithio ar y gwasanaeth a ddarperir ar eich cyfer. Gobaith holl aelodau'r Gwasanaeth Cynorthwyol Plant a Theuluoedd fodd bynnag yw y byddwch yn cytuno i gymryd rhan fel y gall y canlyniadau wir gynrychioli barn holl rieni plant ifanc sy'n defnyddio ein gwasanaeth a'n galluogi ni i wella'r gwasanaeth a gynifir gennym.

Os hofech ragor o wybodaeth am yr astudiaeth cyn cael eich gweld, cysylltwch â mi os gwelwch yn dda. 'Rwyf yn gobeithio y byddwch yn cytuno i'n helpu i ddod i wybod mwy am y plant y gofynnir inni eu weld a pha mor effeithiol yw ein gwasanaeth.

Gwasanaeth Cynorthwyol Plant a Theuluoedd
(rhif ffôn)

Gwasanaeth Cynorthwyol Plant a Theuluoedd
Arolwg o'r gwasanaeth a gynigir i blant cyn-ysgol a'r teuluoedd

Ffurflen Ganiatâd

'Rwyf i, _____, rhiant _____

_____, drwy hyn yn cytuno i gymryd rhan yn yr astudiaeth i wneud arolwg o'r Gwasanaeth Cynorthwyol Plant i blant cyn-ysgol. Deallaf fod hyn yn golygu dau gyweliad un awr ac y cedwir y wybodaeth a roir gennyf yn **gyfrinachol** gan yr ymchwilydd a'i chyhoeddi fel rhan o ganlyniadau'r grwp cyfan yn unig.

Enw _____

Lofnod _____ Dyddiad _____

A fydddech gystal â dychwelyd hwn yn yr amlen baron at Judy Hutchings, Prif Seicolegydd Clinigol, Gwasanaeth Cynorthwyol Plant a Theulueodd.

Appendix III

Child and Family Guidance Service - Pre-school Service Evaluation

Dear (Dr. or referrer)

You recently referred (name of patient) to this service and we will be writing to you again shortly to let you know when and by whom they will be seen.

In the meantime I am writing to let you know that we are currently evaluating our service to pre-school children and their families and this child and his/her primary carer will be invited to participate in this study. If they agree, this will involve them in an interview lasting approximately one hour before they start any therapy and a similar follow-up interview, at the termination of therapy or after 6 months, whichever comes sooner.

They will be asked to provide a baseline assessment of the problems and the same measures at follow-up. At follow-up they will also be asked to complete a satisfaction questionnaire. If you see this family in the near future I would be grateful if you could encourage them to participate in this study.

I would also be grateful if you could help by completing and returning the attached questionnaire. This asks about the severity of the child's problems, any mental health problems currently affecting the child's main carer and the social support available to them. These are all factors known to influence the outcome of therapy. I would also like you to complete a similar questionnaire at follow-up and at that stage I would also like your views about our service to this family.

I look forward to receiving the completed questionnaire from you, it has been designed to make minimal demands on your time and a reply paid envelope is included. We hope that the study will provide us with information that will enable us to deliver a better service to yourself and your patients.

Yours sincerely,

Judy Hutchings,
Principal Clinical Psychologist

Appendix IV

The characteristics of the children whose parents did not consent to the research interview.

The mean age of the children whose parents did not consent to interview was 46.5 months (as compared with that of participants of 44.2 months). The sample of four included three boys and one girl of whom two were referred by Health Visitors and two by GPs.

The referral letters suggested that two of the children had problems of the conduct disorder type whereas the other two were referred with concerns about risk of abuse and already had the involvement of the Social Services Department with the child. It is possible that these latter two referrals were made without the knowledge of, or against the wishes of, the parents who may have already had considerable contact with outside agencies as a result of concerns about risk. None of the participants had abuse queries associated with their referral.

Appendix V

i) Child Health and Development Questionnaire

ii) Scoring criteria for the SED5, the index of socio-economic disadvantage

Child's Health and Development Questionnaire

Judy Hutchings Research Sample

Name of child _____ Research Ref. No. _____

Date of birth_____ Sex_____ Age_____

Did you have problems during pregnancy and at the time of his/her birth?

Has he/she had any serious health problems, other than normal childhood illnesses?

Has he/she ever been in hospital? _____

Does he/she have any current health problems? _____

How would you describe his/her development so far? (normal or causing you concern)

What are the current problems if any that you feel that this child has?

Anything else that you would like to tell us about your child's health or development?

Who else lives with the child?
parent/s_____
siblings (ages) _____
others _____

Employment/income of father/mother/step parent/s

Appendix Vii

Scoring criteria for the SED5, the Index of socio-economic disadvantage.

The index of socio-economic disadvantage, SED5, was based on the criteria used by Rutter and Quinton (1977) and by Dumas and Wahler (1983). The five factors used in the present study and their scoring criteria are set out below:

1. Employment status of primary provider. This was coded on the basis of whether the family had an earned income or were dependant on welfare benefit.
2. Marital status was coded for single parent or married/cohabiting status. It had been decided to use the two year criterion for cohabiting as suggested by Dumas and Wahler but, in the event, all but one of the sample who did not have single parent status were still living with the father of the referred child and the other mother had married her new partner.
3. Number of children, on the basis of the Brown and Harris (1978) findings three or more children was taken as the large family size category
4. Housing circumstances, poor quality/overcrowded/insecure, this was a rating made by the interviewer on the basis of both responses to questions and observations. Overcrowded included situations where it was necessary for the child to share a room with an adult or for children of different sexes to share rooms and poor quality was concerned with the state of the fabric of the building. Two of the twenty-six respondents were coded as being in poor housing using these criteria, one was a mother with two small children in a high rise two bedroomed flat and the other a single mother with one child living in a privately rented short let property
5. Area of residence, high/low crime. This was done on the basis of areas known to have high crime and social problem rates. On this basis three respondents were rated in this way.

Each item was given a 1 or 0 score and this was summed into an Index of Socio-economic Disadvantage.

This list was based more closely on the Dumas and Wahler factors, since their index was predictive of treatment outcome. Like Dumas and Wahler, the scoring system of Rutter and Quinton was followed. Due to an oversight, data on maternal educational status was not collected.

Appendix VI

The data on the one father who attended a research interview and reasons for his exclusion from the analyses.

Both parents of one child were at home for the interview and they described a pattern of shared care with the mother caring for the children during the earlier part of the day whilst the father was at work and the father caring for them in the evening whilst the mother was out in part-time employment.

A complete data set was obtained from both parents although it became clear that it was the mother who considered the child to have a conduct problem and had sought the referral. The father did not consider the child to have a problem and was quite happy with the situation when he had sole responsibility for the children. The mother's data set which was included in all analyses.

Brief details of the father are as follows. He was 33 years of age, in full-time skilled manual employment. He did not consider his child to have a behavioural problem, either in interview or as assessed by his responses to the ECBI. He himself scored well below the clinical cut-off on both the GHQ and the Beck Depression Inventory.

Subsequent to the initial interview, this child was seen by the Agency. The father attended some but not all of the therapy sessions and, at follow-up, reported satisfaction with the service received and positive outcomes for his child, particularly in relation to his wife's management of her.

Appendix VII

- i) Questionnaire to therapists regarding their use of behavioural strategies**
- ii) Responses from therapists to the behavioural strategies questionnaire**

Appendix VIIi

Questionnaire to therapists regarding their use of behavioural strategies

Dear

As part of our ongoing study looking at the outcome of treatment for pre-school children with behavioural difficulties I would be grateful if you could complete the questionnaire below so that I can describe the typical treatment received by such children and families.

Which of the following components of treatment do you **REGULARLY** use in your treatment of children with behavioural difficulties.

- | | |
|--|--------|
| 1. Direct observation of parent child interactions | Yes/No |
| 2. Recordings of behaviour by yourself based on 1. | Yes/No |
| 3. Asking parents to keep records | Yes/No |
| 4. Setting homework tasks | Yes/No |
| 5. Setting specific goals or targets | Yes/No |
| 6. Providing star charts and record sheets for parents and/or children to record successes | Yes/No |
| 7. Providing direct feedback to parents on their management skills | Yes/No |
| 8. Specific discussion on contingency management | Yes/No |
| 9. Specific advice on the management of problem behaviour | Yes/No |
| 10. Written summaries of agreed goals or strategies | Yes/No |

Please return to me via my box ASAP

Thanks, Judy

Appendix VIIIi

Responses from therapists to the behavioural strategies questionnaire

The responses, from the seven therapists who treated the children and families, to the therapy skills questionnaire are shown below.

Question	No. who use this
1. Direct observation of parent/child interaction	5
2. Recording by self of 1.	2
3. Parents asked to keep records	7
4. Setting homework tasks	6
5. Setting specific goals or targets	6
6. Star charts and record sheets for recording success	7
7. Direct feedback to parents on management skills	7
8. Specific discussion on contingency management	7
9. Specific advice on the management of problem behaviour	7
10. Written summaries of agreed goals or strategies	3
Total	57

The mean use of the ten behavioural treatment components included in the questionnaire was 8.1 with a range from 7 to 10. All therapists reported use of five items, asking parents to keep records, providing star charts and record sheets, giving direct feedback to parents, discussing contingency management and giving specific advice on the management of problem behaviour.

Appendix VIII

Follow-up interview request letters to the mothers of treated and untreated children.

Letter to mothers whose children were seen,

Dear

About six months ago I called on you, as part of my research, to interview you and find out about the problems you were having with (name of child).

I should like to call and do the follow-up interview, which I mentioned to you when we met last time, in order to find out what changes, if any have occurred since I last saw you.

I shall call on you at _____ on _____ unless I hear from you that this is not convenient.

I hope that things have gone well since we last met and look forward to seeing you.

Yours sincerely,

Judy Hutchings.
Principal Clinical Psychologist

Letter to mothers whose children were not seen,

Dear

About six months ago I called on you, as part of my research, to interview you and find out about the problems you were having with (name of child).

I know that you did not take up the referral to Child Guidance but I should still like to call and do the follow-up interview, which I mentioned to you when we met last time, as it will still be of use to my research to find out what changes, if any have occurred since I last saw you.

I shall call on you at _____ on _____ unless I hear from you that this is not convenient .

I hope that things have gone well since we last met and look forward to seeing you.

Yours sincerely,

Judy Hutchings.

Principal Clinical Psychologist

Appendix IX Community Interaction Checklist (Wahler, 1980).

Community Interaction Checklist

Family _____

Person giving information _____

Working? yes ____ no ____

Access to car? yes ____ no ____

Date _____

Phase _____

Observer _____

Interactor Codes and Specifications

Code

Specify

1. husband's side
2. wife's side
3. ex-husband
4. ex-wife
5. friend
6. acquaintance
7. stranger
8. helping agency
9. business
10. work setting
11. no contact
12. church activity

sex, age
sex, age
sex, age
sex, age
sex, age
sex, age
sex, age
which type

Interactor		Initiator	How			Where			
Code	Specifi- cation	Self Other Unclear	Phone	In person	Other (specify)	In house	Within block	Within neighbor- hood	Outside neighbor- hood

How Would You Rate Your Day?

today before _____

yesterday after _____

(fill in blank with observation time)

+3 +2 +1 0 -1 -2 -3

+3 +2 +1 0 -1 -2 -3

goodneutralbad

Not counting time spent sleepingat night, how long was the child in your care:

today before _____ ?

yesterday after _____ ?

**TEXT CUT
OFF IN
ORIGINAL**

Nature of Interaction

Interaction Valence

Specify

Talked about:

nonroutine

1. the way I raise the kids
2. the children at school
3. a problem with the kids
4. my work around the house
5. finances or money
6. borrowing something
7. the people I associate with
8. how much time we spend together
9. my work on the job
10. how we relax together

good

+3

+2

+1

neutral

0

-1

-2

bad

-3

[illegible]

List any unusual circumstances (illness, extended absence of spouse, etc.)

Observer

Do you think this data is accurate?

yes _____ no _____

Nature of Interaction			
Did any of the following activities occur? Talked about:	Were you critical?	Was other critical?	Rate the interaction
1. the way I raise the kids			
2. the children at school			
3. a problem with the kids			
4. my work around the house			
5. finances or money			
6. borrowing something			
7. the people I associate with			
8. how much time we spend together			
9. my work on the job			
10. how we relax together			
11. other people's problems			
12. miscellaneous			
13.			
14. no data			

	good	+3
Spouse Interaction Checklist		+2
		+1
Not counting the time spent sleeping a night, how many	neutral	0
hours did you and your spouse spend together:		-1
Yesterday after ____		-2
	bad	-3
today before ____		
(Fill in blank with time of observation)		

Appendix X

i) Community Contacts Questionnaire.

ii) CCQ scoring criteria.

iii) CCQ reliability and validity data.

Appendix X

Community Contacts Questionnaire

Research Id. No._____

Name of child_____Date completed_____

Completed by_____

Relation to child_____

This questionnaire asks about the contact that you, the child's main carer, generally have with people outside your own home, that is people that 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.

1. Relatives

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

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

Please tick each of the following topics that you regularly discuss with your relative/s

Problems with your children
Finances or money
Doing things together
Things to do with your job
Health issues
Domestic matters
Things not involving you personally

How would you rate your contact with your relatives generally

Very bad	Bad	Poor	Fair	Good	Very good
----------	-----	------	------	------	-----------

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
---------------	----------	-------	------------	-----------------

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
---------------	----------	-------	------------	-----------------

2. Friends

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

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

Please tick each of the following topics that you regularly discuss with your friend/s

Problems with your children
Finances or money
Doing things together
Things to do with your job
Health issues
Domestic matters
Things not involving you personally

How would you rate your contact with your friends generally

Very bad	Bad	Poor	Fair	Good	Very good
----------	-----	------	------	------	-----------

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
---------------	----------	-------	------------	-----------------

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
---------------	----------	-------	------------	-----------------

3. Welfare agencies and helping professionals (e.g. DSS, your GP, Health Visitor, Social Worker)

How often do you have contact with these agencies and/or professionals?

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

Please tick each of the following topics that you regularly discuss with these people.

Problems with your children
Finances or money
Doing things together
Things to do with your job
Health issues
Domestic matters
Things not involving you personally

How would you rate your contact with these agencies generally

Very bad	Bad	Poor	Fair	Good	Very good
----------	-----	------	------	------	-----------

Do you feel that most of the contact that you have with these agencies or professionals is critical or supportive of your lifestyle in general?

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

Do you feel that most of the contact that you have with these agencies or professionals is generally critical or supportive of your management of your child/children?

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

4. Other people.

Do you have contact with any other significant person or people not covered by the above, e.g. people at work. If so who are they and how would you rate your contact with them?

Other regular contacts

How often do you have contact with these people?

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

Please tick each of the following topics that you regularly discuss with these people

Problems with your children
Finances or money
Doing things together
Things to do with your job
Health issues
Domestic matters
Things not involving you personally

How would you rate your contact generally with these people?

Very bad	Bad	Poor	Fair	Good	Very good
----------	-----	------	------	------	-----------

Do you feel that most of the contact that you have with these people is critical or supportive of your lifestyle in general?

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

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

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

5. Time spent each day with others.

How much time each day do you generally spend in the company of people that you do not live with?

Less than half an hour	One hour	Up to two hours	Two to four hours	Over four hours
------------------------	----------	-----------------	-------------------	-----------------

Overall how would you rate your social network?

Very bad	Bad	Poor	Fair	Good	Very good
----------	-----	------	------	------	-----------

Thank you for completing this questionnaire.

Judy Hutchings July 1994 (based on Wahler 1980)

Appendix Xii

Community Contacts Questionnaire scoring criteria.

Two scores were calculated from the CCQ. First the responses were reviewed and the respondents classified as insular or non-insular on criteria that as closely as possible followed those used by Dumas and Wahler (1983) in scoring the CIC. These were that less than one third of the social contacts of the mothers were with friends and/or that mothers rated at least one third of their social contacts as neutral or negative in valence.

In considering which of the data generated by the CCQ to use, the rating of frequency of contact was considered first. As none of the respondents had frequent contact with professionals, 24 respondents rating this as not more than weekly, it was decided to focus on the mothers' rating of their contact with friends and relatives. The first criterion was therefore whether friends received a lower frequency rating than relatives. This was the case for nine respondents.

In terms of the quality ratings it was felt that the rating mixed, or a lower rating corresponded with the Wahler criterion of neutral or negative in valence. All respondents that used this rating for either of the two categories concerning lifestyle in general or management of the children were included if this related to the persons with whom they had most contact. Ten mothers rated their responses to the two questions on how supportive their relationships with friends and relatives were as mixed. All of these latter were considered to be insular in terms of the Dumas and Wahler criteria, but two of the mothers who had more contact with relatives than friends were excluded since they rated these contacts as supportive. This produced ten mothers who were considered to be insular, of whom seven had rated contact with relatives as more frequent than contact with friends.

The four categories below define the coding criteria:

1. If most contact was with friends and they were also rated positively this would classify as non-insular even if the person rated their contact with relatives as poor.
2. If most contact was with friends and they were not supportive this counted as insular regardless of any ratings of contact with relatives because it was the prime source of contact.

3. If most contact was with relatives but they were rated as supportive this was not counted as insular unless friends ratings were poor.

4. If most contact was with relatives and was poor this rated as insular, regardless of contact with friends, because it was the prime source of contact.

Nobody who rated contact as poor reported equal contact with friends and relatives but if they had done so it would have been rated as Insular if both had been poor.

In order to make further use of the CCQ data it was decided to also compute an insularity score based on the ratings given to the two categories concerning lifestyle in general and management of the children for both friends and relatives. This summed to a maximum possible score of 20 for those who rated as very supportive both types of contact with both friends and relatives. This scores was tested against the category coding of insularity using a factorial anova and found to be significantly related ($F_{1,24} = 20.806$, $p = .0001$).

Appendix Xiii CCQ reliability and validity

Validity

The validity of the CCQ concerns whether it measures what it is intended to measure and whether it has face validity.

One important criterion for assessing whether the new instrument measures what it is intended to measure would be whether it produced the same results as those reported by Dumas and Wahler i.e. did it predict poor outcome? The results in relation to outcome are discussed in the text of the thesis, chapter 6.

Face validity.

Face validity can be considered in terms of the responses of the sample. No-one had any difficulty in completing the CCQ and their responses to the different items and scales were differentiated as shown in the table below.

Table Xi Comparison of summed quality of contacts scores within different domains with similar scores for other domains.

	Relatives total	Friends total	Profess total	Others total
Relative total	1.000	.080	.191	.103
Friends total		1.000	.216	.159
Profess total			1.000	.082
Others total				1.000

Lack of significant correlations between the responses to different domains for the same questions suggests that the respondents were able to differentiate between different aspects of their lives.

Reliability.

Test/retest reliability was not assessed here due to the size of the test battery and the inclusion of some additional measures at follow-up. Reliability was however assessed by comparison of summed scores across domains and the global ratings. The responses to the question about frequency of contact were summed across the domains and compared to the summed scores on quality across the domains. These summed scores were also compared with the two global ratings completed at the end of the questionnaire.

The four scores that were generated for the purpose of this comparison of the scales were:

- 1. The frequency of contact with friends, relatives, professionals and others, as a combined score
- 2. The quality of contacts with friends, relatives, professionals and others, as a combined score
- 3. A global rating of frequency and
- 4. A global rating of quality.

The relationship between these four scores was assessed using a Pearson Correlation and yielded the following results.

Table Xii Comparison of the summed scales of frequency and quality and the two global scales of frequency and quality

	Total Frequency	Total score	Global frequency	Global score
Total frequency	1.000	.790***	.401*	.340
Total score	.790***	1.000	.413*	.412*
Global frequency	.401*	.413*	1.000	.420*
Global score	.340	.412*	.420*	1.000

Significance levels: *.05; **.005; ***.0001

There appears to be a strong relationship between the scores on all four subscales with the majority intercorrelating at the .05 significance level and total frequency and total score correlating beyond the .001 level. Only one relationship, between global score and total frequency failed to achieve statistical significance. This internal consistency of responding across the questionnaire as a whole is considered to be an indication of the reliability of the measure as a whole.

Relationship between scales within domains

Correlations were also undertaken between the two scales that were used within each domain to assess the data for the purpose of categorising the respondents as Insular or Non-insular. These were the two questions which asked how critical or supportive the person found members of that category to be in terms of their lifestyle in general and of their management of their children. The results as set out below show the relation between these two scales.

Table Xiii Correlations between lifestyle and child management scales for each of the four domains

	Relatives	Friends	Professionals	Others
Correlation coeff	.454	.503	.877	1.000
p value	.0188	.0079	< .0001	complete match

These results show significant within domain correlations for each of the four domains.

Appendix XI The Parent Child Autobiographical Memory Test

- i. The response sheet,**
- ii. the administration instructions**
- iii. the scoring sheet**
- iv. reliability and validity data**

Appendix Xli **Parent-child autobiographical memory test.**

Name of respondent_____Research no._____

cue word	latency in seconds	response/s	time since event
helpless	_____ _____ _____		
excited	_____ _____ _____		
upset	_____ _____ _____		
calm	_____ _____ _____		
hurt	_____ _____ _____		
pleased	_____ _____ _____		
bad	_____ _____ _____		
proud	_____ _____ _____		
guilty	_____ _____ _____		
peaceful	_____ _____ _____		

Judy Hutchings May 1994 Date of test administration_____

Parent Child Autobiographical Memory Test.

Judy Hutchings, June 1994

Administration instructions.

I am interested in your memory for events that happened in (name of child)'s life. I am going to read you some words. For each word, I want you to think of an event that happened to (child) which the word reminds you of. The event could have happened recently (yesterday, last week) or when (child) was 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 "(child) is always good at bedtime" because that does not mention a specific event. But it would be O. K. to say "(child) was good when I put him to bed last night" because that is a specific event.

Let us try some words for practice: happy, bold, enjoy.

Time allowed 30 seconds, can include 2 prompts

Further prompts: "Can you think of a particular time?" can be repeated.

Autobiographical memory scoring sheet

Research No. _____ Initial/follow-up interview_____

Scored by_____

	no prompt	prompt		no prompt	prompt
1. helpless					
2.			excited		
3. upset					
4.			calm		
5. hurt					
6.			pleased		
7. bad					
8.			proud		
9. guilty					
10.			peaceful		

Scores

total without prompt	_____	total incl. prompts	_____
negative words without prompt	_____	neg. incl. prompts	_____
positive words without prompt	_____	pos. incl. prompts	_____

Appendix Xliv Parent-Child Autobiographical Memory - Reliability and validity

As the PCAMT was a new instrument consideration was given to the issues of reliability and validity. In the present study, the answers given by subjects were recorded in terms of the total number of responses within thirty seconds both with and without a prompt. The without prompt score was used throughout in the analyses since this seemed most closely related to the research questions under investigation and is also the score most frequently reported in other studies, as reviewed in chapter 3.

Data from Nightingale (1995) were available for comparison purposes. Nightingale also used the PCAMT, as devised by the author and used in the present study, and used the same administration and scoring instructions. His data were collected from 22 mothers of pre-school children who had not had clinic referrals of their children. The following table gives the mean age of the children in the Nightingale and present samples as well as the mean no. of unprompted responses to the ten words. (Data collected from the initial test administration in the present study are shown).

Table XII Comparison of results with Nightingale's normative sample

	Present study	Nightingale sample
No of children in sample	26	22
Mean age of children	44, sd 8 months	38, sd 11months
Mean no. of responses	3.5	5.2

There was a significant difference between these two sets of data ($F_{1,46} = 7.944$, $p = .0071$) as is reported in chapter 6 section 2.

Reliability

Test/retest reliability

There was a significant correlation between the initial and follow-up scores for the whole sample ($r = .748$, $p < .0001$).

Inter-rater reliability

The inter-rater reliability for the coding of maternal responses as specific and without prompt was assessed. The responses were scored by an independent blind rater and then compared with the scores given by the person who had administered the test. This yielded a Kappa of .87. On the small number of occasions that there were

differences in scoring, the scores used in the data set were those of the interviewer who was present at the time that the responses were made.

Despite this high inter-rater reliability coefficient, it must be recalled that the data were collected by means of hand written recording by the investigator of the responses at the time of test administration. The accuracy of collection of the response data could be verified and possibly improved by audio-recording of these responses.

Internal consistency.

Before considering the internal consistency in terms of the contribution of individual scale items to the total score, the data were subjected to a comparison of responses to positive and negative words, the scale included five of each type of word, balanced for both frequency and emotionality. The mean for negative responses was 1.65 and for positive was 1.85. Using a paired t-test the following results were obtained:-

Table XIIi Negative and Positive Responses without a prompt

Mean Diff.	DF	t-value	p-value
-.192	25	-.723	.4766

No significant difference was found between the responses to positive and negative words and this confirmed the findings of Nightingale.

Table XIIii shows the number and percentage of specific responses to each word from the initial administration of the PCAMT for this research sample and those obtained by Nightingale with his sample of 22 non-clinic referred mothers of pre-school children.

Table XlIii Comparison of responses to individual words from Nightingale and the present study

	No. of responses (out of 26) Present sample	Percentage response Present sample	No. of responses (out of 22) Nightingale S's	Percentage response Nightingale S's
Helpless	5	19	9	41
Excited	12	46	13	59
Upset	12	46	17	77
Calm	5	19	9	41
Hurt	13	50	18	82
Pleased	12	46	16	73
Bad	8	31	10	45
Proud	15	58	13	59
Guilty	6	23	10	45
Peaceful	3	12	6	27
Mean no.	3.5	35	5.5	55

No significant difference was found when the number of responses to any individual word was compared to the whole (F1,18 values ranged from .507 to 2.862, p values from .1291 to .7992).

None of the words differed significantly from the others in terms of its contribution to the overall scores. It is, however, worth noting that although not significantly different from the remainder of the words, peaceful was the word that was most out of line, with the lowest number of specific responses. Parents almost always (73%) responded first with generic responses associated with the child being in bed and asleep "when he is in bed", "when I see him in bed after he has fallen asleep". It may be worth substituting another word for peaceful but in any event a more adequate assessment of internal consistency would require data from a larger sample which could be subjected to factor analysis.

Validity

As reported in the test-retest reliability data the pre and post-test data sets were significantly correlated and, since the post-test scores were higher, the difference between pre- and post- test scores, for the total sample of 26 subjects, was also tested

using a t-test. This was significant ($t = -2.923$, $p = .0073$). This means that although the pre- and post-test scores were significantly correlated, respondents also improved significantly between initial and follow-up test administrations.

Since 16 of the sample, (62%) received treatment for their child the data were also tested to see whether there was a significant difference in the improvement between pre- and post- test scores for the parents whose children were treated and the parents whose children were not treated. The table below shows the pre and post group means for the whole group and the two sub-groups.

Table XIiv

	Treated group	Untreated group	All
Initial test mean	4.687	1.600	3.500
Post-test mean	5.875	2.600	4.600
t value	-2.104	-2.236	-2.923

No significant difference was found, parents of both groups were just as likely to have improved.

Taken together, the significant correlation between the two test administrations, which were six months apart, and the consistent but small improvement (one word on average) of both groups suggests that the PCAMT is a stable measure and that a practice effect is a most likely explanation for the slight improvement found. This stability has also been found with the AMT, as reported in previous studies described in chapter three (Williams and Dritschel, 1988; Brittlebank et al, 1993).

Appendix XII **Parental Satisfaction and Outcome Questionnaire**

Child and Family Guidance Service

Service User Feedback Questionnaire

This questionnaire is in three sections, a) the general arrangements, b) what actually happened when you were seen and c) how useful the service was in dealing with the problem/s. Please answer all questions and underline or tick the appropriate box.

Section One. General Arrangements.

1. How long did you wait for your first appointment?_____

How satisfied were you with this?

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

2. Were you satisfied with the information you received before the first appointment?

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

If not satisfied, what else would you have liked to know before your first appointment?_____

3. Where were you seen?_____

How satisfied were you with this?

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

If you were not seen at home, how satisfied were you with the surroundings for you and your child?

a) in the waiting room

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

b) in the consultation room

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

4. At what time of day were you seen?_____

Were you satisfied with this?

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

Were you given a choice of time? yes_____ no_____

Any other comments about the general arrangements?

Section two. What happened during therapy

1. Was sufficient time spent in investigating the problem?

yes, definitely	yes, probably	undecided	probably not	definitely not
-----------------	---------------	-----------	--------------	----------------

2. Do you feel that the therapist really understood the problem?

yes, definitely	yes, probably	undecided	probably not	definitely not
-----------------	---------------	-----------	--------------	----------------

3. Do you feel that you received sufficient explanation about the problem/s?

yes, definitely	yes, probably	undecided	probably not	definitely not
-----------------	---------------	-----------	--------------	----------------

4. How often were you seen?

weekly	fortnightly	monthly	two monthly	other
--------	-------------	---------	-------------	-------

Were you satisfied with the number and frequency of appointments?

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

Comments

5. Would you recommend the service to another parent experiencing a similar problem?

yes, definitely	yes, probably	undecided	probably not	definitely not
-----------------	---------------	-----------	--------------	----------------

6. How satisfied were you overall with the service that you received?

very satisfied	satisfied	undecided	dissatisfied	very dissatisfied
----------------	-----------	-----------	--------------	-------------------

Section Three. Outcomes.

1. What was the problem for which your child was referred?

2. How would you **now** rate the problem for which you sought help ?

a lot better	a little better	no change	a little worse	a lot worse
--------------	-----------------	-----------	----------------	-------------

3. Did you learn helpful ways of dealing with the problem as a result of the therapy?

yes, definitely	yes, probably	undecided	probably not	definitely not
-----------------	---------------	-----------	--------------	----------------

If yes, have the things you learned helped you to deal successfully with other problems?

yes, definitely	yes, probably	undecided	probably not	definitely not
-----------------	---------------	-----------	--------------	----------------

Any other comments or suggestions? _____

Thank you for completing this questionnaire.

Judy Hutchings, Child and Family Guidance Service

Appendix XIII

Research Follow-up Interview

Research No. _____Name of child_____

Age of parent_____

Have you had a service from Child Guidance?_____

Approximately how many times were you seen?_____

Is this ongoing?_____

Has anything else of significance occurred in the life of the child since I saw you last?

How would you describe you child now in relation to the problem for which he or she was referred? _____

Judy Hutchings' Research Sample.

Therapist outcome assessment.

1. Name of Child _____ Research No. _____

2. Assessment of treatment dose

Cancelled referral/not seen	Minimal intervention/ one appointment	Limited intervention 2-4 appointments	Five+ appointments
--------------------------------	---	--	--------------------

3. On the basis of your last contact with this child how would you rate the problem for which they were referred?

a lot better	a little better	no change	a little worse	a lot worse
--------------	-----------------	-----------	----------------	-------------

Appendix XV

Referral source and service take-up.

Table XVI Distribution of referrals by referral source.

Referred by	
Medical - Paediatrician	6
Medical - Community Medical Officer	3
Medical - G. P.	4
Nursing - Health Visitor	10
Nursing - School Nurse	1
Social Worker	2
Total	26

As table XVI shows, the vast majority of the referrals were from health service personnel, with only two non-health origin referrals (8%) from Social Workers. The remainder were split between referrals from a variety of medical Doctors (50%) and referrals from nurses (42%), all but one of whom were Health Visitors.

TABLE XVII. Service take-up by referral source.

Referral Source	All	%	Cases	%	N-Cases	%
Paediatrician	6	23	2	12.5	4	40
CMO	3	11	2	12.5	1	10
GP	4	15	1	6	3	30
Health Visitors	10	39	8	50	2	20
School Nurse	1	4	1	6	0	0
Social Worker	2	8	2	12.5	0	0
TOTAL	26	100	16	99.5	10	100

Within the total sample, 92% of all referrals came from health sources with by far the largest group being referrals from Health Visitors (39%). It is clear, however, that the distribution of cases actually seen for therapy was different from that of those that did not become cases. Eight of the 10 referrals made by Health Visitors became cases and therefore represented 50% of the sample seen whereas only two of the six referrals from Paediatricians became cases, resulting in 40% of the sample of cases not seen having been referrals from Paediatricians. This raises a number of issues for the agency, in terms of the information available to referrers about the service and the ways in which information about the service is conveyed to the parents of referred children, which are the subject of ongoing discussion.

Appendix XVI The diagnosis of childhood conduct disorder, ICD 10 and DSM IV.

Despite disagreements about the nature and causes of such problems, most people recognise when a child's behaviour is outside of the normally acceptable limits for children of a similar age (Kazdin, 1988). Notwithstanding the enormous variety of ways in which different individuals and professions define such problems there is agreement that what is called conduct disorder or severely disruptive behaviour is a serious and growing problem that cannot be ignored. The clinical definitions associated with these problems are set out in the International Classification of Diseases (ICD 10) which describes a number of categories of Conduct Disorder and in the Diagnostic and Statistical Manual (DSM IV) which includes Conduct Disorder as one of a number of problems covered by the diagnosis Disruptive Behaviour Syndrome.

ICD-10 10th Revision Vol. 1 World Health Organisation 1992

F91 Conduct disorders

Disorders characterised by a repetitive and persistent pattern of dissocial, aggressive, or defiant conduct. Such behaviour should amount to major violations of age-appropriate social expectations; it should therefore be more severe than ordinary childish mischief or adolescent rebelliousness and should imply an enduring pattern of behaviour (six months or longer). Features of conduct disorder can also be symptomatic of other psychiatric conditions, in which case the underlying diagnosis should be preferred.

Examples of the behaviours on which the diagnosis is based include excessive levels of fighting or bullying, cruelty to other people or animals, severe destructiveness to property, fire-setting, stealing, repeated lying, truancy from school and running away from home, unusually frequent and severe temper tantrums, and disobedience. Any one of these behaviours, if marked, is sufficient for the diagnosis, but isolated dissocial acts are not.

Excludes: mood (affective) disorders (F30-F39)
pervasive developmental disorders (F84.-)
schizophrenia (F20.-)
when associated with:

- emotional disorders (F92.-)
- hyperkinetic disorders (F90.1)

F91.0 Conduct disorder confined to the family context

Conduct disorder involving dissocial or aggressive behaviour (and not merely oppositional, defiant, disruptive behaviour), in which the abnormal behaviour is entirely, or almost entirely, confined to the home and to interactions with members of the nuclear family or immediate household. The disorder requires that the overall criteria for F91.- be met; even severely disturbed parent-child relationships are not of themselves sufficient for diagnosis.

F91.1 Unsocialized conduct disorder

Disorder characterised by the combination of persistent dissocial or aggressive behaviour (meeting the overall criteria for F19.- and not merely comprising oppositional, defiant, disruptive behaviour) with significant pervasive abnormalities in the individual's relationships with other children.

Conduct disorder, solitary aggressive type

Unsocialized aggressive disorder

F91.2 Socialized conduct disorder

Disorder involving persistent dissocial or aggressive behaviour (meeting the overall criteria for F91.- and not merely comprising oppositional, defiant, disruptive behaviour) occurring in individuals who are generally well integrated into their peer group.

Conduct disorder, group type

Group delinquency

Offences in the context of gang membership

Stealing in company with others

Truancy from school

F91.3 Oppositional defiant disorder

Conduct disorder, usually occurring in younger children, primarily characterised by markedly defiant, disobedient, disruptive behaviour that does not include delinquent acts or the more extreme forms of aggressive or

dissocial behaviour. The disorder requires that the overall criteria for F91.- be met; even severely mischievous or naughty behaviour is not in itself sufficient for diagnosis. Caution should be employed before using this category, especially with older children, because clinically significant conduct disorder will usually be accompanied by dissocial or aggressive behaviour that goes beyond mere defiance, disobedience, or disruptiveness.

F91.8 Other conduct disorders

F91.9 Conduct disorder, unspecified

Childhood:

- behavioural disorder NOS
- conduct disorder NOS

DSM IV

DISRUPTIVE BEHAVIOUR DISORDERS

312.8 Conduct Disorder

Diagnostic Features

The essential feature of Conduct Disorder is a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated (Criterion A). These behaviors fall into four main groupings: aggressive conduct that causes or threatens physical harm to other people or animals (Criteria A1-17), nonaggressive conduct that causes property loss or damage (Criteria A8-A9), deceitfulness or theft (Criteria A10-12), and serious violations of rules (Criteria A13-A15). Three (or more) characteristic behaviors must have been present during the past 12 months, with at least one behavior present in the past 6 months. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning (Criterion B). Conduct Disorder may be diagnosed in individuals who are older than age 18 years, but only if the criteria for Antisocial Personality Disorder are not met (Criterion C). The behavior pattern is usually present in a variety of settings such as home, school, or the community. Because individuals with Conduct Disorder are likely to minimise their conduct problems, the clinician often must rely on additional informants. However, the informant's knowledge of the child's conduct problems may be limited by inadequate supervision or by the child's not having revealed them.

Children or adolescents with this disorder often initiate aggressive behavior and react aggressively to others. They may display bullying, threatening or intimidating behavior (A1); initiate frequent physical fights (Criterion A2); use a weapon that can cause serious physical harm (e.g. a bat, brick, broken bottle, knife or gun) (Criterion A3); be physically cruel to people (Criterion A4) or animals (Criterion A5); steal while confronting a victim (e.g. mugging, purse snatching, extortion, or armed robbery) (Criterion 6); or force someone into sexual activity (Criterion A7). Physical violence may take the form of rape, assault, or in rare cases, homicide.

Deliberate destruction of others' property is a characteristic feature of this disorder and may include deliberate fire setting with the intention of causing serious damage

(Criterion A8) or deliberately destroying other people's property in other ways (e.g. smashing car windows, school vandalism) (Criterion 9).

Deceitfulness or theft is common and may include breaking into someone else's house, building, or car (Criterion A10); frequently lying or breaking promises to obtain goods or favors or to avoid debts or obligations (e.g. "conning" other people) (Criterion A11); or stealing items of nontrivial value without confronting the victim (e.g. shoplifting, forgery) (Criterion A12).

Characteristically, there are also serious violations of rules (e.g., school, parental) by individuals with this disorder. Children with this disorder often have a pattern beginning before age 13 years, of staying out late at night despite parental prohibitions (Criterion 13). There may be a pattern of running away from home overnight (Criterion 14). To be considered a symptom of Conduct Disorder, the running away must have occurred at least twice (or only once if the individual did not return for a lengthy period). Runaway episodes that occur as a direct consequence of physical or sexual abuse do not typically qualify for this criterion. Children with this disorder may often truant from school, beginning prior to age 13 years (Criterion A15). In older individuals, this behavior is manifested by often being absent from work without good reason.

Subtypes

Two subtypes of Conduct Disorder are provided based on the age at onset of the disorder (i.e. Childhood-Onset Type and Adolescent-Onset Type). The subtypes differ in regard to the characteristic nature of the presenting conduct problems, developmental course and prognosis, and gender ratio. Both subtypes can occur in a mild, moderate, or severe form. In assessing the age at onset, information should preferably be obtained from the youth and from caregiver(s). Because many behaviors may be concealed, caregivers may underreport symptoms and overestimate the age at onset.

Childhood-Onset Type. This subtype is defined by the onset of at least one criterion characteristic of Conduct Disorder prior to age 10 years. Individuals with Childhood-Onset Type are usually male, frequently display physical aggression toward others, have disturbed peer relationships, may have had Oppositional Defiant Disorder during early childhood, and usually have symptoms that meet full criteria for Conduct Disorder prior to puberty. These individuals are more likely to have persistent Conduct Disorder and to develop adult Antisocial Personality disorder than are those with Adolescent-Onset Type.

Adolescent-Onset Type. This subtype is defined by the absence of any criteria characteristic of Conduct Disorder prior to age 10 years. Compared with those with the Childhood-Onset Type, these individuals are less likely to display aggressive behaviors and tend to have more normative peer relationships (although they often display conduct problems in the company of others). These individuals are less likely to have persistent Conduct Disorder or to develop adult Antisocial Personality Disorder. The ratio of males to females with Conduct Disorder is lower for the Adolescent-Onset Type than for the Childhood-Onset Type.

Prevalence

The prevalence of Conduct Disorder appears to have increased over the last decades and may be higher in urban than in rural settings. Rates vary widely depending on the nature of the population sampled and methods of ascertainment: for males under age 18 years, rates range from 6% to 16%; for females, rates range from 2% to 9%. Conduct Disorder is one of the most frequently diagnosed conditions in outpatient and inpatient mental health facilities for children.

Course

The onset of Conduct Disorder may occur as early as age 5-6 years but is usually in late childhood or early adolescence. Onset is rare after age 16 years. The course of Conduct Disorder is variable. In a majority of individuals, the disorder remits by adulthood. However, a substantial proportion continue to show behaviors in adulthood that meet criteria for Antisocial Personality Disorder. Many individuals with Conduct Disorder, particularly those with Adolescent-Onset Type and those with few and milder symptoms achieve adequate social and occupational adjustment as adults. Early onset predicts a worse prognosis and an increased risk in adult life for Antisocial Personality Disorder and Substance-Related Disorders. Individuals with Conduct Disorder are at risk for later Mood or Anxiety Disorders, Somatoform Disorders, and Substance-Related Disorders.

Diagnostic criteria for 312.8 Conduct Disorder

A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months.

Aggression to people and animals
(1) often bullies, threatens or intimidates others
(2) often initiates physical fights
(3) has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)
(4) has been physically cruel to people
(5) has been physically cruel to animals
(6) has stolen while confronting a victim (e.g. mugging, purse snatching, extortion, armed robbery)
(7) has forced someone into sexual activity

Destruction of property
(8) has deliberately engaged in fire setting with the intention of causing serious damage
(9) has deliberately destroyed others' property (other than by fire setting)

Diagnostic criteria for 312.8 Conduct Disorder cont'd

Deceitfulness or theft

- (10) has broken into someone else's house, building, or car
- (11) often lies to obtain goods or favours or to avoid obligations (i.e. "cons" others)
- (12) has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

Serious violations of rules

- (13) often stays out at night despite parental prohibitions, beginning before age 13 years
- (14) has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
- (15) is often truant from school, beginning before age 13 years

- B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.
- C. If the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

Specify type based on age at onset:

Childhood-Onset Type: onset of at least one criterion characteristic of Conduct Disorder prior to age 10 years

Adolescent-Onset Type: absence of any criteria characteristic of Conduct Disorder prior to age 10 years

Specify severity:

Mild: few if any conduct problems in excess of those required to make the diagnosis **and** conduct problems cause only minor harm to others

Moderate: number of conduct problems and effect on others, intermediate between "mild" and "severe"

Severe: many conduct problems in excess of those required to make the diagnosis **or** conduct problems causing considerable harm to others

313.81 Oppositional Defiant Disorder

Diagnostic Features

The essential feature of Oppositional Defiant Disorder is a recurrent pattern of negativistic, defiant, disobedient, and hostile behavior toward authority figures that persists for at least 6 months (Criterion A) and is characterised by the frequent occurrence of at least four of the following behaviors: losing temper (Criterion A1), arguing with adults (Criterion A2), actively defying or refusing to comply with the requests or rules of adults (Criterion A3), deliberately doing things that will annoy other people (Criterion A4), blaming others for his or her own mistakes or misbehavior (Criterion A5), being touchy or easily annoyed by others (Criterion A6), being angry and resentful (Criterion A7), or being spiteful or vindictive (Criterion A8). To qualify for Oppositional Defiant Disorder, the behaviors must occur more frequently than is typically observed in individuals of comparable age and developmental level and must lead to significant impairment in social, academic or occupational functioning (Criterion B). The diagnosis is not made if the disturbance in behavior occurs exclusively during the course of a Psychotic or Mood Disorder (Criterion C) or if criteria are met for Conduct Disorder or Antisocial Personality Disorder (in an individual over age 18 years).

Negativistic and defiant behaviors are expressed by persistent stubbornness, resistance to directions, and unwillingness to compromise, give in, or negotiate with adults or peers. Defiance may also include deliberate or persistent testing of limits, usually by ignoring orders, arguing and failing to accept blame for misdeeds. Hostility can be directed at adults or peers and is shown by deliberately annoying others or by verbal aggression (usually without the more serious physical aggression seen in Conduct Disorder). Manifestations of the disorder are almost invariably present in the home setting, but may not be evident at school or in the community. Symptoms of the disorder are typically more evident in interactions with adults or peers whom the individual knows well, and thus may not be apparent during clinical examination. Usually individuals with the disorder do not regard themselves as oppositional or defiant, but justify their behavior as a response to unreasonable demands or circumstances.

Prevalence

Rates of Oppositional Defiant Disorder from 2% to 16% have been reported, depending on the nature of the population sample and methods of ascertainment.

Course

Oppositional Defiant Disorder usually becomes evident before age 8 years and usually not later than early adolescence. The oppositional symptoms often emerge in the home setting but over time may appear in other settings as well. Onset is typically gradual, usually occurring over the course of months or years. In a significant proportion of cases, Oppositional Defiant Disorder is a developmental antecedent to Conduct Disorder.

Diagnostic criteria for 313.81 Oppositional Defiant Disorder

A. A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months during which four (or more) of the following are present:

- (1) often loses temper
- (2) often argues with adults
- (3) often actively defies or refuses to comply with adults' requests or rules
- (4) often deliberately annoys people
- (5) often blames others for his or her mistakes or behavior
- (6) is often touchy or easily annoyed by others
- (7) is often angry and resentful
- (8) is often spiteful or vindictive

Note: Consider a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.

B. The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

C. The behaviors do not occur exclusively during the course of a Psychotic or Mood Disorder.

D. Criteria are not met for Conduct Disorder, and, if the individual is age 18 years or older, criteria are not met for Antisocial Personality Disorder.

312.9 Disruptive Behavior Disorder Not Otherwise Specified

This category is for disorders characterised by conduct or oppositional defiant behaviors that do not meet the criteria for Conduct Disorder or Oppositional Defiant Disorder. For example, include clinical presentations that do not meet full criteria either for Oppositional Defiant Disorder or Conduct Disorder, but in which there is clinically significant impairment.

Appendix XVII

Main problem identified in the referral letter.

Table XVIIIi Classification of main problem identified in the referral letter, numbers and percentages

Type of problem	No.	%age
Conduct problem	15	58
Emotional problem	5	19
Bowel problem	5	19
Other	1	4
Total	26	100

The referral problems as identified in the referral letter

1. ** Fearfulness about going out particularly during windy weather and tantrums
2. * Antisocial behaviour, breaking windows, easily led, does not respond to discipline
3. **Eating problems and clinginess, mum has been overprotective because she lost another child, needs management advice
- 4.*Tantrums, bangs her head, throws things, naughty in shops
5. *Unmanageable, naughty from the moment she gets up
6. **Previous physical bowel problem now resolved but still problems, will not sit on toilet and will not pass urine in the toilet except when out, management advice requested
7. **Tearful child, I suspect for attention
8. *Behaviour problems
9. *Boisterous and manipulative, lack of consistent discipline
- 10.* Temper tantrums, slams doors, breaks things, defiant.
11. **Parental expectations inappropriate, shouts at child, needs management advice
12. *Naughtiness, management advice, occasional daytime wetting
- 13.*Difficult to control.
14. *Lively, aggressive, naughty,
15. *Physical and verbal aggression and non-compliance
16. **Toileting problems needs behavioural management advice
17. Moody, secretive following marital breakdown
18. **Constipation no organic cause, potty training is difficult,

** specific problem but with management advice also required

* primary behaviour problems

19. **Bowel and eating problems, concern about weight loss, needs management advice
20. wetting, distress following marital breakdown
21. *boisterous, overactive, management problem at home and in playgroup
22. *Severe behavioural problems, aggressive, hyperactive, cant sleep
23. *Won't sleep, destroys things, demolished consulting room
24. **soiling and frustrated and angry when not understood
25. *behaviour problems, throws food, behaviour worse in company
26. *Unmanageable at home and school, poor attention and hyperactive

Generalised behavioural problems were the primary referral problem for 15 children, a further 9 children were referred for management advice associated with a specific non-organic problem. Two referrals made no reference to management advice or problems.

Appendix XVIII Comparison data for treated and untreated children

Of the twenty-six parents interviewed only 16 (62% of the research sample) took up the offer of treatment for their child. The two groups, those seen for treatment and those declining to be seen, were compared on all of the measures taken at baseline.

Source of Referrals.

Referrals from different sources were not equally represented in the treatment group. Table XVIIIi shows the distribution of referrals by type of referrer. Within the total sample 92% of all referrals came from health sources with the largest single group being referrals from Health Visitors (39%). However, the distribution of cases actually seen for therapy was different from that of those that did not become cases. Eight of the 10 referrals by Health Visitors became cases, representing 50% of the sample seen, whereas only two of the six referrals from paediatricians became cases resulting in 40% of cases not seen being referrals from paediatricians.

Table XVIIIi Referrals and cases seen and not seen for treatment.

Referral Source	All	%	Cases	%	N-Cases	%
Paediatrician	6	23	2	12.5	4	40
CMO	3	11	2	12.5	1	10
GP	4	15	1	6.25	3	30
All Doctors	13	50	5	31.25	8	80
Health Visitors	10	39	8	50	2	20
School Nurse	1	4	1	6.25	0	0
Social Worker	2	8	2	12.5	0	0
All Other	13	50	11	68.75	2	20
TOTAL	26	100	16	100	10	100

Comparison of Doctor and Other referral sources among referrals and within treatment and non-treatment groups is shown in the bar chart. The difference in take up of referral between Doctors and Others achieved statistical significance (Chi square, df1, 5.85, p = .0156)



Figure XVIIIi Distribution of referrals to treatment/non-treatment by referral source, Doctor/non-doctor.

Sex of child.

Table XVIIIii Sex distribution of treated and non-treated children.

	Male	Female	Total
Treatment	10	6	16
Non-treatment	4	6	10
Total	14	12	26

Although the difference in take up of treatment by boys and girls did not reach statistical significance the boys appear to be over represented in the treatment group relative to their numbers among the referrals as is shown in the following bar chart.

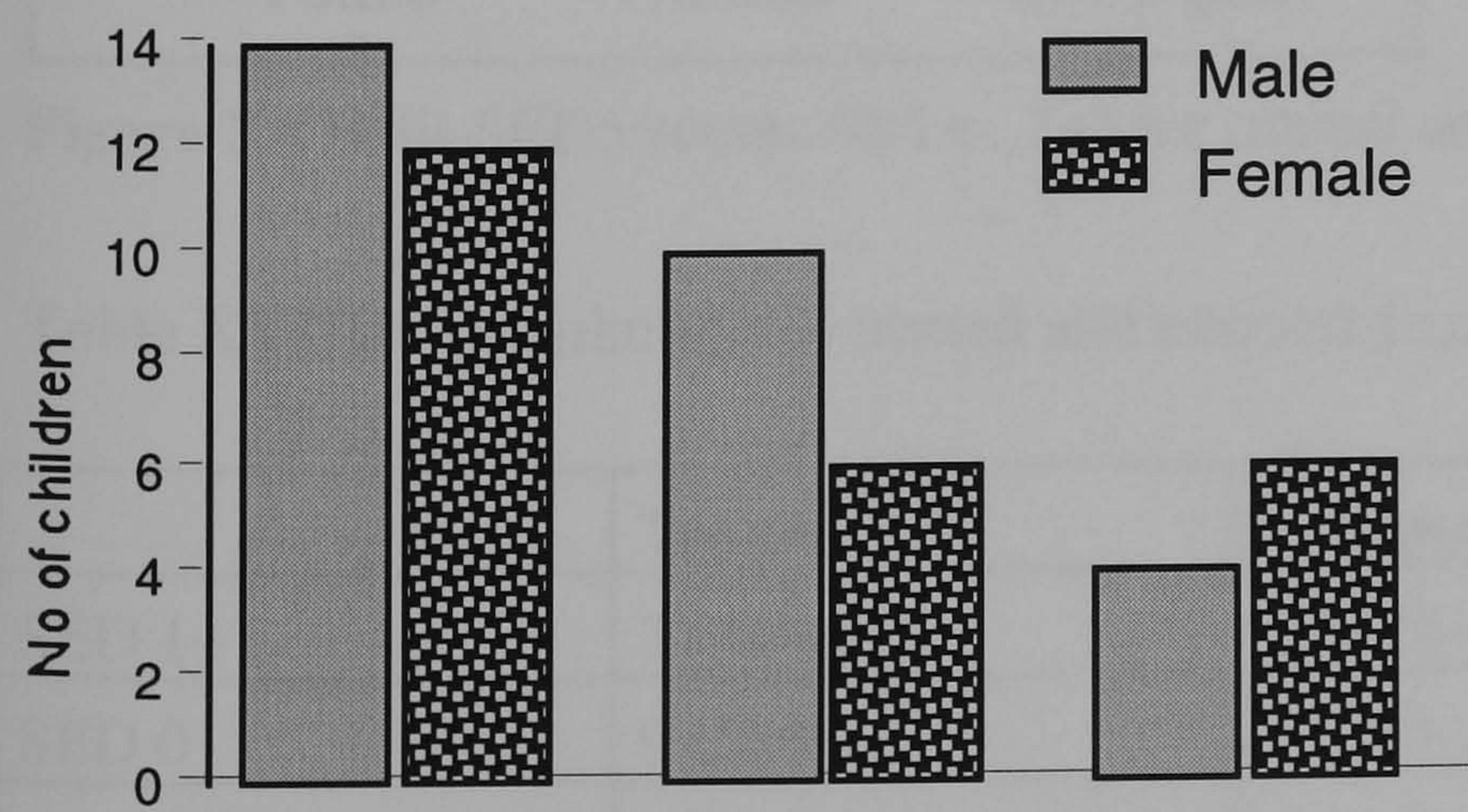


Figure XVIIIii Sex distribution of referrals by treatment/ non-treatment

Socio-economic status of the child and family.

An indicator of socio-economic deprivation was calculated as described in chapter 5 with coding details as set out in appendix V and although not achieving statistical significance in terms of the distribution of cases between treated and untreated groups the following tables and graphs show the distribution between the groups and are suggestive of the view that the more socio-economically deprived families were less likely to attend for treatment.

Table XVIIIiii Distribution of treated and untreated cases by SED index 0-1 and 2+.

	Treated	Untreated	All
SED 2+	5 (31.25%)	5 (50%)	10 (39%)
SED 0-1	11 (68.75%)	5 (50%)	16 (61%)
All	16 (100%)	10 (199%)	26 (100%)

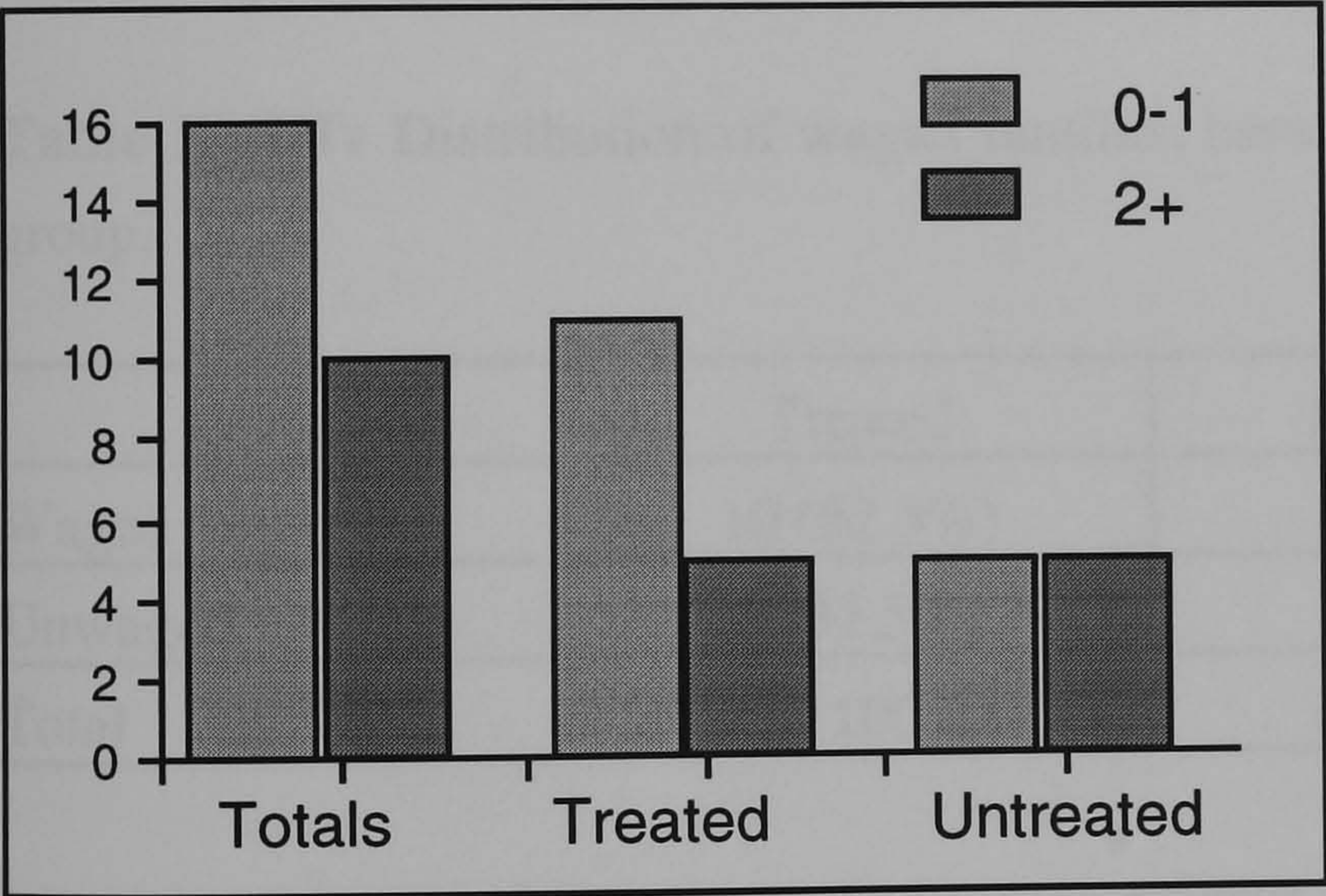


Figure XVIIIiii SED5 scores (0-1 or 2+) for treated and untreated groups

Table XVIIIiv Distribution of treated and untreated cases by SED index 0 and 1+.

	Treated	Untreated	All
SED 1+	7 (44%)	8 (80%)	15 (58%)
SED 0	9 (56%)	2 (20%)	11 (42%)
All	16 (100%)	10 (100%)	26 (100%)

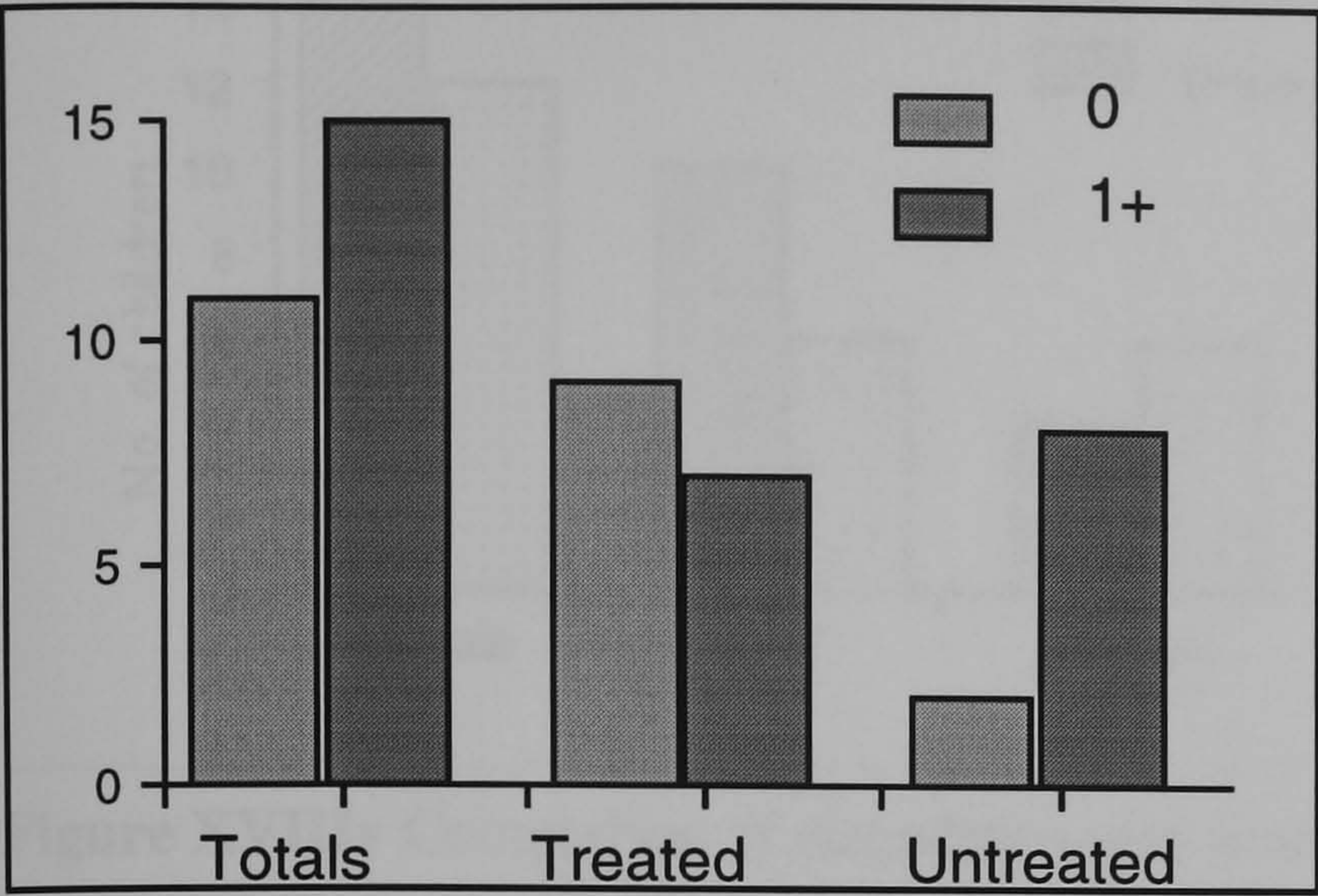


Figure XVIIIiv SED5 scores (0 or 1+) for treated and untreated groups

Source of income and single parent status.

The two main factors making up the SED index were being unwaged and being a single parent and these data are presented both in tabular and graphic form in relation to treatment/nontreatment.

Table XVIIIv Distribution of waged families between treatment and non-treatment group.

	Treated	not treated	Total
Waged	10 (62.5%)	4 (40%)	14 (54%)
Unwaged	6 (37.5%)	6 (60%)	12 (46%)
Total	16 (100%)	10 (100%)	26 (100%)

Although not a significant difference the children from waged families were more likely to be found in the treatment group than their unwaged counterparts.



Figure XVIIIv Comparison of waged/unwaged to treatment/non-treatment groups

Single or two parents in the child's home

As previously described all children were living with their natural mothers and 15 with their natural fathers. One child was living with a step-father and for the purpose of the comparison between treated and untreated groups this child was included in the two parent group. The following table and bar chart show the distribution of one or two parent families between the treatment and non-treatment groups.

Table XVIIIvi Distribution of one and two parents between the treatment and non-treatment groups.

	Treated	Untreated	Total
One parent	5 (31.25%)	5 (50%)	10 (38.5%)
Two parents	11 (68.75%)	5 (50%)	16 (61.5%)
Total	16 (100%)	10 (100%)	26 (100%)

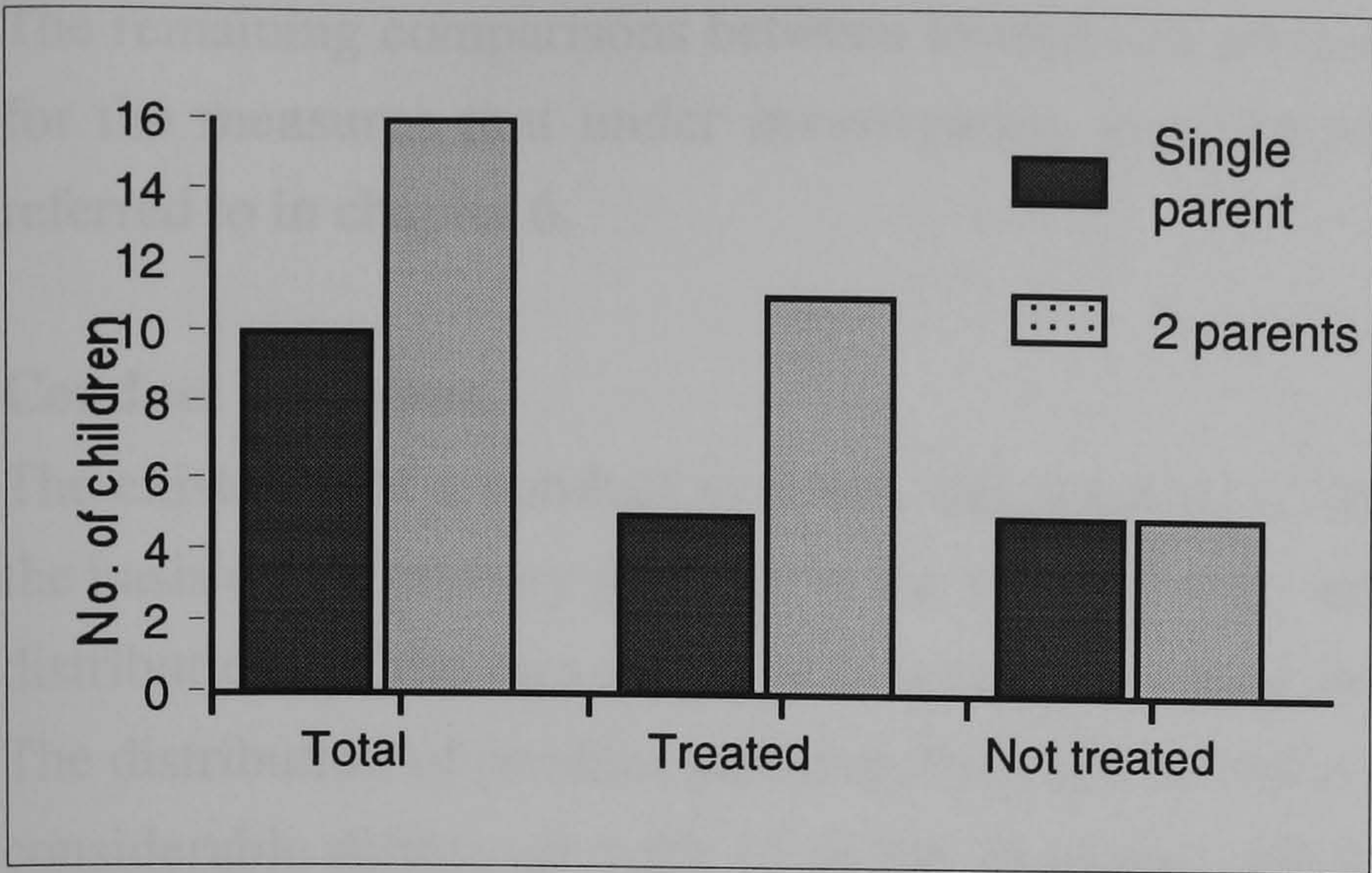


Figure XVIIIvi No. of resident parents as distributed between treated/untreated samples.

Although not a significant difference there appeared to be a greater likelihood of the children with two resident parents taking up the offer of treatment than those with one resident parent.

The initial sample description reported the relationship between socio-economic status and no. of resident parents. Bearing in mind that all of the single parents were unwaged it seems that children with two parents, one of whom is a wage earner to be more likely to be found in the treatment group.

Table XVIIIviii Comparison of the means of the baseline measures for the no of children resident in the house, the age of the mother and the age of the child

Means	Treated group	Untreated group	F1,24
No. children in house	2.063	1.900	.966
Age of mother	28.375	27.100	.862
Age of child	47.000	39.700	5.795

The age of the children in the treated and untreated groups differed significantly with the mean age of the treated children being over seven months higher ($F_{1,24} = 5.8, p = .02$).

The remaining comparisons between treated and untreated groups reported below are for the measures that under investigation in terms of treatment outcome and are referred to in chapter 6.

Conduct problems.

The existence of a conduct problem was assessed by both the Eyberg scores and on the basis of the primary problem in the referral letter, with a very strong overlap in the distributions of the two methods. It is this combined measure that is considered here. The distribution of conduct problems between treated and non-treated groups shows a considerable difference with 13 of the 16 treated children having a conduct problem and only three of the 10 children who were not seen having any identifiable conduct problem. Those with conduct problems were therefore much more likely to receive treatment than those without. This is shown in the following table and bar chart

Table XVIIIix The distribution of conduct problems among those children who did and did not receive treatment

	Seen	Not seen	Total
Conduct problem	13	3	16
Not conduct problem	3	7	10
Total	16	10	26

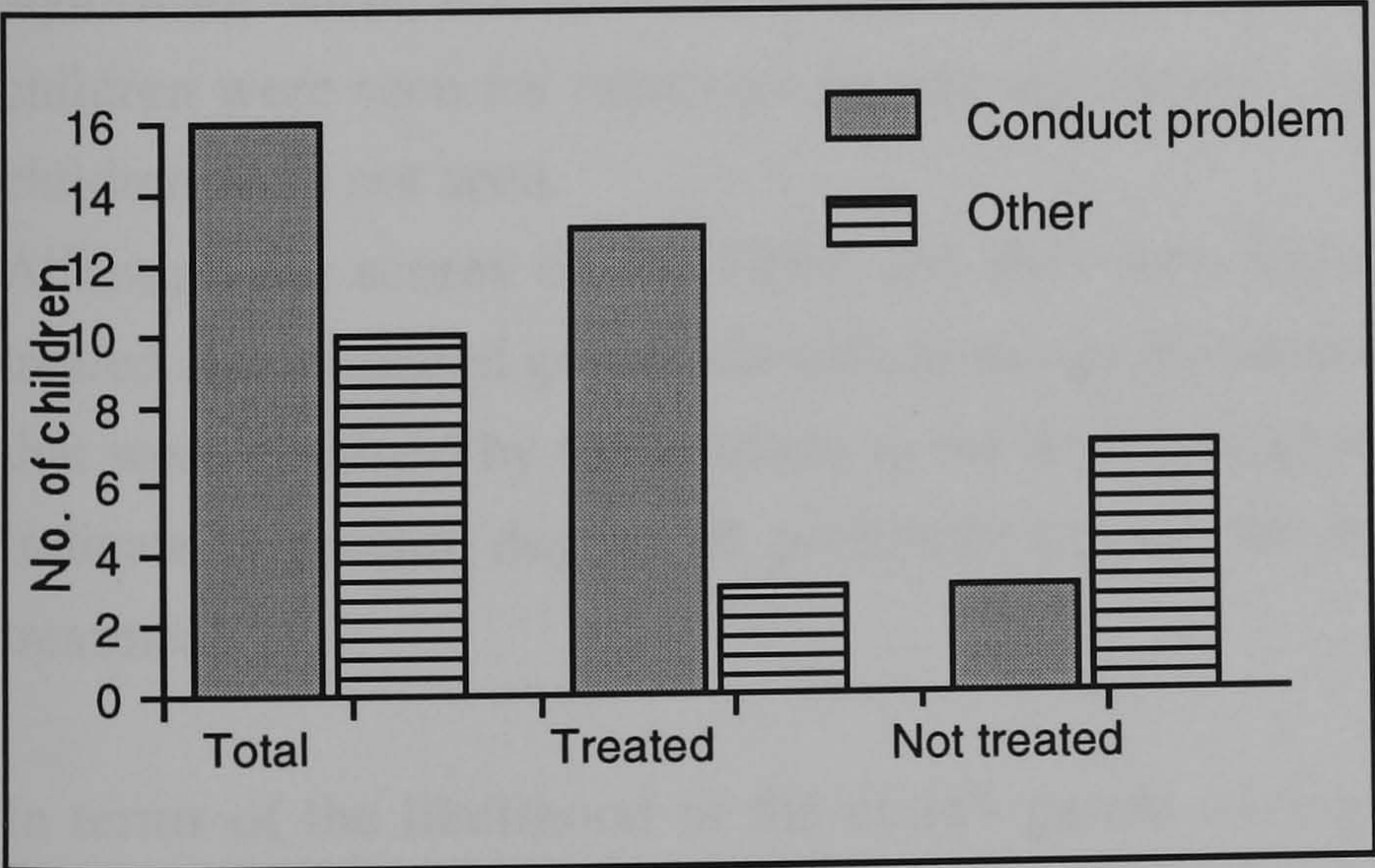


Figure XVIIIvii Distribution of conduct problems between treated and untreated samples

This difference was tested by means of a chi square test and was significant (Chi Square = 6.829, df1, p=.009)

Although not achieving statistical significance, the difference between the means of the treated and untreated groups on the two ECBI scales were quite different as shown in the following table and figures reflecting the greater extent of conduct disorder within the treatment group.

Table XVIIIix Comparison of ECBI means between treated untreated groups

	treated	untreated	p value
ECBI-I	136.500	110.400	.1114
ECBI-TP	13.25	9.7	.3622

Table XVIIIix Comparison of the remainder of the criterion measures

Means	Treated group	Untreated group	p value
GHQ	11.625	6.5	.1657
BDI	14.250	8.400	.1564
Autobiog memory	4.688	1.6	.0005
CCQ2 insularity sc.	14.688	15.4	.39

Of these measures only the autobiographical memory scale yielded a statistically significant difference between treated and untreated groups with those parents whose children were seen for treatment having significantly higher scores than those whose children were not seen.

Although the scores on the GHQ and BDI were not significantly different for the treated and untreated groups the differences in the means show the higher mean scores that were obtained by the mothers in the treatment group. In both cases these results indicate a greater degree of problems among the mothers of children seen for treatment.

In terms of the likelihood of the child's parent having a mental health problem the distribution of scores above or below the cut-off point for the GHQ is as follows:

Table XVIIIxi comparison of parental mental health problems as recorded by the GHQ scores for treated/untreated groups.

	treated	untreated	all
GHQ case	10	5	15
GHQ non-case	6	5	11
Total	16	10	26

(Chi Square .048, df1, p = .8261)

The distribution of BDI cases between treated and untreated groups is very similar.

Table XVIIIxii comparison of parental mental health problems as reported on the BDI for treated/untreated groups.

	treated	untreated	all
BDI case	10	4	14
BDI non-case	6	6	12
Total	16	10	26

(Chi Square 1.254, df1, p = .2629)

Appendix IXX. Scoring criteria for the ECBI change index

The scale

5. Large improvement	4. Moderate improvement	3. No change	2. Small deterioration	1. Large deterioration
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The scoring criteria

A figure was calculated by deducting the follow-up score from the baseline score for each scale. Scores were then scaled on the basis of the following criteria.

ECBI intensity sores

- A deterioration of over 30 points = 1
- A deterioration of from 6 to 30 points = 2
- A deterioration of 5 points or less to an improvement of 5 points or more = 3
- An improvement of from 6 to 30 points =4
- An improvement of 31 points or more = 5

ECBI total problem score

- A deterioration of over 11 points = 1
- A deterioration of from 3 to 10 points = 2
- A deterioration of 2 points or less to an improvement of 2 points or more = 3
- An improvement of from 3 to 10 points =4
- An improvement of 11 points or more = 5

On the basis of these change ratings a correlation coefficient between the two change rating scales was calculated and found to be highly significant ($r = .528, p = .0343$). It was therefore decided to make use of a single change rating scale in which the less favourable ratings were used in the five cases that there was a difference. No ratings were more than one category apart.