An investigation of mothers attributions and affective and behavioural responses to pre-school children's problem behaviour: a group comparative study

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An investigation of mothers' attributions and affective and behavioural responses to pre-school children's problem behaviour: A group comparative study

DIANA LORENC BA Hons

Submitted in partial fulfilment of the requirements for the degree of DOCTORATE OF CLINICAL PSYCHOLOGY

CLINICAL PSYCHOLOGY
SALOMONS CENTRE
ACCREDITED INSTITUTION OF THE OPEN UNIVERSITY

Date of Award: May 1997
DECLARATION

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ABSTRACT

An independent groups comparative design was used to investigate mothers' attributions and affective-behavioural responses in relation to their pre-school child's problem behaviour. Mothers' beliefs about the age at which children develop aspects of social understanding and skills was also investigated. One group involved mothers whose pre-school child was identified as presenting with a behaviour problem, a second group involved mothers of a 'non-problem' pre-school child. A premise of the research, however, was that all young children will at times present their parents with behaviour management problems. Participants were recruited from a number of sources, predominantly within community settings. Twenty-one participants were assigned to each group.

The main findings were that groups differed significantly in terms of the extent to which participants believed their child had misbehaved in order to deliberately upset them, with problem group participants rating their child as having acted more intentionally. There was some evidence that groups also differed in relation to the extent to which they believed their child had control over the causes of their misbehaviour, with non-problem group participants rating their child as having more control. No group differences were found in terms of mothers' estimates of the age at which children develop a range of skills and understanding.

Groups were also found to differ significantly in the number of child misbehaviour incidents they resolved and the type of behaviour response strategies used. Participants in the non-problem group were more likely to use 'co-operative' responses than those in the problem group. There was also a suggestion of some differences between groups in terms of reported affective responses to child misbehaviour.

Results are discussed in relation to previous research and relevant theoretical literature. Implications for clinical practice and directions for future research are suggested.
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1. INTRODUCTION

1.1 Clinical background

The author's interest in this research area arose from clinical work with families where a pre-school child (i.e. aged 2 to 5 years) was presenting with behaviour problems. One example involved a three year old girl who was presenting with severe, frequent temper tantrums related to non-compliance and marked aggression towards other family members, particularly her mother. Parental reports and direct clinical observation suggested that an escalating cycle of both parent and child aversive behaviour had been established, where the parents' response to their daughter's tantrums and aggressive behaviour involved anger, reciprocal aggression and a rejection of the child.

The proposed clinical intervention with this family involved a parent training approach, advocated by Forehand & McMahon (1981). An important initial aspect of this is to encourage more positive interaction, understanding and communication between parents and child by establishing 'special' interactive time each day, where the parent follows the child's lead in activities or play. The parents of this three year old, however, expressed great reluctance to engage in this approach, saying that they did not want to "reward" their daughter's "badness" with increased parental attention and 'special' time together.

In the course of work with this family it seemed a number of things were important to understand and address, before the parents could positively engage with the proposed intervention. Of particular importance was exploration of the parents' causal attributions about the conflict situations with their daughter and their beliefs about her behavioural motivation. They attributed the problem behaviour to dispositional characteristics of the child, who they believed was acting with malicious intent. The parents also appeared to consider their daughter's level of social and emotional understanding to be at a more sophisticated level than was likely for a child of her age. Exploration and consideration of these beliefs facilitated a change in the parents' attributions and a more helpful understanding of their child's behaviour. This was accompanied by an active engagement with the parent training
programme, which, over time, resulted in a dramatic change in the parent-child interaction pattern and a marked decrease in the child’s problem behaviours.

In discussing this work with other clinicians in child and family services it seemed that there was a general acknowledgement that parents of young children presenting with behaviour problems tended to ‘blame’ the child for the conflict situations and believed the child to be acting with wilful intent. An exploration of the literature in this area, however, yielded limited empirical research regarding parental attributions of pre-school children’s problem behaviour.

1.2 Behaviour problems in pre-school children

1.2.1 Background, definition and identification

Richman, Stevenson & Graham (1982) note that the 1970’s saw an increase in concern regarding pre-school children’s health and development, as reflected in a number of government reports, such as ‘Fit for the Future’ (DHSS, 1976) and an increase in the provision of services for pre-school children. Richman et al. (1982) report that there had previously been only limited empirical investigation of the prevalence and associated factors of behavioural and emotional difficulties in pre-school children and they considered it important that comprehensive information in these areas should be available to those involved in planning services. To address this, Richman et al. (1982) conducted a longitudinal research study, begun in 1970, investigating the prevalence of emotional and behavioural problems in a population of three year old children. They reported an overall prevalence rate for behaviour problems of 22.3 per cent, with mild problems accounting for 15 per cent of this, moderate problems for 6.2 per cent and severe problems 1.1 per cent. Richman et al. (1982) suggest this represents “a widespread and hitherto largely unrecognised source of suffering involving young children and their families” (p.55). Nicol, Stretch & Fundudis (1993) report similar prevalence rates in the USA (e.g. Cornley & Bromet, 1986), although they note that differences in the criteria for defining behaviour problems has resulted in some variability in the research findings.
The issue of defining and identifying behavioural problems in pre-school children is important to consider. Luk, Leung, Bacon-Shone, Chung, Lee, Chen, Ng, Lieh-Mak, Ko, Wong & Yeung (1991) suggest that it is common for pre-school children to develop minor or transient difficulties in a number of areas, such as control of aggression, sleep problems and the development of a balance between dependence and independence and that these should not be regarded as a 'disorder'. Bidder (1989) further emphasises the importance of understanding children's behaviour in relation to their age and developmental level, when considering whether a particular child has a behaviour problem. Luk et al. (1991) suggest that it is appropriate to identify behaviour disorders in pre-school children who present with multiple problems and or problems that are severe and persistent enough to negatively impact their development or present significant difficulties for themselves or their parents.

Richman (1988) suggests that although there are difficulties in clearly defining distinct types of disorder in young children, there is general agreement in the field that two main groups of problem behaviour can be identified. The first group consists of conduct problems, such as defiance, disobedience, aggression, destructiveness, restlessness and poor concentration and the second group consists of emotional difficulties, such as misery, apathy, fears and worries. Richman, Stevenson & Graham (1975), however, also suggest that pre-school children are particularly reactive to their environment and it may not be helpful to regard their behaviour in isolation, particularly from their parents. They suggest that it may be more meaningful to identify disorders within the family, or within the mother-child dyad, where the child's problem behaviour is regarded as a dependent variable related to other aspects of family life or wider social variables.

One of the main methods of obtaining information about pre-school children's problem behaviour has been through parent report. Richman & Graham (1971) suggest that whereas an unstructured interview with parents concerning their child's behaviour may allow for freer communication, this method has the disadvantage of not providing information systematically, thereby creating difficulties in comparing children or using the information for research purposes. A number of standardised measures for identifying behavioural problems
in the pre-school age group have therefore been developed, with items relating to the range of problem behaviour areas commonly presented by such children. Luk et al. (1991) note that one of the most commonly used research instruments is the Behaviour Screening Questionnaire (BSQ) (Richman & Graham, 1971), a semistructured interview administered to the parent. A disadvantage of this measure is that it is relatively time consuming to administer. Parent completed questionnaires have also been developed, which have the advantage of being quick and easy to complete. Richman (1977) derived the parent completed Behaviour Checklist (BCL) from the BSQ. While found not to be as sensitive or specific as the BSQ, Stallard (1993) suggests the BCL represents an economical and efficient method of screening pre-school children's behaviour.

Minde & Minde (1977) propose the importance of obtaining a teacher's assessment of pre-school children's behaviour, as they consider a behavioural assessment without this may rely inappropriately heavily on parent opinion. However, only a weak correlation between behavioural ratings of teachers and parents has been found (McQuire & Richman, 1986). Jenkins, Bax & Hart (1980) suggest that parents are in fact the most obvious source of information about pre-school children and report Dunn's (1978) findings of a close correlation between information obtained from parent completed questionnaires and direct observation of children's behaviour in the home. Friedlander, Weiss & Taylor (1986) emphasise the importance of taking into account parents' perception of their child's behaviour, as they suggest this will largely determine the pattern of parent-child interaction. Bryman & Burgess (1994) suggest a 'triangulation' approach to the gathering of information can increase validity. Nicol, Stretch, Fundudis, Smith & Davison (1987) report the positive use of a multicriterion screen which, in addition to the parent completed BCL, included a health visitor questionnaire.

1.2.2 Pre-school children's presenting problems

Douglas (1988) reports that common behaviour problems in pre-school children include temper tantrums, defiance, sleeping and eating problems. Jenkins et al. (1980) found that parents most commonly reported behaviour management difficulties with their pre-school
children. Bernal, Klinnert & Schultz (1980) found that among pre-school children referred to clinics for treatment for behaviour problems, non-compliance was the most frequent presenting complaint of parents. Similar findings are reported for a community sample (Johnson, Wahl, Martin & Johansson, 1973). Forehand & McMahon (1981) suggest that non-compliance, when broadly defined to include the breaking of implicit family rules or values, would include most of the problem behaviours associated with the pre-school child. Nicol et al. (1993) report some gender differences in the pattern of pre-school children’s behaviour problems, with boys being more likely than girls to show restlessness, sphincter control problems and negativism. In their study of abusive parents, Golub, Espinosa, Damon & Card (1987) found that the child in the family identified as a problem was more often male, which they suggest is consistent with other research.

Greenberg & Speltz (1988) suggest that behaviour problems in pre-school children has become an increasing area of research interest due to findings of a relationship between early childhood problems and later maladjustment. A relationship between behaviour problems in early childhood and future problem behaviour, emotional instability and delinquency in adolescence and adulthood has been reported (Olweus, 1979). Forehand & McMahon (1981) suggest this indicates the importance of developing appropriate, early treatment interventions for pre-school children. In order to develop such interventions it has been important to have a theoretical model for the development and maintenance of child conduct problems.

1.2.3 The ‘family coercion model’ of child conduct problems

Greenberg & Speltz (1988) suggest that Patterson’s (1976) ‘family coercion model’ has offered the best articulated operant formulation of the development and maintenance of child conduct problems. This model hypothesises the involvement of two family processes: 1. The reinforcement of child aversive behaviour by the parents and 2. The establishment of cycles of escalating coercive behaviours in the parent-child dyad. Patterson (1976) suggests that the first process arises when the parent places a demand on the child. The child responds to this by engaging in persistent behaviour which is aversive to the parent, such as tantruming
or aggressiveness. The parent in turn responds by withdrawing or terminating the original demand, thereby negatively reinforcing the child’s aversive behaviour. The second process occurs in situations where, instead of responding by withdrawing the demand, the parent responds with aversive behaviour of their own, such as getting angry, using threats or becoming aggressive. Patterson (1976) proposes that both child and parent may then respond by increasing the level of their own aversive behaviour, creating an escalating cycle until the child complies with the demand. In this way the parent’s use of increasingly aversive behaviour tactics is negatively reinforced. Patterson (1976) has termed this the ‘negative reinforcement trap’, as whether or not the child or parent ‘win’ the struggle, both parent and child behaviour is reinforced by the other.

Patterson (1976) places his coercion model within a developmental context. He suggests that rudimentary child aversive behaviours may be due to temperamental and developmental factors in the infant or young child. For example, an infant’s crying when hungry is an aversive behaviour which elicits maternal attention or caregiving. The developmental model suggests that as children grow older they tend to replace these rudimentary coercive behaviours with more appropriate verbal and social skills. Patterson (1976) suggests that in some circumstances a range of environmental factors may instead contribute to children continuing to use aversive behavioural strategies, such as parents failing to model or reinforce more appropriate prosocial skills, or even modelling inappropriate behaviour, resulting in a coercive family interaction pattern. Greenberg & Speltz (1988) report empirical support for this model.

1.2.4 Intervention

Greenberg & Speltz (1988) note that of a number of treatment interventions for young children with behaviour problems, parent training has been the most commonly applied and the most frequently investigated in recent years. A primary aim of this approach is to teach parents to be more effective reinforcing agents for their child, based on the above behavioural formulation. Forehand & McMahon (1981) present a detailed account of their parent training programme, which is primarily a behavioural intervention involving didactic
instruction, modelling, role playing and practice of new parenting skills and strategies. They report empirical research which demonstrates the effectiveness of various aspects of the parent training approach, although they also suggest some limitations and considerations. It was found, for example, that behavioural change does not generalise well to the school setting and that in some cases the parent's maladjustment, rather than ineffective parenting skills, is the more appropriate focus of intervention.

Wahler & Afton (1980) report differential success rates for parent training interventions. They suggest that while there is no single set of predictors to account for the success-failure differences, research suggests a number of factors which may be important. These include marital problems, number of parents present and parents' experience of social and emotional problems beyond those relating to child interactions. Forehand & McMahon (1981) propose that factors working at the levels of the individual, family and wider environment can contribute to problematic parent-child interactions, by reducing the likelihood that parents will use effective parenting skills and increasing the probability that the parent will fall into a behaviour reinforcement trap. Greenberg & Speltz (1988) note, however, that in operant formulations of coercive behaviour, no causal significance is given to child or parent cognitive variables, with such variables being understood as consequences of the observed coercive patterns. They suggest that operant parent training models aim to produce "surface change", without attempting to impact the "deep structure" of the child's working model of relationships, or of the parent's view of the child (p.208).

Baden & Howe (1992) note that while Patterson's coercion model provides understanding of the development of stable conduct problems in children, it does not explain why some families are more likely to initiate or maintain such negative behaviour cycles than others. They propose that cognitive variables concerning parents' perceptions of themselves and their children are important in understanding this. Baden & Howe (1992) draw on Doherty's (1981) model, which proposes that family conflict is sustained by the assumptions that family members make concerning the causes of the conflict. Fincham & Bradbury (1987) suggest that in addition to causal inferences, family conflict is increased when members blame other
family members for the conflict and that such blameful attributions rest heavily on the inference of intent.

1.3 ATTRIBUTION THEORY

Attribution theory relates to the process by which people attempt to explain behaviour, with a central premise of the theory being that people spontaneously engage in attributional activities (Wong & Weiner, 1981). A number of attribution theorists have suggested various models describing the strategies people use to infer the causes of observed behaviour and how such inferences influence observers' behaviour.

Kelley (1973) proposes a number of ‘principles’ to explain the causal attribution process, such as the ‘covariance principle’, which holds that an effect is attributed to the one of its possible causes with which it covaries over time. Kelley (1973) suggests that although a wide variety of causal information may be available, people often lack time or motivation to take all possible information into account when making an attribution. He suggests that instead, individuals tend to base their attributions on ‘causal schemata’ which involve causal preconceptions and stereotypes, relating to an individuals' past experience of observing cause-effect relationships. Kelley (1973) distinguishes between simple and complex schemata and suggests an example of an attributional belief related to a simple schema is "A child who disobeys his parents is a bad child" (p.121). He proposes that a preference for simple rather than complex causal explanations persists from childhood into adulthood.

Ross (1977) found that people tend to underestimate the situational causes of behaviour and instead are biased towards making dispositional attributions, which he termed the ‘fundamental attribution error’. Jones & Davis (1965) propose that dispositional attributions are made when the effects of behaviour are believed to be freely chosen and intended to occur. They suggest that intentionality is in turn inferred when observers attribute three factors to the actor: 1. that they were able to foresee that the effects were likely to result from their actions; 2. that they wanted to produce those effects and 3. that they had the ability to produce those effects. This model is similar to Fincham & Bradbury's (1987) proposal that
certain "capacities" (p. 1108) are necessary before someone can be held responsible or accountable for their conflict-related behaviour. That is, the person needs to be judged to possess the ability to foresee that the behaviour will result in conflict, have knowledge of and the ability to carry out, alternative conflict avoidant behaviours.

Weiner (1979, 1980) proposed that attributions can be usefully considered in relation to four main attribution dimensions: 1. 'internal-external', which refers to the perceived locus of the cause of the behaviour; 2. 'controllable-uncontrollable', relating to beliefs about the degree of control an individual has over the cause of behaviour; 3. 'stable-unstable', which refers to the duration of the cause over time and 4. 'general-specific', which refers to the extent to which the cause is present across different situations. Walker (1985) suggests that by examining the attributional ratings people make about the causes of behaviour, on each of these four dimensions, it is possible to infer their attributional biases, that is, patterns of perception which reflect the perceiver's subjective view of the world.

Weiner (1979) proposes that attributions influence behaviour primarily because they influence the observers' affect and expectations about future behaviour. Weiner, Graham & Chandler (1982) found particular relationships between inferences about causal attributions and affective responses. Affective responses of anger and guilt, for example, were associated with behavioural causes perceived as controllable and internal to the actor. Weiner et al. (1982) propose that causal thoughts often precede and determine particular affective responses.

Dix & Grusec (1985) suggest that although the study of attributions has been of considerable importance in the field of adult social interaction, attributions within parent-child interactions have been largely unexplored. They propose extensions to existing attribution models to include issues of parenting and social development, with a particular emphasis on child problem behaviour.
1.4 Parental attributions of child behaviour

Dix & Grusec (1985) suggest that research into parenting behaviour has tended to focus on global styles of parenting, with relatively little research into specific variables that may be related to day to day parenting behaviour. They suggest a particularly important factor in this area may be parents' causal attributions of their child's behaviour. Dix & Grusec (1985) propose that a central feature of attributions of children's, rather than adults', behaviour is the fact that children are immature, that is, that much of child behaviour is constrained by developmental limitations beyond the child's control. They suggest that when making adult to adult attributions, the attributer can use information about their own level of knowledge or motivation, to help understand the others' internal processes. When children are the objects of attributions, however, Dix & Grusec (1985) suggest it is inappropriate to use such an internal source of information, as this could result in an attribution bias caused by a failure to take the role of the child. They suggest therefore that when children are the objects of attributions, estimates of their basic knowledge, ability and motivation may be more difficult and follow different processes than when adults are the objects of attributions. Dix & Grusec (1985) note that a further important factor when considering parental attributions of children's behaviour is that parents and children are involved in a powerful social and biological relationship and that children's behaviour therefore has a particularly personal relevance for parents.

A number of researchers have investigated parental attributions of children's behaviour. Butler, Brewin & Forsythe (1986), in a study of maternal attributions for child nocturnal enuresis found that the majority of mothers attributed the cause of the behaviour to the child being a heavy sleeper. Butler et al. (1986) note that there is no consistent research evidence in support of this view and suggest their findings are an example of the 'fundamental attribution error' (Ross, 1977), where mothers overattributed their child's behaviour to dispositional factors, while underestimating the importance of situational factors.

Parental attributions of children diagnosed with attention deficit disorder (ADD) have also been the subject of research. Sobol, Ashbourne, Earn & Cunningham (1989) investigated
parent's attributions for achieving compliance from their ADD children, as compared to parents of non-ADD children. They found differences between mothers' and fathers' attributional ratings, with mothers rating the causes of their child's non-compliance as more external than did fathers. Mothers of ADD children also rated the causes of their child's non-compliance as more unstable than did control mothers. Sobol et al. (1989) note that although parents within both groups at times used the same categories to explain their children's behaviour, they made different attribution dimension ratings for these explanations. Walker (1985) suggests that how an individual perceives a cause of behaviour depends on the phenomenology of the perceiver. She cites an example where two mothers may both attribute their child's failure to carry out a task to "stubbornness", but have quite different thoughts about stubbornness, in relation to different attributional dimensions.

Walker (1985) empirically investigated clinical findings which suggest parents are particularly tolerant of chronically ill children's behaviour. She hypothesised that a positive bias towards chronically ill children would be demonstrated in parents' ratings of the causes of the children's behaviour, with parental ratings of child positive behaviour being significantly more internal, stable, controllable and global than the causes of their negative behaviour. She further hypothesised that this positive bias should be greater than for parents of healthy children. To investigate this Walker (1985) designed the Parent Attribution Questionnaire. She found that, in general, mothers of chronically ill children, aged 4 to 18, held a more positive attributional bias towards their children than did other mothers, but that this positive bias varied according to the degree to which the mothers perceived the child as difficult to manage. Those mothers who reported finding their children difficult to manage rated the causes of their child's negative behaviour as internal, stable and global, but rated their positive behaviour as due to unstable situational factors, outside the child's control. Mothers reporting their ill children as easy to manage tended to attribute their negative behaviour to external, unstable and specific factors, while their positive behaviour was attributed to factors which were internal, stable and controllable.
From the child abuse literature Golub et al. (1987) suggest that where the abusing parent has themselves been abused in childhood, psychological and dynamic factors related their own abuse history may lead such parents to misidentify or misperceive the motivations behind their children's misbehaviour. Golub (1984, cited in Golub et al., 1987) found that abusive parents were more likely than non-abusive parents to attribute their child's misbehaviour to stable factors. They were also more likely to believe that their child was misbehaving intentionally, in order to harass the parent. Golub (1984) found that these factors, in particular the perception of intentionality, were related to the degree of anger experienced by the parent and harshness of punishment administered, in response to child misbehaviour.

Baden & Howe (1992) propose that parents' perceptions of the causes and intentionality of their children's behaviour are related to initiation of, or engagement in, aversive behaviour cycles. They empirically tested the related hypothesis that parents of adolescents diagnosed with conduct-disorder would report more blameful attributions when describing their children than would parents of nondisturbed children. Blameful attributions were defined as parental beliefs that the cause of the negative behaviour was internal to the child and intentional. Baden & Howe (1989) further hypothesised that parents of conduct-disordered children would be more likely to attribute the causes of their problem behaviour to global, stable and uncontrollable child factors. They found that mothers of conduct-disordered children were more likely to attribute their child's misbehaviour to child intent and as being due to stable and global factors. No group differences were found on the controllability dimension. Baden & Howe (1992) conclude that while their findings provide evidence of a relationship between a parental stance of blame and the presence of child conduct disorder, it is not known whether such parental cognition's are precursors of coercion cycles, or whether they emerge as a result of such established cycles.

1.4.1 Attributional biases

Dix & Grusec (1985) suggest that known attributional biases may provide further understanding of parent's perceptions of their children's behaviour. In relation to the 'fundamental attribution error' (Ross, 1977) they suggest that in parent-child interactions
parents may not take sufficient account of the various constraints that may be operating on children's behaviour, such as limited knowledge or skills. They suggest that this may result in parents inappropriately making dispositional attributions about their child's behaviour, such as attributing a lack of sharing to selfishness, rather than perhaps a lack of social understanding in this area.

A second important attributional bias relates to when another's behaviour has direct personal consequences. Termed 'hedonic relevance' (Jones & Davis, 1965), this has also been shown to increase dispositional attributions. Grusec, Dix & Mills (1982) found that hedonic relevance was an important factor in parenting. They asked mothers to indicate how they would respond to descriptions of child misbehaviour, where the child either transgressed against a neighbour or the mother herself. As predicted, Grusec et al. (1982) found that mothers responded more harshly when the child transgressed against them and were significantly more likely to recommend punishment in such situations.

A related attributional bias is that of 'personalism' (Jones & Davis, 1965), which suggests that both positive and negative evaluations of others are increased when it is believed that they are intentionally trying to either please or "spite" us. Dix & Grusec (1985) suggest parental inferences based on 'personalism' should promote dispositional attributions and extreme negative evaluation and that this would lead to an increase in parental responses of anger and punishment. Steele & Pollock (1968) propose that the bias of 'personalism' has particular relevance for abusive parents.

### 1.4.2 Attributions and parental affective responses

Dix & Grusec (1985) propose that for the attribution process within the family to be more fully understood, it is important to understand the role of affect in this. Dix, Ruble, Grusec & Nixon (1986) found, in line with Weiner et al. (1982), that parents' negative affective reactions to child misconduct were related to their causal attributions for the behaviour. Dix et al. (1986) suggest that this differs from Maccoby & Martin's (1983) proposal that negative affect is a stable quality of parent-child dyads, or that negative affect is the automatic result of the
child's violation of stable parental values. Dix & Grusec (1985) suggest that angry parents are more likely to punish or insult their child in response to child misbehaviour and less likely than calm parents to explain or discuss the behaviour with the child. They also suggest that affect may influence parents' subsequent information processing abilities, with highly aroused parents being less able than calm parents to reason or be able to take the child's role. The proposed relationship between parental responses of anger and punishment to child misbehaviour has found empirical support from Golub (1984) and Engfer & Schneewind (1982).

1.4.3 Attributions and parental behavioural responses
Dix et al. (1986) found that parents' attributions regarding their children's behaviour influenced the discipline strategies they used, with parent's responses differing according to the judgements they made about the intentions underlying the child's actions. Dix & Grusec (1985) propose that parents' effectiveness in managing child misbehaviour will depend on their ability to make accurate causal attributions. They suggest that a correct attribution should result in socialisation efforts by the parents, directed at causes which are maintaining the behaviour, whereas incorrect attributions may result in inappropriate parental responses. They offer the example of a child who steals due to a lack of knowledge of property ownership and argue that if a parent makes a correct causal attribution they will be more likely to provide the child with necessary socialisation information. If the parent, however, believes that the child stole due to intentional dishonesty, they may be more likely to punish the child, without providing information that would reduce the likelihood of the behaviour occurring again.

As part of a parent education programme for abusive parents, Golub et al. (1987) attempted to address findings that abusive parents extensively use punishment in response to their child's misbehaviour. Parents were initially asked to say how they would respond to various child misbehaviours, described in story vignettes. The behavioural responses offered were coded into three categories: 'co-operative', which involved restructuring of the task, compromise and use of logical consequences; 'positive power assertive', which included use
of time-out, removal of object or privileges and sending the child to their room and 'punitive', which involved smacking or shouting. Stated parental causes of the child's behaviour were also coded as either 'excusing' or 'blaming' the child. The related research hypotheses were that, following the intervention, parents would propose using more 'co-operative' and 'positive power positive' responses and fewer 'punitive' responses, that the number of causes of behaviour suggested by parents would increase and that these would include more reasons that 'excused' the child. Golub et al. (1987) propose that the more explanations parents can generate for a child's behaviour the less likely they will be to attribute misbehaviour to a stable trait or intentional 'badness'. They reported significant parental change following the intervention, in line with most of their hypotheses.

1.5 Parental expectations of children's capabilities

A number of authors have suggested the importance of taking into account parents' inferences and expectations about children's capabilities, in relation to parental attributions of young children's behaviour. Miller, White & Delgato (1980) found that parents have differentiated beliefs about when in a child's development different skills emerge. Ninio (1988) found that cultural factors were related to such beliefs, with parents from Western ethnic origins giving earlier age estimates of infant capabilities than parents from African-Asian ethnic origins. Parents with higher education were also found to give earlier age estimates and mothers gave earlier estimates than fathers. Dix et al. (1986) proposed that such age expectations may be used by parents in situations of child misconduct, as a guide to whether their child may be lacking in the basic competencies necessary for more appropriate behaviour or not, which in turn would influence parental attributions and behavioural responses. They found, however, that not all parental attributional inferences were related to their child's developmental level. Parents of older children did not attribute their misbehaviour more to internal, stable and global factors than did parents of younger children. Parents also did not attribute misbehaviour in pre-school age children more to a lack of self-control or behavioural knowledge than they did for older children. Dix et al. (1986) suggest that although the absence of this effect may be due to aspects of their research.
methodology, the possibility that parents fail to consider possible developmental constraints when assessing young children's behaviour deserves further study.

Twentyman & Plotkin (1982) note that the issue of parental expectations of children's capabilities is commonly discussed within the child abuse literature and that within this literature unrealistic parental expectations are almost universally accepted as a controlling variable in child abuse (e.g. Steele & Pollock, 1968). Twentyman & Plotkin (1982) point out, however, that this acceptance is not based on empirical investigation. They developed the Developmental Expectation Questionnaire, to empirically investigate the direction and magnitude of error of parental expectation, within three groups: a child neglect group, a child abuse group and a control group. Participants were asked to estimate the age at which their own child and an 'average' child would attain various developmental milestones. They found that both the abuse and neglect groups showed a bidirectionality of error, where mothers both overestimated and underestimated the age at which their own and an 'average' child would attain certain milestones and differed significantly in this respect from the control group. It was also found that, contrary to Steele & Pollock's (19768) model of child abuse, the abuse group differed from the other two groups in that they expected their own child to attain developmental milestones later than an average child. Twentyman & Plotkin (1982) concluded that their results were indicative of abusive or neglectful parents being less knowledgeable about children's developmental processes than matched controls.

1.6 Young children's social understanding

Dix & Grusec (1985) propose the importance of parents making correct attributions concerning their children's behaviour, in relation to whether they then provide necessary socialisation information or punish the child. This suggests that in addition to considering parents' inferences about certain child capabilities, it is also important to have an understanding of normative child development, particularly with regard to the development of social understanding and skills. Dunn & Brown (1993) found that in everyday conversational discourse with an adult, children often exhibit cognitive capacities beyond those evidenced in interview or test situations. Dunn (1988) reports the findings of an observational study of pre-
school children’s interaction with other family members, within the home environment. She suggests that such observations indicate that, even in their second and third years, children have a much more subtle comprehension of their social world than they have previously been given credit for. Dunn (1988) suggests that children’s understanding of other’s feelings and the use of social rules develops rapidly and is increasingly explicitly articulated, during the third year. She reports findings that by age 30 to 36 months children demonstrate a practical knowledge of the idea of responsibility, of excuses of intent and incapacity, of how rules apply differently to different family members, how such rules can be questioned and of how transgressions can be justified. Bloom & Capatides (1987) found that children aged between two and three years were able to express causal relationships between events and showed particular interest in causal relationships that involved social behaviour. Dunn (1988) concludes, however, that “it is the very beginnings of understanding the social world that we see in these young children” (p.175), with clear limitations to that understanding.

Dunn (1988) suggests a number of factors are related to individual differences in children’s development of social understanding, such as differences in children’s emotional experiences, differences in the discourse of the family and cultural differences in behavioural expectations and acceptability of child behaviour. She argues, however, that what is common to all children growing up in families is the importance of understanding what is allowed or disapproved of and how others will respond to their behaviour.

1.7 Introduction to the current study

Interest in this research area was the result of clinical work with families of pre-school children presenting with behaviour problems, where parents appeared to hold particularly negative attributions regarding their young child’s behaviour. Luk et al. (1991) make the point that all young children present behaviour management problems for parents at times. No empirical research was found which compares the attributions of parents of pre-school children who are identified as presenting a ‘behaviour problem’, with parents of ‘non-problem’ pre-school children. It was considered that such research would add useful information to the field and be of particular clinical interest.
Baden & Howe (1992) found that mothers of adolescents with conduct-disorder made more blameful attributions regarding their child's behaviour than did mothers of non-conduct-disordered adolescents. They suggest that such differences are not evidence of a causal relationship between maternal attributions and child conduct disorder, but could result from the sustained family conflict situations. They suggest that further research in this area is warranted. In relation to this it was considered of particular interest to conduct a similar group comparative study, with mothers of younger children, who are likely to have experienced conflict situations for a shorter time period.

In addition to obtaining parental ratings on main attributional dimensions, previous research suggests aspects of the causes parents provide to account for their children's behaviour are of interest (Golub et al., 1987). These will be considered in the present study. A number of authors have proposed the importance of the relationship between parental attributions and parents' affective and behavioural responses to their children's misbehaviour. The present study will also investigate such parental responses.

Much has been written about the particular importance, within the field of parental attributions of children's behaviour, of taking into account parents' inferences and expectations concerning the development of children's social understanding and skills. The present study will investigate whether mothers of pre-school children presenting with behaviour problems have different expectations about child development than do mothers of children not presenting with behaviour problems.

1.7.1 Some methodological considerations

Clinical experience and general population information shows that mothers are more often the primary carers of young children than are fathers. It is notable that the majority of research studies which discuss 'parental' attributions of child behaviour have in fact investigated maternal attributions only. As research findings indicate that mothers and fathers differ in their attributions and expectations of children's behaviour (e.g. Sobol et al., 1989) it was decided that, as an initial investigation, the present study would involve mothers only.
The issue of attribution assessment was important to consider. Empirical research in this field has tended to use fictional vignettes as a stimulus base for causal attributions. These vignettes typically depict or describe an anonymous child, or the parent's 'own' child, acting within a range of commonly experienced problem behaviour situations. Rosenberg & Reppucci (1983) suggest, however, that there is no evidence for the validity of using case vignettes when researching into causal attributions. They propose that the 'narrative' method, which involves participants recounting specific, real life incidents, has greater reliability and validity. Holtzworth-Munroe & Jacobson (1985) similarly suggest, from their research into attributions within couple relationships, that stronger more consistent attributional information may be obtained by using "salient relationship events" (p.1410) as the stimulus base. Walker's (1985) Parer Attribution Questionnaire uses real life behavioural incidents as the basis for parental attributions and it was therefore considered that this would be an appropriate measure for use in the present study.

1.8 Research aims, hypotheses and questions

The primary aim of the study was to compare across child problem and non-problem groups, mothers' attributions of their child's problem behaviour, on each of five attribution dimensions. A secondary research aim was to compare mothers' beliefs about the age at which children develop a range of skills and social understanding. An additional, qualitative element of the study involved an exploration of the causes mothers offered to explain their children's behaviour, mothers' affective and behavioural responses to misbehaviour and mothers' experience of taking part in such a research study.

1.8.1. Hypotheses

Two main hypotheses were investigated, both are two-tailed and are stated in terms of the null hypothesis:
1. There will be no differences between child problem and non-problem groups with regard to mothers' attributional rating for their child's behaviour, on each of the following five attribution dimensions:

1. Internal - external
2. Stable - unstable
3. Controllable - uncontrollable
4. Global - specific
5. Intentionality

2. There will be no differences between child problem and non-problem groups with regard to mothers' estimates of the age at which children attain cognitive understanding and skills, in each of 15 developmental areas.

1.8.2 Research questions

The remaining stated aims of the research were investigated in relation to the following research questions:

1. What affective responses do mothers report in relation to their child's misbehaviour and are there group differences in this regard?

2. What behavioural responses do mothers report in relation to their child's misbehaviour and are there group differences in this regard?

3. a) How many causes do mothers offer for their child's misbehaviour b) to what extent are these causes considered to 'blame' or 'excuse' the child and c) are there group differences in this regard?

4. What type of problem behaviours do mothers report on the Parent Attribution Questionnaire and are there group differences in this regard?

5. To what extent are these reported problem behaviours resolved and are there group differences in this regard?

6. How do mothers experience the research interview?
2. METHOD

2.1 Design

The study was an independent groups comparison design with two groups of mothers of preschool children. In one group the index child was presenting with behaviour problems (problem group) and in the second group the index child was not presenting with behaviour problems (non-problem group). Consultation with a statistician suggested 20 participants per group was an appropriate number to allow for the statistical detection of group differences.

A number of demographic factors were taken into consideration, including age, education, occupational status, family composition and age, gender and ordinal position of the index child, such that any observed group differences on the research measures could be more confidently attributed to participant group membership, rather than to other, confounding, variables.

2.2 Recruitment

The possibility of using a two-stage recruitment procedure, to determine participant's group membership before interview, was considered during the early design stages of the research. However, it was considered that any preliminary requirement on the part of participants may have resulted in a reduced response rate. As research time was limited and the need to maximise response rate was considered paramount, it was decided that all necessary information, including group inclusion data, would be obtained from participants during a single research interview.

Participants were recruited from four inner city areas, involving a number of different recruitment sources. Three child mental health services were involved in recruitment of participants for the problem group. However, discussion with these services, in relation to their referral patterns, suggested that it would be difficult to recruit the sample size needed from them. Jenkins et al. (1980) note that very few pre-school children with behaviour problems ever reach specialist child services. In addition to the pragmatic issue of recruiting adequate numbers, it was also considered that recruiting the problem group solely from clinic
sources would result in an unrepresentative sample. As all pre-school age children have an allocated health visitor it was considered that recruiting participants predominantly through health visiting services would increase the possibility of recruiting representative samples, within both groups. Eight health visiting teams, involving around 100 health visitors, agreed to take part in the recruitment process.

Significant problems with this recruitment process were experienced, however, with initially only two health visitors taking an active role in participant recruitment. Subsequent discussions with the health visiting teams suggested health visitor involvement could be increased by reducing to a minimum the time demands involved in recruitment. This resulted in the withdrawal of original requests for health visitors to nominate comparable prospective participants for both the problem and non-problem groups and also to provide external validation of group inclusion via the author-developed Health Visitor Screening Questionnaire (Appendix 1.). Although health visitors were eventually asked to simply distribute research packs to any mother of a pre-school age child on their client lists, this did not significantly increase their involvement.

In view of this it was considered necessary to approach alternative recruitment sources. Following approval from the relevant local authority Early Years Education Services, 25 early years centres and nurseries were approached, either directly by the author or by the early years education officer. All agreed to take part in recruitment. In addition, 12 private/voluntary sector nurseries, approached directly by the researcher, agreed to take part. An additional recruitment source was the voluntary sector organisation 'Newpin', which offers support and therapy for mothers of pre-school age children who are experiencing a range of difficulties, including difficulty coping with a child with behaviour problems. A number of participants were also recruited via existing participant nomination and through the authors' personal network, although none were previously known to the author.
2.3 Group selection

2.3.1 Problem group

To maximise the validity of the groupings an attempt was made to establish a number of criteria for group inclusion. Participants' perceptions of their child's behaviour were obtained during the interview, in response to an open ended question asking them to describe their child's behaviour. This qualitative information was rated by the author as to whether or not the child presented with a behaviour problem. A second rater, a clinical child psychologist, was asked to similarly rate this information from 20 interviews, randomly selected with the use of random number tables. Inter-rater agreement was 95 per cent. Scores on the Behaviour Checklist (BCL) (Richman, 1977) constituted a second criterion for group inclusion. A cut-off score of 8 was used, where scores of 8 and above were considered indicative of child behaviour problems, with a maximum possible BCL score of 24.

The initial research design included a measure of external validation of group inclusion, via the Health Visitor Screening Questionnaire, which was subsequently withdrawn. Following earlier recruitment difficulties it was considered necessary to make minimal demands on other recruitment sources, so as to try and maximise their involvement in the recruitment process. No other measures of external validation of group inclusion were therefore used. When further information was available, such as from the recruitment source, attendance at specialist child services or direct observation of the child's behaviour by the author, this was used for group inclusion purposes.

2.3.2 Non-problem group

Participants were included in the non-problem group if the qualitative information from the mother, in relation to their child's behaviour, was judged by the author as indicating that the child was not presenting with behaviour problems, their BCL score was below the cut-off of 8 and there was no contradictory information from other sources concerning the appropriateness of assigning the participant to the non-problem group.
2.4 Response rate

It was not possible to calculate an exact response rate, as the total number of research information packs distributed to prospective participants by Health Visitors and through early education centres was not known. While around 400 research packs were provided to Health Visitors, available feedback suggests that only about 20 were distributed, yielding 8 participants (an approximate response rate for Health Visitor recruitment of 40%). The specialist child services were provided with a total of 30 research packs. Response rate information was available from only one of these services, where one participant was recruited from a possible twelve (8%). Six out of approximately 15 potential participants were recruited from Newpin centres (40%). From 680 research packs provided to early education/playgroup centres, 36 consent forms were returned, representing a response rate of only 5.3 per cent. Of the 36 only 27 participants took part in a research interview. The remainder were either inappropriate for the study, or withdrew their consent.

2.5 Participants

Fifty-four mothers took part in a research interview. Data from 42 participants were included in the analysis, with 21 participants in each group. Information from the remaining 12 participants was excluded as they did not meet the criteria for inclusion in either the problem or non-problem groups. This was due to there being inconsistent information across the different group selection criteria in relation to these participants. Demographic information relating to the problem and non-problem groups is presented in Table 1. Demographic information relating to the excluded participants is presented in Appendix 2.
Table 1. Group demographic information

<table>
<thead>
<tr>
<th></th>
<th>PROBLEM GROUP N = 21</th>
<th>NON-PROBLEM GROUP N = 21</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>21 - 48 years</td>
<td>23 - 47 years</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>32 years (7.6 yrs)</td>
<td>35.4 years (6.2 yrs)</td>
</tr>
<tr>
<td><strong>PARENTAL STATUS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single parenta</td>
<td>57.1% (n=12)</td>
<td>28.6% (n=6)</td>
</tr>
<tr>
<td>Two parentb</td>
<td>42.9% (n=9)</td>
<td>71.4% (n=15)</td>
</tr>
<tr>
<td><strong>ETHNIC ORIGIN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>65.7% (n=18)</td>
<td>76.2% (n=16)</td>
</tr>
<tr>
<td>Black</td>
<td>14.3% (n=3)</td>
<td>19% (n=4)</td>
</tr>
<tr>
<td>Asian</td>
<td>None</td>
<td>4.8% (n=1)</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Degree / higher degree</td>
<td>23.8% (n=5)</td>
<td>42.9% (n=9)</td>
</tr>
<tr>
<td>Further education</td>
<td>14.3% (n=3)</td>
<td>19% (n=4)</td>
</tr>
<tr>
<td>'A' Level</td>
<td>9.5% (n=2)</td>
<td>14.3% (n=3)</td>
</tr>
<tr>
<td>'O' Level or below</td>
<td>52.4% (n=11)</td>
<td>23.8% (n=5)</td>
</tr>
<tr>
<td><strong>EMPLOYMENT STATUS</strong></td>
<td></td>
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</tr>
<tr>
<td>Full-time</td>
<td>14.3% (n=3)</td>
<td>14.3% (n=3)</td>
</tr>
<tr>
<td>Part-time</td>
<td>19% (n=4)</td>
<td>28.6% (n=6)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>66.7% (n=14)</td>
<td>57.1% (n=12)</td>
</tr>
<tr>
<td><strong>OCCUPATIONAL LEVEL</strong></td>
<td>N=7</td>
<td>N=9</td>
</tr>
<tr>
<td>Professional</td>
<td>14.3% (n=1)</td>
<td>22.2% (n=2)</td>
</tr>
<tr>
<td>Managerial / Technical</td>
<td>28.6% (n=2)</td>
<td>33.3% (n=3)</td>
</tr>
<tr>
<td>Skilled (non-manual)</td>
<td>42.8% (n=3)</td>
<td>11.2% (n=1)</td>
</tr>
<tr>
<td>Skilled (manual)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Partly skilled / Unskilled</td>
<td>14.3% (n=1)</td>
<td>33.3% (n=3)</td>
</tr>
<tr>
<td><strong>FATHER’S OCCUPATIONAL LEVEL</strong> (two parent families) N=9</td>
<td>N=15</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td>22.2% (n=2)</td>
<td>6.7% (n=1)</td>
</tr>
<tr>
<td>Managerial / Technical</td>
<td>33.4% (n=3)</td>
<td>20.0% (n=3)</td>
</tr>
<tr>
<td>Skilled (non-manual)</td>
<td>22.2% (n=2)</td>
<td>26.7% (n=4)</td>
</tr>
<tr>
<td>Skilled (manual)</td>
<td>11.1% (n=1)</td>
<td>26.7% (n=4)</td>
</tr>
<tr>
<td>Partly skilled / Unskilled</td>
<td>11.1% (n=1)</td>
<td>13.2% (n=2)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>None</td>
<td>6.7% (n=1)</td>
</tr>
<tr>
<td><strong>RECRUITMENT SOURCE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursery / playgroup</td>
<td>57.1% (n=12)</td>
<td>38.1% (n=8)</td>
</tr>
<tr>
<td>Health Visitor</td>
<td>14.3% (n=3)</td>
<td>14.3% (n=3)</td>
</tr>
<tr>
<td>Newpin</td>
<td>9.5% (n=2)</td>
<td>14.3% (n=3)</td>
</tr>
<tr>
<td>Child clinical service</td>
<td>4.8% (n=1)</td>
<td>None</td>
</tr>
<tr>
<td>Nominated by another participant</td>
<td>4.8% (n=1)</td>
<td>23.8% (n=5)</td>
</tr>
<tr>
<td>Other</td>
<td>9.5% (n=2)</td>
<td>9.5% (n=2)</td>
</tr>
<tr>
<td><strong>AGE OF INDEX CHILD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>2yrs 1m - 4yrs 11m</td>
<td>2yrs 2m - 5yrs 1m</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>39.8mths (9.4mths)</td>
<td>40.3mths (10.5mths)</td>
</tr>
<tr>
<td><strong>GENDER OF INDEX CHILD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>19% (n=4)</td>
<td>38.1% (n=8)</td>
</tr>
<tr>
<td>Male</td>
<td>81% (n=17)</td>
<td>61.9% (n=13)</td>
</tr>
<tr>
<td><strong>NO. OF CHILDREN (in family)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One</td>
<td>57.1% (n=12)</td>
<td>23.7% (n=5)</td>
</tr>
<tr>
<td>Two</td>
<td>23.8% (n=5)</td>
<td>66.7% (n=14)</td>
</tr>
<tr>
<td>Three to five</td>
<td>19.1% (n=4)</td>
<td>9.6% (n=2)</td>
</tr>
<tr>
<td><strong>ORDINAL POSITION</strong> (index child)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st born</td>
<td>78.2% (n=16)</td>
<td>47.6% (n=10)</td>
</tr>
<tr>
<td>2nd born</td>
<td>9.5% (n=2)</td>
<td>47.6% (n=10)</td>
</tr>
<tr>
<td>3rd born</td>
<td>4.8% (n=1)</td>
<td>None</td>
</tr>
<tr>
<td>4th born</td>
<td>9.5% (n=2)</td>
<td>None</td>
</tr>
<tr>
<td>5th born</td>
<td>None</td>
<td>4.8% (n=1)</td>
</tr>
<tr>
<td><strong>INDEX CHILDREN ATTENDING A NURSERY OR PLAYGROUP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>85.7% (n=18)</td>
<td>90.5% (n=19)</td>
</tr>
</tbody>
</table>
As can be seen from Table 1, the majority of participants in both groups were white and unemployed. More participants in the problem group were single parents. Participants in the non-problem group tended to be educated to a higher level than those in the problem group. The majority of index children in both groups were male and attended nursery or playgroup, at least part-time. There were some differences in family composition between groups, with more participants in the problem group having only one child and more index children in the non-problem group being second born. More children in the problem group had contact with a specialist child service. Information regarding statistical comparison between groups, on the main demographic variables, is presented under preliminary analysis in the results section.

### 2.6 Research materials and measures

#### 2.6.1 Research pack

The research pack distributed to prospective participants consisted of a Research Information Sheet (Appendix 3), a Consent Form (Appendix 4) and a pre-paid return envelope. The voluntary nature of participation was stressed and information concerning confidentiality and anonymity was also provided. Prospective participants were provided with details of how the author could be contacted, should they want to discuss the research further. Comments regarding the clarity of the information sheet and consent form were obtained from three mothers of pre-school children, at the design stage. All reported finding them sufficiently informative and clear.
2.6.2 Health visitors information sheet (Appendix 5)

In addition to discussing health visitors' role in recruitment directly with a number of the Health Visiting Teams and via the managers of the remaining teams, it was considered important to provide Health Visitors with written information of what their role in participant recruitment would involve.

2.6.3 Interview checklist (Appendix 6)

This was used as a guide for briefing participants at the commencement of each research interview, ensuring the questionnaires were administered in the correct order and as a guide for debriefing participants.

2.6.4 Request slip for brief report of research findings (Appendix 7)

At the conclusion of the interview participants were provided with a reply slip with which they could request a brief report of the research findings.

2.7 MEASURES

The research measures are described in the order of their use in the study:

2.7.1 Health Visitor Screening Questionnaire (Appendix 1)

Although appropriate standardised child behaviour questionnaires were available, preliminary discussion with a number of health visitor teams suggested that limited time resources meant that health visitors would be unable or unwilling to complete anything other than a very brief questionnaire concerning the index child's behaviour. A short, easy to complete questionnaire was therefore developed by the author.

2.7.2 Demographic Questionnaire (Appendix 8)

This 14 item structured questionnaire was designed by the author to elicit information regarding a range of demographic variables relating to the participant, the index child, family composition and father of the child. Such information was considered important to allow for a
general description of the sample and for comparison between problem and non-problem groups on those variables considered to have relevance to the area of investigation. Information obtained included whether there had been any recent or current involvement with specialist child services, which was considered could be one aspect of external validation of group membership. The main socio-economic indicator was taken as participants' occupational classification, in relation to the Registrar-Generals Classification (Office of Population Censuses and Surveys, 1991).

2.7.3 Behaviour Checklist (BCL) (Appendix 9)

The BCL has been used in a number of research studies as a means of identifying pre-school children with behaviour problems (e.g. Stallard, 1993; Nicol et al., 1987; Minde & Minde, 1977). Richman (1977) concluded that the BCL was a useful instrument for comparing populations and for alerting professionals to the possibility of behaviour problems in pre-school children.

The BCL is comprised of 21 items, relating to 12 main areas of behavioural importance for the pre-school child, including eating, sleeping, temper tantrums, concentration ability and peer relationships. Each item consists of three or four statements relating to the behavioural area and the parent is asked to select that statement which they think best describes their child's recent behaviour. Items are scored as 0, denoting no, or trivial difficulties; 1, denoting moderate difficulties or 2, denoting marked difficulties. Not all individual item scores are included in the total BCL score. Full details of scoring can be found in Appendix 9.

Richman (1977) reports the psychometric properties of the BCL. A four week test-retest reliability correlation coefficient of 0.81 was obtained. With a suggested cut-off score of 10, where 10 or above is indicative of child behaviour problems, the BCL was found to identify approximately 82 per cent of moderate to severe child behaviour problems, with a false positive rate of 12.6 per cent and a false negative rate of 30.4 per cent. During the current research study there was an unfortunate early miscommunication concerning the scoring of the BCL. Using the scoring method that was originally understood to be correct, the
suggested cut-off score of 10, when considered in conjunction with other available information, appeared appropriate to the study. However, subsequent information concerning the correct scoring of the BCL resulted in participants' overall BCL scores being reduced by between one and three points. Six participants originally selected for the problem group received a revised BCL score below 10. In reviewing all the available information it was considered that use of a cut-off score of 10 on the BCL, a measure known to produce a high false negative rate, could inappropriately exclude participants from the problem group. Stallard (1993) argues that the choice of a cut-off score for the BCL is a matter of compromise. He suggests that a cut-off score of 8 in his study of the prevalence and parental perception of problem behaviour in three year old children would have usefully identified more of the children whose behaviour was perceived by their parents as concerning. Nicol et al. (1987) similarly report using a modified BCL cut-off score of 8. For the purposes of the current study a cut-off score of 8 was used, as it was considered that this provided a more valid criterion for group selection than a cut-off score of 10.

2.7.4 Parent Attribution Questionnaire (PAQ) (Appendix 10)

The PAQ (Walker, 1985) is administered via interview. Mothers are asked to describe, separately, two recent episodes of compliance and two of non-compliance by the Index child, in alternate order. After describing each incident the mother is asked what she thinks caused the child's behaviour. If more than one cause is offered the mother is asked to designate what she considers the main cause.

The mother is then asked to rate that cause on each of four causal attribution dimensions: 'internal-external', 'stable-unstable', 'uncontrollable-controllable', 'specific-global', in response to corresponding structured questions. A response sheet containing five separate, five point Likert-type scales is provided (also in Appendix 10). The first four scales relate to the above causal attribution dimensions and are anchored by statements at either end. For example, in relation to the controllability dimension the question is: 'Is this cause (repeat cause) something that your child cannot control or can completely control?'. The corresponding rating scale is anchored by the statements 'cannot control at all' and 'complete control'. The
fifth scale relates to the attribution of intentionality. Mothers are asked to rate the extent to which they think their child behaved in the way reported, in order to deliberately upset them. For this five point scale each point is anchored by a statement, ranging from 'not at all' to 'a whole lot'. Respondents verbal ratings are recorded by the researcher.

In order to increase the stability of the measure, attribution ratings for each pair of compliant and non-compliant incidents are averaged (Walker, 1985). Walker (1985) reports that the PAQ was able to distinguish mothers of chronically ill children who perceived their children as demanding and difficult from those mothers who did not. The psychometric properties of the PAQ were not established (Walker, 1997, personal communication)

Baden & Howe (1992) used a modified version of the PAQ. This modification involved mothers being asked to select four behaviours that typified their child, from a 12 item menu of typical child misbehaviours, rather than, as in the original PAQ, asking mothers to recall recent incidents of actual behaviour. Child positive behaviour was not investigated. Baden & Howe (1992) report the psychometric properties of this modified protocol: Internal consistency was found to be adequate for all but the internal scale, with alpha coefficients for the scales reported as comparing favourably with those of other attribution measures, which typically range from .30 to .75.

Some modifications to the PAQ were also made in the current study. The present investigation was concerned with pre-school children's problem behaviour. As in the Baden & Howe (1992) study, participants' attributions were therefore not elicited in relation to episodes of child positive behaviour. In addition, the current study was not concerned solely with child non-compliance. Participants in the present study were given the more open ended instruction to recount two recent incidents when their child misbehaved. The PAQ was otherwise administered as described by Walker (1985).

A measure of the reliability of the PAQ, as used in the current study, in terms of the internal consistency of the attribution scales, was determined. The following alpha coefficients were
obtained: Internal-external, .12; Stable-unstable, .56; controllable-uncontrollable, .47; specific-global, .38; intentionality, .47. Following Baden & Howe (1992), alpha coefficients of .30 and above were considered to indicate adequate reliability. Although the internal-external scale had low reliability it was decided to include it in the analysis, but interpret the results with caution.

2.7.5 Qualitative Interview (Appendix 11)

The qualitative interview asked participants to respond to three main open-ended questions:

1. "Can you describe (child's name) behaviour?"
2. "How do you feel when (child) misbehaves in the ways you have described?"
3. "How do you usually respond when (child) misbehaves in the ways you have described?"

Participants' responses were recorded manually by the author. As appropriate, minimal prompts were given, such as, "can you say more about that?" or "is there anything else you can think of?".

2.7.6 Social Cognitions/Developmental Questionnaire (SCDQ) (Appendix 12)

This measure was developed by the author to investigate hypothesis 2 concerning possible group differences in mother's expectations of the age at which children develop certain social skills and understanding. A measure for assessing parents' age estimates of child developmental milestones had been previously developed (Twentyman & Plotkin, 1982). While attempts by the author to obtain a copy of this unpublished measure were unsuccessful, it was also considered that the item content was not completely appropriate to the present research. Rather than the more usual developmental milestones the present study was concerned with mother's expectations regarding the age at which children develop aspects of social understanding. It was therefore considered necessary to develop a questionnaire to meet the specific requirements of the present investigation. It was not an aim of the current research to investigate the accuracy of participants' age estimates.
2.7.6.1 Questionnaire development

Questionnaire item selection was informed by relevant research relating to children's development of social understanding (e.g. Dunn, 1988) and through consultation with clinical child psychologists. An initial pool of 28 items was generated, including some items selected from published child development scales (e.g. Sheridan, 1960). A number of items were included which were designed to assess the cognitive 'capacities' which Fincham & Bradbury (1987) suggest a family member would need to be attributed with, in order to be judged responsible and to blame for, their conflict related behaviour.

Questionnaire instructions asked respondents to estimate the age at which an 'average' child would be able to understand, or do, certain things. Questions related to an 'average' child, rather than the index child, to assess mother's general expectations regarding aspects of child development. A standard item format was established, with each item beginning with the phrase "At what age do you think an average child...". The measure called for respondents to give as precise an answer as possible, taking into account months and years.

2.7.6.2 Pilot study

The initial questionnaire was piloted on three mothers of pre-school children. As a result of the pilot study a number of items were eliminated completely, either because they were not considered sufficiently different from other items or because they were considered too difficult to answer, such that the pilot participants considered they could only "guess" at a response. In other cases suggestions were made concerning item word changes, to increase clarity and comprehension. Suggestions were incorporated into a revised version of the questionnaire. In some cases this involved considerable expansion of the item, providing the general item statement followed by an example. Two different pilot participants commented on the revised, 15 item questionnaire. Additional minor suggestions were incorporated into the final questionnaire version, as used in the main study.
2.7.6.3 Reliability and validity

The consultation process, review of relevant literature and pilot study was an attempt to ensure questionnaire face and content validity. Reliability of the measure was assessed by a test-retest procedure. The first 20 participants interviewed were asked to complete the questionnaire again after two weeks. Eighteen of these agreed. The retest element was conducted over the telephone. Although this did not replicate the original administration of the questionnaire, retest by telephone was considered preferable by participants as it allowed greater flexibility and was less demanding of their time.

As the resultant data did not meet the requirements for parametric statistical analysis, the nonparametric Spearman correlation coefficient was calculated for each item and averaged to produce a two week test-retest correlation coefficient of 0.70. Advice obtained from a statistician suggested a correlation coefficient of 0.70 or above was indicative of adequate reliability. Individual item correlations ranged from 0.36 to 0.92. Correlation coefficients for individual SCDQ items are presented in Appendix 13.

2.8 PROCEDURE

2.8.1 Research approval

Ethical approval for the current study was sought and obtained from the appropriate Hospital Trust Research Ethics Committee (Appendix 14). Approval to recruit research participants via the Health Visiting service was also obtained (Appendix 15). Verbal approval for participant recruitment via local authority early education services was obtained from the appropriate Principal Officers.

2.8.2 Recruitment process

Changes in the role of health visitors in the recruitment of participants have been described. Representatives from the child mental health recruitment sources were supplied with participant research packs, to be given to appropriate clients at the point at which they were offered a first appointment with the service. Newpin centre managers distributed research packs to their members. The majority of research packs distributed through early years
centres, nurseries and playgroups were distributed directly to mothers via centre staff. In the case of two nurseries, 70 research packs were handed out directly to mothers by the author.

2.8.3 Research interviews

On receipt of a consent form, prospective participants were contacted by the author and a research interview arranged. A number of mothers asked at this point if it was necessary for their child to be present during the interview. It was explained that while this was not essential, the child could be present if necessary or if the mother wished. All but six of the participants were interviewed in their own homes, the rest elected to be interviewed at a Newpin centre.

Attempts were made to establish rapport with participants. The pre-interview checklist was used as a guide to ensure that important information regarding participation in the interview was restated. Participants were asked to reconfirm their consent by re-reading their signed consent form and verbally acknowledging their agreement to take part. The format and expected timing of the interview was then outlined.

The five interview questionnaires were administered in a fixed order for all participants, as follows:

1. Demographic Questionnaire
2. Behaviour Checklist
3. Parent Attribution Questionnaire
4. Qualitative interview
5. Social Cognitions / Developmental Questionnaire

This order was considered to form a reasonable progression and it was not considered appropriate to counter-balance the administration of the questionnaires. It was hoped that beginning the interview with the relatively innocuous demographic questionnaire would put participants at their ease and that completion of the BCL would then prime participants for the PAQ, which required them to recount two incidents of child misbehaviour. Having
completed the structured PAQ it was considered appropriate to present the qualitative questionnaire, which allowed participants greater freedom to express their thoughts about their child's behaviour. This interview procedure was piloted on two mothers of pre-school age children and was found to be clear and appropriate by them.

All measures, apart from the BCL, were administered verbally and participants' responses recorded manually by the author. The BCL was designed to be completed independently by the parent, although three participants requested it be administered verbally. During a number of interviews it was found necessary to provide additional instructions or explanation of particular scales or items, for the BCL, PAQ and SCDQ.

A debriefing phase was carried out, following completion of all questionnaires. The post interview checklist was used as a guide to ensure relevant areas were covered. Participants were asked to comment on their experience of taking part in the research interview. If any particular concerns or distress had been voiced by the participant during the interview this was addressed by the author and, as necessary, there was a discussion with the participant about how appropriate support could be accessed. The participants attention was also drawn to the research information sheet, for details of how the author could be contacted in the future, if necessary. Participants were given a reply slip to request a brief report of the research findings.

2.9 Statistical analysis / data management

2.9.1 Hypotheses 1 and 2

Following Walker (1985), attributional ratings in relation to the two recounted incidents of child misbehaviour were averaged, in an attempt to form more stable measures. All PAQ scores presented refer to these averaged scores and fall within the range 1 to 5. Groups were compared separately on each of the five attribution scales. As the data were ordinal in nature, the non-parametric Mann-Whitney U test was used. Although there is something of a precedent for analysing ordinal scale data 'as if' it approximated interval data, this was not considered appropriate by the author. It is acknowledged, however, that non-parametric tests
are less powerful than their parametric equivalents, as a certain amount of available information is lost, thereby increasing the possibility of a type 2 error. SCDQ data was compared separately for each of the 15 questionnaire items using the non-parametric Mann-Whitney U test, as the data did not conform to a normal distribution.

Statistical analysis was carried out using SPSS for Windows Release 5.0 (Norusis, 1993). Howell (1992) discusses the need, when conducting multiple statistical comparisons, to use an appropriate level of significance, to minimise the occurrence of type 1 errors. As 20 separate comparative analyses were carried out, in relation to hypotheses 1 and 2, it was decided to set the level of significance at the one per cent level, with results at the five per cent level considered to be approaching significance. All analyses were two-tailed.

2.9.2 Qualitative data management: Research questions 1 to 6

Patton (1987) suggests a range of ways of analysing qualitative information. He makes a broad distinction between 'quantitative-qualitative' and 'qualitative-qualitative' analysis. For the most part qualitative data obtained in the present study were analysed quantitatively.

**Research question 1:** Qualitative data relating to participants' affective responses to child misbehaviour were analysed in terms of frequency information for each feeling category reported by participants. Statistical analysis was not employed, due to low numbers in most categories.

**Research question 2:** Qualitative data regarding participants' behavioural responses to child misbehaviour were first categorised and frequency of responses per category were subsequently compared across groups, using the chi-square test. Three previously established parental behavioural response categories (Golub et al., 1987) were used, as it was considered that this would better allow for comparison of results across research. The categories were as follows:

1. 'co-operative': restructuring of the task, compromise, the use of logical consequences.
2. 'positive power assertive': use of time-out, removal of objects or privileges, sending child to their room.

3. 'punitive': smacking or shouting.

Reliability of the categorisation was addressed by having a second rater categorise a random sample of 10 participants' interview data. Inter-rater agreement was 94 per cent.

Research question 3: From the PAQ, the number of causes offered by participants for child misbehaviour was determined separately for each misbehaviour incident as well as the total number of causes, for each group. Number of causes per group were compared using the chi-square test. Suggested causes were also categorised in terms of whether they 'blamed' or 'excused' the child, and groups were compared using the chi-square test. A second rater also categorised a random sample of 10 questionnaires. Inter-rater agreement was 88.5 per cent.

Research question 4: Incidents of child misbehaviour were classified according to 11 categories, emerging from the data, which are familiar within the field of child clinical psychology (Appendix 16). Frequencies per category were compared across groups. Statistical analysis of this data was not carried out. Inter-rater reliability was addressed by having a second rater categorise information from a random sample of 10 questionnaires. Inter-rater agreement was 100 per cent.

Research question 5: The number of reported incidents of child misbehaviour which were resolved or not was compared across groups using the chi-square test.

Research question 6: Mothers' experience of taking part in the research interview was explored by examining participants' debriefing comments, other comments offered during the interview and information based on the authors direct observations.
3. RESULTS

3.1 Preliminary analysis

3.1.1 Group comparison of demographic variables

Parametric and non-parametric analyses, as appropriate to the data, were carried out to compare the groups on demographic variables. Variables of mother's age, Index child's age and number of children in the family were analysed using t-tests. Results showed no significant differences between groups on these variables.

Chi-square analyses were carried out on data relating to: Parental status, ethnic origin, employment status, educational attainment, ordinal position of Index child, recruitment source, child service attendance, nursery attendance and gender of Index child. Given the recommendation in chi-square analysis of having a minimum expected cell frequency of 5, a number of variables were collapsed to two categories, to increase cell numbers, although this inevitably led to the loss of some information detail. For example, employment status was collapsed to employed or not employed; recruitment source was collapsed to recruited from early education/playgroup or from another source and education level was collapsed to secondary education or higher education.

Only one significant group difference was found, in relation to attendance at a specialist child service: $\chi^2 = 6.637$ (1 d.f.), $p=0.009$. This finding lends support to the validity of the participant groupings, with children having contact with a specialist child service being significantly more likely to be in the problem group. A statistical trend was also found, suggesting that if the index child was second born, they were more likely to be in the non-problem group ($\chi^2 = 5.716$ (1 d.f.), $p=0.017$).

Significant group differences were also found in regard to Behaviour Checklist scores. The data were non-normally distributed and statistical analysis involved the non-parametric Mann-Whitney U test: $U$ value <.000, $p<.00001$. BCL scores for the problem group were significantly higher than those for the non-problem group, suggesting that the problem and non-problem groups were unlikely to come from the same population.
3.1.2 Measures of central tendency for BCL, PAQ and SCDQ scores

Descriptive information relating to Behaviour Checklist (BCL), Parent Attribution Questionnaire (PAQ) and Social Cognitions/Developmental Questionnaire (SCDQ) data, in the form of measures of central tendency, can be seen in Tables 2, 3 and 4. Although BCL, PAQ and SCDQ scores did not meet normal distribution parameters, it was considered that in addition to presenting median and modal scores for these variables, presenting the mean and standard deviations would provide a useful additional reflection of central tendency and variability.

Table 2. Measures of central tendency for BCL scores

<table>
<thead>
<tr>
<th>BCL SCORE</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAN (SD)</td>
<td>11.48 (3.14)</td>
<td>4.33 (1.35)</td>
</tr>
<tr>
<td>MODE</td>
<td>8 and 10</td>
<td>4 and 6</td>
</tr>
<tr>
<td>MEDIAN</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: maximum possible BCL score is 24. Cut-off score of 8 was used.

Table 3. Measures of central tendency for PAQ scores

<table>
<thead>
<tr>
<th>PAQ SCALE</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN (SD)</td>
<td>MODE</td>
</tr>
<tr>
<td>INTERNAL</td>
<td>2.31 (0.99)</td>
<td>2</td>
</tr>
<tr>
<td>STABLE</td>
<td>2.83 (1.42)</td>
<td>3</td>
</tr>
<tr>
<td>CONTROL</td>
<td>2.52 (0.88)</td>
<td>2</td>
</tr>
<tr>
<td>GLOBAL</td>
<td>3.69 (1.02)</td>
<td>4.5</td>
</tr>
<tr>
<td>INTENT</td>
<td>3.12 (1.17)</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Key: Internal = internal-external; Stable = stable-unstable; Control = controllable-uncontrollable; Global = global-specific; Intent = intentionality scale

To increase understanding of the information presented in Table 3, the attribution scale anchors and direction are presented:

- Internal-external: Totally my child 1 → 5 Totally others or the circumstances
- Stable-unstable: Never changes 1 → 5 Changes a lot
- Controllable-uncontrollable: Cannot control at all 1 → 5 Complete control
- Specific-global: Influences only this situation 1 → 5 Influences most other areas of child's life
- Intentionality: Not at all 1 → 5 A whole lot

From Table 3 it can be seen that participants in both groups tended to rate the causes of their child's misbehaviour as more internal than external to the child, although due to problems
with this scale this finding may not be reliable. Both groups rated the cause of their child's misbehaviour around the midpoint of the stable-unstable scale. Participants in the non-problem group rated their child as having more control over the cause of their misbehaviour than participants in the problem group. Problem group participants rated the cause of their child's misbehaviour as more global and intentional than non-problem group participants.

Table 4. Measures of central tendency for SCDQ data

<table>
<thead>
<tr>
<th>SCDQ ITEM</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEAN (SD)</td>
<td>MODE</td>
</tr>
<tr>
<td>1</td>
<td>12.48 (1.66)</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>14.67 (3.64)</td>
<td>18</td>
</tr>
<tr>
<td>3</td>
<td>32.9 (14.08)</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>38.1 (25.23)</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>32.76 (15.45)</td>
<td>24</td>
</tr>
<tr>
<td>6</td>
<td>39.71 (19.58)</td>
<td>48</td>
</tr>
<tr>
<td>7</td>
<td>41.43 (20.95)</td>
<td>36</td>
</tr>
<tr>
<td>8</td>
<td>33.95 (8.58)</td>
<td>36</td>
</tr>
<tr>
<td>9</td>
<td>17.67 (16.55)</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>27.52 (12.23)</td>
<td>24</td>
</tr>
<tr>
<td>11</td>
<td>39.57 (11.76)</td>
<td>36</td>
</tr>
<tr>
<td>12</td>
<td>34.52 (14.33)</td>
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<tr>
<td>13</td>
<td>33.71 (11.9)</td>
<td>24</td>
</tr>
<tr>
<td>14</td>
<td>47.43 (17.28)</td>
<td>36</td>
</tr>
<tr>
<td>15</td>
<td>32.0 (11.28)</td>
<td>24</td>
</tr>
</tbody>
</table>

Note: Data refers to mothers' age estimates, in months.

As can be seen from Table 4, problem and non-problem groups' age estimates were similar for many of the questionnaire items. Problem group participants gave somewhat later age estimates than non-problem group participants in relation to items 2 (understand simple requests), 4 (understand how others feel), 6 (know how their parents want them to behave), 8 (toilet-trained), 11 (understand cause-effect) and 14 (can make a definite behavioural choice). Non-problem group participants gave somewhat later age estimates than those in the problem group, in relation to item 9 (can understand what no means).
3.2 Hypothesis testing

3.2.1 Hypothesis 1. There will be no differences between child problem and non-problem groups with regard to mothers' attributional rating for their child's behaviour, on each of five attribution dimensions.

Groups were compared using the Mann Whitney U test. Results of the analyses can be seen in Table 5. Significant group differences were found in relation to the intentionality scale, with mothers in the problem group rating their child's behaviour as more intended to deliberately upset them than mothers in the non-problem group. The null hypothesis was therefore rejected with regard to this attribution dimension. No significant group differences were found in relation to the internal-external, stable-unstable and global-specific attribution dimensions. The null hypothesis was accepted for these scales. Group differences in relation to mothers' ratings on the controllability attribution dimension was found to be approaching significance.

Table 5. Group comparison of attribution dimension ratings (PAQ scale scores)

<table>
<thead>
<tr>
<th>MEAN RANK</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAQ SCALE</strong></td>
<td><strong>PROBLEM GROUP</strong></td>
</tr>
<tr>
<td>INTERNAL</td>
<td>18.76</td>
</tr>
<tr>
<td>STABLE</td>
<td>19.57</td>
</tr>
<tr>
<td>CONTROL</td>
<td>17.67</td>
</tr>
<tr>
<td>GLOBAL</td>
<td>24.4</td>
</tr>
<tr>
<td>INTENT</td>
<td>27.19</td>
</tr>
</tbody>
</table>

Key: Internal = internal-external; Stable = stable-unstable; Control = controllable-uncontrollable; Global = global-specific; Intent = intentionality scale

** Difference significant at < 0.01 level  * Difference approaching significance; p< 0.05

3.2.2 Hypothesis 2. There will be no differences between child problem and non-problem groups with regard to mothers' estimates of the age at which children attain cognitive understanding and skills, in each of 15 developmental areas.

Groups were compared using the Mann Whitney U test. Results of the analyses can be seen in Table 6. No statistically significant group differences were found for any of the 15 SCDQ items. The null hypothesis was therefore accepted for each of these. As can be seen from
Table 6, group differences with regard to item 14 fell just outside the probability level designated as approaching significance. This item asked mothers to estimate the age at which they thought an average child could make a definite choice to behave in one way rather than another. Mothers in the problem group tended to give higher age estimates for this item than mothers in the non-problem group.

Table 6. Group comparison of mothers' age estimates for SCDQ items

<table>
<thead>
<tr>
<th>SCDQ ITEM NUMBER</th>
<th>MEAN RANK</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
<th>MANN-WHITNEY U VALUE</th>
<th>p VALUE</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>21.05</td>
<td>21.95</td>
<td>211.0</td>
<td>0.795</td>
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</tr>
<tr>
<td>2</td>
<td>23.67</td>
<td>19.33</td>
<td>175.0</td>
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<tr>
<td>3</td>
<td>24.14</td>
<td>18.86</td>
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<td>0.153</td>
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</tr>
<tr>
<td>4</td>
<td>22.98</td>
<td>20.02</td>
<td>189.5</td>
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</tr>
<tr>
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<td>210.5</td>
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</tr>
<tr>
<td>6</td>
<td>23.17</td>
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<td>185.5</td>
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<td>7</td>
<td>21.62</td>
<td>21.38</td>
<td>218.0</td>
<td>0.949</td>
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</tr>
<tr>
<td>8</td>
<td>22.07</td>
<td>20.93</td>
<td>208.5</td>
<td>0.758</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>21.24</td>
<td>21.76</td>
<td>215.0</td>
<td>0.888</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>22.12</td>
<td>20.86</td>
<td>207.0</td>
<td>0.730</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>23.71</td>
<td>19.29</td>
<td>174.0</td>
<td>0.235</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>20.79</td>
<td>22.21</td>
<td>205.5</td>
<td>0.700</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>22.5</td>
<td>20.5</td>
<td>199.5</td>
<td>0.593</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>25.02</td>
<td>17.98</td>
<td>146.5</td>
<td>0.059</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>20.81</td>
<td>22.19</td>
<td>206</td>
<td>0.711</td>
<td></td>
</tr>
</tbody>
</table>

3.3 RESEARCH QUESTIONS

3.3.1 Research question 1. What affective responses do mothers report in relation to their child's misbehaviour and are there group differences in this regard?

Participants were asked to say how they felt when their child misbehaved. More than half of the participants, in both the problem and non-problem groups, gave two or more affective responses. Participants' affective responses and number of participants reporting each response are presented in Table 7. The majority of the responses are presented as individual categories, reflecting the participants' own words, in an abbreviated form. Three categories have combined affective responses which were considered to be closely related: Hurt/upset;
useless/helpless; irritable/annoyed. Each separate report of an affective response is recorded for each participant.

Table 7. Participants' reported affective responses to their child's misbehaviour and frequency of responses for problem and non-problem groups

<table>
<thead>
<tr>
<th>AFFECTIVE RESPONSE</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
<th>AFFECTIVE RESPONSE</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANGRY (intensely)</td>
<td>10 (3)</td>
<td>8 (2)</td>
<td>LONELY</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>FRUSTRATED</td>
<td>5</td>
<td>4</td>
<td>IMPATIENT</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>HURT / UPSET</td>
<td>4</td>
<td>4</td>
<td>INTERESTED</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>A FAILURE AS A MOTHER</td>
<td>4</td>
<td>3</td>
<td>FEELS COULD HURT CHILD</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>EMBARRASSED</td>
<td>5</td>
<td>1</td>
<td>ANXIOUS</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>IRRITABLE / ANNOYED</td>
<td>0</td>
<td>6</td>
<td>CONCERNED FOR CHILD</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>USELESS / HELPLESS</td>
<td>4</td>
<td>1</td>
<td>HATES CHILD A LITTLE</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>GUILTY</td>
<td>3</td>
<td>1</td>
<td>DISAPPOINTED</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>UNDERSTANDING OF CHILD'S BEHAVIOUR</td>
<td>0</td>
<td>4</td>
<td>FEELS CHILD IS NOT HERS</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>LOW</td>
<td>3</td>
<td>1</td>
<td>CAN'T COPE</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ASHAMED</td>
<td>2</td>
<td>0</td>
<td>CAN COPE</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>BLAMES SELF</td>
<td>1</td>
<td>0</td>
<td>RESENTFUL</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>LIFE'S UNFAIR</td>
<td>0</td>
<td>1</td>
<td>TIRED</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>CONFUSED</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 7, similar numbers of participants in both the problem and non-problem groups reported feeling angry, frustrated, hurt/upset or a failure as a mother. Six mothers in the non-problem group reported feeling irritated or annoyed while none in the problem group reported these feelings. More mothers in the problem group reported feeling embarrassed, guilty, ashamed, low or useless/helpless than did mothers in the non-problem group. A number of non-problem group participants reported feeling that they understood their child's behaviour, were interested in the behaviour or could cope with the behaviour, whereas none of the mothers in the problem group reported such feelings. Two problem group participants reported feeling that they could physically hurt their child in response to child problem behaviour. Findings with regard to research question 1 are that mothers in the problem and non-problem groups report a number of similar feelings, as well as some different feelings, in relation to their child's problem behaviour.
To illustrate some of the above affect categories, a sample of problem and non-problem group participants' qualitative responses is presented in Table 8.

Table 8. A sample of mothers' reported affective responses to child misbehaviour

<table>
<thead>
<tr>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;I go through a whole gamut of things&quot;</td>
<td>&quot;You run the gamut of emotion with them&quot;</td>
</tr>
<tr>
<td>&quot;Quite intensely angry&quot;</td>
<td>&quot;Sometimes furious&quot;</td>
</tr>
<tr>
<td>&quot;I get really hot and embarrassed&quot;</td>
<td>&quot;It can be very annoying, frustrating, when he persists with a behaviour&quot;</td>
</tr>
<tr>
<td>&quot;It surprises me sometimes how upsetting it can be&quot;</td>
<td>&quot;GUILTY. I get really upset&quot;</td>
</tr>
<tr>
<td>&quot;I feel like the walls are coming in&quot;</td>
<td>&quot;A bit like a pressure cooker sometimes&quot;</td>
</tr>
<tr>
<td>&quot;Furious, because he's not old enough to reason with&quot;</td>
<td>&quot;I don't hate her, but you can hate them a little bit - get resentful&quot;</td>
</tr>
<tr>
<td>&quot;I feel a failure as a mother - not preparing her well enough for the future&quot;</td>
<td>&quot;It makes me feel as if I'm failing in a lot of ways&quot;</td>
</tr>
<tr>
<td>&quot;Nervous, very nervous, it makes my nerves bad&quot;</td>
<td>&quot;It used to make me feel very irritated, now I take it in my stride&quot;</td>
</tr>
<tr>
<td>&quot;I feel as if I want to burst into tears - because I can't cope&quot;</td>
<td>&quot;Sometimes I feel very lonely, isolated, if I'm having a bad day with him&quot;</td>
</tr>
<tr>
<td>&quot;I get really embarrassed, especially when out shopping&quot;</td>
<td>&quot;I feel sometimes she's not mine, why am I having to deal with a child who's someone else's&quot;</td>
</tr>
<tr>
<td>&quot;I feel scared of what I might do to him&quot;</td>
<td>&quot;I sometimes get annoyed and get cross with him&quot;</td>
</tr>
</tbody>
</table>

3.3.2 Research question 2. What behavioural responses do mothers report in relation to their child's misbehaviour and are there group differences in this regard?

Participants were asked what they tended to do in response to their child's misbehaviour. Qualitative responses were coded into one of three response categories. Each separate response given by participants was categorised. Where the participant reported using more than one behavioural response from within the same category, they were recorded as using that category. Data relating to the number of participants in each group reporting behavioural responses within each of the three categories can be seen in Table 9. A number of participants reported using behavioural responses within each of the three categories, others
reported using behavioural responses from only one or two of the categories. Information relating to this can also be seen in Table 9.

Table 9. Number of participants reporting using each behavioural response categories, or combinations of these

<table>
<thead>
<tr>
<th>RESPONSE CATEGORY</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO-OPERATIVE</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>POSITIVE POWER ASSERIVE</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>PUNITIVE</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>CO-OP + PPA + PUN</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>CO-OP ONLY</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>PPA ONLY</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>PUN ONLY</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>CO-OP + PPA</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>CO-OP + PUN</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>PPA + PUN</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

KEY: CO-OP = 'co-operative'; PPA = 'positive power assertive'; PUN = 'punitive'

As can be seen from Table 9, more participants in the non-problem group reported using 'co-operative' response strategies than did participants in the problem group. Participants in the problem group reported using 'positive power assertive' strategies more often than did the non-problem group. Similar numbers in both the problem and non-problem groups reported using 'punitive' behavioural strategies in response to their child's misbehaviour. No significant group differences were found in terms of the number of participants reporting using behaviour response strategies within each of the three categories ($\chi^2 = 2.11$ (2 d.f.), $p = 0.35$).

While similar numbers in both groups reported using behavioural response strategies from all three categories, more mothers in the non-problem group reported using 'co-operative' strategies only. Only a few mothers in both groups reported using 'punitive' strategies only. More mothers in the problem group reported using 'positive power assertive' plus 'punitive' strategies, without 'co-operative' strategies, than did mothers in the non-problem group. The small numbers involved precluded statistical analysis of these differences.

To illustrate the three behavioural response categories, a sample of qualitative responses taken from both problem and non-problem groups is presented in Table 10.
Table 10. A sample of participants' qualitative responses, illustrating each of three
behavioural response categories

CO-OPERATIVE

"I will try and speak to him calmly, about the behaviour and what the problem with it is"  
"I try and get her interested in something else"  
"I try to give [daughter] time and attention"  
"I usually let him have another go on his own"  
"I try to make things specific to what's going on, I have a range of responses"  
"I try to make simple, immediate consequences"  
"I tell [daughter] whatever she's done can be coped with and worked out"

POSITIVE POWER ASSERTIVE

"I get him to sit on a chair and count, to 10 or 20, depending on what he's done"  
"I stop him getting ice-cream from the van in the evenings"  
"I generally send him to his room"  
"I try to remove him from the situation"  
"If he's really naughty he has a time-out, at the bottom of the stairs"  
"I find sanctions work best for [son], grounding, no videos, no sweets"

PUNITIVE

"I sometimes go ape-shit"  
"I sometimes throw a wobbly, when I'm frustrated"  
"If it's a dangerous situation I'll shout and go mad at her"  
"I may lose my temper and shout at him"  
"I sometimes tell him to kneel down, face the wall and put his hands up"  
"If he goes on and on I get mad and smack him"  
"I tell him no three times, if he still does it I smack him"

3.3.3 Research question 3. a) How many causes do mothers offer for their child's
misbehaviour b) to what extent are these causes considered to 'blame' or 'excuse' the
child and c) are there group differences in this regard?

Table 11. Number of causes suggested by mothers for incidents of child misbehaviour
and percentage of these causes which blame or excuse the child

<table>
<thead>
<tr>
<th>NUMBER OF SUGGESTED CAUSES</th>
<th>% OF TOTAL CAUSES (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INCIDENT 1 (M)</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
</tr>
<tr>
<td></td>
<td>(mode/med)</td>
</tr>
<tr>
<td>PROBLEM GROUP</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>3.1 (1.2)</td>
</tr>
<tr>
<td></td>
<td>(3 / 3)</td>
</tr>
<tr>
<td></td>
<td>43.8% (53)</td>
</tr>
<tr>
<td></td>
<td>3.2 (1.9)</td>
</tr>
<tr>
<td>NON-PROBLEM GROUP</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>2.9 (0.94)</td>
</tr>
<tr>
<td></td>
<td>(3 / 3)</td>
</tr>
<tr>
<td></td>
<td>38.9% (49)</td>
</tr>
<tr>
<td></td>
<td>3.7 (2.1)</td>
</tr>
</tbody>
</table>

Note: Incidents 1 and 2 relate to mothers' reports of two separate child misbehaviour incidents, from
the PAQ.
As can be seen from Table 11, similar total number of causes and number of causes in relation to incident 1 were offered by participants in both groups. Mothers in the problem group offered fewer causes for the second incident of child misbehaviour than the first, whereas mothers in the non-problem group offered more causes for the second incident than the first, although this difference was not statistically significant ($\chi^2 = 0.499$ (1 d.f.), $p=0.48$). Within both groups, mothers offered more behavioural causes that excused the child rather than blamed the child. No statistical difference between groups was found for the number of causes which either excused or blamed the child ($\chi^2 = 0.428$ (1 d.f.), $p=0.51$).

3.3.4 Research question 4. What type of problem behaviours do mothers report on the PAQ and are there group differences in this regard?

The PAQ asks mothers to recount, separately, two specific instances of when their child has misbehaved in some way. These incidents were coded into 11 behavioural categories. Frequencies of child behaviours within each of these categories are presented in Table 12.

<table>
<thead>
<tr>
<th>BEHAVIOURAL CATEGORY</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGGRESSION</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>TANTRUM</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>NON-COMPLIANCE</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>DEMANDING</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>EATING PROBLEM</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SLEEP PROBLEM</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>SOILING</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>LYING</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>SWEARING</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>CHILD DISTRESSED/UPSET</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>SHYNESS</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

From Table 12 it can be seen that the reported child behaviour problems follow a relatively similar pattern for both the problem and non-problem groups, except for eating and sleep problems.
3.3.5 Research question 5. To what extent are these reported problem behaviours resolved and are there group differences in this regard?

An aspect of recounting child instances of misbehaviour for the PAQ involved mothers saying if, and how, these specific incidents were resolved. The number of incidents resolved, or remaining unresolved, for each group, is presented in Table 13. Mothers' reports of these child misbehaviour incidents also included their behavioural response to the incident. Frequency of mothers' responses, in relation to the three behavioural response categories: 'co-operative'; 'positive power assertive' and 'punitive', is also provided in Table 13. In a number of cases, where mothers reported that the incident was not resolved, they reported making no particular behavioural response to the child's misbehaviour, or reported 'giving in' to the child. A fourth response category of 'give in/no response' has therefore been included.

Table 13. Frequency of resolved or unresolved child misbehaviour incidents and categorisation of mothers' reported behavioural responses to misbehaviour incidents

<table>
<thead>
<tr>
<th>RESOLVED</th>
<th>PROBLEM GROUP</th>
<th>NON-PROBLEM GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESOLVED</td>
<td>26</td>
<td>40</td>
</tr>
<tr>
<td>UNRESOLVED</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>RESPONSE CATEGORY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO-OPERATIVE</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>POSITIVE POWER ASSERTIVE</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>PUNITIVE</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>GIVE IN / NO RESPONSE</td>
<td>10</td>
<td>1</td>
</tr>
</tbody>
</table>

As can be seen from Table 13, participants in the non-problem group reported resolving more specific child misbehaviour incidents than did participants in the problem group. This difference was statistically significant ($\chi^2 = 11.95$ (1 d.f.), $p<0.001$). Looking at the frequency of reported use of the three behavioural response categories across groups, differences in participants response patterns can be seen. Significantly more mothers in the non-problem group reported using 'co-operative' response strategies than did mothers in the problem group ($\chi^2 = 8.06$ (1 d.f.), $p=0.005$). Groups did not significantly differ in their reported use of 'positive power assertive' and 'punitive' response strategies ($\chi^2 = 0.23$ (1 d.f.), $p=0.88$).
3.3.6 Research question 6. How do mothers experience the research interview?

The majority of participants, in both problem and non-problem groups, reported finding the research interview a positive experience. Debriefing comments suggested many of the mothers particularly valued the opportunity to talk in detail about their child's difficult behaviour, even though very few expected, or requested, feedback about their child or information about behaviour management strategies from the author.

Several participants reported that the interview provided them with an opportunity to reflect on their child's behaviour and consider aspects of this which they may not otherwise have done. For example, a number of participants, in response to the PAQ, reported that they had not considered what might have caused their child's misbehaviour before. Following the interview a number of participants commented that they thought they had gained a greater understanding of their child's behaviour and that they felt more positively towards the child as a result of this.

A particularly notable aspect of the research was that a number of participants began to re-evaluate their previous attributional ratings, in relation to the Intentionality dimension, in light of their responses to items on the Social Cognitions/Developmental Questionnaire. For example, having responded that the age at which they thought an average child could make a deliberate choice to upset others was older than their own child, some participants remembered having rated their child as misbehaving in order to deliberately upset them and they recognised the incongruity between these responses. A number of mothers subsequently commented that perhaps their child had not acted intentionally in that way after all, but it had "felt" as if they had at the time.

Although participants' generally reported experiencing the measures as easy to complete, most required at least some additional explanatory information in relation to various questionnaire items from the BCL, PAQ or SCDQ. With regard to the PAQ, a few participants appeared to have difficulty focusing their attributional ratings on the cause of the child's behaviour, rather than on the behaviour itself. A number of mothers also expressed some
anxiety in relation to completing the Social Cognitions/Developmental Questionnaire. This appeared to relate to them perceiving the questionnaire as a 'test' of knowledge, although questionnaire instructions emphasised that there were no right or wrong answers. In relation to the SCDQ, some participants from African or Asian ethnic backgrounds commented on cultural differences concerning expectations of child development, which they thought were important to consider.

4. DISCUSSION

4.1 Discussion of method

A number of issues relating to the research method are important to consider, in relation to the interpretation of findings. One main area involves recruitment. It was originally intended to recruit the majority of participants via health visiting services, as it was considered this would provide access to representative samples of mothers with pre-school children. This approach was unsuccessful, with feedback from some health visitor managers suggesting this was due to work demands and policy disputes within the profession. Although other sources of recruitment did, with time, yield the numbers necessary for the study, the response rate was low, particularly from nursery/playgroup sources. Relying on recruitment sources to nominate prospective participants and requiring voluntary participation necessarily introduces sample biases. When also considered in terms of a low response rate it is suggested that the current findings be treated with caution as the participant groups are unlikely to be representative of the relevant population of mothers. It will be important to see if future research replicates the findings.

A further important issue, in relation to changes made in the recruitment process, was that the original aim of obtaining a measure of external validation for the groupings, via the Health Visitor Screening Questionnaire, could not be met. When conducting a group comparative study it is clearly essential that group selection criteria lead to valid groupings. While some external validation of appropriate group inclusion was available for some participants, such as information about referral to, or attendance at, a specialist service, this was not available for all participants. A related issue in this regard was the decision to lower
the cut-off score for the Behaviour Checklist. While this was considered an appropriate way
to minimise the false negative rate for the problem group, it is acknowledged that this is likely
to have increased the possibility of false positives. This therefore also needs to be
considered when interpreting the results.

The BCL has been found to identify children presenting with mild, moderate and severe
behaviour problems, as reflected in the range of possible overall BCL scores. Lowering the
suggested questionnaire cut-off score may have increased the number of participants in the
problem group with a child presenting with mild behaviour problems. It may be that mothers'
attributions and affective-behavioural responses to pre-school children's problem behaviour
are dependent on the severity of the problem. The presence in the problem group of mothers
of children presenting with a range of problem severity may be a confounding variable in the
research.

The method of eliciting attribution information is also important to consider, in relation to the
reliability and validity of the data. Mothers were asked to rate the cause of their child's
problem behaviour, on Likert-type attribution dimension scales. Some participants appeared
to experience initial difficulty in focusing on the cause of the child's behaviour, rather than the
behaviour itself, when making their attribution ratings. When this was observed the author
was able to restate the attribution question and emphasise that it related to the cause of the
behaviour. However, it is possible that, unknown to the author, a number of participants
inappropriately based their ratings on the behaviour rather than the cause. Sobol et al. (1989)
recognise this as a general methodological issue in the measurement of parental attributions.
Other methodological considerations relate to known response biases regarding the use of
Likert-type scales, such as directional biases and bias towards a middle response. Some
participants also reported a negative affective response in relation to completing the SCDQ,
which may have influenced their responses.

A further methodological consideration concerns the number of participants whose interview
data was excluded from the analysis. In retrospect, despite the anticipated difficulties
outlined in the method section, it may have been preferable to include a pre-selection stage before asking participants to invest their time in a research interview. Although information obtained from excluded participants was not considered in the current analysis it is anticipated that it could be usefully included in further data analysis, perhaps looking at the wider question of mothers' response to child problem behaviour, unrelated to problem or non-problem group membership.

4.2 Discussion of results

Taking into consideration the number of comparative analyses carried out, the research significance level was set at the conservative level of $p \leq 0.01$, in an attempt to minimise the possibility of incorrectly rejecting the null hypothesis. This, however, needs to be balanced against increasing the possibility of a Type 2 error. Analysis of group differences in relation to ratings on the controllable-uncontrollable attribution dimension of the PAQ yielded a significance level of $p=0.041$, a level designated as approaching significance, for the purposes of the current study. While the inappropriateness of making too much of non-significant findings is acknowledged, this finding was considered to warrant discussion.

No group differences were found in relation to mothers' age estimates for the 15 SCDQ items. While this may be a valid finding, it may also be that results were related to problems with the measure. The items on the SCDQ aimed to address young children's development of social understanding and skills. Dunn (1988) and others found that a number of important advances in children's social understanding take place between the ages of two and four. Although this 24 month period can be considered relatively long, in the context of the lifetime of a young child, it may not have been broad enough to allow for a sufficient spread of age estimates to allow for the detection of possible group differences. Although mothers in both the problem and non-problem groups did express differential beliefs in relation to aspects of child development, in terms of providing different age estimates for different items, they tended not to use monthly increments, but rather whole or half year estimates. The measure may therefore not have been sensitive enough to detect group differences.
A group difference which approached statistical significance was found in relation to the number of second born index children present in the non-problem group. This may have had an impact on the current results. Some of the participants, where the index child was second born, commented during the interview that they felt more relaxed with this child than their first born and were aware that they had different expectations of their second born's behaviour, such that they were more tolerant of and less anxious about, difficult behaviours.

A further issue with regard to the research results relates to the internal-external attribution dimension scale of the PAQ. This scale was found to have low internal consistency. This may relate to Dix & Grusec's (1985) findings that for pre-school children both internal and external causes for child misbehaviour were chosen equally by parents. They suggest this may reflect an understanding by parents that young children are particularly reactive to their environment. However, this would not explain why Baden & Howe (1992) also found low internal consistency for the internal scale, as their study was in relation to mothers of adolescents.

4.3 General discussion

The main aim of the current research was to investigate possible differences in maternal attribution patterns regarding pre-school children's problem behaviour, between problem and non-problem groups. A secondary and theoretically related aim was to investigate whether there were group differences in relation to beliefs about the ages at which children develop a range of skills and social understanding. Further research aims involved an exploration of the causes mothers offered for their child's misbehaviour and their affective and behavioural responses to child misbehaviour. The findings will be discussed in relation to each of these aims, whilst recognising an inherent overlap between the various areas of investigation.

4.3.1 Hypothesis 1.

The null hypothesis, that there would be no differences between child problem and non-problem groups with regard to mother's attributional ratings for their child's behaviour, on each of five attribution dimensions, was accepted with regard to the internal-external, stable-
unstable and global-specific dimensions. The null hypothesis was rejected in relation to the intentionality scale, with mothers in the problem group rating their child as behaving more intentionally to upset them than did mothers in the non-problem group. With regard to the controllable-uncontrollable dimension, group differences were found to approach significance and it is suggested that the null hypothesis can not be accepted with certainty.

Baden & Howe (1992), investigating group differences in mothers' attributions of adolescents identified as either conduct-disordered or not, found similar significant group differences in relation to the intentionality dimension. They suggest that such findings concerning attributions of intent can be related to Patterson's (1976) family coercion model of the development and maintenance of child problem behaviours. Patterson (1982) suggests that parents who engage in coercive cycles with their children tend to blame the child for their misbehaviour and research suggests that the perception of blame is strongly related to the attribution of intent (Fincham & Bradbury, 1987).

Baden & Howe (1992), however, also found significant group differences on two further attributional dimensions: stable-unstable and global-specific, with mothers in the problem group rating the cause of their child's behaviour as more stable and global than mothers in their non-problem group. They note that while their findings are evidence of a relationship between parental blameful attributions and child conduct disorder, it is not possible to know whether such attributions precede coercion cycles or whether they emerge as a result of aversive behaviour cycles. The current findings, of no group differences on the stable-unstable and global-specific attribution dimensions may relate to a number of different factors. Attributions concerning the stability and specificity or globality of the causes of child misbehaviour would be expected to be dependent on parents' experience of their child over time (Weiner, 1979). It may be that mothers of pre-school children, who are undergoing relatively rapid developmental changes, are less inclined to attribute the causes of their child's misbehaviour to stable and global factors than mothers of conduct-disordered adolescents, who have had longer experience of their child's problem behaviours and may consider them to be more entrenched.
There are, however, also important methodological differences between the current study and Baden & Howe’s (1992), which may account for the difference in findings. Baden & Howe (1992) asked mothers to base their attributional ratings on behaviours which typified their child, from a given selection, rather than on instances of actual behaviour. Sobol et al. (1989) question whether attributions for hypothetical, albeit familiar, child behaviour situations, are the same as those for actual events. This relates to a general methodological issue in attribution research, concerning the stimulus base used to elicit the attributions. A further important factor to consider is that the child problem group in the Baden & Howe (1992) study was a clinic referred sample. It may be that factors associated with clinical referral, including duration and severity of the problem behaviour, are important influencing factors on parents' attributions, rather than just the presence of child-behaviour problems per se.

Although acknowledged as not reaching statistical significance in the current study, findings in regard to the controllable-uncontrollable attribution dimension are considered worth discussing in relation to previous research findings. In the current study there was a statistical trend for mothers in the non-problem group to rate their child as more able to control the causes of their misbehaviour than mothers in the problem group. Baden & Howe (1992) found no group differences on this attribution dimension. Weiner's (1979, 1980) model, with regard to the attribution of controllability, suggests that inferences about an actors' control over their actions in part determines whether the actions are considered intentional and whether the actor can therefore be held responsible for the effects. This model was not supported by the current findings, as mothers in the problem group rated their child's misbehaviour as more intentional but the cause as less controllable by the child, than mothers in the non-problem group. The current findings are, however, in line with Walker (1985), who found that there was a tendency for mothers who experienced their chronically ill children as difficult to manage to rate them as less able to control the causes of their negative behaviour than did mother's who found their children easy to manage. She suggests this is contrary to what might reasonably be predicted: that the more mothers view their children as difficult, the more they would perceive the child as able to control their behaviour and therefore to be wilfully misbehaving. Walker (1985) suggests that her finding may reflect
a parental belief that child negative behaviour is related to a personality trait, such as poor self-control. Dix & Grusec (1985) similarly suggest from their findings that “Like children who don't try, children who lack self-control are thought to have acted intentionally and in accord with their traits and dispositions” (p.224). Such findings may reflect Dix & Grusec's (1985) proposal that when children are the objects of attributions, estimates of knowledge, ability and motivation may follow different processes than when adults are the objects of attributions.

4.3.2 Hypothesis 2.

The null hypothesis stated that there would be no group differences between child problem and non-problem groups with regard to mother's estimates of the age at which children attain certain cognitive understanding and skills. No significant group differences were found in relation to any of the questionnaire items and the null hypothesis was therefore accepted. Although results relating to Item 14 on the SCDQ did not reach significance it is considered worth commenting on this. This item asks mothers to estimate the age at which an average child would have an awareness of different possible courses of action and be able to make a definite choice of how to behave in a given situation. This relates to Fincham & Bradbury's (1987) proposal that in order for someone to be held responsible or accountable for their conflict-related behaviour, they need to be judged to have certain "capacities", which includes having a knowledge of and ability to carry out, alternative actions. Mothers in the non-problem group gave somewhat earlier age estimates for this item than mothers in the problem group. It might have been predicted that mothers in the problem group, who rated their child's behaviour as more intentional than mothers in the non-problem group, would consider that children could make definite behavioural choices at an earlier age than mothers in the non-problem group. However, the current findings may again reflect mothers' beliefs about the ability of young children to control their behaviour, and therefore support the findings reported above regarding the controllable-uncontrollable attribution dimension, where mothers in the non-problem group rated their child as more able to control the causes of their misbehaviour.
Possible methodological factors, which may be related to the finding of no significant group differences for items of the SCDQ, have been presented above. Rosenberg & Reppucci (1983), however, suggest that non-significant findings should not be dismissed as unimportant without further consideration of the data. It was notable that, in line with Miller et al.'s (1980) findings, participants did express differentiated beliefs about when in a child's development different skills emerge, with many mothers giving considerable thought to their responses and drawing on a range of information in relation to child development, when making their age estimates. The question remains, however, to what extent mothers use their knowledge and understanding of child development, whether accurate or not, in relation to expectations of their own child's behaviour. An important aspect of proposed models for parental attributions of children's behaviour is the suggestion of a relationship between parents' expectations of children's capabilities and their causal attributions (Dix & Grusec, 1985). Dix et al. (1986), however, suggest from their research findings that parents may fail to appropriately consider developmental constraints when assessing young children's behaviour. In the current study, although group differences were found in relation to some aspects of mothers' attributions of child problem behaviour, this was not accompanied by differences in mothers' expectations of children's capabilities at various ages.

A notable aspect of the current research was that a number of mothers began to re-evaluate their previous attributional ratings, in relation to the intentionality dimension, in light of their responses to items on the SCDQ. This again suggests that at least some mothers may not draw on their beliefs about child development when forming attributions about their own child's behaviour. A number of mothers who reconsidered their earlier attributions commented that perhaps their child had not acted intentionally to upset them after all, but it had "felt" as if they had at the time. Goodnow (1988) suggests that, given the emotional component of parent-child interaction, it is likely that at times parents will act first and reflect later and that in such situations parents may construct beliefs in order to justify or rationalise their behaviour. This therefore raises the question of the extent to which parental behaviour in response to child misbehaviour is actually mediated by attributional inferences.
Dix & Grusec (1985) suggest that certain child misbehaviours, such as those that endanger the child or others, or are particularly mild in nature, may elicit immediate or routine parental responses which are not mediated by causal considerations. Schank & Abelson (1977) make the wider point, that attribution theorists may have overestimated the level and amount of cognitive activity that people engage in, in the course of everyday activities. Wong & Weiner's (1981) findings, however, support the central premise of attribution theory, that people spontaneously engage in attributional activity, particularly when the outcome of an event is unexpected or negative. Henker, Whalen & Hinshaw (1980), commenting on measurement difficulties in the field of attribution research, note that the most common research approach is to ask people about their causal attributions. They suggest, however, that there is uncertainty about how much people actually know about their causal inferences and that the attribution assessment interview or questionnaire may itself influence the respondents' cognitive constructs. In the present study a number of participants commented, in relation to the PAQ, that they had not considered what might have caused their child's misbehaviour before. There was a sense that the causes they then offered were not an articulation of existing beliefs but were constructed within the context of the attributional interview. Despite such methodological considerations, however, it is worth noting that a number of participants commented that they found being asked to consider the causes of the child's behaviour was a helpful way for them to reflect on and try to gain increased understanding of their child and that they found this process therapeutic in its own right.

4.3.3 Causes of child misbehaviour

Golub et al. (1987) suggest that in addition to understanding parents' causal attributions, the actual causes parents offer to explain their child's problem behaviour are important to consider. They suggest that the more causes that a parent offers, the more they are likely to take account of possible situational factors relevant to the behaviour, rather than attributing the misbehaviour to child dispositional factors. Golub et al. (1987) also suggest that the causes offered for child misbehaviour can be usefully considered in terms of whether they blame or excuse the child. They found, in an outcome study of an educational intervention programme for abusive parents, that while the total number of causes offered for child
misbehaviour pre and post intervention did not increase, there was a marked, positive change in the types of reasons offered, with more causes which excused the child being offered following the intervention. Golub et al. (1987) found that causes which excused the child tended to refer to age or developmental limitations of the child and suggest that this indicates the presence in parents of a helpful developmental perspective to the understanding of child problem behaviour.

The current study found no differences between problem and non-problem groups in terms of the number of causes offered for two separate child misbehaviour incidents. The mean number of causes offered by participants, for each separate incident, was comparable to the mean number of causes offered by parents in the Golub et al. (1987) study. Their study, however, utilised a different methodology for eliciting causes and had different aims and participant groups. Other research studies in the area of mothers' attributions of children's behaviour have tended to ask respondents to state their beliefs about the main cause of the behaviour only and it was not possible to further explore the implications of the number of causes offered in the present study. This may represent a useful area for future research.

No statistical difference was found between groups in the current study in relation to number of causes which either blamed or excused the child, although both groups offered more causes which excused the child. The mean number of causes which excused the child, for both the problem and non-problem groups, was comparable to the post-intervention mean number of excusing causes in the Golub et al. (1987) study. Of interest from the current study was information relating to the categorisation of causes as either blaming or excusing. It was notable than several participants, in both the problem and non-problem groups, suggested 'attention seeking' as one possible cause of their child's misbehaviour, but whereas for some mothers this served to excuse the child, for others it was blaming of the child. Such blame/excuse judgements were based on valuable qualitative information relating to the causes offered, provided by participants during the interview and recorded by the author. Walker (1985) suggests that how someone perceives the cause of a behaviour depends on the phenomenology of the perceiver and it is possible for different mothers to
suggest the same cause for a child behaviour, but hold very different beliefs about that
cause. It is suggested that the current research highlights the usefulness of conducting
research interviews in relation to attribution research, where participants are given
opportunities to use their own words in response to open ended questions, in addition to
providing quantitative attribution dimension information.

4.3.4 Mothers' affective responses
The intentionality dimension, as used in the PAQ, particularly relates to the attribution bias of
'personalism', as mothers' are asked to rate the extent to which they think their child
misbehaved in order to deliberately upset them. Dix & Grusec (1985) suggest that
attributional models would predict that such inferences of child intent should elicit
dispositional attributions and extreme negative parental evaluations, which would be
expected to increase parental anger and punishment. This model has been supported by
empirical research (Dix et al., 1986; Golub, 1984). Baden & Howe (1992) similarly suggest
that parents' readiness to blame a child for their behaviour, which is strongly related to the
inference of intent, may be linked with other cognitive and affective patterns, such as
overattention to aversive child behaviours or a tendency to become angry in response to
child misbehaviour. In this way they suggest that parental attributions of blame are part of a
"cognitive-affective set" (p.481) which increases the likelihood of the initiation and
maintenance of coercion cycles within parent-child dyads.

Findings from the current study, however, were that although mothers in the problem group
rated their child as behaving more intentionally to upset them than did mothers in the non-
problem group, there were no group differences in regard to mothers' reported affective
responses of anger in relation to their child's misbehaviour. Sobol et al. (1989), in relation to
attribution research, emphasise the need for researchers to take into account respondents' idiosyncratic meaning for their attributions and not assume a shared understanding.
Extending this to the current findings, it may be that participants within the different groups
have different experiences and understanding of anger. One further finding in this regard was
that six mothers in the non-problem group reported feeling irritable or annoyed in response to
their child's misbehaviour, whereas these feelings were not reported by any of the mothers in the problem group. Such feelings may be considered to be related to anger, but denote a lower level of negative affect. However, given the small numbers involved, this finding is presented tentatively.

A further finding in relation to affective responses to child misbehaviour was that a number of mothers in the problem group reported feeling embarrassed or ashamed, whereas only one mother in the non-problem group reported such feelings. Embarrassment and shame suggest a particular sensitivity to negative external judgements, either of their child, or their parenting ability. Patterson's (1976) model for the development and maintenance of child problem behaviour includes the process of negative reinforcement of child aversive behaviour by the parent giving in to the child and withdrawing their demand or expectation. Sensitivity to perceived negative evaluation by others may make it more likely that some mothers would fall into this 'negative reinforcement trap' (Patterson, 1976), as they would be particularly concerned that their child did not display aversive behaviours in public. A comment from one participant in the problem group was "I get really embarrassed, especially when out shopping". Research has shown that parental affective responses of anger to child misbehaviour is related to punitive behavioural responses. According to Patterson's (1982) model, this could lead to an escalation of parental aversive behaviour, which is negatively reinforced by the termination of child aversive behaviour. Affective responses of embarrassment or shame, however, may be more relevant to coercion cycles related to parental withdrawal in response to aversive child behaviour, whereby the child's aversive behaviour is negatively reinforced.

A related issue is that of beliefs about parental self-efficacy. Baden & Howe (1992) found that whereas mothers of conduct-disordered children did not differ from mothers of non-problem children in terms of their beliefs about the general effectiveness of a range of parenting strategies, they were significantly less likely than non-problem group mothers to believe that they could effectively implement child behaviour management strategies with their own children. Baden & Howe (1992) suggest that such a parental stance of "helplessness" (p.481)
may contribute to ineffectual attempts to discipline their children and lead to withdrawal when presented with aversive child behaviour. In the current study more mothers in the problem group reported feelings of uselessness and helplessness than mothers in the non-problem group, although again such numbers are small and need to be considered with caution.

4.3.5 Mothers' behavioural responses

A number of studies have found that mother's attributions and proposed behavioural responses in relation to child problem behaviour are related to the type of problem behaviour the child exhibits (Bell & Chapman, 1986; Grusec & Kuczynski, 1980). Scott & Dembo (1993), for example, found that mothers of children aged 3 to 8 years proposed stronger, more power assertive behavioural responses for direct defiance rather than passive non-compliance. Although investigating possible interaction effects between type of child misbehaviour, attributions and mothers' behavioural responses was outside the scope of the current study, it was considered important to obtain information about the type of problem behaviour reported by mothers and ascertain whether there were any group differences in this regard which may have influenced the results. Aggression, tantrums and non-compliance accounted for the majority of reported problem behaviours. In line with findings of Johnson et al. (1973), non-compliance was by far the largest problem category. No important group differences were found in relation to types of child problem behaviour reported.

As part of the research interview, information relating to how participants would typically respond to their child's misbehaviour, as well as information relating to how they actually responded to specific misbehaviour incidents, was obtained, from the Qualitative Interview and PAQ respectively. Mothers' behavioural responses were coded into three response categories. Findings concerning mothers' reported typical behavioural responses to child misbehaviour showed no significant group differences. However, when participants' behavioural responses to actual incidents of child misbehaviour were investigated, group differences were found. Mothers in the non-problem group reported resolving 95 per cent of the child problem behaviour incidents recounted for the PAQ, whereas mothers in the problem group reported resolving only 62 per cent. Several participants in the latter group
reporting that they did not know how to resolve the situation or that they gave in to the child’s demands. This could again be related to the suggestion that some mothers in the problem group find it difficult to tolerate possible external negative evaluations and therefore behave so as to quickly end their child’s embarrassing aversive behaviour, by acceding to the child’s demands.

A further potentially important finding was that, in relation to actual incidents of child misbehaviour, mothers in the non-problem group were more likely to use co-operative strategies than other behavioural response strategies. They were also significantly more likely to use co-operative strategies than were mothers in the problem group. The most commonly reported co-operative strategy was talking to the child about the problem behaviour, including explaining to the child what was wrong with the behaviour, what could be done differently and helping the child understand the mothers' concern. Dix & Grusec (1985) propose the importance of providing such socialisation information to children. They suggest that to punish a child and not provide such information makes it likely that the same behaviour would be displayed in the future, whereas providing children with necessary social information would decrease the likelihood of the behaviour occurring again. Dix & Grusec (1985) suggest the importance in this regard of parents making accurate attributions about child misbehaviour, such that if they correctly believe the problem behaviour to be a result of limitations in social understanding or skills they will be more likely to address this knowledge or skills gap than if they, for example, attribute the behaviour to child dispositional factors or wilful intent. This could be related to the finding of group differences, although not significant differences, on the controllable-uncontrollable attribution dimension. If mothers in the non-problem group consider their child to have a measure of control over the cause of their misbehaviour, they may consider it more likely that their child could make use of social knowledge than mothers who believe their child lacks self-control.

Dix & Grusec (1985) suggest that when parents perceive child behaviour as intentional and not related to developmental limitations they are more likely to respond punitively. Newth & Corbett (1993) also found that mothers of pre-school children presenting with behaviour
problems were more likely than mothers of non-problem children to smack them, be Irritable or fear losing control of themselves, in response to child misbehaviour. In the current study, however, although problem group mothers experienced child problem behaviour as more intentional than those in the non-problem group, this was not accompanied by significant group differences in the reported use of punitive behavioural responses, either typically or in relation to actual child misbehaviour. It is possible that this may reflect a response bias of social desirability, although mothers in both groups appeared quite open about their use of punishment. One finding perhaps worth commenting on, which reflects Newth & Corbett's (1993) finding in relation to mothers in their problem group fearing losing control of themselves, was that two mothers in the current problem group reported feeling that they might physically hurt their child whereas none of the mothers in the non-problem group reported this.

4.3.6 Implications for clinical practice

The current research was prompted by clinical work which suggested the importance of taking into account parental attributions for child problem behaviour, in the context of improving engagement in a treatment intervention programme. There was a general assumption in the clinical field that parents tended to inappropriately blame the child for their negative behaviour. Findings from the current study, with regard to group differences on the attributional dimension of intentionality, suggest the particular importance in clinical work of understanding mothers' beliefs about the motivation behind their child's problem behaviour, especially in relation to the attribution bias of personalism. There is a need for further research into father's attributions of pre-school children's problem behaviour before particular clinical implications can be discussed for them.

A further finding from the current study which has implications for clinical practice relates to group differences in mothers' effectiveness in resolving child problem behaviour incidents. The findings suggest that mothers of children presenting with problem behaviour may be less effective in resolving conflict situations than other mothers, often inappropriately giving in to their child's demands. A number of factors may be important to consider in this regard, in
relation to developing appropriate clinical interventions. Mothers of pre-school children with problem behaviours may be less effective in resolving child problem behaviours due to particular affective responses, such as embarrassment or feeling useless. This would suggest the importance of addressing affective issues within the clinical work, as well as providing input around more effective child behaviour management strategies, which already tends to be the intervention of choice for young children presenting with behaviour problems.

Weiner (1988) similarly proposes that those therapists who are guided by attribution theory should take account of the entire theoretical perspective, rather than direct interventions solely at attempting to change peoples' attributions. He suggests that a wider understanding and use of attribution models, which include proposed relationships between attributions and affective and behavioural responses, should result in the use of a number of therapeutic interventions. These would include the modification of environmental antecedents of behaviour and interventions directed at changing behaviour, in addition to those directed at changing attributions.

Other findings from the current research which may be useful to consider in a clinical setting include the observation that a number of mothers began to re-evaluate their negative attributions of child misbehaviour, following consideration of normative child development. It may therefore be helpful to facilitate mothers' consideration of child development generally and their own child's development specifically, to develop a more helpful understanding of the context of their child's misbehaviour.

A related aspect of the research which may have clinical relevance is the finding that a number of mothers reported the process of considering the causes of their child's problem behaviour as helpful in understanding their child. Engaging mothers in discussion of the possible causes of their child's problem behaviour, within a clinical setting, may promote the development of a more helpful understanding of the factors associated with child misbehaviour, which could include encouraging mothers to take more account of possible important situational factors.
Golub et al. (1987) report that parents who completed an education programme for abusive parents demonstrated increased knowledge of alternatives to physical punishment, increased understanding of normal child development as well as changes in their attributions concerning children's misbehaviour. It may be that aspects of this programme could be usefully included in work with other families that experience conflict situations with their young children.

4.3.7 Directions for future research

It is notable that within the field of parental attributions of children's behaviour, authors have tended to refer to 'parental' attributions when in fact the research has largely investigated mothers' attributions only. The few exceptions to this have reported differences in mothers' and fathers' attributions in relation to their child's behaviour (e.g. Sobol et al., 1989) and differences in factors associated with mothers and fathers' attributions (Johnston, 1991). During the recruitment stage of the current study a number of fathers expressed a wish to take part in a research interview. While outside the scope of the current study, investigation of fathers' attributions and affective-behavioural responses to their pre-school children's behaviour would seem an important area for future research, in relation to potential differences between mothers' and fathers' attributional patterns and how this may impact father-child interaction in particular, as well as wider family interaction patterns.

On a similar note, research findings relating to cultural differences in attributions and expectations of pre-school children's problem behaviour also suggests a need for further research in this area. As Britain is very much a multicultural society it is important to have information about the nature of possible differences in attributions and expectations for children's behaviour, of parents from a number of different cultural backgrounds. Newth & Corbett (1993) propose the importance of exploring the prevalence and experience of problems for people of different cultures, to gain information concerning causes of the problems and so as to provide appropriate services to people who may have different needs. While the majority of participants in the current research were white European, a number of mothers from Indian or African cultures suggested that cultural factors were of particular
importance in regard to parental expectations of child behaviour and they suggested a relationship between this and parental use of various discipline methods. A related issue concerns the accuracy of parents' beliefs about the age at which children develop social understanding and skills. Further research in this area would have potentially important implications for clinical practice.

The current research aimed to investigate possible group differences in mother's attributions and affective-behavioural responses in relation to pre-school children's problem behaviour. Potential factors associated with mother's attributions were not investigated. Research in the field suggests a number of factors which may be relevant in this regard, such as maternal depression (Johnston, 1991). Future research investigating factors associated with parental attributions for pre-school children's problem behaviour, within problem and non-problem groups, would appear important.

While there are suggestions that findings from the fields of general parental attributions of child behaviour and attributions of abusive parents offer tangential support for each other (Baden & Howe, 1992), it is unclear to what extent these are distinct research concerns. Studies of attributions of abusive parents, in relation to child misbehaviour, tend not to say whether the child was presenting with behaviour problems or not. It may be that this is an important and confounding influencing factor in relation to attributions of abusive parents. Further investigation of this would appear warranted.
REFERENCES


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HEALTH VISITOR SCREENING QUESTIONNAIRE

HEALTH VISITOR'S NAME:__________________________________________________________

TELEPHONE NUMBER:__________________________________________________________

DATE RESEARCH INFORMATION GIVEN TO THE MOTHER:__________________________

MOTHER'S NAME:______________________________________________________________

CHILD'S NAME:_______________________________________________________________

GENDER: MALE / FEMALE AGE:_________________________________________________

1. How often do you visit the family?____________________________________________

2. Has the child any disability, disease or syndrome already diagnosed, labelled or known to you? YES / NO If yes please specify:________________________________________

3. Does this child show observable behavioural difficulties, at a level that is unusual for the child's age? (Please circle)
   DEFINITELY
   POSSIBLY
   NO

4. If definitely, how severe do you consider the behavioural difficulties? (please circle number)

   1 not very severe 2 3 4 5 moderately severe 6 7 8 9 10 very severe

5. Please give details of the behavioural difficulties:______________________________

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

   How long has the behaviour(s) been present?__________________________

6. Have you referred the child to any other services, due to the behavioural difficulties? YES / NO Please specify where, or indicate why not (e.g. no available services)

   ____________________________________________________________
   ____________________________________________________________

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## Table of demographic information for excluded group

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<tr>
<td>Range</td>
<td>26 - 38 years</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>32.8 years (3.2 yrs)</td>
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<tr>
<td><strong>PARENTAL STATUS</strong></td>
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<tr>
<td>Single parent</td>
<td>41.7% (n=5)</td>
</tr>
<tr>
<td>Two parent</td>
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<td><strong>ETHNIC ORIGIN</strong></td>
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<tr>
<td>Degree / higher degree</td>
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<tr>
<td>'O' Level or below</td>
<td>33.3% (n=4)</td>
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<tr>
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<tr>
<td>Managerial / Technical</td>
<td>28.6% (n=2)</td>
</tr>
<tr>
<td>Skilled (non-manual)</td>
<td>42.8% (n=3)</td>
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<tr>
<td><strong>RECRUITMENT SOURCE</strong></td>
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<td>Nursery / playgroup</td>
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<td>16.8% (n=2)</td>
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<tr>
<td>Newpin</td>
<td>8.3% (n=1)</td>
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<tr>
<td>Nominated by another participant</td>
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<tr>
<td>Other</td>
<td>8.3% (n=1)</td>
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<td><strong>AGE OF INDEX CHILD</strong></td>
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<tr>
<td>Range</td>
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<tr>
<td>Mean (SD)</td>
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<tr>
<td><strong>GENDER OF INDEX CHILD</strong></td>
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<td>Female</td>
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<tr>
<td>Male</td>
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<tr>
<td><strong>NO. OF CHILDREN (in family)</strong></td>
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<tr>
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</tr>
<tr>
<td>Two</td>
<td>25.0% (n=3)</td>
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<tr>
<td>Three to five</td>
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<tr>
<td><strong>ORDINAL POSITION (index child)</strong></td>
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<tr>
<td>2nd born</td>
<td>8.3% (n=1)</td>
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<tr>
<td>3rd born</td>
<td>16.7% (n=2)</td>
</tr>
<tr>
<td>4th born</td>
<td>8.3% (n=1)</td>
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<tr>
<td><strong>INDEX CHILDREN ATTENDING A NURSERY OR PLAYGROUP</strong></td>
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<td><strong>INDEX CHILDREN INVOLVED WITH A SPECIALIST SERVICE</strong></td>
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RESEARCH INFORMATION SHEET

Mothers' perceptions of pre-school children's problem behaviour

Background and outline of the research project

As a psychologist in my final year of clinical training I have worked with a number of families with a young child with behaviour problems. In thinking about how best to help such families, it seems that it could be particularly important to understand more about what parents think is causing their child's behaviour. To explore this further, I would like to interview a number of mothers of children aged between two and five years. To understand the range of mothers' thoughts about their children's behaviour I would like to interview some mothers who are currently finding their child's behaviour particularly difficult and some who are not.

I realise that looking after small children can be very demanding and there is often not much time for other things, particularly if you work outside the home as well. However, it is only through talking to people like yourself and hearing your experience and point of view, that better ways of helping families with children with behaviour problems can be developed.

What taking part would involve

The research interview would last no more than an hour and this would be arranged at a time and place to suit you. The interview would involve you completing a short written questionnaire and answering questions about your own child's behaviour as well as some more general questions about children's behaviour.

You do not have to take part in this research study if you do not want to. Your decision whether to take part or not will not affect any services you currently receive or may receive in the future. Before taking part, I will ask for your written consent. However, you still have the right to withdraw from the research at any stage, without having to give a reason. Information you provide during the interview will be confidential and your name, or anything that might identify you, will not be used later. All proposals for research are reviewed by an ethics committee before they can proceed. This research proposal was approved by Lewisham and North Southward Local Research Ethics Committee and by Optimum Health Services.

What to do next

Before deciding whether or not you want to take part in the research, you may want some more information or have specific questions answered. You can contact me by telephoning: 0171- 4357111 extension 2256. If necessary, please leave a message and I will get back to you as soon as possible. Alternatively, you can contact me via the South Thames Clinical Psychology Training Scheme: (01892) 515152, or write to me using the pre-paid envelope provided. If you think you have enough information and you would like to take part in the research, then please complete the attached consent form and return it to me in the pre-paid envelope provided.

Thank you for your help

Diana Lorenc
Psychologist in Clinical Training
CONSENT FORM
FOR PARTICIPATION IN A RESEARCH PROJECT

Title of Project: Mother's perceptions of pre-school children's problem behaviour.
Researcher: Diana Lorenc, Psychologist in Clinical Training

Outline Explanation:
In thinking about how best to help families with young children with problem behaviours, it seems that it could be particularly important to understand more about what parent’s think is causing their child’s behaviour. The present research study will explore mother’s perceptions of pre-school children’s problem behaviours, by interviewing a number of mothers of children aged two to five years.

What taking part will involve:
Consent to take part in this research project will involve meeting face-to-face with the researcher, during a research interview lasting about one hour. Questions relating to your own child's behaviour and more general child behaviour will be addressed. The information obtained during the interview will be confidential and your name, or anything that may identify you, will not be used later.

I (name) ____________________________ ____________________________
of (address) _______________________________________________________

_____________________________________________________________________ TEL :

hereby consent to take part in the above investigation, the nature and purpose of which have been explained to me. I have been given an information sheet about the research project, which I can keep for future reference. Any questions I wished to ask have been answered to my satisfaction. I understand that I may withdraw from the investigation at any stage, without necessarily giving a reason for doing so and that this will in no way affect the care or services I am receiving at present, or may receive in the future.

SIGNED ____________________________ DATE _______________________

Having completed this consent form, please return it to Diana Lorenc in the pre-paid envelope provided. I would be grateful if you could return the consent form as soon as possible, following which I will contact you to arrange a suitable interview time.

Thank you for agreeing to take part in this research.
INFORMATION FOR HEALTH VISITORS

Recruitment of research participants

My aim is to recruit a total of 40 mothers of children aged between two and five years, via Health Visitors and other specialist services (e.g. Bloomfield Clinic, Under 5's Team). There will be two groups:

1. Mothers of pre-school children currently presenting with behaviour problems.

The criteria for inclusion in this group is:
- That you, as the Health Visitor, consider that the child in question is presenting with a behaviour problem, to an extent that might warrant a referral to a specialist service, if one was available (this would include any families you may already have referred to a specialist service, who are awaiting an appointment). This would be documented by your completion of a short Health Visitor Screening Questionnaire.
- That the child's mother also considers her child to have a behaviour problem. This would be further assessed by the mother completing the Behaviour Checklist during a research interview.

2. Mothers of pre-school children not currently presenting with behaviour problems.

The criteria for inclusion in this group is:
- That you, as the Health Visitor, do not consider that the child is presenting with a behaviour problem, that is, that their behaviour is not unusual for a child of their age and is not causing particular concern. This would again be documented by completion of the short Health Visitor Screening Questionnaire.
- That the child's mother also does not consider that their child has a behaviour problem, as would also be assessed by her completion of the Behaviour Checklist.

What I am asking of Health Visitors

I would ask Health visitors to think about the children, aged 2 to 5, on your current caseload, who would fall into either the 'problem' or 'non-problem' groups. If there is more than one pre-school age child in the family I would ask you to choose one to nominate for the research.

Next time you are visiting these families, or see them at a clinic, I would ask you to explain to the mother that a research project is being carried out in the area and that the research has the support of Optimum Health Services. I would then ask you to give an Information Sheet, Consent Form and pre-paid envelope to the mother. These are for her to keep and consider in her own time. It would be particularly helpful, however, if you could remind the mothers about the research on your next visit, or if they attend a clinic, as this might just prompt them to return the consent form to me. If possible, I would be grateful if you could give the research packs out to mothers from both the 'problem' and 'non-problem' groups, but if you are not currently in contact with any from the 'problem' group then please go ahead and give them out to mothers whose pre-school child is not presenting with a behaviour problem.

For every research pack you give out to a mother I would ask you to also complete the short Health Visitor Screening Questionnaire, for the child in question, and return it to me in the pre-paid envelope. This should be very quick for the mothers in the 'non-problem' group and take no more than a minute or two for those in the problem group. If you need any more pre-paid envelopes please contact me and I will send them.
APPENDIX 6

PRE-INTERVIEW CHECKLIST

1. Check they still have their Research Information Sheet. If not give one.

2. Ask if any questions about participating in the research.

3. Restate confidentiality, anonymity, non-effect on service provision, can withdraw at any point.

4. Reconfirm consent to participate (ask to reread consent form).

5. Check Health Visitor’s name and team, or how participant was recruited.

INTERVIEW

1. Demographic Questionnaire

2. Behaviour Checklist

3. Adapted PAQ (Response sheet)

4. Qualitative Interview

5. Social Cognitions / Developmental Questionnaire

POST INTERVIEW CHECKLIST

1. Any questions.

2. Comments on experience of taking part in the research.

3. Any concerns raised by interview. Discuss how to access appropriate services, as necessary.

4. Provide slip for requesting brief report of results.

5. Draw attention to Research Information Sheet for details of how I can be contacted, if the need arises.

6. Ask sample of participants if they are willing to be contacted by telephone in two weeks, with regard to test-retest reliability check of Social Cognitions / Developmental Questionnaire.
Thank you for taking part in this research. If you would like to receive a brief report of the research findings, please complete the attached slip and return it to me at the following address, by August 1st 1996.

Diana Lorenc  
Psychologist in Clinical Training  
South Thames Clinical Psychology Training Scheme  
Salomons Centre  
Broomhill Road  
Southborough  
Tunbridge Wells  
Kent TN3 OTG

I would like to receive a brief report of the research findings, on conclusion of the research study.

NAME

ADDRESS

...
APPENDIX 8

DEMOGRAPHIC QUESTIONNAIRE

CHILDREN

INDEX CHILD’S: AGE

GENDER

ATTENDING NURSERY/PLAYGROUP ETC?

RECEIVING / ATTENDING ANY SERVICES?

OTHER CHILDREN: AGES AND GENDER

MOTHER

AGE

EMPLOYMENT STATUS/OCCUPATION

EDUCATIONAL ATTAINMENT

MARITAL STATUS

ETHNIC ORIGIN

FATHER

AGE

EMPLOYMENT STATUS/OCCUPATION

EDUCATIONAL ATTAINMENT

ETHNIC ORIGIN
### BEHAVIOUR CHECKLIST

Below is a list of behaviours which are often seen in children. Opposite each behaviour please put a cross (x) in the box which you think applies best to your child at the present time.

1. **Usually has a good appetite**
   - Sometimes has a poor appetite
   - Nearly always has a poor appetite

2. **Not faddy about eating**
   - Has a few fads, won't eat certain things
   - Very faddy, won't eat many different foods

3. **Never wets at night**
   - Wets the bed up to once or twice a week
   - Wets the bed 3 or more times a week

4. **Never wets during the day**
   - Wets during the day up to once or twice a week
   - Wets during the day 3 or more times a week

5. **Completely bowel trained. Never dirties pants**
   - Occasionally soils, up to once or twice a week
   - Soils pants 3 or more times a week

6. **Easy to get to bed and to sleep**
   - Some difficulties in settling at bedtime
   - Often takes over an hour to settle at bedtime

7. **Hardly ever wakes at night**
   - Sometimes wakes at night
   - Frequently wakes at night and difficult to settle

---

**Take highest score from items 1 and 2**

**Exclude item 3**

**Exclude item 4**

**Take highest score from items 6, 7 and 8**

---

81
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
</table>
| 8. | Never sleeps with parent
     | Occasionally sleeps with parent because upset or doesn’t want to sleep alone |
| 9. | Not active enough
     | Not markedly active
     | Very active
     | Too active, won’t sit still for meals or at other times for more than 5 mins |
| 10. | Concentrates on play indoors for 15 mins or more
     | Concentration 5 - 15 mins or very variable
     | Hardly ever concentrates for more than 5 mins on play indoors |
| 11. | Not clinging, can easily be left with people he/she knows
     | Gets upset if away from mother but gets over it
     | Very clinging; can’t be left with others |
| 12. | Independent; doesn’t ask for a lot of attention
     | Sometimes asks for a lot of attention, follows mother around all day
     | Demands too much attention, follows mother around all day |
| 13. | Easy to manage and control
     | Sometimes difficult to manage or control
     | Frequently very difficult to manage or control |
| 14. | Doesn’t have temper tantrums
     | Sometimes has tantrums lasting a few minutes
     | Has frequent or long temper tantrums |
15. Usually happy except for brief periods, when tired for instance
   Sometimes miserable or irritable
   Frequently miserable or irritable

16. Not a worrier
   Sometimes worried for short periods
   Has many different worries, broods over things, e.g. illness, accident, monsters, changes

17. Few or no fears
    Has some fears
    Very fearful, has a lot of different fears

18. Gets on well with all brothers and sisters
    Some difficulties with brothers or sisters
    Gets on badly with brothers or sisters
    Take highest score from items 18 and 19

19. Gets on well with other children
    Some difficulties playing with other children
    Finds it very difficult to play with other children

20. Speaks sentences of 3 or more words
    Uses single words
    No recognisable words
    Exclude Item 20

21. Clear speech
    Sometimes speech not clear
    Speech can't be understood by people outside the family
    Exclude Item 21

Thank you very much.

**SCORING:** Items score 0, 1 or 2, from top to bottom statement.
Exclude items 3, 4, 20 and 21 from total BCL score.
Take highest score only from grouped items, as indicated.
Maximum possible score is 24.
PARENT ATTRIBUTION QUESTIONNAIRE

INSTRUCTION
First I'd like you to give me a recent example of a time when (child's name) misbehaved.

1. Tell me about what happened.
   (Get a brief description of what the child did, what the parent did and how long ago it happened.)

2. When your child did this, what did you think was the cause?

3. Were there any other causes of her/his behaviour that you can think of?
   (If more than one cause is stated, ask for the main cause.)

MAIN CAUSE
INSTRUCTION

The next few questions are about the main cause of the behaviour. Remember, you've said the main cause was (repeat cause). I want to know more about this cause. First:

A 4. Is this cause (repeat cause) something about your child, or is it something about other people or the circumstances?

B 5. Is this cause (repeat cause) something that never changes or does it change a great deal? (or permanent/temporary)

C 6. Is this cause (repeat cause) something that your child cannot control, or can completely control?

D 7. Is this cause (repeat cause) something that only influences this particular situation, or does it influence most other areas of your child's life?

E 8. To what extent did your child behave this way in order to deliberately upset you?
INSTRUCTION
Now I'd like you to tell me another recent example of when (child's name) misbehaved.

1. Tell me about what happened.
   (Get a brief description of what the child did, what the parent did and how long ago it happened.)

2. When your child did this, what did you think was the cause?

3. Were there any other causes of her/his behaviour that you can think of?
   (If more than one cause is stated, ask for the main cause.)

MAIN CAUSE
INSTRUCTION

The next few questions are about the main cause of the behaviour. Remember, you've said the main cause was (repeat cause). I want to know more about this cause. First:

A 4. Is this cause (repeat cause) something about your child, or is it something about other people or the circumstances?

B 5. Is this cause (repeat cause) something that never changes or does it change a great deal? (or permanent/temporary)

C 6. Is this cause (repeat cause) something that your child cannot control, or can completely control?

D 7. Is this cause (repeat cause) something that only influences this particular situation, or does it influence most other areas of your child's life?

E 8. To what extent did your child behave this way in order to deliberately upset you?
### RESPONSE CATEGORIES

**A.** Totally others or my child the circumstances

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<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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</table>

**B.** Never changes

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**C.** Cannot control at all

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<th>3</th>
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</table>

**D.** Influences only this situation

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<th>1</th>
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**E.**

<table>
<thead>
<tr>
<th></th>
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<th>some</th>
<th>a lot</th>
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<tr>
<td></td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
QUALITATIVE INTERVIEW

I'm going to ask you a few more questions about (child's) behaviour, and ask you to respond just using your own words. So I can remember what you have said, I will make some notes as we go along.

Can you describe (child's) behaviour?

How do you feel when (child) misbehaves in the ways you have described?

How do you usually respond when (child) misbehaves in the ways you have described?
Children's Social Cognitions/Developmental Questionnaire

Now, rather than asking you directly about your own child, I am going to ask you to estimate the age at which you think an 'average' child would be able to understand, or do, certain things. I will read out a number of questions, for example "At what age do you think an average child can understand what no means" and I'd like you to give as precise an answer as possible, taking into account months as well as years. For example, you might think an average child can understand what no means at 18 months, or two years, or 10 months, whatever you think.

It is also important to say that there are no right or wrong answers to these questions, as I am interested in what you think.

At what age do you think an 'average' child:

1. Will begin to walk.
2. Can understand simple requests, such as 'give me the cup'.
3. Can express how they feel, in words.
4. Can understand how other people feel, in different situations, such as when others feel angry or sad or happy.
5. Can understand, or know what will upset or anger other people.
6. Can understand, or know how their parents want them to behave.
7. Is able to choose to deliberately upset other people.
8. Will be fully toilet trained, barring the occasional accident.
9. Can understand what "no" means.
10. Knows themselves when they are 'being naughty' or 'behaving badly'.
11. Can understand or foresee that certain behaviour on their part will cause other things to happen, for example, that if they misbehave it could lead to conflict with parents.
12. Can play co-operatively with other children, such as sharing toys.
13. Is able to choose to deliberately please other people.
14. Can make a definite choice to behave in one way rather than another, that is, be aware of different alternatives and make a definite choice of how to behave in a situation.
15. Can play 'make-believe' or 'pretend' games.

I have been asking you to think about an 'average' child. Would your answers have been different if I had asked you about your own child? What would have been different?
Table of Spearman correlation coefficients for test-retest data for SCDQ items

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<td>.75</td>
</tr>
<tr>
<td>15</td>
<td>.80</td>
</tr>
</tbody>
</table>
Ms Diana Lorenc  
Clinical Psychology Training Scheme  
Salomons Centre, Broomhill Road  
Southborough, Kent TN3 0TG

21 February 1996

Dear Ms Lorenc,

An investigation of maternal attributions of pre-school children's problem behaviour

Thank you for asking us to look at this. I have discussed it with another of the members of our committee and we both think that this innocuous survey does not raise any ethical problems.

Kind regards,

Yours sincerely,

PROFESSOR  
Chairman of the Research Ethics Committee
Dianna Lorenc

Dear Dianna,

Thank you for sending me a copy of your Ethics Committee submission for your research project into the investigation of maternal attributions of pre-school children's problem behaviour. This is obviously a well thought out and worthwhile research proposal which we would wish to support you in.

I have much pleasure therefore in confirming that you have the go ahead to undertake this research within, recruiting participants via the Health Visiting service.

It is the policy of the Trust to always seek permission of parents before the release of their name or their children's name to any research party. We would therefore wish for those candidates selected by the Health Visitor, to be approached by the Health Visitor first with regard to giving permission.

I would like to know whether you have approached the appropriate Health Visiting Managers yet. If you have please could you let me have their names so that I can confirm permission for you to go ahead. However, if you require help in accessing the Managers please do not hesitate to contact me. Naturally it is up to the Managers to agree the level of involvement of Health Visitor with you.

Finally we would wish to receive a copy of your final research report and if possible to set up a small seminar though which you can disseminate your findings to those Health Visitors who took part.

Yours sincerely

Information Manager
CHILD PROBLEM BEHAVIOUR CATEGORIES

1. AGGRESSION: TOWARDS OTHERS

2. TANTRUM

3. NON-COMPLIANCE: not following or completing a direct request, or breaking an unspoken 'rule', includes making a mess, saying things parent disproves of, saying no.

4. DEMANDING: of parental attention, time, things.

5. EATING PROBLEM: Poor appetite, difficulty at mealtimes.

6. SLEEP PROBLEM: wanting parent to stay with them in bedroom; getting up in the night; wanting to sleep in parental bed etc.

7. SOILING / DEFECATING INAPPROPRIATELY

8. LYING

9. SWEARING

10. CHILD DISTRESSED / UPSET

11. SHYNESS