Foster Carers’ Attributions About Problematic Behaviour in ‘Children Looked After’ by Local Authorities

Colin McGuinness, April 2007

“Submitted in partial fulfilment of the Degree of Doctorate in Psychology”

Word Count: 16,815
Acknowledgements

My sincere thanks to both Professor Britton and Professor Dagnan, for their support and encouragement in my hour of need.
Abstract

Background: Children may be ‘looked after’ (taken into care) by a local authority for a variety of reasons, but a large proportion of children are accommodated because of neglect and abuse. When ‘looked after’ children are compared with children living in private households, the former are over-represented in the child population displaying psychiatric illness and psychological disorders (McCann et al., 1996; Meltzer, 2002). Outcome measures also show that young adults, who have been ‘looked after’ as children, are over-represented in areas such as homelessness (Biehal et al., 1995) and unemployment (Broad, 1998).

Stability of placement with foster carers seems to be a protective factor against poor outcomes. The stability of placement seems to be enhanced by the provision of support for carers.

This study investigated the attributions made by foster carers about the challenging behaviours exhibited by children who are ‘looked after’ by the local authority. It explored their responses with reference to Weiner’s model (Weiner, 1985, 1995) of emotion and motivation.

Method: Three scenarios depicting three different types of challenging behaviour (shouting and swearing; destroying property; stealing and lying) were presented to foster carers registered with the local authority. Carers were asked to complete a questionnaire investigating their attributions of controllability, judgement of responsibility; their emotional responses of anger and sympathy; and outcomes of confidence in managing behaviours and the likelihood of breakdown of placement.

Results: In one of the scenarios presented (lying and stealing), carers’ judgement of responsibility were related to more anger being felt and less sympathy being felt. Increased anger was related to less confidence regarding the management of behaviour and to an increased belief in the likelihood of placement breakdown. Mediation analyses indicated there was a relationship between judgement of responsibility and outcomes, mediated by anger.

Conclusions: The study finds some limited support for Weiner’s attributional theory of motivation and emotion (Weiner, 1985) with regard to one scenario, but methodological difficulties demand a cautious approach to the interpretation of the results.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abstract</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>6</td>
</tr>
<tr>
<td>Children Looked After</td>
<td>7</td>
</tr>
<tr>
<td>Mental Health and Children In Local Authority Care</td>
<td>8</td>
</tr>
<tr>
<td>Foster Carers</td>
<td>11</td>
</tr>
<tr>
<td>Placement Stability and Placement Disruption</td>
<td>13</td>
</tr>
<tr>
<td>Foster Carer Training</td>
<td>17</td>
</tr>
<tr>
<td>Attribution Theory</td>
<td>19</td>
</tr>
<tr>
<td>Weiner’s Attribution Theory</td>
<td>20</td>
</tr>
<tr>
<td>Helping by Carers</td>
<td>25</td>
</tr>
<tr>
<td>Parental Attributions</td>
<td>29</td>
</tr>
<tr>
<td>Aims and Hypotheses</td>
<td>31</td>
</tr>
<tr>
<td>Ethical Issues</td>
<td>32</td>
</tr>
<tr>
<td><strong>METHODOLOGY</strong></td>
<td>35</td>
</tr>
<tr>
<td>Design</td>
<td>35</td>
</tr>
<tr>
<td>Participants</td>
<td>36</td>
</tr>
<tr>
<td>Procedure</td>
<td>37</td>
</tr>
<tr>
<td>Measures</td>
<td>38</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>42</td>
</tr>
<tr>
<td><strong>RESULTS</strong></td>
<td>45</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>45</td>
</tr>
<tr>
<td>Correlations</td>
<td>48</td>
</tr>
<tr>
<td>Indirect Effect Analysis</td>
<td>51</td>
</tr>
<tr>
<td><strong>DISCUSSION</strong></td>
<td>59</td>
</tr>
<tr>
<td>Clinical and service implications</td>
<td>63</td>
</tr>
<tr>
<td>Critical Review</td>
<td>66</td>
</tr>
<tr>
<td>Implications for Further Research</td>
<td>68</td>
</tr>
<tr>
<td><strong>CONCLUSION</strong></td>
<td>69</td>
</tr>
</tbody>
</table>
REFERENCES 70

APPENDICES

Appendix 1 – Copies of Measures Used 85
Appendix 2 – Copies of Ethical Approval, Letter & Information for participants 86
FOSTER CARERS’ ATTRIBUTIONS ABOUT PROBLEMATIC BEHAVIOUR IN ‘CHILDREN LOOKED AFTER’ BY LOCAL AUTHORITIES

INTRODUCTION

This thesis describes a study of the influence of attributions on the emotional and behavioural responses of foster carers towards the children they care for. The thesis begins with a description of “looked after children” and the concerns regarding their emotional wellbeing, their mental health and their life chances.

The role of foster carers is then explored, including context of foster care, the expectation and demands made on them and their families. A link is made between the need of a looked after child to have a stable placement and the factors which undermine the stability of a placement. Consideration is also given to the role of training in supporting foster carers, and of its specific role in contributing to positive outcomes for children by increasing placement stability. The introduction then considers the development of general attribution theory and, specifically, Bernard Weiner’s (1985) attributional theory and its application to helping behaviour (Schmidt & Weiner, 1988). The review identifies that Weiner’s (1985) theory has been useful in developing understanding of carer behaviour in other clinical areas and considers how it might be applied to the context of foster caring.
“Looked after” is a term introduced by the Department of Health in 1989 (Department of Health, 1989) to describe all children in public care. These children and young people are looked after by the local authority in a number of different provisions, including residential units and foster care homes.

Children and young people who are looked after may be accommodated by the local authority under a voluntary agreement with the consent of the child’s parents, or indeed the consent of the young person if they are aged sixteen or seventeen years. Children may enter the looked after system if they have a care order or interim care order made by the court under section 31 of the Children Act 1989. Children may also be accommodated by the local authority under section 21 (2) (C) (i) of the Children Act 1989, which results in children or young people being remanded to local authority care. Children may also be placed on an emergency protection order under section 44 of the Children Act 1989.

Children may be accommodated in small residential units funded and resourced by the local authority, or they may be looked after by foster carers registered with the local authority, or be placed with independent providers of foster care. Other looked after children may be in secure accommodation and a number may be in placements with family or friends, although they remain looked after by the local authority.
In 2003 there were approximately 60,800 children being looked after by local authorities in England (Department for Education and Skills, 2004). Of these approximately 41,300 or 68% were looked after by foster carers.

In England, children who are looked after may enter the care system at different ages, stay in the looked after system for different periods of time and come into the looked after system for a variety of different reasons. Children may move between very short term placements, lasting only two or three days, to medium term or long term placements lasting for several years until the young person reaches the age of eighteen and young adulthood. Children may move between settings and may be subject to different court orders at different times, although the overriding legal precedent is to avoid issuing court orders if possible, whilst maintaining that “the welfare of the child is paramount” (Children Act 1989). Children may come into the looked after system for a number of different reasons, such as parental illness or death. Neglect and abuse accounted for 49% of the looked after population (Department for Education and Skills, 2004).

**Mental Health and Children in Local Authority Care**

McCann *et al.* (1996) investigated the prevalence and type of psychiatric disorder of all 13-17 year olds in the care of a local authority. The young people had been looked after for a mean of 2.9 years. Sixty-seven percent of the total number had diagnosable psychiatric disorders; 96% of the adolescents accommodated in residential units had diagnosable psychiatric disorders and 57% of those in foster care had diagnosable psychiatric disorders. In the control group of children living at home the prevalence of diagnosable disorders was 15%. The most common disorders
among the adolescents being looked after was conduct disorder (28%), overanxious disorder (26%), major depressive disorder (23%) and unspecified functional psychosis (8%). In contrast the prevalence in the control group was; conduct disorder 0%; “overanxious disorder” (generalised anxiety disorder) 3%; major depressive disorder 3%; and unspecified functional psychosis 0%.

Dimigen et al. (1999) investigated the mental health of 70 children at the time they entered the care of the local authority. The mean age of children was 9.6 years: over 35% showed severe conduct disorders; nearly 30% showed severe attention problems; nearly 25% exhibited (autistic-like) detachment; 20% of the sample experienced “acute problems” (p.675), (which refer to psychotic behaviours, for example hallucinatory behaviours); and, approximately 15% experienced anxiety disorders. In both of the above studies co-morbidity was high and indicated a high degree of need and complexity of case.

More recently, the Office of National Statistics (Meltzer, 2002) have confirmed that children looked after by local authorities have higher rates of mental disorders compared to children who live in private households. Thus, amongst five to ten year olds, 11% of children looked after experienced emotional disorders compared to 3% of private household children; 36% of children looked after presented with conduct disorder compared to 5% of private household children; 11% of children looked after compared to 2% for hyperkinetic disorder and 42% for any childhood mental disorder compared to 8%.
Among eleven to fifteen year old children the prevalence of mental disorders were; 12% compared to 6% for emotional disorders; 40% compared to 6% for conduct disorders; 7% compared to 1% for hyperkinetic disorders; and 49% compared to 11% for any mental disorder.

Thus, children who enter the looked after system are at greater risk of experiencing high levels of emotional and behavioural problems and are more at risk of psychiatric illness.

However, not all looked after children go on to develop mental illness problems (Buchanan, 1999), and one of the protective factors identified is stability and continuity of care (Dumaret et al., 1997).

In view of the trend over the last ten years to place children with foster carers rather than in residential units, it is reasonable to suppose that foster carers are far more likely to be required to care for children with high levels of emotional need and associated challenging behaviours. Indeed, it may also be the case that a greater proportion of children living in foster care have a diagnosable psychiatric disorder compared to ten years ago (McCann et al., 1996). Thus, there is an increasing need for foster carers to have access to high quality support and training to help them to meet the complex needs of the children in their care. Unfortunately, the evidence regarding the kind of training which may be effective in improving foster carer skills is, at best, mixed. The systematic review of five cognitive behaviour training interventions carried out by Turner et al. (2005) concluded that “enhancing foster carers’ characteristics and abilities using cognitive-behavioural based training provision is not an effective way to improve outcomes for foster care in general”(p.21). This review is commented on more fully later.
Foster Carers

Foster care is an umbrella term which covers a number of different substitute family arrangements. Whilst the arrangements for the differing types of foster care are described in categorical terms, the reality is that carers provide a continuum of care, with overlap between the categories. Foster carers may provide:

- Relief care (or respite care) for children who are living with birth parents or with long term foster carers.
- Emergency fostering which involves foster carers being available whenever needed on a short term basis until more permanent arrangements can be made.
- Short term foster care, which usually involves a child staying with carers for a period ranging from a few days to a few months (although in reality this short term period may stretch to several months).
- Medium term foster care, which covers most children in foster care. Medium term foster care may last from a few months up to two or more years.
- Long term foster care lasts for over two years or until the child reaches adulthood. Long term foster placements are usually provided for children who cannot return home and who have not been placed for adoption, or who have been placed for adoption but have not been matched with adoptive parents. Long term fostering provides relative permanency for the child.

Triseliotis et al. (1995, p.1) summarised the main expectations placed on foster carers as
• providing nurturing care, through the experience of family life and dependable relationships, to children whose families are unable to do so either in the short or long term;
• recognition that children separated from families can be in distress, and require help to cope with feelings of loss, rejection and guilt;
• recognition that foster care is substitute care, whilst plans for permanency are made and implemented, (involving either a return home to the birth parents or a move to a permanent foster care placement);
• encouraging and facilitating contact with the birth family and to maintain the child’s self esteem and sense of cultural identity;
• helping the child cope with and overcome possible existing emotional and behavioural problems; and,
• collaboration with children’s services in order to prepare the child for a return home to their birth parents or a move to a more permanent setting, which may involve independent living.

Thus, the role of foster carers is demanding in the extreme. Carers are expected to open their homes, their hearts and minds to children who are likely to be experiencing emotional upset because of the loss of parents, family relationships, peer groups and familiar surroundings. Foster carers are required to provide a warm, caring and dependable family environment which includes affection and acceptance, whilst continuing to recognise that their relationship with the child is temporary and will end. They are expected to accept the child’s family, their culture and values and to try to suspend judgemental attitudes whilst working with care professionals towards
a return home or a move to another family. The relationships between foster carers and others involved with the child are complicated and demanding. Tensions may develop between the personal belief systems of the carer and those of the birth family and there may be differences of opinion with representatives of the local authority, who act as “corporate parents”.

The roles, rights and responsibilities of foster carers may not always be clear despite national guidance and local procedures and protocols. The local authority, the birth parent, and on occasions other appropriate adults will share ‘parental responsibility’ for a child who is looked after. Whilst the views of foster carers will usually be sought about decisions being made, they do not have legal authority to make important decisions about the children in their care (Children Act, 1989). The majority of foster carers hold no legal rights regarding the children in their care.

**Placement Stability and Placement Disruption**

“Researchers and child welfare workers agree that placement stability is critical for the success of foster care placement”, (Newton *et al.* , 2000, p.1364). Indeed, the first objective of the Quality Protects Programme (Department of Health, 1999, p.1) was “to ensure that children are securely attached to the carers capable of providing safe and effective care for the duration of childhood”. Many of the children entering the looked after system do so because of neglect and abuse (Department for Education and Skills, 2004). Such children have not experienced consistent, available and nurturing primary care-giver behaviour towards them. As a result, children are likely to have insecure or disorganised attachment patterns (Ainsworth *et al.*, 1978).
Evidence from comparative studies between children provided with care in institutional settings and those cared for in foster care settings have shown that institutional care resulted in significantly higher rates of behavioural disturbance (Roy et al., 2000). The children in the institutional group had much higher levels of hyperactivity and inattention, and had increased unsociability, compared with fostered children and with a control group who had not received any type of substitute care. These researchers suggest that the larger a residential unit is, the greater the turnover of carers and the greater the likelihood of less individualised care-giving. This results in the difference in the findings between the groups. Similar findings have been reported for children in family foster care compared to those in group residential care (Rowe et al., 1984). Evidence for the importance of stability of placements and continuity of care comes from a study by Dumaret et al. (1997). They interviewed adults who had been raised in stable foster homes for five or more years and found that nearly 70% were socially integrated. on a scale of social integration devised by the researchers; 75% were employed; 57% had partners, and of this 57% over half of the individuals had been with their partner for over seven years. Stable placements have also been linked with other positive outcome measures such as relationship skills, good education and employment outcomes. Older studies have also shown that children living in stable placements have better outcomes. For example, Fanshel and Shinn (1978) showed that children in New York who remained in a stable foster care setting made more educational progress and had higher IQ increases than those who returned home. Festinger (1983) also showed that being admitted to foster care and remaining in foster care longer was associated with better outcomes. However, it is unfortunately the case that long term foster care is also associated with high rates of placement breakdown. Over the last forty years, studies examining placement breakdown or disruption have found differing rates. Interpretation and
comparison of these rates is difficult for a number of reasons, including definitions of breakdown and disruption, the differing ages at which children are placed in long term fostering and the period of time a child is in a placement prior to the disruption. Thus, reported rates of breakdown vary from 38% within five years (Parker, 1966) to 47% within five years (George, 1970). Rowe et al. (1989) found that 28% of long term placements broke down within a period of 13–24 months and those children over the age of eleven experienced a breakdown rate of 35%.

It is possible that breakdown is part of a negative spiral in which challenging behaviour leads to placement breakdown, which in turn leads to the child feeling more rejection, presenting with more challenging behaviour and thus experiencing further placement breakdowns (Wolkind & Renton, 1979).

Risk factors which have been associated with placement breakdown include placing a child in a family where there is already a child under five years of age or of a similar age to the child being placed (Parker 1966; Berridge & Cleaver, 1987). Parker (1966) also found the existence of conduct problems to be associated with breakdown, whilst Rowe et al. (1989) found stealing and unmanageability to be associated with breakdown. Several studies have found that the older a child is when placed, the greater the likelihood of breakdown (Berridge & Cleaver, 1987; Rowe et al., 1989). Triseliotis (1989) suggests that the stability of a placement is threatened if foster carers believe that the wellbeing of their own child is put at risk by the behaviours being exhibited by the children in foster care.
The proportion of children looked after who are fostered has roughly doubled as a proportion of the total who are looked after. Thus, carers may well have to meet the needs of children exhibiting more serious levels of behavioural problems. A number of recent studies have shown that many foster carers have not received the support and training required to meet the complex needs of the children in their care (Schofield, 2003). This lack of training, coupled with evidence that across the UK there is shortfall of some 10,000 foster carers (Tapsfield & Collier, 2005), contributes to the inevitable reality of hard pressed professionals and children’s services trying to find any placement that they can for a child. Choice of placement, and matching of carer and child, which could contribute to the possible stability of a placement, are highly unlikely to occur. The logical conclusion is that some of the robust predictors of breakdown mentioned above will be present in the placement identified. Foster carers will have their own birth families and some will have children of a similar age to those they are being asked to look after. These factors cannot be altered. However, support can be offered to foster carers to help them deal with and to manage some of the behaviour problems exhibited by children in their care. Schofield et al. (2000) identified that social workers are less confident in offering parenting advice, behavioural management advice and help with the carer–child relationship even though they perceive a need for it. Whilst social work support is crucial, including the preparation of a careful and thorough plan for the child, other specialist advice will contribute to the general support of the carers. Therefore, it would seem therefore that the one of the issues to be considered is; how should advice on parenting strategies and behavioural management be provided and by whom?
**Foster Carer Training**

The provision of support and training for foster carers is identified as a factor contributing to the successful recruitment, retention and quality of foster carers (Audit Comm. 1994) and to increasing the likelihood of successful outcomes for children (Sinclair *et al.*, 2004). A number of training programmes for foster carers have focused on cognitive-behavioural approaches to the management of challenging behaviour (Minnis *et al.*, 2001; Pithouse *et al.*, 2002; Pallett *et al.*, 2005). Cognitive-behavioural approaches use cognitive techniques such as developing problem-solving techniques, identifying thoughts and beliefs about problematic behaviour, and also uses behavioural techniques, such as positive reinforcement of pro-social behaviours, to help manage behaviour. These approaches have been used with foster carers since the evidence suggests that such approaches have had consistently positive, although often moderate, outcomes when used in parental management training (Webster-Stratton & Hammond, 1997; Serketich *et al.*, 1996). However, Turner *et al.* (2005) assessed the effectiveness of cognitive-behavioural training interventions on

- children looked after behaviour and relationship problems;
- foster carers psychological wellbeing and functioning;
- foster family functioning; and
- foster agency outcomes.

The reviewers looked at the results from five studies (Chamberlain *et al.*, 1992; Barth *et al.*, 1994; Minnis *et al.*, 2001; Pithouse *et al.*, 2002; Macdonald & Kakavelakis 2002). All the studies included foster carers who were allocated by random or quasi-random methods to a
cognitive-behavioural based training intervention or to a waiting list or no-treatment control
group. Turner et al. (2005) concluded that cognitive-behavioural training interventions produced
little evidence of effect, either on the behaviour problems of the children being looked after, or
on foster carer or foster agency outcomes, which included placement disruptions. Macdonald and
Turner (2005) recommended that, to improve outcomes, the training should be sufficiently long
to provide opportunities to practice the skills being taught; to use a maximum group number of
eight; to consider ‘contracting’ attendance and completion of homework tasks; and that family
placement social workers should be invited to attend the training and should be offered a three
day separate programme to develop their skills and knowledge in cognitive-behaviour work. As
Turner et al. (2005) suggest, given the support for cognitive-behavioural approaches in other
areas, further research is needed to tease out the factors which may improve the effectiveness of
such approaches with foster carers.

A related theoretical area that could provide a different perspective to help and inform
understanding and future training in this area is attribution theory. Attributional models of
helping behaviour (Weiner, 1980, 1985) have helped to provide a framework in which the
responses of staff to challenging behaviours can be understood (Dagnan et al., 1998) and have
been used in learning disability training to inform cognitively-based interventions which
influence the self-explanations used by carers regarding the causes of challenging or difficult
behaviours (Kushlick et al., 1997). Johnston (1996) has presented a cognitive-behavioural model
of parenting which includes the role of parental cognitive processes in mediating between
situational stressors including child and parental behaviour. Thus, an approach to training for
foster carers, focusing on attributions and emotions, could help to carers to change their personal
explanations for behaviour, and therefore the management strategies employed. The result could, theoretically, influence outcomes for children looked after.

**Attribution Theory**

Attribution theory explores how individuals attribute causes to events i.e. it seeks to identify the causal explanations generated by individuals to explain events or the behaviour of others. It seeks to explain how this cognitive process influences an individual’s motivation or behaviour. Attribution theory is not one unified or comprehensive theory, although efforts have been made to draw elements of attribution theory together into one coherent whole (Weiner 1985, 1995; Rudolph *et al.*, 2004).

In more modern times, Fritz Heider (Heider, 1944, 1958) can be regarded as the father of modern attribution theory, and can be seen to have forged the links between the philosophical roots of attributional theories and the development of the theory as a branch of social psychology. Heider (1944) began to link the actor with the act and the cause and effects and later began to formulate the processes by which an untrained observer, the naïve psychologist, makes sense of the actions of others (Heider, 1958). Hewstone (1989) highlights four of Heider’s important ideas; firstly, Heider suggested that something perceived in reality with objective properties was possibly perceived differently by the perceiver because of their personal psychology. Thus, the behaviour of others could be explained by the perceiver to himself in such a way as to maintain stability of, predictability of and controllability of the perceiver’s world. Secondly, Heider made a distinction between personal and situational causes for events. Thirdly, he suggested that personal
dispositions (causes) were more invoked by the naïve observer for intentional rather than unintentional actions. Finally, he suggested it was factors within the perceiver, the properties of the object and the mediating conditions which explained why we attribute effects sometimes to the person and sometimes to the event.

Kelley (1967) developed Heider’s work to consider what information a naïve observer uses to generate a causal attribution for an event. Thus, attribution theories are concerned with the information that an individual uses to determine the cause of an event – the information deemed to be salient or that which is discounted in order to arrive at a causal explanation for an event.

However, the work on attributions includes a subgroup of theories which focus not on the antecedents or causes of events, but on the consequences or outcomes of particular attributions. This group of theories are known as attributional theories rather than attribution theories. The most prominent of these theories and that which is of most interest in this study, is that of Bernard Weiner (1985, 1995). Over the last twenty-five years Weiner has developed an attributional theory of motivation and emotion (Weiner, 1980, 1985) and a theory of social conduct (Weiner, 1995).

**Weiner’s Attributional Theory**

Weiner (1985) has described an attributional model which explores the relationship between causal attributions, emotional reactions and the consequent behaviour of the observer. Weiner’s early work focused on achievement and motivation, but was developed into a general theory of
motivation and emotion. The model has been applied not only in the area of achievement, but in clinical areas such as depression (Abramson et al., 1978), relapse in mental illness and expressed emotion (Brewin et al., 1991) and helping behaviour (Weiner, 1995).

Weiner’s central thesis is that individuals make attributions about the course of events on three causal dimensions; locus of causality, stability and controllability (Weiner 1985). He outlines the need for a “structure of perceived causality” (p. 550) to be determined, and he describes the dimensions of causal structure. His analysis identifies the existence of three dimensions of causality as mentioned above. The locus of causality refers to the location of the cause – causal factors which lie within or outside the person (internal versus external causal factors). Thus, for example, ability and effort would be considered internal causes of success at a task, compared to external causes which might include the difficulty of the task. Stability (stable versus unstable) refers to causal factors which remain constant over time. Causal factors are those which are under the individual’s control and subject to volitional change. For example, an individual may choose to put more or less effort into a particular task, and accordingly the person may be more or less successful at that task.

Weiner (1985) has described an attribution model which explores the relationship between perceived events, causal attributions, emotional reactions and the potential behaviours then elicited. He recognised that the search for explanations for events crosses cultures and time and has an adaptive function. It is in the individual’s interest to try and understand a causal network either to replicate it if an outcome was perceived as desirable or to change it if the outcome was
undesirable. In short, explanations for events provide the mechanisms for individuals to change their behaviours and to attempt to improve outcomes.

According to Weiner (1985), the perceived causes of an event differ mainly on the three attributional dimensions of internality, stability and controllability. He argues that, following success or failure at a task, individuals reflect on why a particular outcome occurred. Weiner postulates that the expectancy of success or failure at a task will be influenced by the causal explanations generated by the individual, particularly about why there has been success or failure in the past. Thus, for example, Weiner argues that success at a task (for example a maths test) which is attributed to an internal, stable and uncontrollable factor (“I have a natural facility for maths”) will increase the expectancy of being successful at similar tasks (new maths tests). Correspondingly, internal, stable and controllable attributions for failure decrease the expectancy of future success and increase the likelihood of quickly abandoning a task (“I do not have a mathematical mind, there is no point in studying the algebra module, I will never pass”). However, internal unstable and controllable attributions (“I have poor mathematical ability, but I am going to put as much effort as I can into the algebra module to try and pass it, just like I did with the trigonometry module”) raises expectations of future success and leads to greater persistence in the face of difficulty.

Weiner (1985) predicts that positive outcomes produce positive emotions, for example, happiness. Conversely, negative outcomes tend to produce negative emotions such as unhappiness and anger. The causal attributions made about an event will result in different emotions being experienced by the individual making the attributions. Thus, if a positive
outcome is attributed to the self (internal) then the emotional experience may be positive. If a negative outcome is attributed to the self, emotions such as guilt or shame may be experienced. These emotions are labelled “outcome dependant – attribution independent” because they are a result of whether or not the desired goal has been achieved. Attributions made under the controllability dimension are believed to underlie the evaluation of others and related “social emotions”, such as pity and anger. Thus, pity is elicited if an individual attributes a negative outcome to an uncontrollable cause. For example, pity would be felt for an individual involved in an accident (uncontrollable) which renders them unable to participate in activities enjoyed prior to the accident.

However, if a negative outcome is attributed to a controllable cause, then the affect experienced may be anger. The emotions experienced, following the attributional process then influence the behaviour of the individual. Thus, the affect is a direct determinant of the behavioural response. Weiner (2000) proposes the attributions can relate to either one’s own behaviour (i.e. intra-personal attributions), or can relate to the behaviour of another (i.e. inter-personal attributions). He argues that the dimension of “controllability” is the most important dimension in understanding or predicting an individual’s response to inter-personal events. (See Figure 1).
Weiner (1995) reconsiders the views he holds about judgements of responsibility and controllability and, in contrast to his earlier theoretical writings, he explicitly differentiates between controllability and responsibility. Controllability refers to the amount of control a person may have over a cause, whereas responsibility refers to a judgement made about a person. Responsibility is concerned with the observer making an inference – a judgement – about the person. In Weiner’s view, such judgements of responsibility are determined in a series of stages. Thus, in the first stage causality is ascribed to the person or the situation. If there is person causality, as opposed to situational causality then the next stage is for the observer to determine whether or not the cause was controllable. If there is a judgement of controllable causality, as opposed to uncontrollable causality, then the possibility of a judgement of responsibility is made. If mitigating circumstances are absent, then an inference or judgement of responsibility is made.
For example, failure at an examination could be explained by lack of effort in the studying required and the exam candidate held responsible for the failure. However, if the lack of effort was explained by the need to look after a terminally ill family member, then mitigating circumstances would be present and a judgement of responsibility for failure would be far less likely.

**Helping by Carers**

The attributional analysis of helping behaviour has been applied in different areas. Consideration is given to learning disability and parenting below.

The present study explores the inter-personal attributions that foster carers make concerning difficult behaviour manifested by the looked after children who are in their care. Weiner’s model would suggest that if a carer regards the child as being responsible for their behaviour then the carer will feel angry, may reprimand or withdraw help from the child. Alternatively, if the carer believes that child is not responsible for the behaviour, then sympathy is experienced and the carer will respond with greater help giving behaviour. Weiner’s model would suggest the theoretical possibility of working with carers, either on their attributional processes or on their emotional responses to behaviours. Work on their perception of controllability would be expected to attenuate the tendency to attribute responsibility to children for their behaviours.

Weiner appears to regard his model as one involving a traditional “stimulus – organism – response (S-O-R) mediation model, but he also states that “it is uncertain whether causal thoughts
have a direct as well as an indirect influence on helping. Some investigations find this proximal union, others do not”, (Weiner, 1995, p. 175). He presents a model which he believes best fits the existing research data (Weiner, 1995, p. 175). (See below, figure 2).

Figure 2. Model of helping behaviour related to eliciting stimulus, responsibility inference and affective reactions to help giving (Weiner, 1995, p.175).

He is explicit that “in this diagram, the dashed line from controllability to help indicates that the relationship is weak and/or tentative,” (Weiner 1995, p.175).

In the field of learning disability care staff beliefs and behaviours regarding challenging behaviours and the effect of staff behaviours on challenging behaviour have been the subject of much research. (Oliver, 1993; Hastings & Remington, 1994; Hastings, 1996; Dagnan et al., 1998; Dagnan & Cairns, 2005).

The responses of care staff have been identified as sources of social reinforcement for challenging behaviours, such as self harm, aggression towards others, property destruction and
stereotypical behaviour (Taylor & Carr, 1992; Hastings & Remington, 1994) and have thus been identified as contributing to the development and maintenance of challenging behaviours. When staff cognitively evaluate a challenging behaviour, they may find the behaviour aversive and intervene quickly to reduce the duration or intensity of their own aversive experience. The termination of the challenging behaviour through social intervention is negatively reinforcing for the staff member. However, the challenging behaviour itself may be positively reinforced, because the intervention has resulted in social interaction and consequent attention (Hastings & Remington, 1994).

Sharrock et al. (1990) published a study involving care staff working in a medium secure unit for mentally disordered offenders. They were asked to identify a cause for “each of fourteen negative institutionally relevant behaviours commonly associated with mentally ill patients”. Staff were then invited to rate the cause along the attributional dimensions of internal-external, stable-unstable, controllable-uncontrollable and global-specific. The staff also rated their general level of optimism, willingness to offer extra help, and their emotional responses to the patient. These researchers found that “stability” and “controllability” were negatively related to optimism, but that optimism was positively related to helping behaviour (i.e. if staff believed that negative behaviours were produced by the same cause each time, and believed that the person had control over their behaviour, then they felt less optimistic). This reduction in optimism resulted in less helping behaviour being elicited. This study found no support for a mediating effect of any emotional response, contrary to Weiner (1985). The research group suggest that care staff may have learned not to be significantly influenced by their emotional responses. However, in a methodologically similar study, Dagnan et al. (1998) explored the responses of
care staff to the challenging behaviour of people with learning disabilities. Care staff were provided with six examples of challenging behaviour and asked to give a probable cause, to rate their attributions on the four causal dimensions, to rate their optimism and the effort they would be willing to expend to try and change the behaviour of the individuals. Dagnan et al. (1998) concluded that the results of the study supported Weiner’s cognitive-emotional model of helping (Weiner, 1985) since path-analysis indicated that helping behaviour was best predicted by optimism, which in turn was best predicted by negative emotions. Negative emotions in turn were best predicted by the causal attribution of controllability. Dagnan’s 1998 findings were supported by a further study (Dagnan & Cairns, 2005), which examined staff judgements of responsibility for challenging behaviour in predicting their emotional responses and their intended helping responses. The results showed significant correlations between carers’ judgements of responsibility, with the best predictor of intended help being the emotion of sympathy. Dagnan and Cairns (2005) showed that judgements of responsibility predicted the emotional and the intended behavioural responses of carers. They concluded that the results of the study supported Weiner’s model. In contrast, Jones and Hastings (2003) found little evidence to support the relationship between emotion and helping behaviour, although their study differed in two important ways. Firstly, staff were asked to complete self-report scales after viewing videos of an actor engaging in self-injurious behaviour; and secondly, helping behaviour was re-framed as behaviour more or less likely to reinforce challenging behaviour, rather than the amount of effort being put into helping. Whilst the use of video may result in a stimulus condition closer to real life, the possible helping responses offered in the study sampled specified carer behaviours rather than a general effort in helping.
The present study employed a similar methodology to Dagnan and Cairns (2005) to investigate the attributions, emotions and confidence of foster carers in dealing with hypothetical challenging behaviours exhibited by the children in their care. Foster carers are, by definition, not the birth parents of the child. However, the care they provide is similar in many ways to that provided by birth parents. Therefore, it is important to consider some of the attributional processes of parents and their effects on parenting behaviour.

**Parental Attributions**

For over twenty years, the cognitive and attributional processes of parents have been the subject of a number of studies and reviews (Bugental et al., 1989; Joiner & Wagner, 1996; Bugental et al., 1998; Bugental & Johnston, 2000; Hassall & Rose, 2005). The attributions made by parents and their effect on children have been investigated in a number of studies (Baden & Howe, 1992; Miller, 1995; Johnston et al., 1998) Attributions have been linked to parent and child characteristics (Miller, 1995) and blame-orientated attributions have been shown to contribute to harsh parental management strategies (Smith-Slep & O’Leary, 1998). Smith-Slep and O’Leary (1998) led mothers to believe their children were in control of their misbehaviour. The mothers reported more angry feelings and were more likely to use harsh disciplinary strategies with their children compared to mothers who were told that their children were not to blame for their behaviour. The work of Johnston and colleagues on the attributions of parents, suggests that parents of children exhibiting behaviours associated with attention deficit hyperactivity disorder (ADHD) attribute the behaviours to the condition and were less likely to blame the children for their behaviour (Johnston & Freeman, 1997; Johnston et al., 1998). The children were not seen
as fully responsible for their behaviour. In contrast, a study by Baden and Howe (1992), showed that mothers of conduct-disordered children tended to view their child’s behaviour as intentional and to attribute the behaviour to causes that were stable and global.

Larrance and Twentyman (1983) investigated the relationship between internal attributions and child abuse. Their results indicated that physically abusing mothers had more negative expectations for their children compared to matched comparison mothers who were known not to be abusing. When the children of abusing mothers behaved badly or failed at a task the mothers made stable and internal attributions. However, the same mothers made external and unstable attributions when explaining their own child’s success or the poor behaviour of another child. The non-abusing mothers saw their own child’s positive behaviour as being stable and internal. From this study it would seem that negative expectations and the manner in which attributions are made distinguish abusing from non-abusing mothers. Such attributions may be possible contributory factors in determining how mothers may behave towards their children once they have made decisions about the causal factors involved in their child’s behaviour.

Dix et al. (1989) found that when mothers made attributions of competence and responsibility to children for negative acts, they were more likely to use assertive discipline rather than reasoning and instruction. Thus, there seems to be some evidence that appraisal of children’s behaviour by carers may influences parenting practice and management. A search of databases, psycINFO and Medline, using broad, truncated search terms (fostercar$ and attribution$) did not locate any results from
refereed journals. Therefore, consideration of the parental attribution literature may need to inform future attributional research work with foster carers.

**Aims and Hypothesis**

The main aim of this investigation was to examine the relationship between the control beliefs and judgements of responsibility made by carers, their emotional responses and care-giving outcomes, including a prediction of the likelihood of placement disruption. The study examined the relationship between foster carers’ attributions of control; their judgements of responsibility; their emotional responses; and, their behavioural responses to the challenging behaviour of the children they look after.

The main hypotheses were as follows:

1) Attributions to the children of control of behaviour and judgements of responsibility will be associated with higher levels of anger and less sympathy in carers;

2) Attributions to the children of control of behaviour and judgements of responsibility will be associated with less confidence being felt by the carers regarding their ability to manage challenging behaviour;

3) Attributions to the children of control of behaviour and judgements of responsibility will be associated with more likelihood of placement breakdown occurring; and,

4) An indirect or mediational relationship exists between carer attributions and judgements of responsibility and outcomes, influenced by the emotions of anger (and sympathy).
Ethical Issues

The ethical principles in research in clinical psychology are properly concerned with protecting the rights, dignity and welfare of research participants. The major principles are as follows:

- Informed consent – full information about the study is provided and participants are completely free to choose whether to take part in the study or not.
- Avoidance of harm – taking care that any trade-off between harm or psychological upset to participants and the benefits of knowledge gained are carefully considered.
- Confidentiality – the right to have personal information held securely and the right of participants not to provide information to the researcher should they so choose.

(Korchin & Cowan, 1982).

In accordance with these principles, and the general requirement to obtain consent from the Central Office for Research Ethics Committee (COREC) to proceed with the research, an application for ethical review was submitted online to and received by the Cumbria and Lancashire A Ethics Committee in May 2005. Documents supplied included letters of invitation to participate, consent forms, information sheets, CVs of supervisors, statements by Caldecott Guardians and senior managers. Copies of questionnaires were also provided for the ethics committee to examine.

An ethics committee meeting was attended by the author, to respond to queries from committee members about the study. The committee formally replied within ten working days of the
meeting with suggested changes to the information provided and the letter of invitation to participants. Other queries about data storage, confidentiality and child protection issues were also addressed.

The committee approved the study at the end of December 2005. The R & D Department at the relevant NHS Trust was provided with a copy of the REC Application, protocol and the letter of approval from the REC to proceed with the research.

Senior managers in Social Services were also approached and permission sought to approach foster carers to invite them to participate in the study. Feedback from managers indicated that to proceed with the research an application to Cumbria Social Services Research Consultation Governance Group (RCGP) was required. Application was submitted online for approval in October 2005, accompanied by letters of invitation, consent forms and information for the participants. The RCGP required further information and clarification which was provided. The project was approved, subject to approval by the NHS Research and Ethics Committee, by the RCGP in November 2005. Copies of the Research and Ethics Committee letter of approval are attached in Appendix 2.

**Reflection**

Whilst the process of seeking ethical support was time consuming, it provided the researcher with the opportunity to carefully consider the impact on participants of completing a series of questionnaires which demanded introspection and an evaluation of themselves and their
responses. It was also valuable to hear the thoughts and comments of the Ethics Committee, since issues were raised by the committee members which had not been identified, but which were potentially of significant importance to the safety and protection of children in the care of the local authority. The needs of participants for high quality, open and honest information, was made explicit.

The process of applying for and addressing the issues raised provided an educational experience not previously available, despite carrying out other research projects over the course of his career. It also served as a reminder of the balance to be carefully considered between benefits for the researcher and the population for whom services are provided, mainly children looked after by foster carers. It highlighted the fundamental principle that research is only justified if it seeks to improve the outcomes and life chances for those who are vulnerable and in need in our society.
METHODOLOGY

Design

This study employed a cross-sectional correlational design. It examined the relationships between;

- carer beliefs about the extent to which a child is able to control their behaviour (controllability);
- judgements made by carers about a child's responsibility for his or her behaviour;
- carers’ emotional responses to the behaviour; and
- the confidence of carers to manage behaviours and the perceived likelihood of placement breakdown.

Previous research (McGuinness & Dagnan, 2001) found medium effect sizes in a similar study (Correlation of - .46 between controllability and intended helping effort). A priori power calculation showed that for an alpha of .05, power of .8 (Cohen, 1992) and effect size of .4, then 66 participants were required. Post hoc calculations using a sample size of 56 participant’s results in a power of 0.74, slightly less than that recommended.

In order to address the reduction in the desired power, consideration was given to; summing across scenarios to reduce the number of correlations, but this has been criticised (Stanley & Standen, 2000; Jones & Hastings, 2003) when carried out in other studies (Dagnan et al., 1998); analysing data from all three scenarios, but this was believed to increase the probability of
spurious correlations to unacceptable levels; and thirdly, investigating whether the scenarios differed in the strength of effects and choosing the scenario with the strongest effect. The latter approach was felt to be the best option and a preliminary analysis was employed to investigate whether the scenarios differed significantly from each other across the variables. A one-way repeated measures analysis of variance was used and confirmed that a difference existed across the scenarios for all variables except “breakdown of placement”. SPSS options for post hoc analyses for one-way repeated measures, based on Field (2004) were carried out to identify the scenario with the strongest effects and the Bonferroni adjustment was employed. The scenario with the strongest effects was scenario three and was used in the subsequent statistical analysis.

A correlational analysis was carried out between all the variables for scenario three to identify significant associations between the variables (hypotheses one, two and three).

Hypothesis four, that an indirect or mediational relationship exists between attributions and judgements of responsibility and outcomes, mediated by the emotion of anger was investigated using the “Sobel test” and a “bootstrap approach”, which is considered more fully below (Preacher & Hayes, 2004; Sobel, 1982).

Participants

Participants were foster carers approved by and registered with the county council to provide care for children looked after by the local authority. Participants were sent letters of invitation to be involved in the study. In total 58 carers responded. Some respondents had not completed all
items on the questionnaires. The 58 respondents were 50 women (86%) and 8 men (14%): they had a mean age of 49.9 years (SD = 9.7) and had been foster carers for a mean of 9.9 years (SD = 8.9).

**Procedure**

The questionnaires were piloted on fellow students. On the basis of their feedback some minor amendments to the wording of the vignettes were made to clarify the description of the behaviour with the intention of facilitating the responses of the participants. Further consideration of the wording of the scenarios is undertaken in the Discussion section.

Letters of invitation, information sheets about the study, consent sheets and the questionnaires used in the study as approved by the Ethics Committee were collated by the researcher and sent to 320 foster carers. The documents were placed in unaddressed envelopes, along with a prepaid self addressed envelope and handed to the Knowledge Management Department of the county council. (Part of the role of the Knowledge Management Department is to facilitate research and audit projects for the local authority). A further explanatory letter prepared by the Knowledge Management Department was added to the envelope. Envelopes were then posted to all registered foster carers. Examples of letters of invitation and information sheets are provided in Appendix 2.

Thirty completed packs were returned within approximately 4 weeks. Following consultation with supervisors and the Knowledge Management Department it was agreed that a second data
collection sweep would result in a larger response rate. Following the procedure already described, a second wave of packs was sent out to 285 foster carers. (The local authority Knowledge Management Department had used the first postal contact to enquire whether addressees were continuing to provide foster care and whether they wished to remain on or be removed from the authority’s register of foster carers. Hence the reduced total number of packs posted in the second sweep on the basis of returns from the first postal contact). The second round of data collection recruited a further 28 participants. The overall response rate was 20% (58 respondents from a possible population of 285), which is low, given that estimates for postal returns vary from 21% to 85% (Stallard, 1996), and median response rates in academic postal surveys have been found to be 52% (Baruch, 1999).

**Measures**

The measures identified below were used to gather data analysed within the project.

1) A modified form of the Attributional Style Questionnaire (ASQ) (Peterson et al., 1982) as used by Dagnan et al. (1998) was used to assess attributions for three vignettes describing difficult behaviours in a twelve year old child. The difficult behaviours were chosen to represent those behaviours commonly exhibited by children looked after (Minnis & Del Priori, 2001).

Meltzer et al. (2002) found that amongst 5-17 year old looked after children, 37% had clinically significant conduct disorders, and amongst 11-15 year old looked after children the rate was 40%. Conduct disorder rates were higher than other rates of mental disorder
(emotional disorders 12%, hyperkinetic disorders 7%). The scenarios in this study were chosen to reflect some of the behaviours on which the diagnosis of conduct disorder is based in ICD-10 (World Health Organisation, 1996). Thus temper tantrums, severe destructiveness to property, stealing and repeated lying were used to generate the scenarios. These scenarios were also representative of the Minnis and Del Priori (2001) finding that attention seeking behaviours and quarrels were present in over half the children in their sample and that non-compliance and dishonesty were observed in over one third.

Further discussion of the wording of the scenarios is presented in the Discussion. The scenarios are presented below, and describe behaviours likely to have been encountered by foster carers:

**Scenario 1**
The 12-year-old child you are looking after often shouts and swears at you, because you have said “no” to a request or demand.

**Scenario 2**
The 12-year-old child you are looking after destroys their own property and sometimes your property when they are angry and upset.

**Scenario 3**
The 12-year-old child you are looking after constantly steals money from your house and denies doing so when confronted.
Other methodologically similar studies have used between one and four vignettes or behavioural scenarios to elicit responses from participants (Dagnan & Cairms, 2005; Hastings, 1996; McGuinness & Dagnan, 2001; Scott-Little & Holloway, 1994; Stanley & Standen, 2000). The mean and median number of scenarios presented in these five studies is three. This coupled with the view that more than three scenarios would reduce the response rate because of the extra effort required of participants to respond suggested three scenarios was an appropriate number to present.

Participants were then asked to rate the child’s behaviour on four attributional dimensions – internality, stability, globality and controllability (see Appendix 1). A seven point Likert scale was used for the ratings. Whilst the scales were presented to participants so that a consistent positive response did not require responses all at the same end of the scale, the data are described in the results so that a higher score indicates more of the dimension labelled.

Participants were also asked to rate the level of responsibility held by the child for the behaviour. Again, a seven point Likert Scale was used.

Sharrock et al. (1990) presented 14 negative behaviours, associated with one target patient, to staff who were asked to rate the cause of each behaviour along the four attributional scales. Sharrock et al. (1990) computed Cronbach alpha reliability scores for each of the four scales.
as follows; internal-external 0.80; stable-unstable 0.82; global-specific 0.70; controllable-uncontrollable 0.86.

The only attributional scale used to provide data for the reported analysis is the controllability scale which has an acceptable level of reliability of 0.86. No reliability coefficient is available for the judgement of responsibility scale, since it cannot be calculated from a single presentation of the scale. Therefore, responsibility should be treated as unreliable, although a positive and significant correlation between controllability and responsibility was calculated in this study.

2) For each of the vignettes, participants were asked to rate their emotional responses to the behaviour described on a seven point Likert scale. The emotional scales used were as reported by Dagnan et al. (1998) and Stanley and Standen (2000). Although a range of emotions were included in the questionnaire, only the emotions of sympathy and anger are used in the following analysis. Higher scores indicated a greater emotional reaction.

3) For each of the vignettes, participants were asked to rate, on a seven point Likert scale, how confident they felt about managing the behaviour described. Higher scores indicated more confidence. Confidence is defined as a carer’s self belief that they can successfully manage and ameliorate the behaviour described.
4) For each of the vignettes, participants were asked to rate, on a seven point Likert scale, how likely they believed the behaviour would be to result in the breakdown of the child’s placement with them.

**Data Analysis**

Whilst the number of participants was 58 in total, there were some missing data points from the returned questionnaires. Hence, in the analysis ‘n’ varies on occasions between 55 and 58. The total ‘n’ fell short of the 66 required for acceptable power and therefore to retain acceptable power, a smaller number of specific hypotheses were explored. Decisions were taken at each stage of the analysis to ensure that power was maintained and the threat from Type I and Type II errors was reduced.

Data analysis was conducted in three stages and all the tests used were two-tailed. Repeated-measures ANOVAs were used to examine the data. If the assumption of sphericity was violated, then the Greenhouse-Geisser correction (Greenhouse & Geisser, 1959) was employed to obtain an accurate F-Test value.

A one-way repeated-measures ANOVA was employed to explore differences in the dependant variables (attributions of controllability and judgements of responsibility, emotions of anger and sympathy and outcomes of confidence of management of behaviour and likelihood of placement breakdown) across the three scenarios of
1) swearing and shouting,
2) destruction of property,
3) lying and stealing.

Following the initial ANOVA, the option for post hoc analysis offered in version 14.0 of SPSS was used to compare means of the variables anger, sympathy, confidence and breakdown across the scenarios. Post hoc analysis enabled identification of the source of the significant effects. The post-hoc analyses controlled for Type I error using the Bonferroni correction as recommended by Field (2004), resulting in alpha values of .0167.

The initial analysis indicated that scenario 3, lying and stealing, had produced the strongest effects. Therefore, based on the rationale indicated on pages 35-36, further analysis involving correlational and mediation analyses focused on this scenario.

Pearson’s product-moment correlations were calculated for all the relationships between all the variables for scenario 3, lying and stealing.

Indirect effects, or the presence of a mediating variable, were investigated using the Sobel test (Sobel, 1982; Preacher & Hayes, 2004) and also by applying a bootstrap approach to the data set (Shrout & Bolger, 2002; Preacher & Hayes, 2004). The indirect effect of the possible mediator, anger, on the relationship between the judgement of responsibility and outcomes was investigated to determine whether or not support would be provided for Weiner’s model of attribution and helping behaviour (Weiner, 1985) (whilst recognising that the judgement of responsibility scale
is not necessarily reliable). The Sobel test (Sobel, 1982) has recently been suggested as a rigorous method by which mediation hypotheses can be assessed (MacKinnon et al., 2002; Preacher & Hayes, 2004). Preacher and Hayes (2004) provide SPSS macros to facilitate such analysis.
RESULTS

Descriptive Statistics

The means and standard deviations for the attributions of controllability, judgement of responsibility, emotions and outcomes for each of the three scenarios are presented in Table 1.

TABLE 1.

Means and standard deviations of carers’ ratings of the attributions responsibility and controllability as a function of the behaviour type (scenario)

<table>
<thead>
<tr>
<th>Attribution</th>
<th>Scenario 1 Shouting &amp; Swearing</th>
<th>Scenario 2 Destroying Property</th>
<th>Scenario 3 Stealing and Lying</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controllability</td>
<td>Mean (S.D.) 3.54 (1.35)</td>
<td>Mean (S.D.) 3.57 (1.41)</td>
<td>Mean (S.D.) 4.41 (1.42)</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.71 (1.30)</td>
<td>3.82 (1.36)</td>
<td>4.39 (1.47)</td>
</tr>
<tr>
<td>Emotion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>3.14 (1.37)</td>
<td>3.42 (1.34)</td>
<td>4.51 (1.73)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>5.17 (1.11)</td>
<td>5.07 (1.25)</td>
<td>4.28 (1.45)</td>
</tr>
<tr>
<td>Outcome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>5.59 (1.04)</td>
<td>4.95 (1.39)</td>
<td>4.80 (1.35)</td>
</tr>
<tr>
<td>Breakdown</td>
<td>3.01 (1.64)</td>
<td>3.11 (1.58)</td>
<td>3.63 (1.57)</td>
</tr>
</tbody>
</table>
The relationship between gender and all the variables in Scenario 3 was explored using independent t-tests. Equal variance was assumed since Levene’s test for equality of variances was not significant for any variable.

On average, female foster carers experienced greater anger when faced with lying and stealing \((M = 4.78, SE = 0.48)\). This difference was significant \(t(55) = -3.09, p < .01\). No other significant relationships existed between gender and other variables.

The key variables were analysed in separate one-way repeated-measures analyses of variance.

The analyses for anger, confidence and breakdown violated the assumption of sphericity and therefore the Greenhouse-Geisser correction was applied. The analyses indicate a significant effect for Scenario on controllability, responsibility, anger, sympathy and confidence, although not for breakdown.
### TABLE 2.

F values, partial-eta squared values and p-values for main effects of scenario on controllability, responsibility, anger, sympathy, likelihood of breakdown and confidence of managing behaviour.

<table>
<thead>
<tr>
<th>Effect</th>
<th>df Effect</th>
<th>df Error</th>
<th>F</th>
<th>Partial Eta Squared</th>
<th>p-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controllability</td>
<td>2</td>
<td>112</td>
<td>10.4</td>
<td>.161</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Responsibility</td>
<td>2</td>
<td>110</td>
<td>9.56</td>
<td>.148</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Anger</td>
<td>1.58</td>
<td>88.67</td>
<td>25.06</td>
<td>.309</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Sympathy</td>
<td>2</td>
<td>114</td>
<td>17.79</td>
<td>.238</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Breakdown</td>
<td>1.73</td>
<td>95.05</td>
<td>4.74</td>
<td>.079</td>
<td>0.15</td>
</tr>
<tr>
<td>Confidence</td>
<td>1.68</td>
<td>92.61</td>
<td>10.40</td>
<td>.159</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

a Greenhouse-Geisser correction employed because sphericity violated.
The ANOVA and subsequent post hoc analyses demonstrate that scenario 3 (lying and stealing) was responded to more strongly by participants than the scenarios for destruction and shouting and swearing. Previous studies of this type have often chosen to collapse data across the different scenarios, on the basis that the data obtained are a general representation of attributional style. However, such an approach has been criticised for hiding variation in how the model (Weiner, 1985) might work across different behaviours (Jones and Hastings, 2003). In this study the scenario generating the strongest emotional and attributional responses was analysed to test the model. Zero-order correlations between all the variables are presented. Subsequently, two Sobel tests are reported and two ‘bootstrap approaches’ are reported.

**Correlations**

Zero-order correlations between all the variables were calculated.

```
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Loss</td>
<td>Social Loss</td>
</tr>
<tr>
<td>Financial Loss</td>
<td>Social Loss</td>
</tr>
<tr>
<td>Social Loss</td>
<td>Financial Loss</td>
</tr>
<tr>
<td>Social Loss</td>
<td>Financial Loss</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------</td>
</tr>
</tbody>
</table>
```

insert Table 3 here

-----------------------------
Table 3 presents the zero order correlation coefficients for scenario 3 (with 95% confidence intervals where correlations are significant). n=56 or 57

<table>
<thead>
<tr>
<th></th>
<th>Controllability</th>
<th>Responsibility</th>
<th>Anger</th>
<th>Sympathy</th>
<th>Confidence</th>
<th>Breakdown of Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controllability</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>.56** (0.36, .72)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>.20 (0.31, .70)</td>
<td>.53** (0.36, .72)</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sympathy</td>
<td>-.18 (-0.66, -0.27)</td>
<td>-.49** (-0.66, -0.27)</td>
<td>-.39** (-0.60, -0.15)</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confidence</td>
<td>-.07 (-0.58, -0.11)</td>
<td>-.09 (-0.58, -0.11)</td>
<td>-.36** (-0.58, -0.11)</td>
<td>.36** (.11, .57)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Breakdown of Placement</td>
<td>-.19 (.19, .63)</td>
<td>.08 (-.53, -.04)</td>
<td>.43** (-.53, -.04)</td>
<td>-.30*(-.68, -.28)</td>
<td>-.50** (-.68, -.28)</td>
<td>-</td>
</tr>
<tr>
<td>Foster Carer Age</td>
<td>-.09 (-.59, -.13)</td>
<td>-.17 (-.59, -.13)</td>
<td>-.18 (-.59, -.13)</td>
<td>.17 (-.59, -.13)</td>
<td>.23 (-.59, -.13)</td>
<td>-.38** (-.59, -.13)</td>
</tr>
</tbody>
</table>

* p<.05  ** p<.01
Table 3 shows zero-order correlation coefficients for the relationship between carers’ ratings of controllability (attribution) and responsibility, anger and sympathy (emotions) and confidence to manage behaviour and likelihood of placement breakdown as a function of scenario 3 only (stealing and lying). The main variables of interest with respect to Weiner’s model are responsibility, control, anger, likelihood of placement breakdown and confidence in managing behaviour. Significant positive correlations exist between judgements of responsibility and anger, anger and breakdown of placement, sympathy and confidence. Significant negative correlations exist between judgements of responsibility and sympathy, anger and sympathy, anger and confidence, sympathy and breakdown of placement, confidence and breakdown of placement and between foster carer’s age and breakdown of placement. Note that controllability is not significantly correlated with any of the emotional or outcome variables. It is significantly correlated with judgements of responsibility, albeit moderately.
**Indirect Effect Analysis**

Where a variable X (the initial variable) is assumed to affect another variable Y (the outcome), the path, c, is referred to as the *total effect* (see figure 3).

**Figure 3. Effect of variable X on variable Y**

![Figure 3](image)

However, the effect of variable X on variable Y may be mediated by a mediating variable, M. Thus, variable X may still affect Y, but through variable M (paths a and b). Path c’ is referred to as the *direct effect* (see figure 4) and represents the effect of X on Y, after controlling for the effect of M on Y. The paths (c, a, b and c’) can be estimated by multiple regression.

**Figure 4. A mediation effect: X affects Y indirectly through variable M.**

![Figure 4](image)
Tests of mediation in psychology have usually been guided by the procedures outlined by Baron and Kenny (1986). Baron and Kenny (1986) identified three conditions or steps necessary for mediation to be shown, and subsequently, Kenny et al. (1998) describe a further step:

1) X significantly predicts Y (Path c)
2) X significantly predicts M (Path a)
3) M significantly predicts Y, when controlling for X (Path b), and
4) X does not predict Y, while controlling for M.

However, the Baron & Kenny (1986) method of testing for mediation effects has been criticised on a number of grounds. For example, the need for the first condition to be satisfied has been questioned (Collins et al., 1998; MacKinnon et al., 2000) and the method has also been criticised as prone to both Type I error (Holmbeck, 2002), Type II error (Preacher & Hayes, 2004) and low power (MacKinnon et al., 2002).

Preacher & Hayes (2004, p.719) suggest that “testing the hypothesis of no difference between the total effect (c) and the direct effect (c’) more directly addresses the mediation hypothesis than does the series of regression analyses recommended by Baron and Kenny (1986)”. Preacher and Hayes (2004, p.718) suggest the Sobel test (Sobel, 1982) as “a more direct test of indirect effects”, (p.718).
The Sobel test determines the significance of the indirect effect of the mediator by testing the null hypothesis of no difference between the total effect (Path c) and the direct effect (Path c’), that is, \( c - c' = 0 \). The indirect effect of X on Y is defined as the product of X \( \rightarrow M \) (Path a) and the M \( \rightarrow Y \) (Path b), i.e. product ab, (where a and b are the unstandardised regression coefficients).

MacKinnon et al. (1995) have shown algebraically that \( ab = c - c' \). The product, ab, is divided by the standard error of the indirect effect to produce “a critical ratio that is traditionally compared with the critical value from the normal distribution” (Preacher & Hayes, 2004, p.718).

The standard error of the indirect effect \( (s_{ab}) \) is given by

\[
s_{ab} = \sqrt{ \frac{b^2s_a^2 + a^2s_b^2 + s_a^2s_b^2}{s_{ab}}} \]

The ratio is treated as a Z test (i.e. a computed value greater than 1.96 would be significant at p<.05).

Preacher and Hayes (2004) provide macros that provide a test of indirect effects using a Sobel Test and a non-parametric bootstrapping procedure. Electronic copies of the macros are obtainable at http://www.comm.ohio-state.edu/ahayes/sobel.htm.

In the first Sobel analysis the indirect effect of responsibility on breakdown mediated by anger is presented.
Table 4  Unstandardised regression coefficients and standard errors (to 3 decimal placements).

<table>
<thead>
<tr>
<th>Path</th>
<th>Unstandardised Coefficient</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.594</td>
<td>.132</td>
</tr>
<tr>
<td>b</td>
<td>.432</td>
<td>.130</td>
</tr>
<tr>
<td>c’</td>
<td>.161</td>
<td>.147</td>
</tr>
</tbody>
</table>

Figure 5. Path model of regression coefficients

Indirect effect (product of ab) = 0.256

Standard error = 0.098

95% confidence intervals

lower limit = 0.066
upper limit = 0.448

Z = 2.631
p < .01 (.009)
The 95% confidence limits do not include zero and the z test score is significant at p< .01. Thus, there is a significant mediating effect for the emotion of anger between responsibility and breakdown.

In the second Sobel analysis, the indirect effect of judgement of responsibility on confidence mediated by anger is presented.

Table 5  Unstandardised regression coefficients and standard errors (to 3 decimal places).

<table>
<thead>
<tr>
<th>Path</th>
<th>Unstandardised Regression Coefficient</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>.594</td>
<td>.132</td>
</tr>
<tr>
<td>b</td>
<td>.320</td>
<td>.122</td>
</tr>
<tr>
<td>c’</td>
<td>.100</td>
<td>.139</td>
</tr>
</tbody>
</table>
The 95% confidence limits do not include zero and the Z test score is significant at $p < .05$.

Thus, there is a significant mediating effect for the emotion of anger between responsibility and confidence.
The Sobel Test assumes a normal sampling distribution. However, it is possible that such an assumption is not warranted and that normality is violated. Preacher and Hayes (2004) also provide a ‘bootstrapping’ approach to the analysis which makes no assumptions about the shape of the sampling distribution. Bootstrapping involves repeatedly sampling observations from the data set and computing the statistic in each re-sample. Over many bootstrap re-samples (5000 in this case) an empirical approximation of the sampling distributions of the statistic is generated and the 95% confidence intervals for the mean are calculated.

Bootstrap results for indirect effect of judgement of responsibility on breakdown of placement mediated by anger:-

Mean indirect effect = 0.255
Standard error = 0.108

95% confidence intervals
lower limit = 0.074
upper limit = 0.501

Zero is not in 95% confidence limits; therefore the indirect effect is significantly different from zero at p<.05 (two-tailed). Thus, a mediating effect of the variable anger, between responsibility and breakdown of placement, is identified.
Bootstrap results for indirect effect of judgement of responsibility on confidence mediated by anger:

Mean indirect effect = -0.201
Standard error = 0.110

95% confidence intervals
   lower limit = -0.452
   upper limit = -0.027

Zero is not in the 95% confidence limits, therefore the indirect effect is significantly different from zero at p<.05 (two-tailed). Thus, a mediating effect of the variable anger, between responsibility and confidence, is identified.

There were no other significant effects.

The analyses, using both the Sobel test (Preacher & Hayes, 2004; Sobel, 1982) and a bootstrap approach (Shrout & Bolger, 2002), suggest a mediating role for the emotion of anger between judgement of responsibility made by carers and outcomes, at least for challenging behaviours such as stealing and lying. Consequently, carers believe a placement is more likely to break down, and they report less confidence in their ability to manage such behaviours.
DISCUSSION

The challenging behaviours presented in each scenario in this study were those commonly presented by children who are looked after (Minnis et al., 2001; Melzer et al., 2002). They were similar to those challenging behaviours most commonly identified by carers in learning disability (Emmerson & Bromley, 1995), in that they included aggression and destructiveness. However, the scenarios in this study differed from studies in learning difficulties in that the vignettes did not include self injury but did include lying and stealing. The latter has not typically been included in studies of carer’s attributions, although an exception to this is a study by McGuinness and Dagnan (2001), which included lying as one of four challenging behaviours. The analysis in the latter study summed scored responses across all behaviours and did not investigate the effect of specific behaviours on the attributions of carers. Stanley and Standen (2000) argue that there is a need to be explicit about the type of challenging behaviour being studied, rather than collapsing data across scenarios, which has a tendency to mask the potential differences between cares’ attributions for different behaviours.

The present study compared differences between three scenarios depicting challenging behaviours and found a difference in the attributional and emotional responses to the behaviours described in one of the scenarios, namely lying and stealing. However, the wording of the vignettes presented to participants is not comparable across all three vignettes. In vignette two the behaviour is described as a response to an emotional state (the child is “angry and upset”). However, in vignettes one and three the behaviour is contingent on an adult response. Thus, in the first vignette the behaviour is contingent on the carer saying “no”, and in the third vignette the
behaviour is described as occurring when the child is “confronted”. Such inconsistency in the wording may have confounded the main finding. Ensuring the syntax and any contingency described in each vignette was the same, whilst varying only the wording describing the challenging behaviour, would have overcome this difficulty. For example, “The 12 year old child you are looking after… (behavioural description) … if you have said no to a request”, would have helped to overcome this problem. Indeed, the purpose of the study may have been better served by the use of a sentence stem followed by the behavioural description without any indication of contingency.

The reasons underlying the differences in responses by carers to the different behaviours, (i.e. their stronger response to lying and stealing compared to shouting and swearing, or damaging property), may in part be explained by considering the effect of the behaviour on the perceiver (the carer). Jones and Davis (1965) suggest that the more hedonically relevant an action is, (i.e. the more positive or negative the effect of an action on a perceiver), the more likely the perceiver is to make an extreme judgement about the actor. Arguably, the scenarios involving destruction of property, and shouting and swearing, hold less hedonic relevance for perceivers, whilst lying and stealing generate more extreme judgements about the actor.

A second pertinent attributional bias, which may give more valence to the lying and stealing scenario, is that of “personalism”, whereby the evaluations of another person are more extreme if we feel that the behaviour of the actor was aimed personally at the observer. Stealing and lying may be seen by carers as more intensely personalised behaviour, compared to shouting and swearing or the destruction of property. It could be argued that trust in the relationship between
child and carer is undermined or broken since stealing and lying are perceived to be inherently dishonest. In the field of learning disability, Stanley and Standen (2000) found positive results to suggest that more “outward-directed” challenging behaviour, (i.e. behaviour directed at carers rather than the self), were associated with greater attributions of control and negative affect and less likelihood of helping behaviour being elicited.

The finding of significant correlations between judgement of responsibility and the emotions of anger and sympathy, provides some partial support for hypothesis one, in the case of the scenario involving lying and stealing. This result offers some tentative support for the hypothesis that judgement of responsibility made by carers about the challenging behaviour of children may be associated with greater anger and less sympathy. However, the correlational nature of the relationship does not permit conclusions to be drawn about the direction of the association. There are also statistically significant relationships between the anger felt and likelihood of placement breakdown, and anger and the confidence felt in managing the behaviour.

There are no significant correlational relationships between the attributions of controllability and judgements of responsibility and confidence felt by carers regarding their ability to manage challenging behaviours (hypothesis two), nor with the likelihood of placement breakdown (hypothesis three). These hypotheses are not supported by the results of this study.

The mediation analysis in this study focussed on the relationship between judgements of responsibility and outcomes, mediated by the emotion of anger, for only one of the scenarios, namely lying and stealing. However, the analysis is compromised by the wording of the scenarios.
presented to the participants as discussed above, and by the low response rate. Therefore, interpretation of the results must be regarded with caution.

Mediation analyses involved the use of the Sobel test (Sobel, 1982), in line with the views of Preacher and Hayes (2004). They suggest that the requirements for the Sobel test of mediation (Sobel, 1982) are firstly, that there exists an effect to be mediated, and secondly that the indirect effect must be statistically significant in the direction predicted by the mediation hypothesis. Whilst the second condition is satisfied, the low zero-order correlation between responsibility and confidence, and between responsibility and likelihood of breakdown of placement, suggest that the first condition has not been satisfied. Therefore, the interpretation of the mediation analyses using the Sobel test (Sobel, 1982) should be treated with caution. It is uncertain whether the results lend support to Weiner’s mediational model of helping behaviour for scenario three, which is, a judgement of responsibility by a carer increases the amount of anger experienced, resulting in more likelihood of placement breakdown.

A second analysis of the same data using a “bootstrap approach”, making no assumption about the normality of the distribution of the data, produced a significant result regarding the mediational role of anger between judgement of responsibility and outcomes of likelihood of placement breakdown and confidence in managing behaviour.

Bearing in mind the caution already advised regarding interpretation of these results, some very limited support for the proposed existence of an indirect pathway between attributions and outcomes, mediated by the emotion of anger is indicated. Generally, it is the case that support for
Weiner’s model is variable (Jones & Hastings, 2003; Wanless & Jahoda, 2002), and similarly, this study appears to provide only limited evidence to support the associations described by the model.

Subsidiary analysis was undertaken to explore any possible gender differences between the variables. The only significant difference was found between the emotional reaction of female and male carers. Results indicate female carers experience more anger when faced with stealing and lying, but caution must be exercised in any interpretation since the number of male respondents was either seven or eight, whilst there were 49 or 50 female respondents (n varies by one because of missing data points in the data set). Such a gender difference may reflect a tendency for women to be the primary care giver. Thus, they spend more time with the children in their care, and therefore, they are more personally affected when trust is threatened or broken.

**Clinical and Service Implications**

Research findings suggest that the training of foster carers in behavioural principles is not very effective in bringing about change (Turner et al., 2005). If evidence was forthcoming to support the role of emotional reactions in determining or influencing the behaviour of carers in their management of children, then there may be a role for a more cognitive-attributional orientated approach to training. Such training could result in foster carers having more insight and awareness of the negative emotions they experience, particularly anger, which are elicited by their attributional responses to the challenging behaviours of children looked after. However, the results of this study suggest further evidence is required to confirm the efficacy of such an
approach. It may be more beneficial, in terms of outcomes for children looked after, to investigate the content and process involved in the training currently provided, and examine other avenues of support which could be provided for carers. Macdonald and Turner (2005) have suggested practical changes to training for foster carers that may enhance outcomes. Perhaps, developing that part of training which addresses attributions and judgements could also contribute to improved outcomes. It may help foster carers to reflect on their causal thinking and consequently their emotional responses.

Re-attributional training (Forsterling, 1988) might include helping carers to analyse carefully their responses to children who exhibit high frequency of challenging behaviour and to help carers to reattribute the causes of problematic behaviour by increasing the number of other explanations for challenging behaviours. Thus, a cognitive intervention would focus on mitigating factors which need to be understood and considered when generating explanations for unwanted behaviour. In this way, carers would be encouraged to carefully examine different aspects of a child’s life experiences, both past and present (e.g. traumatic life events), and to consider the sophistication of, or lack of, communication and social skills.

Cognitive approaches to training could also focus on helping carers to manage emotions such as anger, which might provide two positive benefits. Firstly, in line with the model tentatively supported in this study, more positive outcomes for children would be predicted; and secondly, the carer’s psychological and possibly physical health might be positively influenced, by encouraging lower levels of psychological and physiological arousal. Certainly, the effectiveness of stress reduction techniques has been demonstrated with both natural and formal
carers of children with disabilities (Singer et al., 1988; Rose, 1997), and so might be implemented effectively with foster carers.

Cognitively based psychoeducational interventions, would necessarily include in their content much more about the psychological effects of early neglect and abuse, the trauma which occurs as a direct result of neglect and abuse and the effects these experiences have on the children’s internal working model, their self esteem and their own attributional and motivational style. Integrating education and information with a cognitive-reattributional process may provide a more effective form of intervention and support for carers, thus promoting outcomes and life chances for looked after children.

Whilst recognising the limited evidence for the efficacy of cognitive-behavioural training for foster carers (Turner et al., 2005), it would be mistaken to abandon training programmes which are based in social learning theory and cognitive-behavioural theory (e.g. Pallett et al., 2005). Training programmes for carers, family placement support workers and other social workers focusing on behaviour management and social learning theory would help to meet the identified need for these professionals to increase their knowledge and skills in management so that they can provide support directly to carers through regular and routine social work. Such training would contribute to the knowledge base of professionals about the importance of recognising the multiple determinants of behaviour (Scott-Little et al., 1994), and would serve to increase the skills and ability of carers to manage behaviours. Increased support, successful reattributional training and an increase in the knowledge and skills of carers and social workers to think about the management of behaviour in terms of social learning theory, might go some way towards
reducing the large numbers of foster carers who leave fostering each year (Tapsfield & Collier, 2005). Such training may help to attenuate or dispel feelings of being unsupported, and may enable both the carer’s understanding about the reasons underlying a child’s challenging behaviour, and the rational judgements they make about the behaviour.

Critical Review

This investigation is subject to a number of methodological and theoretical limitations. The associations identified between variables and the subsequent proposed interpretations are based on the responses of participants in a paper and pencil exercise. The scenarios presented were brief in their descriptions and held no contextual information, which, if presented, may have altered the attributions, judgements, affects and identified outcomes. Information about the child’s birth family or early experience may also have influenced responses. There are methodological problems with the wording of the scenarios, addressed earlier in the Discussion. Further research involving the observation and recording of actual situations involving challenging behaviours is required (Wanless & Jahoda, 2002).

Secondly, it is possible that the responses of participants may have been influenced by a desire on their behalf to provide socially desirable responses (Crowne & Marlowe, 1960) to minimise perceived negative responses and outcomes. Stronger judgements of responsibility and controllability might have been made, with greater anger experienced and therefore an increased likelihood of negative outcomes reported.
It also needs to be noted that the scenarios were presented to each participant in the same order. There is a risk that the responses to each scenario influenced subsequent responses to scenarios. Therefore, responses to the final scenario (scenario three) resulted from a cumulative effect of the presentation of the previous scenarios. Scenario three may have been perceived as more serious because, in a sense, respondents had been sensitised by their responses to scenarios one and two. The order of presentation should have been randomised.

There are further issues surrounding how well the respondents represented foster carers. The participants were invited to take part in the study and therefore it was a self selecting sample of just under 60 carers out of a possible carer-population of around 300. It is difficult, if not impossible, to identify or consider how the results would differ if a higher percentage of carers had completed and returned the questionnaires. It is also reasonable to note that carers were not differentiated according to the types of care for which they were approved i.e. short term foster care, long term foster care or specialist remand placements. Thirdly, carers were not differentiated by their level or experience of training. Whilst a question investigating this variable was included in the questionnaire pack, a great deal of variation in response and a high level of missing data made analysis impossible. Finally, whilst only one carer per household was asked to complete the questionnaire pack, carers were not asked whether they were single carers or shared their caring role with a partner. These qualifying remarks regarding the heterogeneity of the sample are a reminder that the interpretation and conclusions in this investigation should be treated with caution.
The design of this study is a correlational cross-sectional design and as such does not allow conclusions to be drawn about the direction of causality (Kazdin, 1998).

**Implications for Further Research**

A number of further areas of research are indicated. It would be interesting to administer similar measures to those used in this study, whilst exposing groups of carers to re-attributional and other training groups. An independent repeated measures design could then be used to compare an experimental group with a control group to see if significant changes were brought about by the training.

Secondly, as mentioned above further research needs to be conducted in naturalistic situations to access more immediate attributional processes of carers (e.g. Dagnan & Weston, 2006). This would shed further light on the attributions, judgements and emotional responses of carers. Dagnan and Weston (2006) found correlations between attributions of controllability and the emotion of anger. However, the study did not find links between carer cognitive – emotional factors and carer behaviour, as reported by the carer. It would also be interesting to support and complement quantitative research design with more qualitative and process-driven investigations, using methodologies such as interpretive phenomenological analysis (Smith *et al.*, 1999).

It continues to be the case that research needs to investigate how the provision of training in social learning theory, and behavioural management for professionals involved in the child’s
placement might help to raise the quality of support for foster carers and, therefore, potentially contribute to better outcomes for children who are looked after.

### CONCLUSION

The aim of this study was to investigate whether foster carers’ responses to written scenarios depicting challenging behaviours would support an attributional model of motivation and helping behaviour (Weiner 1985). Tentative support was found for a significant relationship between one of the scenarios presented and the outcomes of confidence of management of behaviour and likelihood of breakdown of placement. The results suggest that, for this scenario, carers may believe the child in their care is responsible for their behaviour, resulting in the carer experiencing anger, less confidence about managing the behaviour, and perceiving a greater likelihood of placement breakdown.

Accepting the wide-ranging limitations inherent in this investigation; and that a cautious approach to interpretation must be applied, the findings perhaps suggest that further investigation into the attributional processes of carers may well be worthwhile. It remains possible that re-attributional training, and training in the management of emotions, may be pertinent in helping carers to change the causal ascriptions they make regarding challenging behaviour, which may in turn, influence the style of their helping behaviour.
REFERENCES


Office for National Statistics: HMSO.


Appendix 1.

Measures
Appendix 2.

Ethics approval

Information sheets

Letter of invitation to participants

Example of consent form