Doctorate in Clinical Psychology

University of East Anglia

An analysis of the expressed emotion and attributions of foster carers towards their

looked after children.

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#### **ABSTRACT**

Objective: The current study examined the attributions and Expressed Emotion (EE) of foster carers, towards their looked after children. These constructs were considered in relation to levels of externalising behaviour difficulties. Additionally, two methods used to measure EE were compared; the traditional Five Minute Speech Sample (FMSS) and the Preschool Five Minute Speech Sample (PFMSS).

Design: A cross sectional correlational and between subjects design was used to explore the relationship between foster carer attributions, EE, and levels of externalising behaviour difficulties.

Method: 64 foster carers completed the Five Minute Speech Sample, which was coded using the traditional FMSS and the augmented PFMSS for children and adolescents. The speech sample was also coded using a modified version of the Leeds Attributional Coding System, to generate measures for attributions along six dimensions. Participants completed the Eyberg Child Behaviour Inventory in order to measure child behaviour difficulties.

Results: The two different methods used to measure EE significantly differed in terms of classification of overall EE, emotional over involvement and relationship. Foster carers high in EE (PFMSS) rated the intensity of their child's behaviour difficulties as higher than those low in EE. Foster carers with children with higher ratings of behaviour difficulties made more attributions that were controllable, personal and stable to the child and external and uncontrollable by themselves. Additionally, foster carers high in EE (FMSS) had attributions that were more internal, personal and stable to the child, and external and uncontrollable by themselves.

Conclusions: The relationship between attributions and EE of foster carers supported findings from other studies of parents with children with behaviour difficulties. The attributions of foster carers were generally consistent with attribution theory. The difficulties with using the FMSS and the PFMSS with children and adolescents were discussed and theoretical and clinical implications of the research were explored.

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#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Aims of the Investigation

This research aims to investigate whether there is a link between the Expressed Emotion (EE) and the attributions that foster carers make, concerning their 'looked after' children with externalising behaviour difficulties. These constructs have not previously been investigated in foster families.

There is a plethora of research investigating patient recovery in relation to the EE of a family member. This has been replicated with professional care staff and in families with children who display behaviour problems. The attributions that people make about a relative or patient have been used to understand their emotional and behavioural responses towards that person. Attribution research has also been used to understand the differences in the EE of a family or staff member, caring for a patient or child with mental health and behavioural difficulties.

This chapter will discuss the theoretical background behind EE and attributions and will explore the existing research surrounding these constructs. The chapter will initially discuss looked after children, highlighting some of the difficulties that looked after children and foster carers face today. The EE research will then be examined, with a specific focus on research relating to parents of younger children and adolescents. Attribution theories will be considered, in relation to staff and parental attributions regarding the behaviour of others. The research examining how EE and attributions relate to each other will be outlined and the chapter will end with the specific hypotheses that this research is investigating.

## 1.2 Looked After Children

The term 'looked after children' was introduced in the Children Act (1989); it described children and young people placed in the care of local authorities by court order and children voluntarily accommodated in agreement with their parents.

Children may be placed in a range of settings if they are unable to remain with their birth family, but the most common type of placement is foster care (Department for Children, Schools and Families; DCSF, 2009). Each year, the DCSF releases statistics relating to looked after children in England. In 2009, there were 60,900 looked after children. Foster care accounted for 73 percent of the care given; the remaining 27 percent of looked after children were placed either for adoption, returned to their parents, lived independently, or in residential settings.

#### 1.2.1 Historical Context

Nissim (2006) noted that accounts of children being placed away from their homes with other families date back to before Christian times. Records detailing nurses caring for orphan children date back as far back as the 16<sup>th</sup> Century (Guishard-Pine, McCall & Hamilton, 2007). In England, unwanted or orphaned children were more likely to be raised in institutions and before the Poor Law of 1536, the Church played the key role in providing this service (Nissim). By the 19<sup>th</sup> Century, workhouses or institutions such as Barnardo's were established that aimed to meet the physical needs of orphaned children. Some children were occasionally removed from such institutions and cared for by private families (Nutt, 2006).

Until the mass evacuation of children from London during the Second World War, fostering was seen as a charitable service that was provided by churches and voluntary organisations (Guishard-Pine et al., 2007). The 1948 Children Act gave local authorities increased responsibility for providing such services for children and

led to the establishment of a children's committee and a children's officer in each local authority. The Act also highlighted the importance that foster and residential care met both the children's physical and emotional needs (Hunt, 2008).

Recent decades have seen scandals surround British children's homes (Nissim, 2006). This may have contributed to the reduction in the use of this type of placement and an increase in demand for family based foster care (Hunt, 2008). Guishard-Pine et al. (2007) noted that the 1989 Children Act led to a modernisation of the foster care service, with new legislation and codes of practice being developed.

## 1.2.2 Legislation and Training

The UK National Standards for Foster Care (1999) and the National Minimum Standards for Fostering Services Regulations (2002) led to a new framework for foster care (Mehmet, 2005). This framework applied to both local authority and independent fostering agencies, outlining the support and training that foster carers should all be receiving. These included the recommendations that all foster carers should have a designated supervising social worker, agencies should run at least a monthly support group and foster carers should have access to training.

Sinclair, Wilson and Gibbs (2004) highlighted that the provision of training and support for foster carers increases the chances of successful outcomes for children. Richardson and Lelliott (2003) discussed the difficulties with recruiting, training and retaining foster carers. They stated that children in foster placements can exhibit extremely challenging behaviour, due to their earlier experiences, which often leads to conflict. The authors suggested that this can result in consequences such as false allegations of abuse and breakdowns in foster carers' own marriages.

They highlighted that training in mental health issues for foster carers is paramount, although this is not explicitly stated in the National Minimum Standards (2002). Hill-Tout, Pithouse and Lowe (2003) described how looked after children require foster carers who have the right skills to look after them. This includes stability, good parenting and the ability to operate within a "whole system approach" (p. 47). Hill-Tout et al. emphasised that foster carers are an incredibly important facet to service delivery for looked after children, but their ability to parent is affected by challenging behaviour exhibited by looked after children. They also highlighted common concerns of foster carers, including guidelines regarding confidentiality relating to their looked after child. They stated that foster carers are often denied access to information that could potentially be useful for them to know, in order to better support their looked after child.

Hill-Tout et al. (2003) evaluated the impact of a three day group training programme, designed with the aim to support foster carers with management techniques for challenging behaviour. The training focused on three main areas: developing positive alternative behaviours, developing a preventative approach to challenging behaviour, and dealing with emergencies. It was found that the training did not have an impact on measures of behavioural difficulties before and after training when intervention and comparison groups were compared. No differences were found in carer stress between the groups, nor were there any changes on ratings of carers' ability to show insight into their own reactions to their looked after child's challenging behaviour. The authors concluded, however, that despite the lack of change on the measures used to analyse the outcome of the group, carer satisfaction ratings showed there was strong approval for the training, with 93 percent of the carers finding it useful. Additionally, no foster carers dropped out of the training.

This suggested that foster carers may have gained something from the training that was not measured, including peer support.

## 1.2.3 The Professional Role of Foster Carers

The Government Green Paper 'Care Matters' (DFES, 2006) highlighted the poor long term outcomes for looked after children and proposed a reform of the system. Guishard-Pine et al. (2007) posited that this led to a higher expectation of foster carers to deliver better care, in an increasingly professional role. Guishard Pine et al. argued that foster carers are expected to be able to meet the needs of challenging children, offering individual care and concern in the same way that a parent does, whilst retaining a sense of distance and objectivity. This, in conjunction with enhanced fees, attendance at regular training, and a requirement to contribute to regular professional meetings has made the role of the foster carer more of a professional one.

Schofield (2003) described the difficult role of the foster carer as adults who act as parents, but do not have any legal rights or parental responsibility for the child in their care. This right is held by either the birth parents, or shared between the local authority and the birth parents. This means that the ordinary parenting roles such as parents' evenings and practical decisions, for example haircuts, become a matter of negotiation for the foster carers.

## 1.2.4 Wellbeing of Foster Carers

Farmer, Lipscombe and Moyers (2005) performed a one year prospective study, involving a sample of 68 newly placed adolescents between the ages of 11 and 17. Farmer et al. used three measures to investigate strain; the General Health Questionnaire (GHQ; Goldberg & Hillier, 1979); subjective reports of life events and

strain was elevated when there were difficulties with their children's biological families and problems contacting social workers. Protective factors included; help from professionals or from friends. Foster carer strain had a major impact on the carer's ability to parent their young person and it was found that strained foster carers responded less sensitively to the young person, disliked them more and demonstrated less warmth. Those with higher levels of strain were also less active than others in ensuring their child's education and mental health needs were being met. Farmer et al. also found a positive relationship between foster carer strain and placement breakdown; the more strain the carer felt they were under, the more often the placements disrupted. However the scores on the three different measures of strain varied considerably, with 40 percent of those scoring in the clinical range on the GHQ subjectively reporting that they were not under any strain. This could either indicate potential problems with construct validity, or a lack of insight into their own difficulties.

Whenan, Oxlad and Lushington (2009) stated that foster carers play a pivotal role in providing children with a safe environment, but highlighted the lack of research investigating foster carers own well being. They used a postal survey to investigate the relationships between child behavioural and emotional problems (using the Strengths and Difficulties Questionnaire; SDQ; Goodman, 1997), parenting self efficacy, foster carer-child relationship and foster carer well being. It was found that the levels of foster carer well being were predicted by levels of training, parenting self efficacy and their relationship with their looked after child. Out of 582 potential participants, only 101 questionnaires were returned, which produced a response rate of less than 18 percent. Furthermore, 43 were then

excluded from the research, due to either incomplete data or not meeting the study's inclusion criteria. Response bias could have affected the results, because their final sample consisted of only 58 participants, which is less than 10 percent of the foster carers originally approached.

## 1.2.5 Current Prevalence of Looked After Children

The DCSF (2009) highlighted that for the year of 2009 there were 60,900 looked after children in England. This was a 2 percent increase from 2008 (59,500). Boys made up the majority of children taken into care in 2009 at 57 percent. The largest age group of children taken into care was aged 10 to 15 years, representing 41 percent of the total population of children.

The DCSF (2009) report provided additional information regarding the categories of need for why the children were initially taken into care. Reasons of abuse or neglect received the largest percentage (61%). Other reasons included the child's disability (4%), the parents' illness or disability (4%), the family being in acute distress (9%), family dysfunction (11%), socially unacceptable behaviour (2%) and absent parenting (9%). Of all of the children, nearly two thirds were accommodated under either an interim or full care order and 32 percent were voluntarily accommodated.

#### 1.2.6 Attachment Theory

Attachment theory describes the relationship between infants and their care givers. Attachment has been described as a long lasting connection between human beings (Bowlby, 1969). Bowlby asserted that the early bonds infants form with their care givers are vitally important and have a tremendous impact on not only early child development, but continue throughout the child's life. The theory posits that

young children need to be able to develop a relationship with their primary care giver, so that their needs can be met and they can attain successful emotional and social development. Children have a strong disposition to seek contact and proximity to their attachment figure and when children are unwell, frightened or tired this drive becomes stronger (Bowlby, 1982). The propensity to form attachments is universal, but the quality of the attachment between a child and their care giver varies considerably (van den Dries, Juffer, van Ijzendoorn & Bakermans-Kranenburg, 2008).

Ainsworth, Blehar, Waters and Wall (1978) examined the attachment strategies that children use when encountering a stress inducing situation, using the research tool, the 'Strange Situation.' The infant and care giver are observed interacting together through a series of events. Ainsworth et al. (1978) identified that the quality of the attachment between an infant and their primary care giver could initially be classified into three main groups. Infants who were securely attached used their caregiver as a secure base for exploration and exhibited clear preference for their caregiver over a stranger. Secure attachment style can be seen as the most adaptive attachment style. Infants who were anxious avoidant showed no distress when their caregiver exited the room or when they returned and showed no preference between the stranger and their caregiver. Anxious resistance attachment style is characterised by a wariness of strangers and high distress when the caregiver departs. When they return, there may be ambivalence. A fourth 'disorganised' category was subsequently added to the classification of attachment styles (Main & Solomon, 1980). Disorganised attachment develops when infants experience their caregiver as frightened or frightening, resulting in a paradox where the caregiver is seen as a source of both comfort and fear.

Poor attachment has been linked with an increased risk of behaviour problems (Erickson, Egeland & Sroufe, 1985; Lewis, Feiring, McGuggog & Jaskir, 1984) and is a significant predictor of mental health problems (Atkinson & Zucker, 1997). It can also lead to difficulties with self-esteem, emotional and intellectual skill development (Teggart & Menary, 2005). Bowlby (1988) described that children who have been abused and neglected have a substantial risk of insecure attachment to their primary care giver. Furthermore, Walker (2008) reasoned that given the strong correlation between trauma and disorganised attachment, many children in foster care will also display elements of disorganised attachment. Lyons-Ruth and Jacobvitz (1999) surmised that research has shown that between 55 percent and 82 percent of infants who have been abused show a disorganised attachment style.

It is clear that attachment difficulties can have an impact on looked after children and their behaviour. Foster carers need to be skilled in providing a secure base for their looked after children, at the same time as coping with potential behaviour and emotional problems and any potential stressors that they may be experiencing themselves. Walker (2008) recognises that this is a difficult task for foster carers, because a lot of the children entering care will have a history of loss and trauma and may not have previous experience of a secure base.

# 1.2.7 Prevalence of Emotional and Behavioural Problems in Looked After Children

In a review of the foster care literature, Sellick (2006) noted that many looked after children endure significant behavioural problems that challenge their foster carers. Behavioural problems in children are often described as either 'internalising' or 'externalising' in nature. Internalising difficulties may be

characterised by an over control of emotions, with the child becoming withdrawn, socially avoidant, too dependent or clingy, with feelings of worthlessness or inferiority (McCulloch, Wiggins, Joshi & Sachdev, 2000). Externalising difficulties are characterised by difficulties with controlling emotions including anger; interacting with other children, and maintaining concentration. (Achenbach, Elderbrock & Howell, 1987). Externalising behaviour problems are the most common cause of referral to Child and Adolescent Mental Health (CAMH) services, accounting for up to 50 percent of the referrals (Kazdin, 1997).

Meltzer, Corbin, Gatward, Goodman and Ford (2003) conducted the first national survey relating to the mental health of looked after children in England, using the International Classification of Diseases (ICD) version 10 Classification of Mental and Behavioural Disorders. It was discovered that among 5 to 10 year olds, overall rates of mental health problems were at least five times higher (42%) compared to children in the general population (8%). There were similarly high discrepancies among 11 to 15 year olds, with 49 percent of looked after children experiencing a disorder, compared to 11 percent of children from the general population. Almost one third of children in foster care and nearly two thirds of children in residential homes showed clinically significant conduct disorders.

Meltzer et al. concluded that looked after children are among the most vulnerable in our society and also experience significantly more behaviour problems than children from the general population. This has a significant impact on their foster carer and has been found to be one of the reasons for placement breakdown (Rushton & Minnis, 2002).

In a study that examined the prevalence of emotional and behavioural problems of children at the point of entry to care for the first time, it was found that

72 percent of looked after children aged 5 to 15 showed emotional or behavioural problems (Sempik, Ward & Darker, 2008). Sempik et al. stated that they employed a more "pragmatic approach" (p. 228) to the classification of the children's emotional and behavioural problems because they used social worker's reports, not the more stringent diagnostic criteria of disorders, that was used in the research of Meltzer et al. (2003). However, they argued that their method may have provided a more realistic account of the prevalence of the problems. They also found that a quarter of children under five years of age displayed emotional and behavioural problems, an age group that has previously received little research. Long term outcomes of childhood behaviour problems can include: criminality, mental and physical health difficulties, problems with educational and occupational attainment and poor social relationships (Carr, 2006).

Roth and Fonagy (2004) have found that the psychological needs of looked after children are significant, in terms of their arrested development. The Government White Paper 'Care Matters, Time for Change,' (DFES, 2007) further highlighted the discrepancies in outcomes between looked after children and children from the general population. Looked after children achieved lower educational qualifications, have higher levels of criminality and poorer mental health.

Furthermore, 45 percent of looked after children have a mental health problem, compared to 10 percent of the general population. Bonfield, Collins, Guishard-Pine and Langdon (2009) reported that 63 percent of a sample of looked after children from the East of England had significant mental health problems, and only 51 percent of those were receiving treatment from CAMH services.

## 1.3 Summary

Looked after children are amongst some of the most vulnerable children in our society (Meltzer et al., 2003). There is a range of reported prevalence ratings of mental health problems within this population and these differences are associated with the differing methods used to measure prevalence. However, all of the studies reported that rates of mental health problems are elevated amongst looked after children. It has also been found that looked after children also exhibit a higher prevalence of behavioural difficulties when compared to children from the general population (Meltzer et al.). Foster carers are expected to be able to meet the complex needs of children, where they provide the love and support needed to parent the child, but also retain a sense of distance and objectivity (Guishard-Pine et al., 2007). Research has shown that foster carers do experience strain in relation to their role and this can have a significant impact on placement outcome (Farmer et al., 2005) and whether or not foster carers continue to foster.

## 1.4 Expressed Emotion

In order to provide a context for this research, this section will initially describe the EE construct and provide a historical overview of the research. The different methods used to measure EE will be explored and evaluated. There has not been any specific research into the EE of foster carers therefore this section will mainly focus on reviewing the literature in relation to research surrounding the EE of parents of children and adolescents with behavioural difficulties.

## 1.4.1 Definition of EE

EE is a construct that encapsulates key aspects of interpersonal relationships. It has been used to examine the emotional climate of a relationship in

regards to one person, usually one family member, towards another, who is usually a relative with a disorder (Barrowclough & Hooley, 2003). The underlying assumption behind EE is that the way in which family members talk about another family member genuinely reflects how they treat that person (Chambless, Bryan, Aiken, Steketee & Hooley, 1999).

Vaughn and Leff (1976a) conceptualised EE in a trait like manner, where relatives were classified into two polar categories: either high or low EE. Relatives were classified as high EE if they scored above a certain threshold on the scales of criticism, hostility and Emotional Over Involvement (EOI). Low EE relatives were described as tolerant, sensitive and non intrusive towards their relative. By contrast their polar counterparts, those high in EE were deemed intolerant, inflexible and used inappropriate strategies when coping with problems.

## 1.4.2 Measurement of EE

The Camberwell Family Interview (CFI; Vaughn and Leff, 1976a) was originally developed to measure the levels of negative emotional expression displayed by one family member towards another (Brown & Rutter, 1966). The EE construct is divided into; critical attitudes, hostile attitudes and extreme EOI. The relative is classified categorically as either high or low EE. Although the CFI as a measurement tool has proved to be valuable, the administration, scoring and training is very time consuming (Magaña et al., 1985). Additionally, different researchers have adopted different cut off points. For example, adapting the cut off for high EE to two critical comments has found significant relationships between high EE relatives and relapse in studies relating to depression (Vaughn & Leff, 1976b; Hooley, Orley & Teasdale, 1986; Okasha et al., 1994) and eating disorders (Le Grange, Eisler, Dare & Hodge, 1992).

Magaña et al. (1985) developed the Five Minute Speech Sample (FMSS) as an alternative and quicker method for assessing EE. The relative is asked to talk about their family member uninterrupted for five minutes, with the assumption being that under time pressure, underlying feelings would be elicited. This speech sample can then be coded to produce a distinction between high or low EE relatives. The classifications adopted for the FMSS were criticism, EOI, quality of the initial statement and quality of the relationship. Magaña et al. found high levels of inter rater reliability for classification of high or low EE recorded by the FMSS (r = .73), when three raters coded practice tapes. They also found a high degree of correspondence between scores on the CFI and the FMSS. If the relative was classified as high EE on the FMSS, they almost always were classified as high EE on the CFI. However, Magaña et al. cautioned that the relationship was not faultless. In one third of the low EE cases from the FMSS, the CFI would classify the relative as high EE.

Daley, Sonuga-Barke and Thompson (2003) postulated that there is a general consensus that the high EE distinction from the FMSS is fairly robust, whereas the "low EE category contains a large proportion of false negatives" (p. 55), but nonetheless is useful as a screening instrument in order to establish levels of EE.

Calam and Peters (2006) interviewed the female care givers of 75 children with Conduct Disorder (CD) or Oppositional Defiant Disorder (ODD). They examined the concordance between ratings from the FMSS and a modified version of the CFI, to make it applicable to younger children. It was found that high EE was over represented when measured by the FMSS. They advised caution when using the two different methodologies, warning that they are not interchangeable. For example, 27 percent of their participants were allocated a different EE rating

depending on what methodology was used. The study does have some limitations that may contribute to the low concordance rate found between the two measures. For example, the pattern of administration may have artificially increased the differences between the two measures. The FMSS was always administered prior to the CFI. The lack of counterbalancing of task administration could have affected the results, introducing order effects. The authors do note that administering the FMSS first may have led to a reduction in critical comments spoken during the CFI. Contrary to most of the previous studies, almost 90 percent of the primary care givers were classified as high EE, from the FMSS. The high classification of high EE when the adult version of the FMSS was used may indicate that there are developmental differences that may be affecting the scoring of the measure.

## 1.4.3 EE and Mental Health Difficulties

In families with adult children with psychosis, EE has long been established as a strong predictor of relapse upon return to the family home from hospital (Vaughn & Leff, 1976b). Brown (1959) followed up 156 patients with psychotic illnesses, discharged from psychiatric institutions. It was found that the outcome of patients varied depending on their living arrangements when they returned home; those who returned to parental or marital homes had a poorer outcome than patients who lived with sibling or in lodgings. Furthermore, there was an increased risk of deterioration if the patient had more contact time with a high EE family member.

In the seminal EE study, Brown, Monck, Carstairs and Wing (1962) further investigated the impact of family on recovery in a study of 128 male patients with psychotic illnesses. The severity of their illness was assessed by a psychiatrist on discharge from hospital. At two weeks post discharge the level of EE was assessed between the patient and their closest relative. Their results showed that more patients

who returned home to a relative who demonstrated high EE deteriorated (76%) than those who returned to a low EE relative (28%).

Since this time, a multitude of studies have confirmed a strong relationship between EE and relapse in psychosis (Vaughn, Snyder, Jones, Freeman & Falloon, 1984; Nuechterlein et al., 1986; MacMillan, Gold, Crow, Johnston & Johnstone, 1986, Karno et al., 1987; Barrelet, Ferrero, Szigethy, Giddey & Pellizzer, 1990). This has led to further exploration of the relationship between EE and relapse in other types of mental health problems, including Post Traumatic Stress Disorder (Tarrier, Sommerfield & Pilgrim, 1999) and alcohol problems (O'Farrell, Hooley, Fals-Stewart & Cutter, 1998). The effect of EE of people close to the patient has been measured in parents, spouses and staff members. Staff working with psychiatric patients have also been found to have specific attitudes that were equivalent to those of family members with high and low EE (Van Humbeeck et al., 2002). Moore, Kuipers and Ball (1992) found that low EE staff members understood the difficulties experienced by patients and were more tolerant and motivational towards them. In contrast, staff members with high EE were more likely to be frustrated by the lack of progress of their patients.

#### 1.5 Parental EE and Children

Due to the developmental differences in the relationship between a parent and a child or adolescent, when compared to adult children, various modifications to the measurement of EE have been suggested and will be described in the following section. The section will then lead on to discuss the relationship between parental EE and child psychiatric problems, in studies employing the three different methods to measure EE, namely: the CFI, the FMSS and the PFMSS. There has been no

previous research exploring the EE of foster carers. Therefore this section will review the research with a particular focus on parental EE and childhood externalising behavioural difficulties, in line with the aims of this research.

#### 1.5.1 Parental EE Measurement with Children and Adolescents

Daley et al. (2003) outlined problems in applying the FMSS to parents of young children. For example, the FMSS may not be sensitive enough to identify EOI in parents of younger children, where a higher level of EOI may be developmentally appropriate and normal. The FMSS also does not code for warmth and is not sensitive to the function of changes in parent child relationships during different stages of development. Due to the limitations of applying the FMSS to parents of young children, Daley et al. revised the scoring for the FMSS and created the Preschool FMSS (PFMSS) to account for the developmental differences evident in parents when talking about younger children, as opposed to adults. The PFMSS is administered identically to the FMSS. The verbal and vocal aspects of the speech sample are coded, scoring the narrative for the quality of the initial statement, critical comments, positive comments, EOI and the quality of the relationship. Daley et al. coded speech samples twice within a three month period and reported good coderecode reliability for the initial statement (.82) and relationship (.80), acceptable reliability for warmth (.66) and poor reliability for EOI (.21). There was also a good association between code-recode for critical comments (.77) and positive comments (.68). Inter rater reliability for warmth (.82) was good, acceptable for initial statement (.73) and relationship (.73) and poor for EOI (.19). Daley et al. concluded that EE can be reliably measured in the preschool population using the PFMSS, with the exception of EOI. Although Daley et al. (2003) concluded that EE can be reliably measured amongst the parents of preschool children using the PFMSS; some

problems remained with test-retest reliability and inter rater reliability in relation to EOI. Possible explanations for this include the subjectivity of the EOI construct, or lack of clarity in the coding rules. Also, Daley et al. note that EOI may be more associated with internalising behaviour problems, perhaps accounting for the low rates detected in their sample (n = 9) of mothers of children with ADHD.

However, the PFMSS has only been used in a handful of studies (Daley et al., 2003; Caspi et al., 2004; Yelland & Daley, 2009; Thompson et al., 2009; Clark & Coker, 2009), while the majority of research involving EE and children have used the more traditional methods of scoring EE, sometimes with modifications. Calam and Peters (2006) compared the CFI and the FMSS for use with parents of young children and their results indicated difficulties using the traditional methods. This demonstrated the need for a revised, developmentally appropriate method. There have not been any studies that have examined the relationship between the CFI, the FMSS and the PFMSS.

## 1.5.2 Parental EE and Psychiatric Problems

Using the CFI, Schwartz, Dorer, Beardslee, Lavori, and Keller, (1990) examined the association between maternal EE and childhood affective disorder, CD and substance misuse. The sample consisted of parents with known psychiatric illnesses, recruited from hospitals as well as the community. For the analysis, their 275 children and adolescents aged between 9 and 19 were split into three age defined categories to account for developmental variances. An association was found between high maternal EE and childhood affective disorder, CD and substance abuse. Higher maternal critical EE predicted triple the increase in risk of having a child with a diagnosis of affective disorder, CD or substance misuse. This result remained significant after having a parent with a mental health problem and the fact

that mothers with affective problems displayed more critical EE was controlled for.

However, in order to retain adequate statistical power, the three age groups were combined into one group.

Hibbs et al. (1991) used the FMSS to examine the differences between children with Obsessive Compulsive Disorder (OCD), Disruptive Behaviour Disorder (DBD) and a control group. It was found that childhood psychiatric illness was related to high parental EE. Furthermore, 88 percent of the DBD group had parents classified as high EE compared to 41 percent of the control group. It was also found that fathers with any psychiatric diagnosis were five times more likely to be classified as high EE. A lack of diagnosis of children in the control group was associated with parental low EE. Data for this research was obtained from multiple informants, interviewing all family members where possible. Measures were gained from teachers, therapists and medical staff, thus reducing the problem of shared method variance. However, males were over represented in the DBD group, with 32 out of 34 male, thus making it difficult to generalise the findings to females.

Employing the FMSS, Stubbe, Zahnerm Goldstein and Leckman (1993), used a community sample of 108 children aged between 6 and 11 in order to investigate parental EE and childhood psychiatric disorders. Similar to Hibbs et al.'s (1991) findings, high levels of parental criticism were associated with DBD in children, whereas EOI was associated with anxiety disorders in children. Stubbe et al. used the mother or the primary care giver as the only informant for both the FMSS and the childhood diagnoses. Fathers were not included if they were not the primary care giver and 25 percent of the sample either had invalid speech samples or refused to participate in this aspect. This could have artificially affected the findings, so conclusions regarding the associations must be tentative.

Using the FMSS to measure family EE, Asarnow, Thompson, Hamilton, Goldstein, and Guthrie (1994) researched children aged between 6 and 13, admitted to hospital with depressive disorders and schizophrenia. It was found that comorbid disruptive behaviour within the depressed group was significantly correlated with high levels of parental criticism. However, Asarnow et al.'s measurement of EE was sought after the child developed their difficulties, leaving the question of causality unaddressed. Asarnow et al. also highlight that the results may have been different if they had used the CFI to measure EE, instead of the FMSS, due to the differences in overall classification of EE produced by the two different measures.

Marshall, Longwell, Goldstein and Swanson (1990) specifically investigated a clinical sample of 28 boys diagnosed with ADHD, recruited to a summer camp. They employed the FMSS as a measure of parental EE and a Three Minute Speech Sample (TMSS) for child EE. The TMSS was introduced following their pilot data that indicated that children could not speak for the full five minutes. Scoring was modified from the FMSS and inter rater reliability was deemed satisfactory, with a kappa rating of .76. Maternal high EE was unrelated to the aggressiveness of the boys, although it was predictive of the quality of the interactional behaviour during a task. Parents classified as high EE showed more negative behaviour towards their child, suggesting that parents behave in concordance with their attitudes, not as a consequence of their child's aggressiveness.

Peris and Hinshaw (2003) examined the relationship between parental EE and girls with ADHD in a summer camp. It was found that High EE status was associated with ADHD in girls, as well as oppositionality and aggression. This maintained significance when CD, ODD, parenting stress and parental depression was controlled. A variety of assessment tools were used, utilising multiple

informants, observation tasks, and staff daily behaviour ratings. The sample was also ethnically and socioecomically diverse. However, in a drive to maximise statistical power, Peris and Hinshaw excluded the hyperactive impulsive group of girls with ADHD, focusing instead on the combined and inattentive groups. This, combined with the sampling bias inherent in only those who attended a summer camp for ADHD, limits the generalisability to others with ADHD. Analogous with Marshall et al.'s (1990) study, fathers were excluded from the analysis, leaving their relationship unexamined.

In a cross sectional community sample, Psychogiou, Daley, Thompson and Sonuga-Barke (2007) found a significant correlation between maternal high EE and child ADHD, emotional and conduct difficulties, using the FMSS. However, in further analysis, they concluded that child psychopathology, rather than adult psychopathology drove the maternal high EE. This is because after controlling for maternal psychopathology, the association between child emotional and conduct difficulties, and the criticism aspect of EE remained significant. The design of the study impedes such firm conclusions as longitudinal data would be needed to examine this relationship further. The study also only relies on maternal reports of child behaviour and their own symptoms, which introduces biases into the research and it also employed the use of the FMSS, not the more developmentally appropriate PFMSS.

#### 1.5.3 Parental EE and Child Behavioural Problems

Hastings, Daley, Burns and Beck (2006) explained that high EE can be classified along two main dimensions; criticism and EOI. Hastings et al. argue that it is the criticism aspect that is associated with childhood externalizing behaviours, because the criticism dimension is a "proxy measure of parenting behaviour" (p.

50.). Hastings et al. cite the findings of McCarty, Lau, Valeri and Weisz (2004), who found that parents who scored highly on the criticism subscale of EE interacted with their child in a more disgusted, antagonistic and negative manner during an observed interaction task. This is in contrast to high parental EOI scores, which were not related to any observed parenting behaviour.

Using the CFI, Vostanis, Nicholls and Harrington (1994) found that parental criticism and lack of warmth could distinguish their CD group from their control group and their group of children with emotional disorders. Vostanis et al. interviewed both parents where possible, but unfortunately excluded the fathers' ratings from the analysis due to the small numbers that participated. In their effort to study a homogeneous population, non Caucasian participants were also excluded from the analysis, making it difficult to generalise the results.

Paternal EE was examined in a large Australian study of 522 families (Brennan, Hammen, Katz & Le Brocque, 2002). The FMSS was used and parents and children were each interviewed to establish the presence of depression, substance misuse, other psychiatric diagnoses, family functioning, externalising behaviour difficulties and marital conflict. No relationship was found between ratings of paternal EE and their adolescents externalising behaviour difficulties. The authors excluded data from families where paternal data was missing. Excluded families had lower family incomes and higher rates of maternal depression than those in the final sample. The sample also consisted primarily of intact families, limiting the generalisability of the findings to the rest of the Australian population.

In a very large sample of 800 fifteen year olds with mothers who have depression, Nelson, Hammen, Brennan & Ullman, (2003) reported that both the

maternal EE criticism and maternal depression separately predicted child externalising difficulties. EE criticism was not a proxy for depression; it was independently associated with externalising problems. Nelson et al. used a comprehensive cross validation analysis to reduce the effects of measurement error. They used multiple informants and conducted blind interviews of both the mothers and children and accounted for missing data. They also included a new borderline EE category, which may have improved the face validity of the EE construct. However, the researchers used maximum likelihood data analysis, which assumes that the variables are continuous. Adapting EE from a categorical variable into a continuous variable by adding a third category may affect the validity of the construct. Barrowclough and Hooley (2003) argued that the reason all of the EE data is reduced to a dichotomous split between either a high or low EE categorisation, is due to the predictive validity of the measure in relation to patient relapse rates.

In a study that examined African American families, Kwon et al. (2006) investigated the cross cultural differences of maternal EE in a sample of 148 children aged between 6 and 7 years. Using the FMSS and maternal measures of their child's behaviour, high EE was not associated with behaviour problems when compared to low EE mothers. Kwon et al. used Magaña et al.'s (1986) coding system to classify mothers as either high or low EE. This does not take into account the developmental differences when talking about young children, whereby the PFMSS could have been more appropriate to use. Also as noted by Kwon et al., the validity of the FMSS is unknown when used with an African American sample; it has not been standardised on the population upon which the sample has been drawn.

### 1.5.4 Longitudinal Research

In a longitudinal study, Vostanis and Nicholls (1995) followed up Vostanis et al.'s (1994) sample in order to evaluate the role of parental EE using the CFI. They slightly modified the EOI category to make it more developmentally appropriate for use with their sample of children aged between 6 and 11. It was found that parental EE was not a stable trait and mothers of children with CD were warmer and less critical nine months later. This raised the possibility of EE being episodic and possibly a reaction to their child's current difficult behaviour. However, it was found that lower initial levels of warmth could predict CD at nine month follow up.

Vostanis and Nicholls concluded there was no causal link between parental EE and childhood behaviour difficulties. A criticism of the study is that it relied solely on maternal reports of their child's behaviour. It also used the CFI to measure EE, which Vostanis and Nicholls admitted needed to be "revised and standardized for younger age groups" (p. 843.).

In an American study, Baker, Heller and Henker (2000) recruited a sample of 112 mothers of children aged between 3 and 6 years old. They used the FMSS and found that EE was related to externalising behaviour problems. However they also found that maternal stress was better at distinguishing between the groups, than EE. This raised the issue of whether EE was a proxy variable for maternal stress. In their follow up to Baker et al.'s study, Peris and Baker (2000) found that controlling for maternal stress; high parental EE had predictive validity for children with behaviour problems four years later. A classification of high maternal EE measured at preschool (average age 4.5 years old) predicted a diagnosis of ADHD when their children were in the third grade (average 9.1 years old). Peris and Baker appeared to have a comprehensive coding system and in addition to maternal measures of their

child's behaviour, teacher ratings were also obtained; however, the participants in the samples in the two studies were predominantly Caucasian, well educated and with ratings of middle to upper socioeconomic status. Due to small numbers, fathers again were excluded from the analysis. The groups at the different time points also varied in number quite heavily and it is unclear why the levels of attrition were so high, or if the missing data sets differed in a significant way.

St. John-Seed and Weiss (2002) researched 83 mother infants with low birth weight dyads. They revised the FMSS, adapting the measurement to include the original categories from the CFI, creating a new positive and negative category.

Maternal EE was measured when the babies were six months old and their behavioural difficulties were examined when the infants were two years old. It was found that higher rates of criticism and hostility were correlated with younger maternal age. A positive trend was found between negative EE (high EE) and the severity of the behaviour ratings at aged two. This sample consisted of a diverse ethnic range, including English and Spanish speaking mothers in America; however, the mothers were the only data source and an unusually high number of them (92%) were classified as positive EE (low EE). It is possible that the new positive EE category contained false negatives. The revisions to the FMSS are likely to have affected the reliability and validity of the measure.

Frye and Garber (2005) assessed 240 adolescents and their mothers at two time periods. When the children were in the sixth grade (11 to 12 years old) and again at the eighth grade (13 to 14 years old), mothers completed the FMSS and a measure of behavioural difficulties. It was found that the externalising difficulties at the first time point significantly predicted levels of maternal criticism two years later. This provides support for a bidirectional link between maternal criticism and

child behaviour difficulties. However, this study suffered from a large amount of missing data. In the initial testing, 46 of the participants had to be removed from the analysis due to technical difficulties with the recording devices. At the second time period, a further 83 participants had either dropped out or the data was missing or not able to be coded. This resulted in 132 participants who provided usable data at both time points, which is still a relatively large sample size. The researchers also relied only on the accounts of the mothers and only analysed the criticism subscale from the FMSS. They did not investigate the impact of high or low EE.

In a large cross sectional, longitudinal twin study, Caspi et al. (2004) targeted families with 565 same sex monozygotic twin pairs. The sample was nationally representative, from twins born in 1994 to 1995 in England and Wales. Caspi et al. established which twin received more negative EE and which twin received more warmth and measured behavioural difficulties at aged five and again at aged seven, rated by their teachers and mothers. The twin that received more negative EE had higher rates of behavioural problems. Longitudinal analysis showed that even after the behavioural difficulties were controlled for at age five, maternal EE at age five predicted the increase in behavioural problems at age seven. Caspi et al. argue that this demonstrated that maternal EE is a risk factor and possible cause of early antisocial behaviour problems in children. This study has an innovative design that allows for a tentative causal argument in relation to parental high EE and childhood behaviour problems. In an attempt to make the FMSS more developmentally appropriate, Caspi et al. used a modified approach to both the instructions to the FMSS and the coding. Caspi et al. coded the five minute monologue using the PFMSS, developed by Daley et al. (2003).

### 1.6 Summary of the Childhood EE Literature

Research pertaining to families with young adolescents has replicated the findings from adult EE literature. High parental EE is often associated with poor child outcomes. For example, high EE parents are overrepresented amongst children with OCD and disruptive behaviour (Hibbs et al., 1991), depressive disorders (Asarnow et al., 1994), ADHD (Marshall et al., 1990; Peris & Hinshaw, 2003), CD and substance misuse (Schwartz et al., 1990). High parental EE has also generally been found to be related to childhood externalising behaviour difficulties (Baker et al., 2000; Nelson et al., 2003; Kwon et al., 2006).

Parents with high EE have been found to have more negative interactions with their children (McCarty et al., 2004). The studies utilising longitudinal designs and twin studies (Caspi et al., 2004) generally appear to support the link between high parental EE and childhood behavioural difficulties; however, it is not possible to conclude that parental high EE causes childhood behavioural problems in a unidirectional way as there are many other factors to consider in the development of behavioural difficulties.

EE has been measured using the CFI, the FMSS and the PFMSS. These methods have also been adjusted further still to tailor their use for specific client groups. When assessing EE with parents of children under 18, differing measurement tools have been used, and this lack of consistency in measurement is likely to account for the differences between studies. For example, Peris and Baker (2000) found that using the FMSS high maternal EE predicted their child's behaviour problem four years later. This is contrary to Vostanis and Nicholls (1995) research employing the CFI, who stated their research showed there was not a causal link between maternal EE and childhood behaviour problems.

The CFI has also been sporadically modified when used with children (Bolton et al., 2003; Calam & Peters, 2006), so that it is more developmentally appropriate. This raises questions as to whether or not the PFMSS should be validated against a modified, more appropriate version of the CFI, instead of the original adult version. Studies comparing the validity of the FMSS compared to the CFI have found that the FMSS can generally accurately distinguish the high EE group. However, the low EE group often contains false negatives (Daley et al., 2003). The PFMSS has never been validated using the CFI.

The research evidence generally supports an association between high parental EE and childhood behavioural problems. However, research has mainly focused on maternal EE. There are many families where mothers are not the primary care givers for the children and research into the effect of fathers EE has been sparse. There has also been no research specifically with foster or adoptive parents, which is surprising, considering the recent professionalisation of the role. Clearly establishing factors associated with childhood behavioural difficulties can inform interventions. Research with EE and schizophrenia has successfully informed interventions, for example psychosocial family interventions (Leff, Kuipers, Berkowitz, Eberlein-Vries & Sturgeon, 1982). Currently first line recommended treatment for childhood behavioural difficulties are group based behavioural intervention with parents (Carr, 2006). Being able to focus the intervention towards those children who are at higher risk informs decisions regarding allocating services to those most in need. Also this allows for the tailoring of the intervention, with support for increasing appropriate interactions and decreasing negative interactions, offering opportunities to break the maintenance cycle between parents and their children.

There has been a lack of psychological theory explaining the causes and impact of EE on relatives. However, one way of explaining why individuals with low EE and high EE differ has considered the importance of beliefs (Leff & Vaughn, 1985). The attributions that the individual has about their relative's difficulties may impact on levels of EE and will be examined in the following section.

#### 1.7 Attributions

Relatives tend to make different attributions about their relative's behaviour and illness. This section will briefly summarise the main attribution theory research, outlining the different models that have been developed. Different ways to measure attributions will be discussed and the section will then focus explicitly on parental attributions and child behaviour problems, due to the lack of published research specifically relating to the attributions of foster carers.

# 1.7.1 Heider's (1958) Theory of Attribution

Heider's (1958) developed his theory of attribution from Brunswik's (1956) theory on the Lens Model of Perception. The Lens Model postulates that an object is not simply perceived directly. Perception depends on the characteristics of the object, the context in which it is perceived, the way that it is perceived and the individual characteristics of the perceiver. Heider (1958) proposed that in order for people to better understand, predict and react to their environment, people develop explanations or attributions for events (Snarr, Slep & Grande, 2009). People make inferences regarding the intentions of others (interpersonal attribution), based on the perceived action, motivations and intentions of the observed.

Heider (1958) considered the attributor to be a naive scientist, who uses factors in order to explain behavioural outcomes. These factors can be divided into two groups: factors believed to be located within the individual (internal) and factors believed to be residing in the environment (external). The balance of the internal versus external dimension determines responsibility judgements (Lewis & Daltroy, 1990). Heider's theory led to a considerable amount of research into the causes and effects of attributions.

### 1.7.2 Jones and Davis (1965) Correspondent Inferences

Jones and Davis (1965) elaborated on Heider's (1958) research surrounding the attributional inferences that can be drawn from the consequences of behaviours (Försterling, 2001). They concentrated on researching under what specific conditions people attribute dispositional traits from observing human behaviours. The model focused on how people judge the dispositions of other people, deeming the intentions of others as either intentional or unintentional. It suggested that there were three classes of antecedent, concerning an observer's explanation for an actor's behaviour. Firstly, the attribution that is made depends on the information available; therefore the actual consequence of the action is compared to consequences of alternative behaviours the actor could have performed. Secondly, the beliefs about what other actors would have done in the same situation affect attributions. Finally, if the outcome of the behaviour affects the observer's welfare, there is a higher chance that a disposition will be inferred (Kelley & Michela, 1980).

Correspondence is central to Jones and Davis' (1965) theory. This refers to the amount of information gathered about the intentions and dispositions of the actor as a result of witnessing an action. Correspondence is high if it is believed that an

action and its consequence accurately reflect the actors underlying disposition and low if there is ambiguity as to why the actor behaved in that particular way.

Malle (2004) noted that the theory was highly influential and as such led to research in the field of stereotypes, the fundamental attribution error (Ross, 1977) and the self service bias (Jones & Nisbett, 1972). The fundamental attribution error describes the tendency of a person observing someone's actions to attribute their actions to some internal factor or trait, to the extent that potential influences of external factors on the cause of the person's behaviour are dismissed (Reber & Reber, 2001). The self serving bias is where people make external attributions for events that happen to themselves, but internal attributions for events that happen to other people (Knobe & Malle, 2002). The hedonic bias is another hypothesis to have developed from attribution theory; it refers to the tendency for people to take the credit for positive, successful outcomes and to avoid the blame for unsuccessful, negative outcomes, which, in turn, increases self worth and self esteem. Success, rather than failure, is more likely to be attributed to some internal factor, like effort and ability (Himelstein, Graham & Weiner, 1991).

# 1.7.3 Kelley's (1967) Covariation Principle

Förserling (2001) described that Kelley (1967) aligned the procedure of making attributions, with the procedure of analysing data with an analysis of variance. The likely causes of behaviour are the independent variables and the outcome or effect is the dependent variable. Kelley's covariation principle focused on the extent to which the attributional process is related to the covariation of outcome over time, person and situation. Kelley advanced Heider's (1958) work by including three features that affect the development of attributions: consistency, distinctiveness and consensus. His theory was "concerned with the extent to which

attribution processes are based on the covariation of outcome across time, situation and person" (Bugental, Johnston & Silvester, 1998; p. 461). Consistency refers to the degree to which the same actor will repeat the behaviour at different times.

Distinctiveness refers to the degree to which the actor will exhibit different behaviours on different occasions. Consensus refers to the amount to which other people will perform the same behaviour in the same situation. So cause is inferred from a "systematic covariation between antecedents and consequents" (Himelstein et al., 1991, p. 302).

Himelstein et al., (1991) used the covariation principle and hedonic bias to investigate maternal attributions for their child's successes in social, academic and personality domains; they investigated the mothers of 194 children and adolescents who were academically gifted, regular or had special educational needs. They also compared the number of children in the household to maternal attributions. The covariation principle and hedonic bias were supported in this research. In line with the covariation principle, it was found that mothers of single children attributed greater importance to their parenting, when compared to mothers with multiple children. Supporting the hedonic bias, parenting practices were more endorsed for academically gifted children, when compared to children with special educational needs.

# 1.7.4 Weiner's Attributional Theory

Following on from Heider's (1958) model, Weiner (1985) developed "the most comprehensive theoretical model about the influence of attributions on behaviour, affect, and cognitive processes" (Försterling, 2001, p. 109). Weiner's theory is concerned with causes that people attribute to behaviour, both other

people's behaviour and their own. Attributional appraisals play a vital role in our behavioural and emotional reactions (Barrowclough & Hooley, 2003).

Weiner's theory reflected the underlying dimensions of the attribution process. Weiner (1985) defined attributions as the explanation a person has for behaviour, suggesting that when an event is perceived, observers search for a cause. The attributions that observers make about an event are positioned in a particular dimension, due to causal analysis. Perceptions of the cause of an event can be classified in three main ways, which then determines the consequences. The perceived success or failure of an event can be classified by their locus, controllability and stability; locus refers to whether the perception was deemed to be internal or external to the person; controllability relates to whether the perception was judged to be under the person's control; stability is related to whether the event was due to the person's underlying trait, or some temporary state.

Different causal attributions produce different emotional responses. A response may be pity if the cause is deemed stable and uncontrollable by others. For example, pity may be evoked for another who is unable to perform a task due to an accident or intellectual disability. Internal and controllable attributions may lead to anger if for example a car accident is the result of another's drink driving or lack of attention; the driver may then experience guilt because they attribute their own behaviour to internal and controllable causes, something which could have been avoided.

Despite the lack of research evidence, it is likely that this has implications for foster carers and their relationship with their looked after children. If, for example a

foster carer attributes difficult behaviour as controllable by the child, they may react in an angry negative manner, escalating the difficulties.

Bugental et al., (1998) described how Kelley (1967) and Weiner (1985) formed the basis for both strands of research; stimulus dependent attributions and memory dependent attributional style. Their work allowed for individual differences, due to the result of covariation, in so far as stimulus events that have regularly occurred together, moderate the interpretations given. Bugental et al. relate this to parental attributions, where they are continuously modified, due to changes in environmental contexts and changes in interactional events.

### 1.7.5 Attributions and Help Giving

Weiner (1980a) described an attributional analysis of helping behaviour. Prior to giving help, the potential help giver assesses the underlying reasons for the need for help. If the underlying reason is deemed to be controllable, for example they are seen as responsible for the situation that they need help from, then an emotional reaction of anger is provoked and help is not given. However, if the reason needed for help is deemed to be uncontrollable by the individual, for example a medical illness, the help giver is more sympathetic and help is provided. Weiner (1980b) further investigated help giving in education. A 'student' was presented to be seeking help from another student either because of a physical disability or due to lack of effort. It was found that if the need for help was deemed to be due to a lack of effort, participants experienced anger and were less likely to help. If the need for help was deemed to be due to a disability and therefore uncontrollable, the predominant emotion elicited was pity, and they were more likely to help.

Schmidt and Weiner (1988) investigated help giving behaviour and described a fork like pathway to whether or not the person is helped, or neglected. The deciding factor to which path is to be taken, is whether or not the perceived cause of need is deemed to be under the person's own control. This is also important in foster care. Depending on the perceived controllability of a child's behaviour, this model would postulate that the foster carer would make a judgement of controllability which would then affect their help giving reaction.

These models of helping behaviour have implications for training. They have been used for staff of clients with intellectual disabilities to inform interventions that influence staff explanations relating to the causes of difficult behaviour (Kushlick, Trower & Dagnan, 1997). This type of training may be beneficial to foster carers, providing the space for foster carers to explore their own attributions, emotional reactions and subsequent behaviours towards their looked after children.

1.7.6 Abramson, Seligman and Teasdale's (1978) Attributional Analysis of Learned Helplessness

Abramson et al. (1978) investigated the effects of self directed causal attributions on negative life events (Snarr et al., 2009). Abramson et al. stated that causal attributions of people who find that they are helpless determine how chronic the helplessness becomes, as well as affecting self esteem. Cause can be attributed as stable or unstable, global or specific, and like Heider (1958) originally posited, internal or external. Stable factors are factors that are recurrent or long lived, whereas unstable factors are intermittent or short lived. Global factors are factors that affect a wide range of outcomes, across many situations, whereas specific attributions apply to the singular situation. According to Abramson et al., the

chronic or acute (stable or unstable), broad or narrow (global or specific) and whether this will have a negative impact on self esteem.

### 1.7.7 Patterson's (1982) Family Coercion Model

Patterson's (1982) family coercion model proposed that inadequate responses from parents to misbehaviour in their children, negatively reinforces the behaviour. Both individuals learn to behave in an increasingly coercive manner, maintaining aggressive behaviour. Patterson found that parents who act in a coercive manner are also more likely to place the blame with their children for their poor behaviour.

## 1.8 Measuring Attributions

Barrowclough and Hooley (2003) outlined three different methods that have been used to measure attributions. Firstly, in the most common method, attributional statements are provided that relate to a vignette of a hypothetical scenario and participants are required to rate the causal attributions that the researcher has previously selected. In the second method, open ended questions are asked to participants. Both of these methods allow for easy scoring, but the validity has been criticised. For example, the vignettes are hypothetical and may not capture behaviour that has actually been seen (Miller, 1995). Attributional research involving vignettes also assumes that the responses given to the scenario reflect attributions that people would make in real life situations. The use of this method has problems with ecological validity, because the responses may not be reflective of actual behaviour.

Research highlighting this discrepancy was documented by Lucas, Collins and Langdon (2009). They compared teacher's causal attributions towards their pupils with intellectual disabilities, using both vignettes and real incidents of challenging behaviour. Different reactions were found using the two methods. In

response to real incidents, staff displayed higher rates of attributions of controllability, internality and globality, than when compared to the use of vignette methodology. However, when real incidents are used, experimental control is reduced and possible confounding variables are introduced into the research. When Likert scales are used to rate attributions, there is also a tendency for the data to be skewed in a socially desirable way, perhaps because respondents wish to present themselves in a positive light when responding to questionnaires (Breakwell, Hammond & Fife-Schaw, 2000).

The Leeds Attributional Style Coding System (LACS; Stratton, Munton, Hanks, Heard, & Davidson, 1988) is the third method used to assess attributions. It has been developed in order to assess spontaneous causal attributions in a more valid, naturalistic manner (Barrowclough & Hooley, 2003). The LACS can be used to assess and code attributional statements from speech samples, decreasing the potential of socially desirable responses. It can be used to measure the following five dimensions:

Table 1.1

The LACS Attributional Dimensions

Attributional	Explanation of attribution
dimensions	
Internal to external:	Is it believed that the event was caused by the individual
	(internal) or a result of some other environmental factor
	(external)?
Stable to unstable:	Is the cause more likely to apply in future similar situations
	(stable) or did it occur as a result of some transitory factor
	(unstable)?
Controllable to	Is it believed that the person could influence the outcome
uncontrollable	(controllable) or not (uncontrollable)?
Personal to	Is it believed that the event is particular to the individual
universal	(personal) or as likely to happen to someone else (universal)?
Global to specific	Is it believed that the cause of the event impacts on only one
	outcome (specific) or on many other events (global)?

The LACS has the advantage of assessing spontaneously occurring attributions in a wide range of settings, making it more ecologically valid than the alternative methods. It does not rely on the use of vignettes or questionnaires to access attributions. Wendel, Miklowitz, Richards and George (2000) demonstrated intra class correlations for the LACS to be between .58 and .77 for the attributional dimensions. They used the LACS to rate attributions spontaneously expressed to relatives during a problem solving task. It was found that high EE relatives of patients with bipolar disorder were more likely than low EE relatives to rate their relative's negative behaviour and symptoms to controllable and personal factors.

Bugental et al. (1998) noted a potential criticism of the LACS. They highlighted a difficulty with non comparability across participants due to the varying responses in the content and amount of information given by participants; some participants may generate few attributional statements, focusing more on descriptions and factual accounts.

### 1.8.1 Parental Attributions Regarding Child Behaviour

The following section will examine the attributional research relating to parents with children with behavioural difficulties. Cross sectional, experimental and longitudinal research will be explored, in order to examine the link between parental attributional style and child behaviour difficulties.

### 1.8.1.1 Cross sectional studies.

In an early non-experimental study, Compas, Friedland-Bandes, Bastien and Adelman (1981) investigated the attributions of two clinical samples of children with behavioural difficulties and learning problems. Children in the second group had various diagnostic labels, including intellectual difficulties and learning difficulties such as dyslexia. All of the children and their parents completed a questionnaire of attributional statements, rating the children's successes and difficulties at school. It was found that the children had differing attributional styles for positive and negative outcomes. There was a relative tendency for the children to make internal attributions for positive outcomes, when compared to negative outcomes. Parents however, were more likely to make internal attributions for both their child's positive and negative outcomes. The results should be interpreted with caution, due to the difficulties with the validity and reliability of using a newly designed questionnaire to assess attributions. For the first study pertaining to children with learning problems, researchers supported the children to complete the questionnaires

in clinics. However, for the second study pertaining to children with behavioural problems, postal questionnaires were used. Parents may have helped the children complete these questionnaires, potentially affecting their responses.

In an American study using postal questionnaires, Dix, Ruble and Zambarano (1989) investigated child age and maternal attributions regarding social behaviour. Mothers of children in the second grade (seven to eight years old) were more likely to make internal attributions of responsibility for their children, when compared to mothers of children in kindergarten (five to six years old). The mothers of the older children believed their children to be capable of distinguishing between socially appropriate behaviour. These mothers were also more likely to experience stronger emotional and behavioural reactions to their children's poor social behaviour and as a consequence, be stricter with their discipline than parents of younger children. Dix et al. investigated maternal discipline by asking the mothers to rate a 'discipline prototype' following a vignette. This assumes that mothers would act in the way that they scored each scenario. This method of assessing maternal discipline may lack some ecological validity.

Maternal attributions were further investigated by Baden and Howe (1992). They used a modified version of the Parental Attributions Questionnaire (PAQ; Walker, 1985) to investigate the attributions of the mothers of 40 conduct disordered females, aged between 11 and 18 years old. It was found that mothers of children with behaviour problems were more likely to attribute their children's negative behaviour as intentional, with global, stable causes, which were out of the parent's control. Therefore, they were more likely to believe that the cause lies within their child, rather than themselves.

Alexander, Waldron, Barton and Mass (1989) examined clinical populations of families with a child with behavioural problems. They used positive and negative interactional situations in order to assess behaviours and attributions of the family. It was found that parental attributions were influenced by the initial manipulation of the setting. Negative interactional settings produced more negative blaming attributions and positive interactional situations led to more positive attributions. The authors concluded that parental behaviour is mediated by attributions. It was also found that the negative attributions that resulted from the negative interactional setting were resistant to change following a relabeling process. The authors proposed useful clinical implications. Having family therapy sessions that are problem focused may lead to a higher rate of negative interactions, whereas approaches that focus more on positive, non blaming relational aspects may be more successful in implementing positive changes.

Geller and Johnston (1995) investigated maternal depressed mood and attributional styles, using ratings of hypothetical situations involving either their children or themselves. The participants who reported higher levels of low mood were more likely to rate their own negative experiences to stable, global, internal and controllable causes. They were also more likely to rate the causes of their children's negative experiences as internal to the child and controllable by the child.

Furthermore, they were also more likely to report more negative anticipated reactions toward their child. A distinction between attributional styles was found between maternal mood and their ratings of their child's conduct problems. Higher ratings of child behavioural problems were associated with global and stable attributions. This study employed a correlational design and relied on only the mother for all of the measures. The use of hypothetical situations to measure

attributions lacks validity of spontaneous attributions. The cross sectional nature of this research means that the directionality of cause and effect cannot be established.

This section will now go on to explore experimental and longitudinal research, to investigate this relationship further.

# 1.8.1.2 Experimental studies.

Slep and O'Leary (1998) used experimental research in order to investigate causal processes in parental attributions and parenting behaviour. They manipulated mothers' child centred responsibility attributions. The researchers randomly assigned their 40 mothers of 'hard to manage' toddlers to two conditions: 'child responsible' and 'child not responsible' attribution condition. In the child not responsible condition, researchers read out a feedback script that aimed to produce maternal attributions low in child responsibility, for example, by suggesting reasons that their child's misbehaviour was due to factors uncontrollable by the child, like their underdeveloped self control skills due to their young age. In the child responsible condition, feedback scripts placed the blame with the child for their misbehaviour. The feedback scripts stated that their child's misbehaviour was for attention, or an attempt to control them. This was designed to elicit maternal attributions high in child responsibility. All mother child dyads were filmed interacting together in a challenging situation. The mothers were shown short video clips of their child misbehaving and asked to complete ratings of their affect and attributions regarding the clips. It was found that mothers in the child responsible condition were more over reactive in their parenting, reported feeling angrier and their children were more upset. Slep and O'Leary concluded that their research showed experimentally that maternal attributions do affect child behaviour. However, there are a number of difficulties with this study. The research only targeted mother's of toddlers. This

means the results cannot be generalised to fathers or older children. Slep and O'Leary also used newspaper advertisements to recruit participants for their study, advertising for mothers of hard to manage toddlers. This could have introduced response bias into the sample; with a non representative sample of mothers participating in the research.

# 1.8.1.3 Longitudinal studies.

Investigating a large community sample of 227 families in America, over four years, Nix et al. (1999) examined whether maternal attributions at the summer prior to their child starting education could predict later child behaviour problems. Vignettes were used to assess maternal attributions and childhood behaviour problems were assessed through questionnaires, completed by mothers, fathers and teachers. It was found that the hostile maternal attributions predicted later externalising behaviour problems at school and also that hostile maternal attributions were related to the harsh discipline implementation of the mothers. Harsh discipline practices were measured using analysis of semi structured interviews with the mother, and reports from their spouse. Harsh discipline practices were also related to the externalising behaviour problems of the children, exhibited at school. Nix et al. stated that "mothers' hostile attribution tendencies may function as self-fulfilling prophecies" (p. 906.) and therefore predict future externalising behaviour problems in their children. However, as Nix et al. state, they analysed their data with correlations. The result of this was that "true claims of causation were not possible" (p. 907.).

MacKinnon-Lewis, Lamb, Hattie and Baradaran, (2001) examined 246 mothers' and sons' attributions and aggression at two different time points, 12 to 15 months apart. The boys were aged between seven and nine years old at the first time

point. On both occasions, the dyads separately completed attributions measures (MacKinnon-Lewis, Lamb, Arbuckle, Baradaran & Volling, 1992; MacKinnon-Lewis, Volling, Lamb, Dechman, Rabiner & Curtner, 1994), where five scenarios of interactions between mother and son were described. The participant then had to answer a series of questions relating to each scenario, to which coders later rated the attributions. Following the vignettes, mother and son participated together in both a cooperative and a competitive task. Their behaviour during the task was coded for coerciveness by two raters, coding for negative and positive verbal, physical and affective actions. It was found that both parties' negative attributions about the other person's intent were associated with the aggressiveness of their own behaviour towards the other. Maternal aggression, rated through observations of the interactions at the first time point predicted child attributions at the second time point, but not child aggression at the second time point. Maternal attributions at the first time point also did not predict child aggression at the second time point. The boys' tendencies to attribute negative intent to their mother's behaviour appeared to reflect logical views, based on their mother's behaviour at the first time point. The negative attributions may be an accurate reflection of their relationship, not biased interpretations (MacKinnon-Lewis et al.). It is interesting that this study did not find an association between negative maternal attributions at the first time point and maternal aggression at the second. The authors posited that this could be because the mothers were able to regulate their behaviour more readily than their sons. This study only examined boys, so generalising to girls is not possible. Also, the time interval was only one year apart. As the authors note, it would be interesting to follow up the sample with a larger time gap, to see if the findings hold over different developmental stages (MacKinnon-Lewis et al., 2001)

In a large American study of 256 children, Snyder, Cramer, Afrank and Patterson (2005) assessed maternal attributions and child conduct both at home and at school. Structured interviews using vignettes were used to establish maternal attributions and parent child interactions were recorded and coded to ascertain parental discipline. Mothers' ratings of their child's behavioural problems at kindergarten (five to six years old) predicted subsequent hostile attributions regarding their child's misbehaviour, as well as their use of ineffective discipline. The interaction of their use of ineffective discipline and the hostile attributions predicted the increase in their child's conduct problems at home. Furthermore, child misbehaviour at school, as measured by the Teacher Report Form (Achenbach, 1991) and observations at playtimes at both kindergarten and the first grade (six to seven years old), were predicted by the increase in behaviour problems at home and by the interaction between ineffective maternal discipline and their hostile attributions. A strength of this study is that it examined teacher reports and playground observations as well as maternal reports of behaviour. However, this research also relied on the use of eight vignettes to assess maternal attributions. The use of vignette methodology has been criticised for its lack of validity (Miller, 1995; Barrowclough & Hooley, 2003).

In a British longitudinal study, Wilson, Gardner, Burton and Leung (2006) examined maternal attributions and conduct problems in preschool children. Mothers were interviewed twice, initially when their child was three years old and again at four years of age. A modified version of the PAQ (Walker, 1985) was used to assess attributions through the use of vignettes at both time points. The results suggested that at age three, child conduct difficulties were related to negative maternal attributions. Attributions of mothers with children with more conduct difficulties

thought that the behaviour was due to internal factors to the child and also because of global factors that would affect many facets of their child's behaviour. The dimension of stability was not found to be related to conduct problems. Furthermore, maternal attributions at age four were predicted by conduct difficulties at age three. The authors conclude that the negative maternal attributions could be a result of having a child with behavioural difficulties, not the cause of the behavioural difficulties.

### 1.9 Summary

This section has provided a brief history of attribution theory, summarising early theories that have guided the research into parental attributions. Due to the paucity of research of the attributions of foster carers, this review has focused on parental attributions of children with behavioural problems. Early cross sectional research established a link between negative attributions and behavioural problems in children providing support for Patterson's (1982) family coercion model.

Research has shown that the age of the child affects maternal attributions (Dix et al., 1989), as well as maternal mood (Geller & Johnston, 1995). Alexander et al. (1989) found that parental behaviour is mediated by attributions, after initial manipulations of the setting. Later longitudinal research has provided mixed evidence for the directionality of the process, with some research providing evidence that maternal attributions could predict later childhood behavioural problems (Nix et al., 1999; Snyder et al., 2005) and other research finding the opposite effect (Wilson et al., 2006). The validity difficulties using vignettes and questionnaires to measure parental attributions, makes the drawing of conclusions difficult. However, there is

clearly a link between parental attributions and behaviour, even if the direction of the link has not been firmly established.

Attributional research has focused on the impact that these attributions have on others. This has linked in with the EE literature, examining the difference in attributions that low and high EE individuals have about their relative. Leff and Vaughn (1985) state that low EE individuals tend to display a rational understanding of their relative's difficulties, attributing their symptoms as a sign of the illness. However, relatives high in EE may try to control events, by attempting to change their relative's behaviour, interpreting their difficulties as controllable. The following section will go on to explore the relationship between EE and attributions further.

#### 1.10 Attributions and EE

Hooley, Richters, Weintraub and Neale, (1987) investigated marital satisfaction of spouses in relation to the symptomatology of their partners with psychiatric diagnoses. Couples where the partner displayed more positive symptoms, for example hallucinations and delusions, were associated with higher levels of marital satisfaction. Patients with negative symptoms, for example self neglect, irritability and apathy, and impulse control problems, like drinking and gambling, were significantly associated with lower levels of marital satisfaction. This is surprising considering those patients with positive symptoms were independently rated as having an overall lower level of functioning. Hooley et al. outlined a symptom controllability model to account for these findings. This model postulated that spouses believe their partners are accountable for symptoms that they believe to be under their control, whereas they attribute blame to the illness, not their partner

for symptoms that they do not believe to be under their control. Positive symptoms are therefore more likely to be attributed to the illness, so viewed as external and uncontrollable by the patient. Negative symptoms are extremes of normal behaviour that people do occasionally show (Wearden, Tarrier, Barrowclough, Zastowny, & Rahill, 2000), so these symptoms are likely to be viewed as controllable and internal to the patient. However, Hooley et al. did not measure attributional beliefs directly.

Barrowclough and Hooley (2003) noted that Brewin (1988) examined this link further, in the context of Weiner's (1985) theory of attribution, emotion and behaviour. A link between EE and attributions was proposed, suggesting that the different components that make up the EE construct may be better distinguished from an attributional perspective. Furthermore, cognitive models of depression posit that depressed people have internal attributions for negative events (Brewin, 1985). Wearden et al., (2000) highlighted that if critical relatives agree with and have internal attributions to their depressed relative for negative events; this further reinforces the depressed relative's negative beliefs.

Hooley (1985) and Greenley (1986) separately and independently claimed that high EE relatives of patients with schizophrenia may attempt to control the negative aspects of the illness, by trying to change their relative's behaviour. Hooley believed in an attempt to control the negative symptoms of schizophrenia, high EE relatives would be more critical. Greenley stated that relatives who do not believe the patient is ill are more likely to view their symptoms as voluntary and are therefore more likely to use 'social control' to try to deal with their relatives illness. Therefore, the attributions of relatives affect the way they interact with the patient. This social control theory postulates that attempts to control the patient's behaviour result in

high criticism and therefore high EE. This increases patient relapse rates, due to the stress this induced.

Barrowclough, Johnston and Tarrier (1994) examined the EE and attributions of 60 relatives of 51 patients experiencing an acute schizophrenic episode. They used the CFI to measure EE and the LACS to measure the relatives' attributions about the patient. There were 19 relatives classified as low EE and 41 categorised as high EE. Barrowclough et al. found that those relatives classed as high EE made more attributions in general about the illness than relatives classed as low EE. Furthermore, relatives who exhibited high criticism made more internal to the patient attributions. Relatives that were more hostile perceived the cause of the illness as personal to and controllable by the patient. Low EE and high EOI relatives made more external and uncontrollable attributions. The attributional beliefs were also better predictors of patient relapse at the nine month follow up, than EE. This may imply that EE is not a stable construct over time.

### 1.11 Attributions, EE and Externalising Behavioural Problems

Higher rates of negative behaviour and discord between parents and their children have been consistently found in families with children with behaviour difficulties (Stubbe, Zahnerm Goldstein & Leckman, 1993). EE Research has also established a link between parental criticism and CD (Asarnow et al., 1994; Stubbe et al., 1993, Vostanis et al., 1994). Furthermore, attributional research has found that parents of children with behaviour difficulties are more likely to blame their child for their behaviour (Patterson, 1982; Slep & O'Leary, 1988). Parents of children displaying problem behaviours are more likely to rate the cause of their child misbehaviour as internal, personal and controllable by the child (Miller, 1995). This

has implications for parents' behaviour towards their children, potentially resulting in an increasingly negative pattern of interaction between parents and children (Patterson, 1982).

Bolton et al. (2003) found evidence to support the link between maternal EE, attributions and childhood behavioural difficulties. Primary female care givers of 61 children referred for behavioural problems were interviewed with the CFI. It was also found that there was an association between high EE and attributions that were internal, personal and controllable by the child.

In an examination of attendance at a parent management training programme, Peters, Calam and Harrington (2005) examined the attributions and EE of parents with children with behaviour difficulties. They found there was a tendency for mothers to attribute causes as internal, controllable and personal to their children.

Foster carers look after some of the most vulnerable children in our society (Meltzer et al., 2003). The children are likely to already have insecure (Bowlby, 1988) or disorganised attachment styles (Walker, 2008) prior to entering care. Foster carers are required to provide the secure base for their looked after children, coping with their emotional and behavioural difficulties. Children with difficulties with attachment display more behavioural difficulties (Lyons-Ruth, Easterbrooks & Cibelli, 1997). It is therefore not unreasonable to assume that children with difficulties with attachment may evoke strong feelings and reactions from their foster carers. There has not been any research investigating the EE and attributions of foster carers. Given the research outlined above, this is an important area to examine.

### 1.12 Chapter Summary

This chapter initially discussed looked after children and the increasingly professional role of the foster carer. The theoretical background of EE was discussed, alongside the difficulties with the different measurement techniques. Studies pertaining to the EE of parents with children with behaviour problems were then explored. Attribution theories were discussed and the research surrounding parental attributions was examined. Finally, the link between EE and attributions was explored. The rationale for the current research will now be outlined, concluding with the four research questions this study will address.

#### 1.13 Rationale

Previous research investigating EE and attributions in professional carers has replicated the findings from studies conducted with families containing a family member with a mental illness. However, to date, there has not been any research investigating foster carers levels of EE and their attributional style, with a focus on levels of externalising behaviour difficulties in their looked after child. Foster carers look after children with complex needs and higher rates of behavioural difficulties than children from the general population (Meltzer et al., 2003). Hill-Tout et al. (2003) reported that the ability of foster carers to parent is affected by the challenging behaviour that looked after children can exhibit. This implies that this population requires increased support and focused services, in order to provide the best service possible to looked after children.

Weiner's (1980a) theory would predict that foster carers who have attributions of internality and controllability, would be more likely to experience anger and help would be less likely to be given to their child. However, if the cause

of the problem is deemed to be stable and uncontrollable, pity may be evoked and help may be given. The EE of foster carers may also reflect how they interact with their looked after child and could potentially ameliorate or escalate externalising behaviour difficulties.

Furthermore, there have not been any studies that have compared the use of the PFMSS with the FMSS as a measurement of EE. The PFMSS has been developed to counteract the criticisms relating to the FMSS being developmentally inappropriate for its use with parents of children and adolescents. It has only been used in a small number of studies, but preliminary findings indicate its appropriateness as a measure of EE.

To summarise, the purpose of this thesis is threefold. The first aim is to compare both the PFMSS and the FMSS as a measurement of EE. Secondly, to examine the relationship between EE and externalising behaviour problems, with the aim of exploring if it replicates the research pertaining to parents. Finally, to examine the relationship between foster carer EE and attributions and behavioural difficulties in looked after children.

## 1.14 Research Questions and Hypotheses

In order to investigate the attributions and expressed emotion of foster carers towards their children with externalising behaviour problems, the following research questions have been developed:

- (1) Is there a difference between the EE categories, when measured by the PFMSS and the FMSS? It is hypothesised that the FMSS will produce a higher proportion of high EE, when compared to the PFMSS.
- (2) Is there an association between the levels of EE in foster carers and the level of behavioural difficulties in their looked after child?
- (3) What type of attributions do foster carers make about their looked after children? Is there a relationship between externalising behaviour problems in looked after children and the attributions of their foster carer? It is hypothesised that foster carers who have children with higher rates of externalising behaviour difficulties will have attributions that are more internal, controllable, personal and stable to the child and external and uncontrollable by themselves.
- (4) Is there an association between foster carer levels of EE and attributions? It is hypothesised that high levels of EE will be associated with attributions that are internal, controllable, stable and personal to the child, while low levels of EE will be associated with attributions that are unstable, universal, external and uncontrollable by the child.

#### CHAPTER TWO

#### **METHOD**

## 2.1 Overview of Chapter

The following chapter will provide an account of the research methods used to investigate the questions outlined in chapter one. It will describe the research design, participants, measures, procedure and ethical considerations. The chapter will conclude with an outline of the statistical methods used to analyse the results of this research.

### 2.2 Design

A single sample cross sectional correlational design and a between subjects design were used in this quantitative research study. The correlational design examined the relationship between EE, attributions and externalising behaviour problems. The Five Minute Speech Sample (FMSS) was coded for EE using both the traditional version (Magaña et al., 1985) and the developmentally more appropriate child version, the Preschool Five Minute Speech Sample (PFMSS; Daley et al., 2003). Both coding systems were employed in order to compare the rating systems.

The five minute monologue was also used to examine the attributions that foster carers made, relating to their looked after child. This was facilitated by using an adaption of the LACS (Munton, Silvester, Stratton & Hanks, 1999) that captured behaviours relevant to child and family processes. Participants also completed the Eyberg Child Behaviour Inventory (ECBI; Eyberg & Pincus, 1999) and a demographic questionnaire (Appendix A). The data were collected at a single time point from foster carers.

Considering the between subject design, two independent groups were formed from the PFMSS by classifying participants into a high EE group and a low EE group. Non parametric statistics were used in order to detect differences between attributions and levels of child externalising behaviour difficulties. The analysis was repeated using the FMSS, to examine the difference in results when using this coding system.

### 2.3 Participants

#### 2.3.1 Power Calculation

There is no known previous research relating to the EE and attributions of foster carers, so basing the power calculation on previous research is difficult. The computer program G\*Power (Faul, Erdfelder, Lang & Buchner, 2007) was used to compute the sample size for this study. Assuming a significance level of 0.05, a medium effect size of 0.3 and a power level of 0.8 a sample size of 64 was estimated. Therefore, 64 foster carers across East Anglia were recruited to participate in this research.

### 2.3.2 Inclusion Criteria

Participants in this study were foster or kinship carers. They needed to have a looked after child placed with them under the care of a local authority in East Anglia. All participants had their child placed with them for a minimum of six months, so that the carers had time to get to know their child. Their child also needed to be aged between 4 and 16 years old. Although the ECBI is validated with children between the ages of 2 and 16 years old, this research concentrated on children of school age.

If a looked after child was under the care of a local authority in East Anglia and the foster carer had moved out of area but was still caring for the child, they were also eligible to be included in this research.

#### 2.3.3 Exclusion Criteria

This study investigated current relationships and attributions of foster carers regarding their looked after children. Therefore, participants who had no child placed with them or the child had been placed with them for less than six months were excluded from this study. Respite carers were also excluded from this study, because of the shorter term nature of their placements. This allowed for more accuracy in examining the relationships and attributions for medium to longer term placements, once the child has had time to settle in.

# 2.4 Procedure

### 2.4.1 Recruitment Procedure

To ensure that this study contained an accurate representation of foster carers, participants were recruited from both the independent fostering agencies and the local authorities in East Anglia. Following ethical approval from the University of East Anglia's Faculty of Health Research Ethics Committee (Appendix B), all five of the local authorities were approached. Seven independent fostering agencies with offices in East Anglia were also invited to participate.

Initial contact was made with managers by email, followed up by a personal meeting if required. After the managers of two local authorities agreed to their service participating in the research, their individual research governance application procedure was followed (see Appendix C and D for letters). The five services that agreed to participate were:

- Cambridgeshire Local Authority (CLA).
- Suffolk Local Authority (SLA).
- Foster Care Associates (FCA), a large national independent fostering agency,
   with five offices in East Anglia.
- Nexus Fostering (NF), a foster agency that operates in the Midlands, London and East Anglia.
- Fostering Solutions (FS), a national independent fostering agency with offices in Norwich and Peterborough.

In order to increase the likelihood that the services would agree to participate in this research, performance between individual services was not analysed.

Following approval, the five participating organisations were sent invite packs, including invitation letters, information sheets and consent forms (see Appendix E to G respectively) to distribute to their foster carers. They disseminated the packs to their foster carers in a variety of ways. These methods included posting the packs to all of their foster carers (SLA), posting the packs to foster carers identified by the organisation as fitting the inclusion criteria (CLA, FCA), or by social workers distributing the invite packs on their home visits (FS, NF).

The research phase of this study lasted for eight months. Therefore some of the organisations (CLA, FCA, NF and FS) distributed a second round of packs. This was with the aim of recruiting more foster carers who were interested in participating, but did not meet the inclusion criteria during the first round of invitations. The research was also discussed at team meetings, foster carer training events and support groups. Interested foster carers posted their consent forms directly to the researcher at UEA. They were then contacted to discuss the research and arrange a convenient participation time if they were still happy to participate.

Due to the individual services differential preferences for distribution methods it was not possible to estimate how many foster carers were approached in total to participate in the research, to calculate a response rate. There were 20 foster carers who returned consent forms but did not take part in the research, because they did not meet inclusion criteria.

### 2.4.2 Sample Demographics

# 2.4.2.1 Foster carer demographic information.

The largest majority of foster carers were employed by SLA (45.5%). FCA employed 31.8 percent of the participants and CLA employed 15.2 percent. NF and FS employed 4.5 percent and 3 percent respectively. Data collection occurred either in person, or by telephone. There were two participants who chose to have their interview conducted over the telephone; the remainder were interviewed in person.

A total of 64 participants were required to meet the sample size for this study. However on two occasions the recording equipment malfunctioned. Therefore, 66 participants took part in this research in total. The mean age of the foster carers was 52.7 years (SD = 10.1) with 53 female participants (80%) and 13 male participants (20%). The mean length of time participants had been fostering was 9.63 years (SD = 9.77), with a range of 6 months, to 37 years. The majority of the participants were married (71%) or living with their partners (11%). Over half of the participants had achieved academic qualification of A Levels or higher (53%).

### 2.4.2.2 *Child demographic information.*

In this study, foster carers discussed one of their looked after children. More boys (n = 39, 59%) than girls (n = 27, 41%) were discussed. The mean age of the children was 11.89 (SD = 3.56), with an age range of 4.8 to 16.8. The mean length of

time the child had been in their current placement was 2.48 years (SD = 1.9), with a minimum of 6 months to a maximum of 10 years.

#### 2.5 Measures

# 2.5.1 Demographic Questionnaire

A demographic questionnaire was administered to provide information on various characteristics of the foster carer and their arrangements for fostering. It also established whether or not the participant met the inclusion criteria. The demographic questionnaire examined various characteristics of the foster carer, including gender, age, length of time fostering, level of foster care provided, marital status and educational attainment. It also collected minimal data regarding the looked after child, including gender, age and length of time in placement.

#### 2.5.2 EE and Attributions

In order to measure participant's EE, participants were asked to speak freely and uninterrupted for five minutes about their child. This was recorded and later transcribed. This speech sample was then analysed, using two different coding methods for EE.

The same transcript was also used to examine participant's attributions regarding their looked after child. These two EE coding systems and one attribution coding system will be described in the following three sub sections:

# 2.5.2.1 The Five Minute Speech Sample (Magaña et al., 1985).

The FMSS was developed as an alternative and faster method for assessing EE than the CFI. It was originally developed using speech samples of the relatives of patients with a psychotic illness (Magaña et al., 1985). The aim of the FMSS is to

measure the underlying feelings that one person has about another, by coding five minutes of their uninterrupted speech.

Magaña et al. determined the reliability of the FMSS in their study of relatives with patients diagnosed with psychosis. The agreement between three raters was found to be .80, .70 and .70, when practice tapes were coded. Significant correlations were also found between the individual FMSS dimensions and their CFI equivalent dimension. However, Magaña et al. do caution against false negatives. The FMSS is more likely to determine a proportion of the sample as low EE, when they would be rated as high EE if measured on the CFI.

Participants were asked to speak freely about their looked after child for five minutes, following the original instructions (Appendix H) and an augmented additional expansion on this. The verbal and vocal aspects of the speech sample were coded; scoring the narrative using Magaña et al.'s (1985) coding system. This rates the quality of the initial statement (positive, neutral or negative), quality of the relationship (positive, neutral or negative) and EOI (low, borderline or high). A frequency count of the critical and positive comments is made and the scores on these five dimensions allow for the categorisation of high or low EE to the individual.

During the early administration of the five minute speech sample to the first nine foster carers, most asked for further clarity concerning what to discuss, following the administration of the standard FMSS instructions. Some of the foster carers recounted very factual accounts of their child's early years and how they came to be placed with them, as opposed to focusing on the instructions of the measure. This perhaps could have been due to their experience of talking about their child in professional meetings. Some also struggled to talk uninterrupted for the full five

minutes and required the standard prompt, "please tell me anything about (child) for a few more minutes" (Daley et al., 2003). Administration was therefore slightly augmented, so that enough material was produced for the scoring of EE and attributions. It was explained that as well as focusing primarily on the initial instructions (Appendix H), if they ran out of things to discuss, they could talk about anything about their child that they wanted to. This could include anything at all they wished to discuss, for example any behavioural difficulties, their relationships with peers, school life as well as life at home, health issues, their explanations for this, or anything else at all.

Following joint coding of four transcripts, inter rater reliability between the primary researcher and an experienced rater trained in the FMSS was calculated. Initially, this was calculated for 23 percent of the sample (n = 15). In order to improve the primary researcher's coding ability, a further 15 percent of the sample (n = 10) was calculated following discussions regarding disagreements. Cohen's Kappa measure of agreement was used for the categorical data (overall EE, quality of initial statement, EOI and quality of relationship) and interclass correlations (ri) were calculated for the scale and interval data (critical and positive comments).

Table 2.1.

Kappa Measure of Agreement (k) and Interclass Correlations (ri) for the FMSS

	Reliability							
FMSS Dimension	Time 1 ( $n = 15$ )	Time 2 $(n = 10)$						
Overall EE	k = .87	k = 1						
Quality of initial statement	k = .75	k = 1						
Number of critical comments	$r_i = .86$	$r_i = .92$						
Number of positive remarks	ri = .67	ri = .9						
Quality of relationship	k = .77	k = 1						
EOI	k = .46	k = 1						

Table 2.1 illustrates the improvement in reliability ratings across the coding, resulting in excellent inter rater reliability for all of the dimensions.

2.5.2.2 The Pre School Five Minute Speech Sample (Daley et al., 2003).

The PFMSS was developed by Daley et al., (2003) as a revision to the scoring of the FMSS (Magaña et al., 1985) in order to increase validity for use with parents of young children. For example, the FMSS does not take account the changes in relationship within different developmental ages. The PFMSS is administered identically to the FMSS, where participants can be classified as either high or low EE, but scoring is modified to be more age appropriate. The PFMSS also includes a measure of warmth. Although originally developed for parents of pre-school children, it is also considered appropriate for use with parents of older children (Clark & Coker, 2009).

Classifications were made regarding the quality of the initial statement (positive, neutral or negative) and the relationship (positive, neutral or negative). EOI and warmth were classified as low, moderate or high. The amount of critical

comments and positive remarks made during the five minutes are totalled for a frequency count. High EE is assigned if at least one of the dimensions is classified as low or negative and there are more critical comments than positive comments.

Inter rater reliability was calculated for the PFMSS in the same way as it was for the FMSS. Table 2.2 demonstrates the improvement in reliability rating across the two time points, for the PFMSS.

Table 2.2

Kappa Measure of Agreement (k) and Interclass Correlations (ri) for the PFMSS

	Reliability							
PFMSS Dimension	Time 1 $(n = 15)$	Time 2 ( $n = 10$ )						
Overall EE	k = 1	k = 1						
Quality of initial statement	k = .75	k = 1						
Number of critical comments	ri = .86	$r_i = .92$						
Number of positive comments	$r_i = .71$	ri = .9						
Relationship	k = .77	k = .89						
EOI	k = .82	k = 1						
Warmth	k = .84	k = .86						

# 2.5.2.3 Spontaneous causal attributions.

Causal attributions were extracted from the five minute monologue and coded using an adaption of the LACS (Munton et al., 1999). The guidelines for the LACS are based on Heider's (1958) attribution theory and were generated as a "major attempt to extend the techniques of attribution analysis to natural discourse" (Stratton et al., 1988, p. 9). It allows for the examination of causal statements from a speech sample, without the need for questionnaires or vignettes. The original LACS

research focused on participants' attributions about their own behaviour (first person attributions). This research codes participants' attributions regarding their looked after child's behaviour (third person attributions).

Attributions were extracted from the transcripts by firstly identifying events. There were five categories of events to extract. These included the mental state of the child, behaviours or symptoms, characteristics of the child, developmental stage of the child and interpersonal difficulties. This research focused on foster carer attributions regarding their looked after children. Therefore, events that related specifically to the difficulties that looked after children experience were also extracted. These included placement and adoption breakdowns. Following the identification and extraction of events, each statement was coded on six dimensions. These included:

- Internal (child): Does the foster carer believe that the event was caused by something within the child, (internal)? Or was it caused by some other factor that is outside of the child (external)?
- Internal (foster carer): Does the foster carer believe that the event was caused by some intrinsic factor within themselves (internal)? Or was it caused by another factor, outside of themselves (external)?
- Controllable (child): Does the foster carer believe that the child could influence the outcome of the event (controllable)? Or was the outcome inevitable and not under anyone's control (uncontrollable)?
- Controllable (parent): Does the foster carer believe that they were able to influence the outcome of the event (controllable)? Or was it believed to be inevitable and not under their control (uncontrollable)?

- Personal universal: Does the foster carer believe that the event is typical to their specific child (personal)? Or is it as likely to happen to other children under the same circumstances (universal)?
- Stability: Does the foster carer believe that the cause is likely to apply in future similar situations and cause future events (stable)? Or is the cause likely to vary (unstable)?

These attributions are awarded scores of one or three, for either pole of the attribution dimension. A two is awarded where elements of both poles are present. For example, with the internal dimension, elements of internality and externality must be present. This might include an interaction between two individuals, where the foster carer believed both are involved, For example, "his sister annoyed him so he hit her."

Bolton et al. (2003) used this version of the LACS in their research relating to the EE and attributions of mothers with children with behaviour difficulties. They found kappa coefficients ranging from .55 (controllable by mother) to .89 (internal to child) for the six dimensions. Table 2.3 outlines the reliability information for its use within this current study.

Table 2.3.

Kappa Measure of Agreement (k) and Interclass Correlations (ri) for the LACS

	Reliability							
LACS Dimension	Time 1 $(n = 15)$	Time 2 ( $n = 10$ )						
Extracted attributions	ri = .93	ri = .99						
Internality (to the child)	k = .84	k = .9						
Internality (to the foster carer)	k = .85	k = .83						
Controllability (by the child)	k = .66	k = .8						
Controllability (by the foster carer)	k = .94	k = 1						
Personal - universal	k = .6	k = .98						
Stability	k = .75	k = .9						

# 2.5.3 The Child Behaviour Inventory (ECBI; Eyberg & Pincus, 1999)

The ECBI is a 36 item rating scale. It examines conduct problems in children and adolescents aged between 2 and 16 years of age. It measures the occurrence of a number of different behaviour problems which are rated on an *intensity* scale and a *problem* scale. The intensity scale is rated on 7 points, ranging from 1 (never) to 7 (always) and is based on the frequency of the behaviour. The problem scale is rated yes or no and indicates if the specific behaviour is problematic or not for the parent or carer. The total problem score is the number of times that the behaviour has been rated as problematic (Eyberg & Pincus, 1999).

This scale is deemed to have good test retest reliability, with a Kappa coefficient of .75 for intensity and total problem score (Funderburk, Eyberg, Rich & Behar, 2003). The internal consistency rating is very good, with a Chronbach's alpha of .95 for intensity and .94 for problem rating (Colvin, Eyberg & Adams, 1999). In the current study, the Cronbach alpha coefficient was .93 for intensity and .9 for

problem rating. Guttman split half coefficient analysis for this current study was also deemed to be very good, with .82 for intensity and .83 for the problem scale.

The ECBI also correlates with the externalising scales of the Child Behaviour Checklist (CBCL; Achenbach & Edelbrock, 1983), with .67 for problem and .75 for intensity, indicating good concurrent validity, (Boggs, Eyberg & Reynolds, 1990). It was felt that the ECBI would be a more appropriate measure to use for this study than the CBCL. This is because the research is not investigating internalising symptoms, the ECBI is shorter than the CBCL and it can also be administered via the telephone.

#### 2.5.4 Data Collection Procedure

During the meeting, participants were asked to complete the measures in the following order:

- Demographic Questionnaire. Completion of this measure took approximately five minutes.
- Five Minute Speech Sample. Foster carers were asked to talk for five minutes about their child. This was recorded and later transcribed and coded for two measures of EE and a measure of attributions.
- Eyberg Child Behaviour Inventory. Completion of this measure took approximately 15 minutes.

The measures were presented in this order so that the ECBI would not 'contaminate' the participants monologue for the FMSS.

#### 2.6 Ethical Considerations

The ethical considerations with this research include issues regarding consent, confidentiality and coercion. Issues regarding data storage and possible distress caused by the research will also be discussed.

# 2.6.1 Ethical Approval

The University of East Anglia's Faculty of Health's Ethics Committee approved this research (Appendix B). In order to perform research within the two local authorities who consented to participate, their individual research and development approval was sought and granted (see Appendix C and D for letters).

# 2.6.2 Informed Consent

Foster carers were informed that participation in the research was voluntary and confidential. It was stated in the information sheet and reiterated in person that should they wish to do so they could withdraw their data at any time. The consent form asked that the participants understood the study and that they permitted to have five minutes of the interview recorded, transcribed and scored by both the primary researcher and a secondary rater.

#### 2.6.3 Coercion

After consent forms were received, the researcher met with the participants at a later date to collect data. To ensure that the participants still consented to take part in the research, the study was discussed prior to the start of data collection. To counteract coercion, it was made clear to participants that if they did not wish to participate, this would not affect them or their child in any way and they could chose not to participate. One participant declined to participate.

#### 2.6.4 Data Storage

Foster carers were informed that five minutes of their interview would be recorded, transcribed and coded. They were aware of the possibility that a second researcher may also listen to their tape, to check for accuracy of coding. For the duration of the study, all data kept on a computer was protected by a password and paperwork was kept in a secure, locked filing cabinet. Consent forms were kept separately from the completed questionnaires and speech samples. All participants were informed that on completion of the study, the raw data would be kept in a locked filing cabinet in the research archives at the University of East Anglia for five years.

# 2.6.5 Confidentiality

Participants were assured that the information they gave would be treated completely confidentially at all times. Participants were informed that their data would only be identifiable to the primary researcher, through a number code, not by their name; therefore the data was anonymous to anyone other than the primary researcher. Their organisation would not be informed that they had participated in the research study.

# 2.6.6 Anonymity for the Looked After Children

Participants were asked to use a pseudonym when discussing their child, so that their child's identity remained anonymous. However, it was made clear that if abuse or gross malpractice was disclosed, confidentiality would be broken and appropriate agencies would need to be informed.

#### 2.6.7 Possible Distress

Although unlikely to cause distress to the foster carer, this research could have raised concerns regarding their looked after child's behavioral difficulties. If it did raise concerns, participants were advised to discuss this with their child's social worker.

#### 2.6.8 Right to Withdraw

The participant's right to withdraw from the research at any time was made clear in the information sheet. This was also reiterated in person. If a participant did want to withdraw at any point, this was possible due to a code system linking consent forms to the data, known only to the researcher. There have not been any participants who have requested to withdraw their data.

# 2.7 Data Preparation

Following inspections of histograms, normal distributions and tests of skewness and kurtosis, it was found that the data was not normally distributed. For this reason, non parametric tests were used throughout the data analysis.

Demographic data was examined to ensure that there were no significant differences within the data that potentially could account for statistically significant results. The collected data included nominal, ordinal and interval data.

# 2.8 Statistical Analysis

Prior to analysis, the data was examined to make sure it met the assumptions of the statistical tests. The data did not meet the assumptions; therefore non parametric tests were used throughout the analysis.

# 2.8.1 Research Question One

Is there a difference between the EE categories, when measured by the PFMSS and the FMSS? It was hypothesised that the FMSS would produce a higher proportion of high EE, when compared to the PFMSS.

In order to address the research question, descriptive data for EE using both of the measures was initially computed. The individual categories that comprise both of the measures are outlined in table 2.4.

Table 2.4

EE Categories Measured by the PFMSS and the FMSS and their Scoring Classifications.

	Scoring cla	assification
EE	PFMSS	FMSS
Overall EE	High or low	High or low
Initial Statement	Positive, neutral or negative	Positive, neutral or negative
EOI	Low, moderate or high	Low, borderline or high
Relationship	Positive, neutral or negative	Positive, neutral or negative
Critical Comments	Frequency count	Frequency count
Positive Comments	Frequency count	Frequency count
Warmth	Low, moderate or high	Not measured

Table 2.4 shows that for overall EE and five of the categories, both methods measured the same components. The FMSS does not provide a measure of warmth.

To answer the research question, participants were divided into high and low EE as measured by the PFMSS. The same participants were also divided into high and low EE from the FMSS. A McNemar test was used to determine whether the row and column frequencies in the 2 x 2 contingency table were equal, for overall EE.

In order to examine the individual components that comprise the two EE measures, the Fisher Freeman-Halton exact test was used (3 x 3).

#### 2.8.2 Research Question Two

Is there an association between the levels of EE in foster carers and the level of behavioural difficulties in their looked after child?

In order to examine any significant differences between overall EE and behavioural difficulties, participants were divided into two groups, in accordance with whether they were coded as high or low EE from the PFMSS. Between group differences in participants ratings of their looked after child's behaviour difficulties were determined through Mann Whitney tests. This analysis was repeated for the division of high or low EE when measured by the FMSS.

Individual Kruskal Wallis tests were used to examine the differences within the EE components and the behavioural difficulties. This analysis was performed for the initial statement, warmth, EOI and relationship components.

In order to examine the direction of any significant differences, follow up

Mann Whitney tests were conducted, using a Bonferroni adjusted significance level.

This analysis was again repeated for the components when measured using the

FMSS.

Spearman's Rank Order Correlation Coefficients were used in order to examine the relationship between critical comments, positive comments, positive remarks, intensity of behaviour difficulties and problem scores.

# 2.8.3 Research Question Three

What type of attributions do foster carers make about their looked after children? Is there a relationship between externalising behaviour problems in looked after children and the attributions of their foster carer?

It was hypothesised that foster carers who have children with higher rates of externalising behaviour difficulties will have attributions that were more internal, controllable, personal and stable to the child and external and uncontrollable by themselves.

Events were extracted and coded along the six attribution dimensions, in accordance with Stratton et al.'s (1988) guidelines. The attribution dimensions and their scores are detailed in Table 2.5.

Table 2.5

Codes for Attribution Dimensions.

Type of Attribution	1	2	3
Internal (child)	External	External and internal	Internal
Internal (F.C)	External	External and internal	Internal
Controllable (child)	Uncontrollable	Uncontrollable and	Controllable
		controllable	
Controllable (F.C)	Uncontrollable	Uncontrollable and	Controllable
		controllable	
Personal - universal	Universal	Not rated	Personal
Stable – unstable	Unstable	Unstable and stable	Stable

*Note:* F.C = Foster Carer

Each attribution statement was awarded a score as highlighted in Table 2.5. If it was not possible to determine a code, a score of nine was awarded for 'unrateable.' Scoring followed the guidelines recommended, with scores of two and nine being excluded from the analysis (Stratton et al., 1988). The percentage of attributions made was calculated, by determining the frequencies for each attribution rating.

In order to determine the differences between foster carer attributions, the frequency data was explored using the Wilcoxon Signed Rank test. Correlational

relationships between the frequencies of the attribution statements were explored using a Spearman's Rank Order Correlation Coefficient. Correlations were also explored using this measure between the frequencies of the attributions, intensity of the behaviour difficulty and the problem scale scores. The relationship between these constructs and the mean amount of extracted attributions was also examined.

# 2.8.4 Research Question Four

Is there an association between the levels of foster carer EE and their attributions?

It was hypothesised that high levels of EE would be associated with attributions that were internal, controllable, stable and personal to the child, while low levels of EE would be associated with attributions that are unstable, universal, external and uncontrollable by the child.

Participants were divided into two groups for high or low EE, using the PFMSS. Mann Whitney tests were used to examine if there were any significant differences between EE and the attribution dimensions. This was repeated using the EE division from the FMSS.

In order to determine if there were any significant differences between the individual EE components and attributions, Kruskall Wallis tests were employed. If any significant differences were found, post hoc analyses using Mann Whitney tests and an adjusted alpha level were used to examine the location of the difference.

The relationship between critical comments, positive comments, positive remarks and frequency of the attributions was examined using Spearman's Rank Order Correlation Coefficient.

# CHAPTER THREE

# **RESULTS**

# 3.1 Aim of Results

This chapter will outline the results of the current research. The descriptive statistics will initially be described, followed by an analysis of the individual research questions.

# 3.2. Descriptive Statistics

# 3.2.1 EE

EE was coded using two different methods from the same speech sample; the PFMSS and the FMSS. Table 3.1 shows the descriptive information for EE, when coded using both methods.

Table 3.1

EE Descriptive Data for the Entire Sample.

	Method used to measure EE								
	PFN	MSS	FM	SS					
EE components	n	%	n	%					
Overall EE									
High EE	13	20	59	92					
Low EE	51	80	5	8					
Initial Statement									
Positive	9	14	9	14					
Neutral	50	78	50	78					
Negative	5	8	5	8					
Warmth									
High	24	38							
Moderate	32	50							
Low	8	12							
Relationship									
Positive	31	48	33	52					
Neutral	28	44	25	39					
Negative	5	8	6	9					
EOI									
High / positive	1	2	7	11					
Borderline / neutral	0	0	1	2					
Low / negative	63	98	56	87					
	Md	SD	Md	SD					
Critical Comments	3	2.45	3	2.45					
Positive Comments/remarks	2	2.05	2	2.05					

Table 3.1 shows that the coding using the two different methods for initial statement, critical comments and positive comments produced the same results. This was due to the similarities in the coding rules. However results for overall EE, relationship and EOI produced different results.

# 3.2.2 Attribution Style

Attribution statements were coded along the six dimensions (Table 2.5) and scored between one and three for each pole of the attribution dimension. A score of two was awarded for attributions that fell in the middle of the pole. Following Stratton et al.'s (1988) guidelines, twos were removed from the analysis. A mean of 4.62 (SD = 2.35) events were extracted from the participants speech samples. This indicated that within the recorded five minutes, the participants made on average between four and five statements that could be extracted and coded for causal material.

Table 3.2 illustrates the sum and percentage of attributions that were extracted along the six dimensions.

Table 3.2

The Sums and Percentages of the Attribution Statements Made Along the Six Dimensions.

Attribution dimension	Sum	Percentage
Internality (child)		-
Internal	184	73.32
External	67	26.69
Middle category	45	
Unrateable	0	
Internality (F.C)		
Internal	5	1.75
External	280	98.25
Middle category	11	
Unrateable	0	
Controllability (child)		
Controllable	189	68.48
Uncontrollable	87	31.52
Middle category	17	
Unrateable	3	
Controllability (F.C)		
Controllable	5	1.74
Uncontrollable	283	98.26
Middle category	8	
Unrateable	0	
Personal to Universal		
Personal	157	55.87
Universal	124	44.13
Unrateable	15	
Stability		
Stable	102	35.92
Unstable	182	64.08
Middle category	10	
Unrateable	2	
Total attributions	1776	

*Note:* F.C = Foster Carer

Numbers in italics represent scores that were excluded from the analysis.

Tables 3.2 depicts that participants made more attribution statements that were coded as internal and controllable by the child, external and uncontrollable by

themselves, personal and unstable to their child. Out of the total of 1776 attributions, only 6.25 percent were excluded from the analysis, due to being awarded a code of either a two (n = 20) or a nine (n = 91).

# 3.2.3 Child Behaviour Difficulties

Childhood behaviour difficulties were measured using the ECBI. The ECBI produced an *intensity* rating and a *problem* rating. T scores higher than 60 on this measure indicate clinically significant scores.

Table 3.3.

The Means, Medians, Standard Deviations and Ranges for the Intensity and Problem Ratings from the ECBI (n = 66).

ECBI dimension	М	Md	SD	Minimum	Maximum
Intensity					
Raw score	120.94	116.5	40.64	54	195
T score	57.35	57	11.48	38	78
Problem					
Raw score	9.7	9	7.34	0	27
T score	53.38	52	9.53	41	76

Table 3.3 denotes the means, medians, standard deviations and ranges from the ECBI. The midpoint of a distribution is represented by a T-score of 50, and considering this, the mean of this sample on the intensity rating is higher than average. The problem scale is also slightly above average.

The individual research questions will now be addressed to explore the EE and attributions of foster carers.

# 3.3 Research Question One

Is there a difference between the EE categories, when measured by the PFMSS and the FMSS? It was hypothesised that the FMSS would produce a higher proportion of high EE, when compared to the PFMSS.

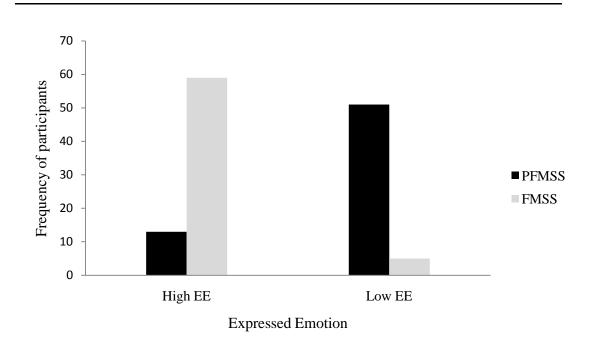


Figure 3.1. The frequencies of the overall categories of EE, when measured by the PFMSS and the FMSS.

Figure 3.1 shows that there was a large difference between the classifications of high or low EE, when coded using the two different methods. The PFMSS produced more low EE participants (n = 51) than the FMSS (n = 5), whereas the FMSS produced more high EE participants (n = 59) than the PFMSS (n = 13). This difference was statistically significant,  $X^2 = 44.02$ , p = .000. This indicated that the two methods used to measure EE produced significantly different overall EE classifications.

Table 3.1 illustrates that for three of the EE components, the two different methods produced exactly the same results (initial statement, critical comments and positive comments/remarks). However, the means for the relationship and EOI categories were different. These differences were found to be statistically significant for both EOI (p<0.001) and relationship (p<0.001).

# 3.3.1 Summary of Research Question One

Overall, there was a significant difference between the EE categorisation when using the two different methods. Significantly more participants were classified as high EE when measured by the FMSS; therefore, the null hypothesis can be rejected. Relationship and EOI, two of the components that make up EE, also significantly varied between the two different methods. Initial statement and the amount of critical comments and positive comments/remarks were not significantly different between the two measures.

#### 3.4 Research Question Two

Is there an association between the levels of EE in foster carers and the level of behavioural difficulties in their looked after child?

In order to address this research question, the descriptive statistics relating to the EE of participants and their ratings of their child's behavioural difficulties will be explored. Further analysis will then be employed to determine if there are any significant relationships or differences between overall EE and the ratings of the looked after child's externalising behaviour difficulties (intensity), and how much of a problem this is for the foster carer (problem). The individual EE components will then also be examined, to determine if there are any significant differences between the components that comprise EE and the intensity and problem ratings.

Table 3.4 outlines the descriptive statistics for the results from the PFMSS and the FMSS, with the intensity and problem scale from the ECBI.

Table 3.4

The Means, Medians and Standard Deviations of the PFMSS and the FMSS, with Intensity and Problem (ECBI)

	ECBI and PFMSS								ECBI and FMSS						
			Intensity			Problem		_	Intensity			Problem			
	n	M	SD	Md	M	SD	Md	n	M	SD	Md	M	SD	Md	
High EE	13	63.5*	11.2	58	55.2	9.5	52	59	57.6	11.6	58	53.8	9.5	52	
Low EE	51	55.6	11.1	55	52.7	9.5	52	5	51.8	9.8	54	46.8	6.7	42	
Initial Statement*1															
Positive	9	65.7	11.7	66	59	12.2	56	9	65.7	11.7	66	59	12.2	56	
Neutral	50	56.2	10.6	55	52.9	8.6	52	50	56.2	10.6	55	52.9	8.6	52	
Negative	5	52.2	15.2	45	46.6	9.9	42	5	52.2	15.2	45	46.6	9.9	42	
Relationship* <sup>2</sup>															
Positive	31	54.6	10.8	54	51.2	9.5	51	33	55.1	10.7	54	51.8	9.5	51	
Neutral	28	57.4	10.8	58	54.6	9.2	55	25	57.6	10.7	58	54.5	9.3	54	
Negative	5	72.6	8.8	77	58.4	10	55	6	67.2	15.5	75	55.8	11	52.5	
EOI															
High/positive	1	56	0	56	1	52	52	7	49	6.2	48	47	5.6	45	
Borderline/neutral	0	0	0	0	0	0	0	1	48		48	51		51	
Low/negative	63	57.2	11.6	57	53.3	9.6	52	56	58.4	11.7	58	54.1	9.7	54	
Warmth															
High	24	57.5	11.33	57	52.4	10	51.5								
Moderate	32	56.2	12	56	53.1	8.8	53								
Low	8	60.1	11	57.5	56.4	11.2	56								

<sup>\*</sup>p<0.05 (two tailed).

<sup>&</sup>lt;sup>1</sup> Significant difference for initial statement and intensity,  $X^2$  (2, n = 64) = 6.1, p = .047, using both the PFMSS and FMSS (positive>neutral, positive>negative, neutral>negative).

<sup>&</sup>lt;sup>2</sup> Significant difference for relationship and intensity,  $X^2$  (2, n = 64) = 9.3, p = .01, using the PFMSS (negative>neutral\*, negative>positive\*, neutral>positive).

#### 3.4.1 Overall EE

Participants who were classified as high EE (as measured by the PFMSS), had significantly higher ratings of the intensity of their child's behaviour difficulty (z = -2.11, p = .035, r = -.26), when compared to the low EE group. There was no significant difference between the two groups when compared on the problem rating (z = -.87, p = .376, r = -.11). When measured by the FMSS, there was no significant difference between the high and low EE group for either intensity (z = -1.16, p = .244, z = -.15), or for problem rating (z = -1.55, z = .120, z = .19). However, these results need to be considered as tentative because the sample size associated with the low EE group was relatively small when measured using the FMSS.

#### 3.4.2 EE Components

#### 3.4.2.1 Initial statement.

The initial statement when measured using both methods produced exactly the same scores (Table 3.4), due to the similar scoring rules. Participants were categorised into three groups: positive, negative or neutral initial statement. There was a significant difference between the three groups when compared using the intensity of the behavioural difficulties,  $X^2$  (2, n = 64) = 6.1, p = .047. The difference between the three groups for problem rating did not reach significance,  $X^2$  (2, n = 64) = 5.65, p = .059.

When further post hoc analysis was conducted for intensity; using a Bonferroni adjusted alpha level of .017, no significant differences were detected between the three groups. There was no significant difference in the behavioural intensity levels between the positive and neutral group, (z = -2.3, p = .021, r = -.3), the positive and negative group, (z = -1.6, p = .109, r = -.43), or between the neutral and negative group (z = -1.8), z = -1.12.

# 3.4.2.2 Relationship.

Participants were classified into three relationship groups using the PFMSS: positive, neutral or negative. There was a significant difference between the three groups when compared using intensity of the behavioural difficulties,  $X^2$  (2, n = 64) = 9.3, p = .01, but not when compared using problem rating,  $X^2$  (2, n = 64) = 3.35, p = .19.

Further analysis was conducted for intensity, using the adjusted alpha level. This revealed a significant difference in the behavioural intensity levels between the positive and negative group (z = -2.8, p = .005, r = -.45). Furthermore, a significant difference was also found between the neutral and negative group (z = -2.7, p = .007, r = -.47). There was no significant difference between the positive and neutral group (z = -1.08, p = .281, r = -.14).

Participants were also classified into three relationship groups using the FMSS: positive, neutral or negative. There was no significant difference between the three groups when compared using the intensity of the behaviour difficulties,  $X^2$  (2, n = 64) = 4.62, p = .1, or the problem rating,  $X^2$  (2, n = 64) = 1.45, p = .49.

# *3.4.2.3 Warmth.*

Participants were classified into three warmth groups: low, moderate or high. There was no significant difference between the three warmth groups when compared using the intensity of the behaviour difficulties,  $X^2$  (2, n = 64) = .75, p = .686, or the problem rating,  $X^2$  (2, n = 64) = .72, p = .698.

#### 3.4.2.4 EOI.

Participants were categorised into three groups using the PFMSS: high, borderline or low EOI. Due to their only being one participant in the high EOI group

(Table 3.4), analysis of the relationship between this category and intensity of behaviour difficulties and problem rating was not computed.

Participants were also categorised into three EOI groups using the FMSS: positive, neutral or negative. There was no significant difference between the three EOI groups when compared using the intensity of the behaviour difficulties,  $X^2$  (2, n = 64) = 4.6, p = .1, or problem rating  $X^2$  (2, n = 64) = 3.25, p = .196.

3.4.3 The Relationship Between Critical Comments and Positive Remarks with Child Behaviour Difficulties

Table 3.5 demonstrates the relationships between critical comments and positive comments from the PFMSS, critical comments and positive remarks from the FMSS and behaviour intensity and problem scores (ECBI). Rules for coding critical comments and positive comments and remarks across the two coding systems are very similar. This resulted in perfect correlations with critical comments from the PFMSS and critical comments from the FMSS. Similarly, the positive remarks (FMSS) and the positive comments (PFMSS) also were perfectly correlated with each other.

Table 3.5.

Correlations Between Critical Comments, Positive Remarks (FMSS), Critical

Comments, Positive Comments (PFMSS), Intensity and Problem (ECBI).

Measure	1	2	3	4	5	6
1. Critical	-	311*	1**	311*	.47**	.502**
comment (PFMSS)						
2. Positive		-	311*	.1**	383**	28*
comment (PFMSS)						
3. Critical			-	311*	.47**	.502**
comment (FMSS)						
4. Positive remarks				-	383**	28*
(FMSS)						
5. Intensity					-	.641**
(ECBI).						
6. Problem						-
(ECBI).						

<sup>\*</sup>Correlation is significant at the 0.05 level (2 tailed)

Table 3.5 shows that there were positive correlations between critical comments and intensity ( $r_s$  = .47, n = 64, p < .001), critical comments and problems ( $r_s$  = .502, n = 64, p < .001) and problem and intensity ( $r_s$  = .641, n = 66, p < .001). This indicated that the more critical comments participants made, the higher the scores were on both the intensity and the problem rating of the ECBI.

There were negative correlations between critical comments and positive comments ( $r_s = -.311$ , n = 64, p = .012), positive comments and intensity ( $r_s = -.383$ , n = 64, p = .002) and positive comments and problem ( $r_s = .28$ , n = 64, p = .025). This shows that the more positive comments a participant made, the lower the score was on the intensity and the problem scale. In other words, the more positive the participant

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2 tailed)

was about their child, the lower they rated their behavioural difficulties to be and the less of a problem they found their behaviour to be for themselves. Also, the more positive comments that were made, the less critical comments were made.

# 3.4.4 Summary of Research Question Two

Analysis using the PFMSS showed that there was a significant difference between participants classified as high EE and their ratings of the intensity of their child's behaviour difficulties. Participants in the high EE group rated the intensity of their child's behaviour problems as higher, compared to participants in the low EE group. No significant differences were found when the FMSS was used to measure overall EE.

Relationship (PFMSS) also produced a significant result with intensity.

Participants who fell into the negative relationship category rated the intensity of their child's behaviour problems as significantly worse, when compared to the participants who had either a neutral or a positive relationship with their child. Initially, there was a significant difference between initial statement and intensity of child behaviour difficulties. However, the differences between the three groups were not significant.

Intensity and problem scores did not significantly vary across the warmth (PFMSS), EOI groups or relationship group, when measured using the FMSS.

There were positive correlations between critical comments and both the problem and intensity score. This indicated that the more critical comments were made, the higher the participants rated their children's behaviour difficulties to be and a higher a problem they were for them. There was a negative correlation between positive remarks and problem and intensity score. In other words, the more positive remarks were spoken, the lower the scores were on the intensity and problem scale.

# 3.5 Research Question Three

What type of attributions do foster carers make about their looked after children? Is there a relationship between externalising behaviour problems in looked after children and the attributions of their foster carer? It was hypothesised that foster carers who have children with higher rates of externalising behaviour difficulties will have attributions that are more internal, controllable, personal and stable to the child and external and uncontrollable by themselves.

The attribution frequency data (Table 3.2) will initially be explored to determine what type of attributions foster carers make about their children. This will then be correlated to examine the relationships between the attributions. The attributions will then be examined in relation to intensity and problem, in order to address the research question.

# 3.5.1 An Analysis of the Frequency of the Attributions Made by Foster Carers

# 3.5.1.1 Internal to external to the child.

There was a significant difference within the frequency of attributions made along the internal-external attribution dimension (z = -4.22, p < .001, r = -.37). Foster carers made significantly more attribution statements that were coded as internal as opposed to external to the child.

# 3.5.1.2 Internal to external to the foster carer.

There was also a significant difference with the frequency of attributions made along the internal-external to the foster carer attribution dimension (z = -7.72, p < .001, r = -.68). Foster carers made significantly more attributions that were external to themselves.

# 3.5.1.3 Controllable to uncontrollable by the child.

The controllable-uncontrollable by the child attribution dimension also significantly varied along the frequencies of attribution statements made (z = -3.92, p < .001, r = -.35). Foster carers made significantly more controllable by the child attributions, than uncontrollable attributions.

# 3.5.1.4 Controllable to uncontrollable by the foster carer.

Controllable-uncontrollable by the foster carers produced significant differences (z = -7.73, p < .001, r = -.68). Participants made significantly more uncontrollable than controllable attributions.

# 3.5.1.5 Personal to universal.

There was no significant difference between the amount of personal and universal attributions made (z = -1.16, p < .25, r = -.1).

# *3.5.1.6 Stable to unstable.*

The amount of stable and unstable attributions significantly varied (z = -3.8, p < .001, r = -.32). Participants made significantly more unstable attributions than stable, indicating that they believed the negative events they discussed were caused by factors that were either in the past, or were likely to be isolated events and therefore not likely to remain present and cause future negative events.

#### 3.5.2 Correlations Between the Attribution Dimensions

Table 3.6 shows the correlations between the frequencies of the attributions.

Table 3.6

Correlations Between the Frequencies of the Attributions.

Attributions	1	2	3	4	5	6	7	8	9	10	11	12
1. Internal (child)	1	314*	214	.737**	.583**	.082	059	.714**	.593**	.343**	.416**	.508**
2. External (child)		1	.401**	.2	.054	.288*	.265*	.227	098	.307*	.223	.062
3. Internal (F.C)			1	124	117	.185	.783**	104	274*	.228	.113	21
4. External (F.C)				1	.745**	.234	.01	.991**	.701**	.472**	.581**	.685**
5. Controllable (child)					1	359**	067	.758**	.698**	.260*	.364**	.602**
6. Uncontrollable (child)						1	.278*	.223	093	.339**	.373**	102
7. Controllable (F.C)							1	024	199	.27*	.213	21
8. Uncontrollable (F.C)								1	.704**	.468**	.568**	.705**
9. Personal									1	154	.299*	.613**
10. Universal										1	.476**	.159
11. Stable											1	106
12. Unstable												1

*Note:* F.C = Foster Carer

<sup>\*.</sup> Correlation is significant at the .05 level (2 tailed).

<sup>\*\*.</sup> Correlation is significant at the .01 level (2 tailed).

Internal to the child attributions negatively correlated with external to the child (rs = -.314, n = 64, p = .01) attributions. Controllable by the child negatively correlated with uncontrollable by the child attributions (rs = -.359, n = 64, p = .004). Therefore, the more internal to the child attributions that were made, the less external to the child attributions were made. This pattern was replicated for the controllable by the child dimension. As the scores at one end of the pole increased, scores at their polar counterpart decreased.

Internal to the child positively correlated with external to the foster carer ( $r_s$  = .737, n = 64, p < .001), controllable by the child ( $r_s$  = .583, n = 63, p < .001) and uncontrollable by the foster carer ( $r_s$  = .714, n = 64, p < .001). Therefore, participants who made more attributions that viewed the negative event as due to an internal factor within their child also saw the behaviour under the child's control but external and uncontrollable by themselves.

Attributions that were external to the child positively correlated with internal to the foster carer ( $r_s$  = .401, n = 64, p = .001), uncontrollable by the child ( $r_s$  = .288, n = 63, p = .022), controllable by the foster carer ( $r_s$  = .265, n = 64, p = .034) and universal ( $r_s$  = .307, n = 62, p = .015). In other words, attributions that viewed the behaviour as a result of a factor deriving from outside of the child were associated with an increased number of attributions that viewed the event as equally likely to happen to other children in a similar situation and they were also unable to control it. Furthermore, if it was due to an internal factor within the foster carer and they were able to control it themselves.

Internal to the foster carer attributions positively correlated with controllable by the foster carer ( $r_s$  = .783, n = 64, p < .001) and negatively correlated with personal attributions ( $r_s$  = -.274, n = 62, p = .031). Therefore, attributions where the foster

carers believed the event was due to a factor that was internal to themselves positively correlated with attributions that they could also control the negative event and negatively correlated with attributions that saw the behaviour as unique to their particular child. External to the foster carer attributions positively correlated with controllable by the child ( $r_s = .745$ , n = 63, p < .001) and uncontrollable by the foster carer ( $r_s = .991$ , n = 64, p < .001). In other words, attributions where the foster carer believed that the event was due to a factor that was external to themselves positively correlated with attributions that they had no control over the event, but that their child could control it.

Controllable by the child positively correlated with uncontrollable by the foster carer ( $r_s$  = .758, n = 63, p < .001). Uncontrollable by the child positively correlated with controllable by the foster carer ( $r_s$  = .278, n = 63, p = .028), universal ( $r_s$  = .339, n = 62, p = .007) and stable attributions ( $r_s$  = .373, n = 62, p = .003). Furthermore, controllable by the foster carer positively correlated with universal attributions ( $r_s$  = .27, n = 62, p = .034). This means that the more the behaviour was deemed to be under the child's control, the more it was viewed as being out of the control of the foster carer and vice versa. Furthermore, if the behaviour was seen to be out of the control of the child, then it was also viewed as not unique to their child, as likely to happen to other children in the same position and the cause was seen as likely to remain present in the future and cause future negative events. However, if the behaviour was seen to be under the control of the foster carer, it was also viewed as not specific to their child and as likely to happen to any other child in the same position.

Universal attributions positively correlated with stable attributions ( $r_s = .476$ , n = 61, p < .001). If the behaviour was seen to be as likely to happen to other children in

the same situation, then it was also more likely that the cause of the event was viewed to be continuous and likely to cause future events.

Four attributions correlated with both ends of the personal-universal and stable-unstable dimensions. They included internal to the child attributions, positively correlating with personal ( $r_s = .593$ , n = 62, p < .001), universal ( $r_s = .343$ , n = 62, p= .006), stable ( $r_s$  = .416, n = 63, p = .001) and unstable ( $r_s$  = .508, n = 63, p < .001). External to the foster carer positively correlated with personal ( $r_s = .701$ , n = 62, p < .701.001), universal ( $r_s = .472$ , n = 62, p < .001), stable ( $r_s = .581$ , n = 63, p < .001) and unstable ( $r_s = .685$ , n = 63, p < .001) attributions. Controllable by the child positively correlated with personal,  $(r_s = .698, n = 62, p < .001)$ , universal  $(r_s = .26, n = 62, p = .001)$ .041), stable ( $r_s$  = .364, n = 62, p = .004) and unstable attributions ( $r_s$  = .602, n = 62, p< .001). Uncontrollable by the foster carer positively correlated with personal ( $r_s =$ .704, n = 62, p < .001), universal ( $r_s = .468$ , n = 62, p < .001), stable ( $r_s = .568$ , n = .568) 63, p < .001) and unstable ( $r_s = .705$ , n = 63, p < .001). Personal attributions positively correlated with both stable ( $r_s = .299$ , n = 61, p = .019) and unstable attributions ( $r_s = .019$ ) .613, n = 61, p < .001). These correlations along both poles of the dimensions are surprising and not what would be expected. Possible reasons for these findings will be explored in the discussion.

# 3.5.3. An analysis of the Relationship Between Behaviour Difficulties and Attributions

The relationship between the intensity of the behaviour difficulties, problem ratings and attributions was investigated. The results of these correlations are depicted in Table 3.7.

Table 3.7

Correlation Between Intensity, Problem and Foster Carer (F.C) Attributions.

Attribution from LACS	Intensity ECBI	Problem ECBI
Total extracted events	.396**	.27*
Internal (child)	.143	.187
External (child)	.161	.056
Internal (F.C)	103	05
External (F.C)	.361**	.248*
Controllable (child)	.288*	.193
Uncontrollable (child)	.149	.145
Controllable (F.C)	046	.046
Uncontrollable (F.C)	.386**	.255*
Personal	.325*	.253*
Universal	.143	.123
Stable	.467**	.308*
Unstable	.143	.042

<sup>\*.</sup> Correlation is significant at the 0.05 level (2 tailed).

There was a medium positive correlation between total extracted events and intensity of the behaviour difficulties (r = .396, n = 64, p = .001). There was also a positive correlation between the total number of extracted events and the problem scale (r = .27, n = 64, p = .031). This indicated that the more events that were extracted and coded for attributions, the higher the scores were on both the intensity and problem scale.

External to the foster carer attributions positively correlated with both the measure of intensity (r = .361, n = 64, p = .003) and problem (r = .248, n = 64, p = .048). Controllable by the child attributions also positively correlated with intensity (r = .288, n = 63, p = .022).

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2 tailed).

Uncontrollable by the foster carer attributions positively correlated with both the intensity of the behaviour difficulties (r = .386, n = 64, p = .002) and the problem scale (r = .255, n = 64, p = .042). Personal attributions correlated with both intensity of behaviour difficulties (r = .325, n = 62, p = .01) and problem (r = .253, n = 62, p = .047). Stable attributions also correlated with both the intensity of the behaviour difficulties (r = .467, n = 63, p < .001) and the problem scale (r = .308, n = 63, p = .014).

To summarise, participants who rated the intensity of their child's behaviour difficulties as higher and also scored higher on the problem scale, had attributions that were more stable and personal to the child, and external and uncontrollable by themselves.

## 3.5.4 Summary of Research Question Three

This section has addressed the question regarding the type of attributions foster carers make about their looked after child. It was found that overall, foster carers made attributions that were more internal and controllable to the child, more external and uncontrollable by themselves and more unstable. Furthermore, the relationships between the attribution dimensions were examined and there were numerous significant relationships between the attributions. To summarise, there were negative correlations between internal and external to the child and between controllable and uncontrollable by the child. If the child's behaviour was seen to be due to some internal factor to the child, it was also more likely to be seen as controllable by the child and external and uncontrollable by the foster carer. If it was seen as external to the child, then it was also more likely to be viewed as universal, uncontrollable by the child, but controllable and internal to the foster carer. Internal to the foster carer attributions also corresponded with personal and controllable by the foster carer

attributions. External to the foster carer attributions correlated with attributions that were controllable by the child and uncontrollable by themselves. Controllable by the child attributions correlated with attributions of uncontrollability by the foster carers and vice versa. Controllable by the foster carer attributions correlated with universal attributions, and universal attributions correlated with stable attributions. There were four attributions that correlated with both poles of the personal-universal and stable-unstable attributions. They included internal to the child, external to the foster carer, controllable by the child and uncontrollable by the foster carer. This is an unexpected result and will be explored further in the discussion.

Relationships were found between the intensity of behaviour difficulties and attributions. Four of the attribution dimensions were found to positively correlate with both the intensity of the behaviour difficulties and the problem scale. In line with the hypothesis, these attributions were: personal, stable, external and uncontrollable by the foster carer. Controllable by the child also positively correlated with intensity, but not problem. However, the relationship between internal and behaviour difficulties was not found to be significant. To conclude, foster carers who rated their looked after child's difficulties as higher and more of a problem also had attributions that were more stable and personal to the child, and external and uncontrollable by themselves.

#### 3.6 Research Question Four

Is there an association between the levels of foster carer EE and their attributions?

It was hypothesised that high levels of EE would be associated with attributions that were internal, controllable, stable and personal to the child, while low

levels of EE would be associated with attributions that were unstable, universal, external and uncontrollable by the child.

# 3.6.1 Attributions and Overall EE

In order to address research question four, differences between EE and attributions will be explored. Analysis will then focus on the individual EE components, to determine if there are any significant differences between the components and attributions.

Table 3.8 outlines the attributions along both poles of the six attribution dimensions, compared to the overall EE ratings, measured by both the PFMSS and the FMSS.

Table 3.8

Attributions and Overall EE, Measured by Both the PFMSS and the FMSS

	PFMSS								FMSS								
•	Hig	gh EE	Lo	w EE	Mar	nn Whit	ney U	Hig	h EE	Lo	w EE	Ma	nn Whitne	y U			
Attributions	N	Md	N	Md	Z	p	r	N	Md	N	Md	Z	p	r			
Internal (child)	13	2	51	2	.46	.628	.06	59	2	5	1	-2.54	.011*	0.32			
External (child)	13	1	51	1	.96	.339	.12	59	1	5	0	.3	.762	.04			
Internal (F.C)	13	0	51	0	02	.986	<01	59	0	5	0	-1.05	.294	-0.13			
External (F.C)	13	4	51	4	.71	.478	.09	59	4	5	2	2.51	.012*	.31			
Controllable (child)	13	3	50	2	1.27	.204	.016	59	3	4	1	1.87	.062	.23			
Uncontrollable	13	1	50	1	94	.348	12	59	1	4	1	.19	.849	.02			
(child)																	
Controllable (F.C)	13	0	51	0	02	.986	<01	59	0	5	0	-1.05	.294	-0.13			
Uncontrollable (F.C)	13	5	51	4	.98	.327	.12	59	4	5	2	2.7	.007**	0.34			
Personal	13	3	49	2	1.23	.220	.16	58	2	4	.5	2.37	.018*	.3			
Universal	13	2	49	2	26	.792	03	58	2	4	1.5	.2	.838	.03			
Stable	13	1	50	1	.65	.518	.08	58	1	5	0	2.94	.003**	.04			
Unstable	13	3	50	3	.38	.704	.05	58	3	5	2	.43	.669	.05			

<sup>\*</sup> p < 0.05 (two tailed),

<sup>\*\*</sup> p < 0.01(two tailed).

Participants were divided into either high or low EE groups and the differences in the attributions made between the two groups were explored. As can be seen in Table 3.8, there were no significant differences between any of the attribution dimensions and the overall EE classification as measured by the PFMSS.

However, there were significant differences in attributions between the high and low EE groups when measured using the FMSS. Participants high in EE had significantly more attributions that were internal (z = -2.54, p = .011, r = 0.32) to the child and external to themselves (z = 2.51, p = .012, r = .31). High EE participants also had attributions that were more uncontrollable by themselves (z = 2.7, p = .007, r = .34), personal (z = 2.37, p = .018, r = .3) and stable (z = 2.94, p = .003, r = .04). This indicated that participants in the high EE group made more attributions that deemed their child's behaviour to be internal to the child, personal, stable and external and uncontrollable by themselves. However, these result need to be interpreted with caution due to the small number of participants in the low EE group. This will be explored further in the discussion.

## 3.6.2 Attributions and the Individual EE Categories

Statistical analysis was performed to determine if there were any significant associations between attributions and the EE categories. These results are outlined below.

Table 3.9 depicts the descriptive statistics for the individual attribution categories, against the categories that comprise EE. The chi squared and significance values are outlined in Appendix I1.

Table 3.9. A. *Internal Attributions and EE Categories, Measured by Both the PFMSS and the FMSS.* 

	Attribution															
		Interna	External to child					Interna	l to F.C	7						
	PF.	MSS	FMSS		PFN	MSS	FMSS		PFMSS		FN	<b>ASS</b>	PFMSS		FMSS	
	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md
Initial Statement <sup>1</sup>																
Positive	9	3	9	3	9	1	9	1	9	0	9	0	9	7	9	7
Neutral	50	2	50	2	50	1	50	1	50	0	50	0	50	3.5	50	3.5
Negative	5	3	5	3	5	1	5	1	5	0	5	0	5	5	5	5
Warmth <sup>2</sup>																
High	24	2			24	2			24	0			24	4		
Moderate	32	2			32	0			32	0			32	4		
Low	8	2			8	1			8	0			8	4		
Relationship																
Positive	31	2	33	2	31	1	33	1	31	0	33	0	31	4	33	4
Neutral	28	2.5	25	2	28	1	25	1	28	0	25	0	28	4	25	4
Negative	5	2	6	2.5	5	1	6	1	5	0	6	0	5	4	6	4
EOI																
High/present	1	1	7	2	1	3	7	1	1	0	7	0	1	4	7	4
Borderline/neutral	0		1	1	0		1	1	0		1	0	0		1	2
Low/not present	63	2	56	2	63	1	56	1	63	0	56	0	63	4	56	4

<sup>1</sup> Significant difference between initial statement and external to the foster carer attributions (PFMSS & FMSS),  $X^2$ , (2, n = 64) = 7.22, p = .027, positive>neutral\*, positive>negative, negative>neutral.

<sup>&</sup>lt;sup>2</sup> Significant difference between warmth (PFMSS) and external to the child attributions  $X^2$  (2, n = 64) = 11.93, p = .003, high>low, high>moderate\*, low>moderate.

Table 3.9. B. *Controllable Attributions and EE Categories, Measured by Both the PFMSS and the FMSS.* 

		Attribution														
		Controllal	ble by ch	ild	Uncontrollable by child				C	ontrollal	ole by l	F.C	Un	F.C		
	PF	MSS	FMSS		PFMSS		FMSS		PFMSS		FMSS		PFMSS		FMSS	
	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md
Initial Statement <sup>3</sup>																
Positive	9	4	9	4	9	1	9	1	9	0	9	0	9	7	9	7
Neutral	49	2	49	2	49	1	49	1	50	0	50	0	50	3.5	50	3.5
Negative	5	4	5	4	5	1	5	1	5	0	5	0	5	5	5	5
Warmth <sup>4</sup>																
High	24	3			24	2			24	0			24	4		
Moderate	31	2			31	1			32	0			32	4		
Low	8	2.5			8	1			8	0			8	4.5		
Relationship																
Positive	30	2	32	2	30	1	32	1	31	0	33	0	31	4	33	4
Neutral	28	2.5	25	2	28	1	25	1	28	0	25	0	28	4	25	4
Negative	5	4	6	3.5	5	1	6	1	5	0	6	0	5	5	6	5
EOI																
High/present	1	2	7	2	1	2	7	1	1	0	7	0	1	4	7	4
Borderline/neutral	0		1	1	0		1	1	0		1	0	0		1	2
Low/not present	62	2	55	2	62	1	55	1	63	0	56	0	63	4	56	4

<sup>-</sup>

<sup>&</sup>lt;sup>3</sup> Significant difference between initial statement and uncontrollable by the foster carer attributions (PFMSS & FMSS)  $X^2$ , (2, n = 64) = 7.98, p = .018, positive>neutral\*, positive>negative, negative>neutral.

<sup>&</sup>lt;sup>4</sup> Significant difference between warmth and uncontrollable by the child attributions  $X^2$  (2, n = 63) = 6.17, p = .046, high>low, high>moderate\*, low=moderate.

Table 3.9. C. *Personal-Universal and Stable-Unstable Attributions and EE Categories, Measured by Both the PFMSS and the FMSS.* 

		Attribution														
		Per	sonal	Universal				Stable				Unstable				
	PF	MSS	FM	1SS	PFN	MSS	FM	1SS	PFI	MSS	FN	1SS	PFI	MSS	FMSS	
	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md	N	Md
Initial Statement <sup>5</sup>																
Positive	9	4	9	4	9	3	9	3	9	3	9	3	9	3	9	3
Neutral	48	2	48	2	48	2	48	2	49	1	49	1	49	2	49	2
Negative	5	4	5	4	5	2	5	2	5	1	5	1	5	3	5	3
Warmth <sup>6</sup>																
High	23	2			23	3			24	1.5			24	3		
Moderate	31	2			31	1			31	1			31	3		
Low	8	3.5			8	.5			8	1			8	3.5		
Relationship <sup>7</sup>																
Positive	29	1	31	1	29	2	31	2	31	1	32	1	31	2	32	3
Neutral	28	2	25	2	28	2	25	2	27	1	25	2	27	3	25	3
Negative	5	3	6	2	5	2	6	2.5	5	2	6	2	5	4	6	3.5
EOI																
High/present	1	1	7	1	1	3	7	2	1	3	7	1	1	1	7	3
Borderline/neutral	0		1	1	0		1	1	0		1	0	0		1	1
Low/not present	61	2	54	2	61	2	54	2	62	1	55	1	62	3	55	3

<sup>&</sup>lt;sup>5</sup> Significant difference between initial statement and stable attributions (PFMSS & FMSS),  $X^2$  (2, n = 63) = 7.31, p = .026, positive>neutral\*, positive>negative, neutral>negative.

<sup>&</sup>lt;sup>6</sup> Significant difference between warmth (FMSS) and universal attributions  $X^2$  (2, n = 62) = 6.45, p = .04, high>moderate, high>low, moderate>low.

<sup>&</sup>lt;sup>7</sup> Significant difference between relationship (PFMSS) and personal attributions ( $X^2$  (2, n = 62) = 6.76, p = .034), negative>positive, negative>neutral, neutral>positive\*.

#### *3.6.2.1 Attributions and initial statement.*

There was a statistically significant difference in external to the foster carer attributions across the three different initial statement groups,  $X^2$ , (2, n = 64) = 7.22, p = .027. Post hoc analysis revealed a significant difference in external to the foster carer attributions between the positive and neutral group (z = -2.58, p = .01, r = -.03). The differences between the neutral and negative group (z = -1.01, p = .312, r = -.04) and the positive and negative group (z = -1.01, p = .31, r = -.27) was not significant. This indicates that foster carers in the positive group made significantly more attributions that were external to themselves than those in the neutral group.

There was also a significant difference between uncontrollable by the foster carer attributions and the three initial statement groups,  $X^2$ , (2, n = 64) = 7.98, p = .018. This difference was found to be significant between the positive and neutral group (z = -2.71, p = .007, r = -.35), with participants making significantly more attributions that were uncontrollable by themselves if they were in the positive compared to the neutral group. The difference between the neutral and negative groups (z = -.99, p = .319, r = -.13) and the positive and negative groups was not significant (z = -1.27, p = .201, r = -.34).

Furthermore, a significant difference was also found in the stable attributions across the three groups,  $X^2$  (2, n = 63) = 7.31, p = .026. The difference between the positive and the neutral group was significant (z = -2.69, p = .007, r = -.38), with participants in the positive group making more stable attributions. The difference between the neutral and the negative group (z = -.39, p = .69, r = -.05) and the positive and negative group (z = -1.49, p = .14, z = .398) was not significant.

## 3.6.2.2 Attributions and Warmth (PFMSS).

There was a statistically significant difference in child external attributions across the three different warmth groups,  $X^2$  (2, n = 64) = 11.93, p = .003. Post hoc tests revealed a significant difference in external to the child attributions between the high and the moderate warmth groups (z = -3.29, p = .001, r = -.44). The differences between the low warmth group (z = -1.78, p = .076, r = -.28) and the high to low warmth group (z = -1.13, p = .26, r = -.02) were not significant. Participants who displayed high levels of warmth made significantly more child external attributions than the moderate group.

There was also a significant difference between uncontrollable by the child attributions and the three warmth groups,  $X^2$  (2, n = 63) = 6.17, p = .046. Post hoc tests revealed a significant difference in uncontrollable by the child attributions between the high and the moderate warmth groups (z = -2.41, p = .016, r = -.325), with those in the high warmth group making more uncontrollable by the child attributions. The differences between the moderate to low warmth group (z = -.53, p = .593, r = -.01) and the high to low warmth group (z = -.1.35, p = .176, r = -.37) were not significant.

There was a significant difference between universal attributions and the three warmth groups,  $X^2$  (2, n = 62) = 6.45, p = .04. However, when the Bonferroni adjusted alpha level was applied; none of the differences between the groups were found to be significant. The difference between the high and the moderate warmth group (z = -2.12, p = .034, r = -.29), the high and the low warmth group (z = -2.01, p = .045, r = -3.36) and the moderate to low warmth group (z = -.91, z = -.15) were not significant.

## 3.6.2.3 Relationship.

Significant differences were found between the three relationship groups when measured using the PFMSS and personal attributions ( $X^2$  (2, n = 62) = 6.76, p = .034). Post hoc analysis revealed that the positive and neutral groups were significantly different from each other with participants in the neutral relationship group making significantly more personal attributions, than the positive group (z = -2.5, p = .012, r = -.33). The relationship between the positive and negative (z = -1.37, p = .17, r = -.23) and neutral and negative (z = -.051, p = .959, r < .001) relationship groups were not significant. There were no significant differences between the relationship groups when measured using the FMSS.

#### 3.6.2.4 EOI.

When measuring EOI using the PFMSS only one participant was classified as high EOI. Due to the unequal groups for this category, no further tests were computed. The group sizes for EOI when measured using the FMSS were still very uneven (low: n = 56, borderline: n = 1, high: n = 7). However, analysis was computed for all the attribution dimensions. No significant differences were found between any of the groups on any of the six attribution dimensions.

# 3.6.2.5 *Critical and Positive Comments.*

Table 3.10 outlines the correlations between the frequency of the attributions and critical and positive comments.

Table 3.10

Correlations Between the Frequency of Foster Carer (F.C) Attributions, Critical and Positive Comments.

Attribution from LACS	Critical comments	Positive comments
Total extracted events	.424**	189
Internal (child)	.34**	.046
External (child)	.025	141
Internal (F.C)	.027	132
External (F.C)	.414**	12
Controllable (child)	.373**	196
Uncontrollable (child)	.069	.062
Controllable (F.C)	.121	18
Uncontrollable (F.C)	.412**	143
Personal	.423**	143
Universal	.128	096
Stable	.456**	075
Unstable	.093	184

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2 tailed).

There was a positive correlation between the total amount of events extracted and critical comments ( $r_s = .424$ , n = 64, p < .001) indicating that the more attribution statements that were extracted, the more likely participants were to make critical comments about their child.

Furthermore, there were positive correlations between critical comments and internal to the child attributions ( $r_s$  = .34, n = 64, p < .001), external to foster carer attributions ( $r_s$  = .414, n = 64, p = .001), controllable by child ( $r_s$  = .373, n = 63, p = .003), uncontrollable by foster carer ( $r_s$  = .412, n = 64, p = .001), personal ( $r_s$  = .423, n = 64, p = .001) and stable ( $r_s$  = .456., n = 63, p < .001).

This indicated that participants who made more critical comments also displayed attributions that were more personal, stable, internal and controllable by the child and external and uncontrollable by themselves.

## 3.6.3 Summary of Research Question Four

The differences between EE and attributions were initially examined. No significant associations were found between level of EE and attribution style when measured by the PFMSS. However, when the FMSS was used, high EE was associated with attributions that were internal, personal and stable to the child and external and uncontrollable by themselves. However, due to the difficulties with uneven group sizes, the significant findings may be better explained by the amount of critical comments made specifically, not the overall EE rating from the FMSS.

The individual EE components were analysed to determine if there were any significant differences between initial statement, warmth relationship and EOI. Significant differences were found relating to initial statement, with participants in the positive group making attributions that were more stable, external and uncontrollable by themselves, compared to those in the neutral group. Participants in the high warmth group also displayed attributions that were more external and uncontrollable by the child. There were no significant differences between attributions and relationship when measured using the PFMSS. However, when the FMSS was used, participants in the neutral group made attributions that were more personal than the positive group. There were no significant relationships between attributions and EOI from the FMSS and this analysis was not performed on the EOI measurement from the PFMSS due to inadequate group numbers.

No significant relationships were found between positive comments and any of the attribution dimensions. However, there were significant positive relationships between critical comments and internal and controllable by the child, external and uncontrollable by the foster carer, and personal and stable attributions.

## 3.7 Chapter Summary

The data analysis produced interesting results. These included the finding that the FMSS and the PFMSS produced significantly different classifications of overall EE in foster carers. This has implications for the reliability and the validity of the measures and will be explored further in the discussion. Participants classified as high EE from the PFMSS made significantly higher ratings of the intensity of the child's behaviour difficulties, compared to those in the low EE group. Furthermore, those who were classified as having a negative relationship (PFMSS) with their child also rated their child's behaviour difficulties as higher. Additionally, participants who made more critical comments also rated their child's behaviour difficulties as higher and more of a problem for them. Conversely, those who made more positive comments had lower scores on both the intensity of the behaviour difficulties and the problem scale.

The relationships between attributions and child behaviour difficulties were as predicted in the hypothesis, with the exception of internal to the child attributions. It was found that foster carers with children with higher ratings of intensity of behaviour difficulties had attributions that were more stable, personal and controllable by the child, and external and uncontrollable by themselves. Furthermore, high EE, as measured by the FMSS, was associated with attributions that were internal, personal and stable to the child and external and uncontrollable by themselves. However, these results cannot be interpreted with confidence and may be better accounted for by the relationship between attributions and critical comments. An examination of the

relationship between critical comments and attributions found that there were significant correlations between critical comments and personal, stable, internal and controllable by the child attributions, and external and uncontrollable by the foster carer attributions.

These findings have theoretical and clinical implications that will be explored in the discussion. The strengths and limitations of this research will also be discussed, in addition to potential avenues for further research in this field.

#### CHAPTER FOUR

#### DISCUSSION

#### 4.1 Overview

This chapter will initially describe a brief summary of the aims of this research. This will then be followed by an examination of the findings from the individual research questions and how this relates to the relevant literature. Theoretical and clinical implications of the findings will be explored and how this research relates to EE research and attribution theory will be discussed. The strengths and limitations of this research will be examined, concluding with suggestions for future research in this field.

# 4.2 Summary of Study Aims

This study aimed to consider the EE and attributions of foster carers, towards their looked after child, in relation to their child's levels of externalising behaviour difficulties. The research questions were guided by the previous EE and attribution literature, applying it to a new context of foster care. This research also aimed to compare the use of two methods to measure EE, the PFMSS and the FMSS. The four research questions will now be explored in more detail.

## 4.3 Research Question One

Is there a difference between the EE categories, when measured by the FMSS and the PFMSS?

Although the two coding systems have not been directly compared before, it was hypothesised that there would be a difference between the two methods, due to the

changes made to the PFMSS (Daley et al., 2003). It was predicted that the FMSS would produce a higher proportion of high EE, when compared to the PFMSS. The results of this research supported this hypothesis and this will now be explored further.

#### 4.3.1 A Comparison of the PFMSS and the FMSS

The FMSS produced significantly more high EE individuals (92%) than the PFMSS (20%) in this sample of foster carers. The EE of foster carers has not been measured before, so it is not possible to compare these rates to other studies within this population. However, this high level for the FMSS is slightly higher than levels reported in parental studies of children with diagnosed behaviour difficulties. For example, in their study of parental EE and DBD, Hibbs et al. (1991) reported that 88 percent of the parents with children diagnosed with DBD had high EE. Peris and Baker (2000) reported that 79 percent of their sample of mothers of preschool children with externalising behaviour difficulties had high EE. In addition, in their study comparing the FMSS to the original measurement of EE, the CFI, Calam and Peters (2006) found that 87 percent of their sample of mothers of children with behaviour difficulties was classified as high EE, using the FMSS. However, they also compared the FMSS to the CFI to measure EE. They found that the FMSS produced more high EE individuals than produced by the CFI, suggesting that the FMSS may lead to elevated inclusion rates of families into the high EE category.

It is perhaps unsurprising that in this sample, the rates of EE were high when the FMSS was used. One of the rules for classifying someone as high EE is that they only need to make one critical comment to meet high EE criteria. However, when the PFMSS was used, the classification of high EE depended on there being more critical than positive comments and at least one negative or low overall global category. Even

though there were the same amount of critical comments made when coded using both of the scoring methods, this difference in allocation can be accounted for by the differences in scoring rules. Foster carers look after children who are amongst the most vulnerable in our society (Meltzer et al., 2003) and many display significant behaviour problems that may challenge their foster carers (Sellick, 2006). The participants only had to make one criticism of their looked after child within the five minutes to be classified as high EE using this measure, which perhaps could be viewed as a low threshold.

Daley et al. (2003) criticised the FMSS for use with parents of younger children. They believed that it is not sensitive enough to identify EOI; it does not code for warmth and is not sensitive to the developmental changes in parent-child relationships. Using the PFMSS, they found that the rates of high EE in mothers of children with a diagnosis of ADHD were 43 percent. This was double the rate of high EE found in this sample of foster carers with the PFMSS. The children in this current research had above average rates of behaviour difficulties, but this rate did not reach clinical significance. The sample was drawn from the general population of foster carers; therefore the variance may be accounted for by sampling differences.

The significant difference in the classification of overall EE using the two different methods has a major impact on the potential reliability and validity of both of the measures. The overall classification of high or low EE seemed to be more appropriate using the PFMSS with foster carers. Participants only needed to make one critical comment on the FMSS to be classified as high EE, whereas the rules for the PFMSS were more lenient. This caused 92 percent of the foster carers to be allocated as high EE from the FMSS. This is a higher level than would be expected of this sample, drawn from a general, not a clinical population. However, in terms of validity

to the original method for assessing EE, the CFI, Daley et al. (2003) described how the high EE distinction from the FMSS is generally accepted to be accurate. It is the low EE category that contains false negatives. Whereas Calam and Peters (2006) found that the FMSS produced more high EE individuals than the CFI. This research indicates that there is the need for a much larger study that can develop a more appropriate method to index EE with child samples, comparing this to the original method developed to measure EE, the CFI.

## 4.3.2 Individual EE Categories

Due to similarities in the coding rules, it was found that the ratings for critical comments, positive comments and remarks, and initial statement were rated exactly the same using both of the methods.

However the EOI and relationship components significantly differed. Only one participant was classified as high EOI from the PFMSS, compared to seven from the FMSS. This difference in EOI can be accounted for by the extensive revisions to the changes in the coding for the PFMSS. For example, one of the changes is that the number of positive comments does not influence the EOI rating. This was changed because it was seen as appropriate for a parent of a younger child to share their achievements with others. In the traditional version, if more than five positive remarks are spoken in five minutes, a high EOI rating is given. Peris and Baker (2000) explained that EOI displayed by parents of adults is seen as a risk factor for mental illness, due to the child's awareness that their parent's behaviour is inappropriate and overprotective. Whereas this type of behaviour in parents of younger children is appropriate.

The EOI scale did not have acceptable reliability in Daley et al.'s (2003) development of the PFMSS. They reported code re-code reliability was .21, inter rater

was .19 and test retest was .17. Although for this study the inter rater reliability was excellent, EOI rates were very low in this sample when categorised using both methods. It is possible that these low rates may be a true reflection of the low rates of EOI amongst this population. EOI has been found to be low in parents of children who displayed externalising behaviour problems, and high with internalising behaviour problems (Stubbe et al., 1993). This research found that the children had higher than average rates of behaviour difficulties. Rates of internalising difficulties were not measured. Daley et al. advised that before the EOI construct is removed from the EE measure, more research needs to be conducted with parents of children with internalising behaviour difficulties.

The relationship classifications also varied using the two different methods. More participants were classified as having a positive relationship from the FMSS than the PFMSS and more participants were classified as having a neutral relationship on the PFMSS than the FMSS. This difference can also be accounted for by the changes in coding between the two measures. The PFMSS scoring was amended to account for developmental changes in the relationship between the parent and their younger child, therefore statements that were more than six months old were excluded from coding. This may explain why more participants were classified as having a neutral relationship on the PFMSS.

## 4.3.3 Summary of Research Question One

It was found that the levels of EE significantly varied when the two measures of EE were used, therefore the null hypothesis can be rejected. Levels of EE from the FMSS could be seen as similar to other research studies of parents with children with behaviour difficulties using the same method (e.g. Hibbs et al., 1991; Peris & Baker, 2000; Calam & Peters, 2006). However, children in this sample only had just above

average levels of behaviour difficulties, therefore the rate of high EE from the FMSS appears to be much higher than would be expected. Due to the developmental inappropriateness of its use, the PFMSS was also coded. A significantly lower proportion of participants were classified as high EE. The level found using this method was smaller than Daley et al.'s (2003) findings. This may be accounted for by differences between the two samples. The two methods also varied on their classification of relationship and EOI. Changes in the scoring rules can account for these differences. However, the rates of critical comments, positive comments/remarks and initial statement was the same across the two measures, providing evidence for the usefulness of these individual components of EE. However, further research is needed to develop and validate appropriate measurements of EE with parents and carers of younger children and adolescents.

## 4.4 Research Question Two

Is there an association between the levels of EE in foster carers and the level of behavioural difficulties in their looked after child?

Foster carers rated the *intensity* and the *problem* of their child's difficulties on two scales (ECBI). The mean of the intensity of the behaviour difficulties fell above average, but just under the cut off for clinical significance. The mean of the problem scale fell slightly above average. This scale measured how much of a problem the looked after child's difficulties were for the foster carer.

Previous parental research has documented that high EE is associated with externalising behaviour difficulties in children (Hibbs et al., 1991; Schwartz et al., 1990; Baker et al., 2000; Bolton et al., 2003; Nelson et al., 2003; Kwon et al., 2006).

The current research replicated this association with foster carers, finding that foster carers with high EE, as measured by the PFMSS also had children with higher rates of externalising behaviour difficulties.

#### 4.4.1 Overall EE and Behavioural Difficulties

It was found that using the PFMSS, the 20 percent of the participants classified as high EE also had children with higher levels of intensity scores. Individuals classified as high in EE are described as more intolerant, inflexible and use inappropriate strategies to cope with problems. Parents with high EE have been found to have more negative interactions (McCarty et al., 2004) and are more likely to escalate negative interactions with their children. Low EE individuals are described as more tolerant, sensitive and non intrusive (Vaughn & Leff, 1976a). Furthermore, low EE staff members have been described as more understanding and motivating towards their patient (Moore et al., 1992).

The replication of the finding that high EE is associated with higher levels of behaviour difficulties within this population is important. Hill-Tout et al. (2003) reported that looked after children require foster carers who have the mixture of the right skills to look after them; for example stability and good parenting. They recognised that the foster carer's ability to parent is affected by challenging behaviour exhibited by their looked after children. This study found that those foster carers who were low in EE rated their children's behaviour difficulties as lower. Due to the design of this study, it was not possible to determine if the low EE individuals objectively had children with lower behaviour difficulties, because this measure was given by the participants, but this clarification would be an important area for further research.

Although the means on the problem scale were higher for the high EE than the low EE group using both the PFMSS and the FMSS, the differences did not reach

significance. This indicated that levels of EE did not significantly differ according to how much of a problem the foster carer found their child's behaviour to be. However, it was possible that this scale could have been influenced by social desirability bias. The measure required foster carers to report whether they found their looked after child's behaviour to be a problem for them specifically. Participants may have felt less comfortable responding to questions regarding how they were coping with their child, preferring to present their abilities in a positive manner.

There was also no significant association between EE and behaviour difficulties when measured using the FMSS. Other studies have reported an association so this may be indicative of the problem of the FMSS with this population. The lack of findings may also be due to the small group size for low EE (n = 5). The uneven group sizes reduced the statistical power and are a constraint throughout the research for this measure.

#### 4.4.2 EE Components and Behaviour Difficulties

Initially, a significant difference was found between initial statement and intensity of behaviour difficulties. When this relationship was explored further using a more stringent, Bonferroni adjusted alpha level, the differences between the three initial statement groups were not significant. There was also no association between EOI and behaviour intensity and problem, or warmth and intensity and problem. The lack of an association between EOI and behaviour intensity and problem may be explained due to the nature of this sample. The children displayed higher than average externalising behaviour difficulties and EOI has been found to be low in similar samples, but higher with children with internalising behaviour difficulties (Stubbe et al., 1993). An investigation into internalising difficulties was not an aim of this study so this was not explored.

The lack of an association between low levels of warmth and behaviour difficulties is perhaps more surprising, given the previous literature reporting this association (Vostanis et al., 1994; Vostanis & Nicholls, 1995). However, this may be explained by the low numbers of participants in this group. Only eight foster carers were classified as displaying low levels of warmth.

There was a relationship between critical comments and the behaviour intensity and problem scores. The more critical comments that the foster carer made the higher they rated both the intensity of the behaviour difficulties in their looked after child and also how much of a problem they found these behaviours to be. Furthermore, there were negative correlations between positive comments and behavioural intensity and problem ratings. The more positive comments and remarks that were made, the lower the intensity and problem scores were. The ratings of critical comments on both measures were exactly the same. This relationship was also true for positive comments (PFMSS) and positive remarks (FMSS). This implies that these results can be interpreted with more confidence than the overall EE classification, which significantly varied between the two measures.

The importance of the relationship between critical comments and the intensity of the behaviour difficulties is further emphasised by the findings of McCarty et al. (2004). They explored the validity of the criticism component of EE, by comparing observations of parent-child interactions to EE. They found that parents high in criticism displayed more negativity, disgust, antagonism and less responsiveness than those parents low in criticism. They concluded that high parental criticism can be used as an indicator of problematic interactions between parents and children. Furthermore, Nelson et al. (2003) found that maternal criticism predicted the level of child

behaviour difficulties and was not a proxy measure of maternal depression but an independent construct.

This current research also found an association between the PFMSS relationship category and intensity. It was found that participants classified as having a negative relationship with their looked after child, rated the intensity of their child's behaviour problems as significantly higher, when compared to the participants who had either a neutral or a positive relationship with their child. This finding is clinically significant for both the wellbeing of the looked after child and their foster carer. Whenan et al. (2009) found that one of the predictors relevant to foster carer well being was the quality of their relationship with their looked after child. They described that foster carers spend much time and energy attempting to form a relationship with their child. These attempts may prove to be difficult, because of possible factors such as their child's insecure attachment style; lack of social skills; behavioural or emotional difficulties. These attempts may then lead to extra stressors, impacting on both their own and their child's well being.

## 4.4.3 Summary of Research Question Two

This question explored the relationship between the EE of foster carers and the intensity of their looked after child's behaviour difficulties. It also explored how much of a problem the foster carers found the behaviour to be. A significant difference was found between the intensity of the behaviour difficulties and EE when measured using the PFMSS. Those classified as high EE had children with higher rates of intensity of behaviour difficulties compared to those low in EE. This finding is clinically significant and points towards a potential focus for intervention. No significant differences were found with the FMSS, although this could be explained by the small group size for low EE. No significant differences were found with the problem scale

either, indicating that levels of EE did not significantly vary with how much of a problem participants found their child's behaviour to be. No significant differences were found between intensity or problem and initial statement, EOI and warmth. It is possible that the lack of an association could be due to the unequal group sizes.

However there was a significant relationship between critical comments and both intensity of the behaviour difficulties and how much of a problem participants found their child's behaviour to be. Higher levels of critical comments corresponded with higher intensity and problem scores. Additionally, higher levels of positive comments corresponded with lower levels of behaviour intensity and problem scores. Because the levels of critical comments and positive comments and remarks corresponded on both of the measures, these results can be interpreted with confidence. Furthermore, participants that were rated as having a negative relationship (PFMSS) with their child also had higher behavioural intensity scores.

## 4.5 Research Question Three

What type of attributions do foster carers make about their looked after children? Is there a relationship between externalising behaviour problems in looked after children and the attributions of their foster carer?

Due to findings from previous research, it was hypothesised that foster carers who have children with higher rates of externalising behaviour difficulties would also have attributions that were more internal, controllable, personal and stable to the child and external and uncontrollable by themselves.

The current research found that generally participants had attributions that were more internal and controllable by the child, more external and uncontrollable by themselves and more unstable. The finding that participants made very few causal

attributions that were internal to or controllable by themselves is consistent with previous research findings (Barrowclough & Hooley, 2003). The relationships between the attributional dimensions will now be explored followed by an examination of the relationship between attributions, intensity and problem scores.

#### 4.5.1 Relationships Between Attributions

Negative correlations were found between internal to the child attributions and external to the child attributions. This indicated that as the frequency of attributions at one end of the internality pole increased, the frequency of attributions at the other end of the pole decreased and vice versa. This relationship was also found between the child controllability dimension. For example, as the frequency of attributions that their child had control over their behaviour increased, attributions that they did not have control over their behaviour decreased. This relationship provides support for the polarity of these two attributions.

A positive relationship was found between internal to the child attributions and controllable by the child attributions, and external and uncontrollable by the foster carer attributions. Therefore if the cause of the behaviour was deemed to be due to some factor located within the child, it was also believed that the child could control this behaviour and that the foster carer could not. External to the child attributions had a positive relationship with uncontrollable by the child attributions, universal attributions, and attributions that were internal and controllable by the foster carer. The foster carer believed that if they themselves were the cause of their child's negative behaviour and could control it, then they also believed that any other child put in the same situation would act in the same way.

Explanations that located the cause of the negative event as internal to the foster carer positively correlated with attributions that it was under their control.

However, internal to the foster carer negatively correlated with personal attributions, indicating that the more internal to the foster carer attributions were made, the less attributions that explained the event as personal and specific to the child were made. Additionally, attributions that placed the location of the cause of the negative event as external to the foster carer positively correlated with attributions that the foster carer was not able to control it, but that the child could.

Attributions that were controllable by the child correlated with uncontrollable by the foster carer attributions. The inverse of this relationship was also found to be significant, with uncontrollable by the child attribution correlating with attribution that the foster carer could control the event. Furthermore, uncontrollable by the child attributions positively correlated with stable and universal attributions, indicating that if a child's behaviour was seen as out of their control, then it was also believed it was likely to remain so and cause further negative events and any other child in the same situation would act in a similar way. Events that were viewed as under the foster carers' control also positively correlated with attributions that were universal. Additionally, attributions that were universal correlated with attributions that were stable. These findings are all broadly consistent with attribution theory.

However, results that are not consistent with attribution theory included the positive relationships found between four of the attributions and both poles of the personal-universal and stable-unstable dimensions. The four attributions were internal to the child, external to the foster carer, controllable by the child, and uncontrollable by the foster carer. These findings are not consistent with previous research and could be explained by findings from research question four, that participants who were more critical also made more attributions generally. Additionally, the findings may represent a difficulty with the validity of the two dimensions. Coding for these two attributions

appeared to be more subjective than for other four dimensions. Although the inter rater reliability for all of the LACS dimensions was excellent for this study, other studies have found the intra class correlation to be less than ideal (Wendel et al., 2000), with .67 for stable-unstable and .58 for personal-universal.

#### 4.5.2 Attributions and Externalising Behaviour Difficulties

Baden and Howe (1992) found that mothers of children with behaviour problems were more likely to attribute their children's behaviour as stable, intentional and out of the control of the parents. Miller (1995) found that parents of children with behaviour difficulties were more likely to rate the causes of their misbehaviour as internal, personal and controllable by the child. The results from this research replicated these findings. Attributions that correlated with both the intensity of the behaviour difficulties and the problem scale included attributions that were personal and stable to the child and external and uncontrollable by the foster carer.

Furthermore, controllable by the child also positively correlated with intensity of behaviour difficulties. Therefore, the higher the level of the behaviour difficulty in the child, the more unique to the child the problems were viewed to be, the more chronic and continuous the causes were believed to be and the behaviour was deemed to be within the child's control. Additionally, the foster carer also believed that the cause was not located within themselves and they were unable to control it.

The findings of this research are generally consistent with the self serving bias where people tend to give external attributions for events that happen to them and internal attributions that happen to other people (Jones & Nisbett, 1972). However, the finding that stable attributions positively correlated with behaviour problems contradicted the finding of Peters et al. (2005). They found a significant association between unstable attributions and rates of problem behaviours. Peters et al. accounted

for this attribution because their sample was from mothers who had sought out a referral to a clinic for their child's behaviour difficulties. Therefore they were hopeful that the cause of the behaviour would not be permanent. This current sample was from the general population of foster carers, which may explain the opposite finding.

Positive correlations were found between the number of extracted events and the level of the behaviour intensity and problem scores. This indicated that the higher amounts of events that were extracted, the higher the rates of behaviour difficulties the child displayed and the more of a problem the foster carer found the behaviour to be personally. This could potentially be problematic, because participants who rated their child's difficulties as higher and more of a problem for themselves also discussed more negative events that were then coded for attributions, thus affecting the results. It would have been helpful if measures of the levels of child externalising behaviour difficulties could have been gained from alternative sources, for example teachers or social workers, so that these results could be interpreted with more confidence.

## 4.5.3 Summary of Research Question Three

This research question examined the attributions that foster carers made about their looked after children. The attributions were generally consistent with attribution theory, that participants with children demonstrating higher levels of behaviour difficulties made more attributions that were external and uncontrollable by themselves, but personal, stable and controllable by their child. However, it was a problem that the number of extracted events also positively correlated with the intensity and problem scores. The results of the examination of the relationships between the attribution dimensions are also consistent with attribution theory.

Additionally, the current research found that generally participants had attributions that were more internal and controllable by the child, more external and uncontrollable

by themselves and more unstable. Unexpected relationships between both poles of the stable-unstable and personal-universal attribution dimension were found. However, this was probably due to difficulties with the distribution of the frequencies of the attributions, or the validity of the dimensions, as opposed to an accurate reflection of true relationships. This will need to be explored in further research before conclusions can be fully drawn.

#### 4.6 Research Question Four

Is there an association between the levels of foster carer EE and their attributions? It was hypothesised that high levels of EE would be associated with attributions that were internal, controllable, stable and personal to the child, while low levels of EE would be associated with attributions that were unstable, universal, external and uncontrollable by the child.

#### 4.6.1 Attributions and Overall EE

No significant associations were found between the level of EE and attributions when measured by the PFMSS. This lack of association between EE and attributions is surprising when previous literature is considered. For example, Barrowclough et al. (1994) found that low EE relatives of patients experiencing psychosis made more external and uncontrollable attributions towards their relative. High EE relatives made more internal, controllable and personal attributions. Additionally, Bolton et al. (2003) found similar associations between high EE and internal, personal and controllable by the child attributions in mothers of young children referred to psychology services for behaviour difficulties. However, both of these studies did not use the PFMSS to measure EE, which may explain the lack of findings of any significant associations

using the PFMSS. This could question the validity of the PFMSS and further research is needed to explore this.

In contrast, when the FMSS was used, high EE was associated with attributions that were personal, stable and internal to the child, and external and uncontrollable by the foster carer. This indicated that if participants were categorised as high EE on the traditional FMSS, then they had attributions regarding the child where they believed the cause or event was particular to their specific child, the cause was viewed as continuous and chronic, internal to the child, and not due to a factor within themselves or under their own control. No associations were found between attributions and low EE. The fact that there were associations as expected when the FMSS measure was used initially points towards the tentative suggestion that this may be a more valid measurement of EE when compared to the PFMSS. However, there are problems that prevent the drawing of such firm conclusions. These include the over inflated rates of high EE detected in this sample. The rates of high EE were much higher than would be expected from this non clinical sample. The uneven group sizes also causes problems with statistical interpretations. Additionally, there is also the theoretical criticism that the FMSS has faced for use with parents of younger children (Daley et al., 2003). These criticisms imply that the findings relating to high EE and attributions are extremely tentative and need to be interpreted with caution.

## 4.6.2 Attributions and EE categories

Significant differences in attributions were detected in relation to initial statement. The ratings of initial statement were the same across both the PFMSS and the FMSS. Participants who had a positive initial statement displayed attributions that were external and uncontrollable by themselves, and stable to their child, compared to those in the neutral group. The quality of the initial statement was included in the

original CFI. It was added to the FMSS because Magaña et al., (1985) believed it to be especially important in reflecting the "initial affective attitudes reported about the patient" (p. 206). Therefore, these findings would predict that the foster carer whose first thought expressed about their child was positive believed the negative events they discussed were caused by something outside of themselves which they were unable to control. Also, the causes of the events were stable, likely to remain present and cause future events. One of the criteria for assigning a stable cause related to disability and chronic illnesses. This information was not collected as standard and only if the participant discussed it during their speech sample did it become apparent. It would have been interesting to have collected this information to discover whether it correlated with stable attributions.

Significant differences were found relating to warmth and attributions. Participants who were classified as displaying high levels of warmth when discussing their child attributed the causes of their child's behaviour difficulties as external to the child and uncontrollable by the child. The differences in universal attributions between the high warmth group and the moderate warmth group was not quite significant, when the Bonferroni adjusted alpha level was used. Studies have shown that mothers of children with behavioural disorders show less warmth towards their children (Caspi et al., 2004). This research showed that significantly more participants in the high warmth group had more external and uncontrollable attributions, compared to the neutral warmth group. The belief regarding the location of the cause of the negative event may impact on help giving behaviour (Weiner, 1980b) and participants who display higher levels of warmth located the blame outside of their child.

There were no significant differences between the attributions and the relationship classification when measured using the PFMSS. However, participants in

the neutral relationship group as classified using the FMSS made more personal attributions than those in the positive group. This indicated that they believed the events discussed were specific to their child and not likely to happen to other children in similar situations. The numbers in the positive (n = 29) and neutral relationship (n = 28) group were satisfactory, indicating that this result can be interpreted with confidence.

The numbers in the EOI groups were inadequate for the PFMSS, with only one participant classified as high EOI. Therefore analysis was not conducted. No significant differences were found between attributions and EOI when measured using the FMSS categorisation of EOI. It is possible that the lack of significant findings is due to the inadequate numbers in the different groups.

There were no significant correlations between positive comments or remarks and any attributions. However, there were positive correlations between attributions and the number of critical comments made. These were internal and controllable by the child, external and uncontrollable by the foster carer, and personal and stable attributions. This is consistent with what would be expected from attribution theory and is very similar to the findings of the FMSS high EE group. This provides further support for the importance of critical comments in relation to the understanding of EE and attributions. It is likely that the findings relating to the critical comments are more reliable than the significant findings relating to attributions and overall high EE as measured by the FMSS. This is due to the difficulties outlined in section 4.6.1, and the finding that the frequency of critical comments were exactly the same from both measures.

# 4.6.3 Summary of Research Question Four

This research question examined if there was an association between levels of EE and attributions. No significant associations were found when EE was measured using the PFMSS. When the FMSS was used however, associations were found between the attributions that were initially predicted in the hypothesis, with the exception of controllable by the child. Foster carers high in EE had attributions that were more personal, stable and internal to the child, and external and uncontrollable by the foster carer. However these findings are problematic and further investigations are warranted. When the individual components of EE were examined, further associations were found. Positive initial statement was associated with attributions that were stable, and external and uncontrollable by the foster carer. High warmth was associated with external to and uncontrollable by the child attributions. Neutral relationship as measured by the FMSS was associated with more personal attributions. Finally, there were positive correlations between critical comments and internal and controllable by the child attributions, external and uncontrollable by the foster carer attributions, and personal and stable attributions. This is consistent with what would be expected from attribution theory and because the rates of critical comments across the two measures were the same, this can be accepted with more confidence than the findings from overall EE as measured by the FMSS.

## 4.7 Theoretical Implications

#### 4.7.1 EE Theories

#### 4.7.1.1 Social control.

There is a lack of psychological theory to explain the negative impact of high EE individuals on their relative's recovery. However, one theory that has been

postulated in the adult population is Greenley's (1986) theory of social control. This described how attempts to control a relative's illness resulted in criticism directed towards that relative. This high level of criticism resulted in the critical relative receiving a high EE rating. Wendel et al. (2000) explained that high EE relatives believed that the illness is internal and can be controlled. The only way they feel that the person will be able to change their behaviour is through criticism, which in turn causes a relapse. This theory has not been explored in the foster carer population.

Results from this research replicated the finding that high EE is associated with behaviour difficulties (Hibbs et al., 1991; Schwartz et al., 1990; Baker et al., 2000; Bolton et al., 2003; Nelson et al., 2003; Kwon et al., 2006). Also, the findings replicated numerous studies that found high levels of criticism by parents relate to childhood behaviour difficulties (Schwartz et al., 1990; Stubbe et al., 1993; Asarnow et al., 1994; Hastings et al., 2006). Hastings et al. stated that criticism was associated with childhood externalising difficulties, because this scale was a proxy measure of how the parents behaved towards their children. It is important that this finding has been replicated in this sample because if critical comments are positively related to behaviour difficulties, then this provides a point of intervention for further training and support. However, the extent to which high EE is due to foster carers attempts to socially control their looked after child remains unclear.

Longitudinal research has investigated the causal role for EE and behavioural difficulties. The findings have been mixed. Some studies have found that levels of parental EE can predict childhood behavioural difficulties at follow up (Caspi et al., 2004; Peris & Baker, 2000; St. John-Seed & Weiss, 2002), whereas others have found a bidirectional link between the two (Frye & Garber, 2005). Vostanis and Nicholls (1995) argued against the causal link of EE leading to behaviour difficulties,

suggesting that EE could be episodic and possibly a reaction to current difficult behaviour. This research does not address the question of causality and in this population; it is likely that there are many other factors involved in the development of behaviour difficulties.

#### 4.7.2 Attribution Theories

## 4.7.2.1 Heider (1958).

Heider (1958) believed the attributor to be a 'naive scientist.' In their pursuit of understanding the behaviour of others, they act like a scientist, considering the evidence regarding an event and its possible causes. This consideration of evidence examined factors that were either located within the individual or in the environment. In other words, they are internal or external to the individual. Lewis and Daltroy (1990) elaborated that the balance of this judgement (internal versus external) leads to judgements of responsibility. Heider suggested that having causal explanations for negative events that are temporary, universal, external and uncontrollable by themselves are protective for the attributor. These types of attributions protect their self esteem, through exoneration of responsibility.

This research with foster carers found that participants generally made attributions that were more internal to their looked after child and more external to themselves. They also displayed more child controllable attributions, and more uncontrollable attributions for themselves. Furthermore, foster carers of children with higher levels of behaviour difficulties had attributions that were controllable by the child, and external and uncontrollable by themselves. This has implications for responsibility judgements. It could be reasoned from these findings that foster carers believed the behaviour of their child to be within the child's control. Following on

from Heider's (1958) theory, these types of attributions could be reasoned to be protective for foster carers.

## 4.7.2.2 *Jones and Davis'* (1965) correspondent inferences.

Jones and Davis (1965) were concerned with the specific conditions in which the observer attributed dispositional traits. Correspondence was high if the observer believed that the actor's behaviour and its consequences accurately reflected the actor's underlying disposition. It was low if there was ambiguity as to why the actor behaved in a certain way. They outlined three specific conditions where a dispositional judgement of intentionality would be made (see section 1.7.2). Two of these conditions are relevant to this current research and will now be explored.

Firstly, beliefs about what other people would have done in the same situations affect attributions. This research measured the personal-universal attribution judgements that participants made about their looked after child during a five minute monologue. It was found that foster carers who rated their child's externalising behaviour difficulties to be higher also made more personal attributions, believing that the cause or event discussed was particular to their specific child and would not happen to most other children in the same reference group.

The second condition of the correspondent inferences theory that is relevant to this research surrounds whether the outcome of the actor's behaviour affects the observers welfare. This can be inferred from the problem scale of the ECBI. This provided a self report measure from the participants of how much their looked after child's behaviour was a problem specifically for them. The mean of this scale fell only slightly above average, indicating that participants did not generally find their looked after child's behaviour to be very problematic for them. However, the problem scale

correlated with four attributions. These included attributions that were external and uncontrollable by themselves, and personal and stable to their child. Participants who believed the cause of their child's actions to be continuous and likely to cause future events, specific to their particular child, and that the cause is mostly located within themselves and they themselves are able to control the event found their child's behaviour to be more problematic. According to the theory, if the behaviour of the actor affects the welfare of the observer, there is more of a chance that a disposition will be inferred (Kelley & Michela, 1980).

# 4.7.2.3 Kelley's (1967) covariation principle.

Kelley's (1967) covariation principle was an advancement of Heider's (1958) attribution theory. It focused on the extent to which the attribution process covaried across time, person and situation. It allowed for cause to be inferred from an examination of how the antecedent and the consequences of the actor's behaviour covary. Three features affect the development of attributions: consistency, distinctiveness and consensus. Consistency is relevant to the stable-unstable dimension and relates to the degree that the same actor will repeat the behaviour at different times. Distinctiveness is also related to this dimension and refers to the extent to which the actor will display different behaviours on different occasions. Consensus relates to the personal-universal dimension, and refers to the amount that other people would perform the same behaviour in similar situations.

The cross sectional design of the current research does not allow for the exploration of how attributions covary over time in foster carers. However, attributions were found to vary according to levels of behaviour difficulties. Participants who rated the intensity of their child's behaviour difficulties as higher made more personal and stable attributions. This indicated that foster carers believed the causes of the negative

events they discussed were specific to their particular child and likely to remain present and cause further events.

### 4.7.2.4 Weiner.

In his influential theory, Weiner (1985) postulated that through a process of causal analysis, observers make explanations about an actor's behaviour along three dimensions. The perception then determines the consequence of the observer's emotional and behavioural reaction towards the actor. Opinions regarding the cause of an event can be observed in three ways: locus, controllability and stability.

In Schmidt and Weiner's (1988) model of help giving, controllability was viewed as a central factor as to whether or not help was provided. This was because controllability implied personal responsibility. If a negative event was deemed to be controllable, then a negative emotional reaction was provoked and help was not given (Weiner, 1980a). If it was deemed to be uncontrollable by the actor, the observer was likely to be more sympathetic, pity was felt and help was provided (Weiner, 1980b).

The locus (internal or external) dimension did not significantly differ in this research according to the extent of the looked after child's behaviour difficulties. However, the controllability dimension did. Foster carers who had children with higher levels of behaviour difficulties made more child controllable attributions. The stability attribution also significantly varied in relation to the levels of the intensity of the behaviour difficulties. Significantly more stable attributions were associated with higher behaviour intensity levels. The cause of the child's behaviour difficulty was viewed as continuous, likely to remain in the future and cause further events.

Bugental et al. (1998) described how the work of Kelley (1967) and Weiner (1985) combined allowed for individual differences in attributions, due to covariation. Stimulus events that have regularly occurred together effect the interpretations given

to the event. This is applicable to parental attributions, where they are continually modified in the light of different environments and new interactional events.

Furthermore, in his more recent attribution affect model, Weiner (1995) described how attributions effect the way the observer experiences emotions. Controllability is a central facet to this, with Weiner believing that if an observer perceived the actor to be in control of their behaviour then this leads to judgements regarding the actor being responsible for their behaviour. This type of judgement leads to anger and criticism. This research found a relationship between child controllable attributions and the amount of critical comments spoken about the child, by the foster carer.

## 4.7.2.5 Patterson's (1982) family coercion model.

Patterson (1982) postulated that parents who act in a coercive manner were more likely to place the blame with their children for their misbehaviour. This research did not observe interactions between the participant and their looked after child. However, it did code for the relationship component from EE. A significant association was found between negative relationship ratings and higher levels of behaviour intensity difficulties, when compared to both the neutral and the positive group. Relationship ratings were coded as positive, neutral or negative. Foster carers classified as having a neutral relationship (PFMSS) had significantly more personal attributions than the positive group. This indicated that even if the relationship was rated as neither positive nor negative, more attributions regarding the behaviour being specific to their child were made. This may tentatively point towards a negative cycle of interaction between foster parent and their child.

### 4.7.3 Attachment Theory

Children who enter the care system are likely to have insecure (Bowbly, 1988) or disorganised (Walker, 2008) attachment styles. Golding (2003) emphasised that looked after children find it hard to trust and often seem to act in a way that invites rejection by foster carers, for example by displaying angry, aggressive and controlling behaviours. Although the child or foster carers attachment styles were not directly measured in this research, it is an important area to consider nonetheless. Attachment theory and EE may relate to each other because attachment is also an index of the relationship between two people, therefore is a similar construct to EE. It is possible that EE could be a proxy measure of the quality of attachment. Alternatively, attachment could drive levels of EE. This would be an interesting area for future research to explore.

The attributions that participants hold could influence the quality of the attachment between foster carers and their looked after children. If participants hold their child to be responsible for and in control of their negative behaviour this is likely to impact upon the relationship and therefore their attachment. This research found a positive correlation between attributions that were internal, controllable, personal and stable to the child, external and uncontrollable by the foster carer with the frequency of critical comments foster carers expressed. Therefore, participants who held these attributions about their child were more critical when talking about them. Attributions affect emotional and behavioural responses (Weiner, 1985); therefore it is likely they will have a direct impact on the quality of the attachment.

Interestingly, participants who were classified as high EE (PFMSS) rated the intensity of their child's behaviour difficulties as significantly higher than those with low EE.

Also, participants who made more critical comments also rated the intensity of their

child's behaviour difficulties as higher and also more problematic. This may imply problematic interactions between the participants and their looked after child and could negatively impact upon attachment.

Levels of warmth (PFMSS) expressed about the child were promising, with 88 percent of the sample classified as displaying either high or moderate levels of warmth. Additionally, the relationship classifications were also encouraging, with 92 percent categorised as either having a positive or neutral relationship with their child from the PFMSS and 91 percent from the FMSS. Furthermore, the levels of EOI were low in this sample, with 2 percent from the PFMSS and 11 percent from the FMSS classified as displaying high/positive EOI. Asarnow, Tompson, Woo and Cantwell (2001) compared the EE of parents of depressed children and children with ADHD to a community control group. The levels of EOI in their community control group were 18.6%, using the FMSS. Levels of high or positive EOI found in this sample were lower than expected. It is possible that this could reflect the nature of the relationship between foster carers and their looked after children, with foster carers possibly protecting themselves by not becoming too emotionally involved with their looked after child.

Following the assumptions that the way the foster carer speaks about their child reflects how they treat their child, these are promising findings. Looked after children require foster carers who they can develop a positive relationship with, with high warmth and low EOI. When considering reviewing the progress of the placement, it may be beneficial to also consider these constructs and how they have impacted upon attachment between the looked after child and their foster carer. The relationship between EE, attributions and attachment in this population has received little attention and is an avenue for future research to examine.

### 4.8 Clinical Implications

### 4.8.1 EE

The finding that high EE (PFMSS) was associated with higher rates of intensity of behaviour difficulties is clinically significant. High EE individuals have been found to be more intolerant, inflexible and used inappropriate strategies when dealing with problems (Vaughn & Leff, 1976a). Staff members with high EE were more likely to be frustrated by the lack of progress of their patients (Moore et al., 1992). Patients returning home to live with high EE relatives following discharge from hospital have been found to relapse faster (Brown et al., 1962). The link between poor outcome and high EE relatives has been replicated in numerous different areas, including spouses of patients with alcohol problems (O'Farrell et al., 1998) and depression (Vaughn & Leff, 1976b; Hooley et al., 1986), parents of patients with eating disorders (Szmukler, Eisler, Russell and Dare, 1985; Le Grange et al., 1992) and professional staff studies (Van Humbeeck et al., 2002; Wiegel et al., 2006).

Van Humbeeck et al. (2002) reported that staff working with psychiatric patients had attitudes regarding their patients that were equivalent to those of family members with high and low EE. This research replicated the finding that foster carers also hold similar attitudes regarding their looked after children. Whether or not high EE is a consequence of the higher levels of behaviour difficulty, or whether the behaviour difficulty is a consequence of having a high EE foster carer remains to be seen. However, it is likely that prior to arrival in placement, the child would have experienced some predisposing risk factors for the development of emotional and behavioural problems. However, when applying the EE literature to this population, it can be inferred that having a foster carer with low EE would be more beneficial to the child than having one with high EE.

It was also found that levels of critical comments were related to intensity and problem scores. This again is clinically important considering the findings of McCarty et al. (2004), who surmised that parental criticism can be indicative of problematic interactions between parents and children.

This has implications for the training and development of foster carers.

Contrary to their initial predictions, Peters et al. (2005) found no difference in the attrition rates at a parent management training programme between parental levels of EE. It has also been suggested that EE is not a stable trait and changes over time, possibly as a reaction to the current level of difficulties (Vostanis & Nicholls, 1995).

Frye and Garber (2005) found that child externalising behaviour difficulties predicted maternal criticism two years later, providing evidence for a bi-directional relationship between behaviour difficulties and parental EE. Research surrounding changes in EE may be a useful avenue to explore further, in order to provide a better service for looked after children.

Furthermore, this research provides support for the development of intervention work for foster carers that are high in EE. Intervention work to reduce levels of EE has produced mixed success (Eisner & Johnson, 2008). However Honig, Hofman, Rozendaal and Dingemans (1997) described a significant reduction in EE in relatives in their research. They showed that six sessions of family psycho-education and intervention work reduced the levels of high EE to low EE in 31 percent of the relatives of patients with a diagnosis of bipolar disorder, compared to no change in the control group. It may be beneficial for looked after children if foster carers who have high levels of EE could access similar training and interventions.

#### 4.8.2 Attributions

Tentative findings from the FMSS indicated that high EE was associated with attributions that were personal, stable and internal to the child and external and uncontrollable by the foster carer. However caution is advised when interpreting these findings, with recommendations to focus on the amount of critical comments made, not the overall levels of EE, as measured by the FMSS. High levels of warmth were found to be associated with external to and uncontrollable by the child attributions. Neutral relationship (PFMSS) was associated with personal attributions. There was a positive relationship between critical comments and internal and controllable by the child attributions, external and uncontrollable by the foster carer attributions, and personal and stable attributions. These findings are consistent with attribution theory.

Eisner and Johnson (2008) noted that Weiner's attribution theory (1985) has been the basis of many psychoeducation courses in relatives of patients with psychiatric illnesses. The aim is to address the misattributions of relatives, in order to help them to be less critical of the patient. This type of training may be relevant for foster carers, in order to address any attributions that they may have regarding their child. This has the potential to improve relationships between foster carer and child, reducing the frequency of placement breakdowns and improve outcomes for looked after children.

The effect that attributions have on foster carers is also important to consider. Weiner (1985) described how affect is dependent on outcome. For example, positive feelings follow successful outcomes, for example passing a test. Negative feelings follow negative outcomes, for example an argument. Slep and O'Leary's (1998) experimentally manipulated mother's attributions to be either child blaming or not

child blaming. Mothers in the child blaming condition rated themselves as angrier during subsequent interactions.

## 4.9 Strengths and Limitations of the Research

This section will now consider the strengths and limitations of the measures, design and statistical analysis employed.

#### 4.9.1 Measures

## 4.9.1.1 Demographic questionnaire.

The demographic profile of participants allowed for the basic sample demographics to be reported. It may have been appropriate to collect information regarding the type and experience of training that participants had gained, in order to consider the impact this may have had on EE and attributions.

A measure relating specifically to the difficulties that foster carers were experiencing may also have provided rich data for analysis. For example, foster carer strain has been found to be higher amongst samples where looked after children had higher levels of CD, violent behaviour and hyperactivity (Farmer et al., 2005). It was also found that the levels of strain had a large impact on the foster carer's ability to parent. High levels of strain were associated with foster carers responding less sensitively to their child, disliking them more and showing less warmth towards them. Strain was also associated with placement disruption. This also had another practical implication; foster carers with higher strain were less active in pursuing their child's educational and mental health needs.

Further information relating to the looked after child could have been useful to collect. For example, how many other children were currently in the household, how many placement moves the child had previously experienced and what the long term

placement plan was for the child. Also, whether the child had any physical disabilities, intellectual disabilities or mental health problems may have been useful information.

### 4.9.1.2 ECBI.

A strength of the ECBI is that it is a well validated measure of behaviour difficulties, with good test re-test reliability (Funderbunk et al., 2003) and internal consistency ratings (Colvin et al., 1999). The internal consistency ratings for its use within this study were very good. The measure was short to administer, could be conducted over the telephone and all of the participants answered all of the questions.

However, there are no norms for the use of the ECBI with looked after children. This is indicative of a larger problem, because there are no published, validated measures that have been developed specifically to determine the level of behaviour difficulties in this population. Measures that have been used, for example the SDQ (Goodman, 1997), have been criticised for their inadequacy, due to the more complex presentations of looked after children (Goodman, Ford, Corbin & Meltzer, 2004).

It would have been beneficial in this study if social workers and teachers could also have provided ratings for the child's behaviour difficulties. This would have provided more reliable ratings of the level of externalising behaviour difficulty.

However, this was beyond the scope of the current research that focused on the EE and attributions of foster carers.

## *4.9.1.3 Spontaneous causal attributions.*

In a drive to increase the ecological validity of the measurement of attributions, this study employed the use of a modified version of the LACS to measure attributions, instead of questionnaires or vignette methodology. Bugental et al. (1998)

stated that spontaneously occurring attributions are more ecologically valid, than those that are directly elicited by the use of vignettes or questionnaires. Stratton et al. (1988) described that the LACS investigates attributions in a valid, naturalistic and non intrusive way. Furthermore, this method does not sacrifice reliability, due to the comprehensive coding system. Stratton et al. purports that the LACS can be used to analyse spontaneously occurring attributions from any recorded material, even material that has been recorded for other purposes.

However, the non comparability of the LACS across participants has been criticised. This is due to the variation in possible responses in the content and amount of information given (Bugental et al., 1998). Schulman, Castellon and Seligman (1989) also reported that a minimum of four attributional statements are needed for a valid assessment of participant's attributional style. This research produced a mean of 4.62 extracted statements. Therefore, some of the participants made less than Schulman et al.'s recommended minimum criteria.

To conclude, despite the potential problem of non comparability across participants, that may have reduced the reliability; this research used an ecologically valid, naturalistic method to assess attributions, which improved validity.

#### 4.9.1.4 EE.

This study compared two methods to measure EE. There are no known studies that have compared the PFMSS and the FMSS before; therefore this was a valuable contribution to the literature. The inter rater reliability for both of the measures was also excellent, indicating no problem with the coding. The fact that the FMSS and the PFMSS produced significantly different overall EE classifications is a strength of this research, because no previous research studies have compared the two methods. However, these findings make interpreting the varying results with confidence

difficult. The findings of this research provided further evidence of the need for a larger study, developing a more appropriate measurement within this population, validated against the CFI.

The instructions were slightly modified to combat the 'professional' factual recalling of information. This may have negatively affected the reliability of the measure. However, other EE studies have augmented the measure to make it more appropriate for their populations (Marshall et al., 1990; Stubbe et al., 1993; Schwartz et al., 1990; St. John-Seed & Weiss, 2002). MacKinlay (2006) postulated that in her research of the EE and attributions of care staff of clients with intellectual disabilities, modifying the FMSS instructions could have been beneficial. This may have counteracted the tendency for care staff in her research to simply factually recall their client's daily activities.

## 4.9.2 Research Design

This study employed a cross sectional quantitative design that used correlational and between-subjects analyses. The correlational analyses allowed for the exploration of relationships between the attributional dimensions, behaviour difficulty and the critical and positive comments. The between-subject analysis examined the differences between high and low EE individuals with behaviour difficulties and attributional style. It also allowed for the exploration of the individual EE categories with the behaviour difficulty and attributions.

An alternative to this method would be a two by two between subjects design, where participants were also divided on the basis of their looked after child's behaviour difficulties. Two samples could have been recruited on the basis of diagnoses of CD, DBD or ODD and matched with a group of looked after children without behaviour difficulties. This would allow for a more in depth comparison of EE

and attributions relating to the two different groups. It would also have addressed the problem of relying solely on participants to provide the information regarding their looked after child's behaviour difficulties.

## 4.9.3 Statistical Analyses

This research employed statistical analyses that have been used in similar previous studies. This enabled comparisons to previous research. However, the cross sectional nature of the design could not address the question of causality. Longitudinal designs would be needed to infer causality.

Although the required sample size was recruited for this research, some of the variables resulted in very uneven group sizes. Non parametric analyses partly compensated for this problem, but a larger sample size was still a problem for some of the groups.

The Bonferroni correction method was also used to lower the alpha level for some of the multiple analyses. This method raised the criteria required for a result to be significant. This decreased the risk of type I errors. However, it was possible that this method increased the risk of type II errors, failing to detect some significant results that may have been present.

### 4.10 Future Research

Throughout this chapter, several opportunities for future research have been identified. Firstly, the PFMSS needs to be better validated as a successful measurement of EE. For example, it would be advisable for the PFMSS to be compared against the 'gold standard' measurement of the CFI. However, the CFI that it is compared to will need to be modified to account for the developmental differences that consider relationships of parents with younger children and adolescents.

This is the first research study that examined the EE of foster carers and attributions. Therefore there is a multitude of possible avenues of exploration. This research did not measure internalising difficulties in looked after children. Previous research has documented as association between EOI and internalising behaviour difficulties (Stubbe et al., 1993) and it would be interesting to determine if this finding is replicated in this population. Further exploration of EE and attributions would be helpful in general within this population, both to identify areas for training, and to determine what makes a successful placement. Additionally, research exploring the links between attachment theory, EE and attributions could also be beneficial.

Parent studies have considered the question of causality of EE and child difficulties (Frye & Garber, 2005; Baker et al., 2000; Peris & Baker, 2000; St. John-Seed & Weiss, 2002; Caspi et al., 2004). Vostanis and Nicholls (1995) found that EE is not a stable trait and varies over time. This is a rich area for further longitudinal research, especially within this complex population, where many factors have been found to influence placement success. This also has the potential to inform decisions regarding where looked after children are placed.

No studies have examined Schmidt and Weiner's (1988) help giving model within the foster care population. Further research could develop this unexamined area, to provide valuable information in the development of training programmes. It would also be interesting to examine the success of an intervention or training designed to modify the EE and attributions that foster carers make.

#### 4.11 Conclusions

This research has examined the EE and attributions of foster carers towards their looked after children. This was considered in relation to their ratings of their

looked after child's levels of externalising behaviour difficulties. A correlational and between subjects design was used to examine the relationships between the constructs. Additionally, two methods to measure EE were compared, the FMSS and the PFMSS.

It was found that the PFMSS and the FMSS significantly varied in their overall classification of EE, EOI and relationship in this sample. The FMSS classified 92 percent of the foster carers, drawn from the general population of foster carers in East Anglia, as high EE. The PFMSS only classified 20 percent of the same sample of foster carers as high EE. Subjectively, the latter appeared to be more of an accurate reflection of the levels of EE in the current sample. Additionally, the classification of high EE from the FMSS is more than what would be expected when compared to the literature of children with clinical disorders and this sample was not drawn from the clinical population. Clearly further research is needed to validate the PFMSS within this population. This will need to be compared with the original method used to measure EE, the CFI. Despite the variations in overall classification, initial statement, critical comments and positive comments and remarks were coded exactly the same using the two methods. Therefore significant results using these categories can be interpreted with more confidence.

Significant associations were found between the intensity of the child's behaviour difficulties and overall EE as measured by the PFMSS. Foster carers high in EE rated the intensity of their child's behaviour difficulties as higher than those low in EE. No such association was found when the FMSS was used. However there was a positive correlation between critical comments and the intensity of child behaviour difficulties. There was a perfect correlation between critical comments on both the PFMSS and the FMSS, which indicates that the relationship between critical comments and the intensity of the behaviour difficulties can be accepted with

confidence. Furthermore, this relationship was also true between positive comments and positive remarks. There was a negative correlation between positive comments/remarks and the intensity of the child's behaviour difficulties, so participants who made more positive comments rated the intensity of their child's behaviour difficulties as lower.

In support of previous literature, it was found that the relationship between the intensity of the behaviour difficulties and attributions were mostly consistent with what would be expected from attribution theory. Foster carers who rated their child's behaviour difficulties as higher had attributions that were external and uncontrollable by themselves, but personal, stable and controllable by their child. However, there was not a significant relationship between internal attributions and the intensity of the behaviour difficulties.

There were no associations with attributions and EE as measured by the PFMSS. However, the FMSS did produce significant associations between EE and attributions. Foster carers classified as high EE made attributions that were more personal, stable and internal to the child, and external and uncontrollable by the foster carer. These findings need to be interpreted with caution due to the difficulties with the validity of the measure with this population and the statistical problems introduced by the uneven group sizes. When the relationship between attributions and critical comments was explored, relationships were found between the frequencies of critical comments and internal and controllable by the child attributions, external and uncontrollable by the foster carer attributions, and personal and stable attributions. This is consistent with what would be expected from attribution theory and provides further support for the importance of critical comments in relation to the understanding

of EE and attributions. These findings can be interpreted with more confidence, due to the same level of critical comments produced from both of the measures.

The theoretical implications relating to EE and attributions were considered. It was not possible to discover if high EE foster carers were attempting to socially control their children (Greenley, 1986). However, the findings of this research that foster carers generally made more attributions that were external and uncontrollable by themselves, and internal and controllable to their child supported Heider's (1958) attribution research. This related to his view that these types of attributions are protective to the 'naive scientist', because they maintain self esteem through the exoneration of responsibility for negative events. Furthermore, this research supports Weiner's (1985) theory of attributions, with the finding that those who made more critical comments about the child also had attributions that were more internal and controllable by the child, external and uncontrollable by themselves, and personal and stable. Patterson's (1982) family coercion model also received support from this research. A neutral relationship classification (PFMSS) was associated with significantly more personal attributions. This indicated that foster carers who had neutral relationships believed that their child's behaviour was specific to them and would not happen to other children in similar situations. However it was not possible to actually observe interactions between foster carers and their child.

The clinical implications of this research were discussed. The finding that high EE (PFMSS) was associated with higher intensity of behaviour difficulties replicated previous research in this new population, which is a significant finding. The implications of this relating to the benefits for looked after children living with foster carers low in EE were highlighted. The need for the development of appropriate training addressing EE and attributions was discussed.

The strengths and limitations of this research have been described relating to the research design, measures and the statistical analysis employed to address the research questions. This chapter concluded with suggestions of areas for future research. These suggestions included research into the further validation of measures used to assess EE in parents and carers of children and adolescents, longitudinal research addressing causality and research into the development of training programmes and courses aimed to address EE and attributions in this population.

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## Appendix A



## Demographic Questionnaire

1.	What is your gender?	Male [		Female	
2.	How old are you?	years o	old		
3.	What is your ocupation?				_
4.	Approximately how long hav	ve you been a	a foster	carer:	
5.	If you know what level foster	r care you pr	ovide,	please tick:	
	Skills Level 1  Sk	ills Level 4		Skills level 6	
	Other			(please	e state)
				*was Youth Co	are Challenge
6.	What is your marital status?				
7.	What is the highest level of e	_ education tha _	t you l	nave completed	1?
8.	What is your foster child's go	ender?		Male	Female
9.	How old is your foster child?	,		yea	rs old
10.	Approximately how long has	this child be	een pla	ced with you?	

#### Appendix B1

#### UEA Faculty of Health Ethics Approval Letter

#### Faculty of Health Research Office

University of East Anglia

Sara Rosamond 8 Ruster Way Hampton Hargate Peterborough Cambridgeshire PE7 8HL

9th June 2009

Faculty of Health Research Office Chancellor's Drive Annexe University of East Anglia Norwich NR4 7TJ United Kingdom

Email: jane.carter@uea.ac.uk Tel: +44 (0) 1603 591023 Fax: +44 (0) 1603 591132

Web: www.uea.ac.uk Web: http://www.uea.ac.uk

Dear Sara,

The attributions and expressed emotion of foster carers towards their 'looked after' children with externalising behaviour problems – 2009017

The amendments to of your above proposal have now been considered by the Chair of the FOH Ethics Committee and we can now confirm that your proposal has now been approved.

Please could you ensure that any amendments to either the protocol or documents submitted are notified to us in advance and also that any adverse events which occur during your project are reported to the committee. Please could you also arrange to send us a report once your project is completed.

The committee would like to wish you good luck with your project.

Yours sincerely,

are Carro

Jane Carter

#### Appendix B2

#### UEA Faculty of Health Approval of Surname Change Letter

## Faculty of Health University of East Anglia Research Office, Room 1.09 Sara Katsukunya Chancellors Drive Annex 8 Ruster Way University of East Anglia Hampton Hargate Norwich NR4 7TJ United Kingdom Peterborough Cambridgeshire Email: jane.carter@uea.ac.uk PE7 8HL Tel: +44 (0) 1603 591023 Fax: +44 (0) 1603 591132 Web www.usu.ac.uk 30 July 2009 Web: http://www.uea.ac.uk Dear Sara The attributions and expressed emotion of foster carers towards their 'looked after' children with externalising behaviour problems - 2009017 The amendment to your above proposal has now been considered by the Chair of the FOH Ethics Committee and we can confirm that the revision regarding your change in surname has been approved. Please could you ensure that any amendments to either the protocol or documents submitted are notified to us in advance and also that any adverse events which occur during your project are reported to the committee. Please could you also arrange to send us a report once your project is completed. Yours sincerely, Dr. Jane Carter

#### Appendix C

#### Research and Development Approval From Cambridgeshire County Council



#### Appendix D

#### Research and Development Approval From Suffolk County Council



Mrs S Katsukunya 8 Ruster Way Hampton Hargate Peterborough PE7 8HL

#### Adult and Community Services

Julie Bateman Head of Development of Care Endeavour House 8 Russell Road Ipswich Suffolk IP1 2BX

Enquiries to: Julie Bateman

Tel: 01473 264661 Fax: 01473 216843

Email:

<u>julie.bateman@suffolk.gov.uk</u> Web: http://www.suffolk.gov.uk

Our Ref: JB/hw Date: 1st June 2010

I am pleased to confirm that the Suffolk County Council Research Governance Panel was happy to approve your research proposal on the "Attributions and expressed emotions of foster carers towards their "looked after" children with externalising behaviour problems" on the 7th August 2009.

We would like to see a final copy of your report and otherwise wish you all the best with your project.

Yours sincerely

#### Julie Bateman

Head of Service Development

#### Appendix E



#### Foster Carer Invite Letter

Mrs Sara Katsukunya Doctorate Course in Clinical Psychology School of Medicine, Health Policy and Practice University of East Anglia Norwich, NR4 7TJ

> S.Katsukunya@uea.ac.uk Tel: 07793115483

12<sup>th</sup> October 2009

Dear Foster Carer,

You are being invited to take part in a research study. You have been contacted because your service has identified you as a foster carer who is currently caring for a foster child between the ages of 4 and 16. Please be assured that I have not seen any of your personal details; this letter has been sent by your service.

The purpose of this study is to investigate the emotions and opinions of foster carers who care for looked after children. Foster carers may face a number of different challenges when caring for their foster children. This research aims to look at what these difficulties may be and how we might understand them. This may show us how further training and extra support may help foster carers to continue to support their children. If there are two foster carer's in your house, you are both very welcome to participate in this research individually.

If you feel you would like to take part, please take the time to read the attached information sheet carefully. If after you have read and understood the information sheet you decide you wish to participate, I would be very grateful if you could complete and return the consent form to the address above, in the envelope provided. Please remember to enter a contact telephone number that I can reach you on to arrange a time for you to take part in the research. This can either be done over the phone or face to face in your home.

Thank you very much for taking the time to read this,

Sara Katsukunya Primary Researcher Trainee Clinical Psychologist

# University of East Anglia

#### Appendix F

#### Participant Information Sheet.

## Research title: An analysis of the opinions and emotions of foster carers towards their foster children.

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully and talk to others about the study if you wish.

#### What is the purpose of this study?

The purpose of this study is to investigate the perceptions of foster carers' who care for a child who may have some difficult behaviour. Foster carers who care for looked after children face a number of difficulties and challenges. The study aims to reflect on these difficulties and consider how increased support and training may help foster carers to continue to support these children. The research is being submitted as part of the course requirement for the main researcher's Doctoral Programme in Clinical Psychology.

#### Why have I been invited to take part?

You have been invited because you care for a foster child between the age of 4 and 16. Researchers have not seen your personal details as this pack was sent by your organisation. We are hoping to recruit around 65 foster carers to take part in this study. In the unlikely event that we get more respondents than we need, it is possible that you may not be contacted to participate.

#### Do I have to take part?

No. Participation in this research is completely voluntary. This sheet will give you the information you need to make a decision. Talk to others about taking part in this study if you wish. If you do decide to take part, you are free to withdraw at any time, without giving a reason.

#### What will happen to me if I take part?

If you decide to take part I would be grateful if you could sign and return the included consent form, to show that you agree to take part in the study. I will then contact you to arrange a time to answer some questions, either over the telephone or in person. If you chose to meet in person to participate, this can be either at the University of East Anglia, at a Social Care building, or at your home. Your travelling expenses will be reimbursed.

I will ask some questions relating to you, for example your age and how long you have been fostering. Information that is collected will not be stored with your name or any other personally identifiable information. I will then ask you to talk generally about your foster child for five minutes. This part will be tape recorded. After this, I will ask you to answer some questions relating to your foster child's behaviour. Throughout the interview, you will not be asked to disclose anything that is personally identifiable about your foster child, for example their name. It is fine for you to use a pseudonym

when referring to your child. The whole interview will last approximately 30 minutes and you will not be asked to answer any more questions after this.

Following the interview, any information that might identify you or your foster child will be erased from the tape immediately. The tape will then be transcribed and reviewed by the main researcher, and a secondary researcher who will not know your identity.

#### What will happen to my information if I choose to take part?

During the study your information will be kept at the University of East Anglia in Norwich. When the research is finished it will be kept for 5 years in a locked filing cabinet at the Research Archive in the Faculty of Health, University of East Anglia. Nobody will be informed about the data that you give and it will be made anonymous so that it cannot be traced back to you. The questionnaires will be coded so that they can be linked together by the main researcher. Your consent form will be held in a separate locked filing cabinet, with the linking code known only by the main researcher. This is so that if you wish to withdraw your data at a later date it will still be possible. All computer files will be password protected and viewed only by the main researcher and research supervisor. The five minute tape recording will be anonymous, so it cannot be traced back to you. It will be listened to by one other researcher, who will not know who you are, or what organisation you work for. You will also be asked not to disclose the name of your foster child. Any inadvertent personally identifiable information, for example the child's full name will be removed immediately following the interview.

All the information we collect about you will be kept confidential and secret. We will not tell anyone else that you have taken part in this research study, and we will not share personally identifiable data with any other person. However, if you disclose anything of an illegal nature, gross malpractice, or tell us that someone is in serious risk of harm, I will have a duty of care to inform an appropriate person. This may be a social worker, the police or a health professional.

#### What are the possible disadvantages and risks of taking part?

This study will take up to 30 minutes of your time. You will be answering questions about your foster child's behaviour. It is unlikely that participation in this study and answering these questions will cause you distress. However, if you feel upset, we can stop the study. You can ask me to stop at anytime. If you feel you need to talk to someone else, it is recommended that you speak to your social worker or manager. Please be assured that this research is not intended to investigate your practice, it aims to look at your feelings and opinions.

#### What are the possible benefits of taking part?

It is unlikely that participating will benefit you individually. However the information we get from this study may help to raise understanding of foster carers' perceptions of their foster children's difficulties, as well as their emotional responses. This may help improve future support and training.

#### What if I participate and then change my mind?

You may withdraw from this study at any time, and your data will be removed. Your withdrawal will not affect you in anyway and you will not be asked for a reason.

#### What will happen to the results of the research study?

The results will be used as part of the thesis submitted to the University of East Anglia as a course requirement for the Doctoral Programme in Clinical Psychology. It may be further submitted for publication in academic journals. No personally identifiable information is written about or given out.

#### Who has reviewed the study?

Research conducted by university students is checked by an independent group of people, called a Research Ethics Committee. This is to protect your safety, rights, wellbeing and dignity. This study has been reviewed by the University of East Anglia's Faculty of Health Research Ethics Committee. It will also be reviewed by the Research Governance Framework of each council where data is collected, to ensure that the research complies with standards of protecting and promoting public health.

#### What if there is problem?

If you have a concern about any aspect of the study you can contact the researcher on the contact details below. If you would prefer to speak to the Principal Research Supervisor, Dr Peter Langdon's details are outlined below.

If you are harmed and this has been due to someone's negligence then you may have grounds for legal action for compensation against the University of East Anglia but you may have to pay your legal costs.

#### **Contact for further information**

If you have any questions or if you wish to contact me about this study for any reason, please do not hesitate to get in contact through the address or email below:

Main Researcher: Research Supervisor: Sara Katsukunya Dr. Peter Langdon

Doctoral Course in Clinical Psychology
School of Medicine Health Policy and Practice
School of Medicine Health Policy and

University of East Anglia Practice,

Norwich, Norfolk, NR4 7TJ University of East Anglia, Email: S.Katsukunya@uea.ac.uk Norwich, Norfolk, NR4 7TJ

Tel: 07793115483 Tel: 01603 593599

If you feel like you would like to participate in the study, please complete the enclosed consent form with your contact details and return it to me. I will then contact you to arrange a time for participation. Thank you for taking the time to read this.

Sara Katsukunya Trainee Clinical Psychologist

### Appendix G



#### Participant Consent Form

Researcher: Research Supervisor:		Sara Katsukunya Dr Peter Langdon	
Resear	ch Title:	An analysis of the opinions and emotions of foster carers towards their foster children.	
Ι		consent to take part in the study named	
above.			Pleas tick
1.	I have receive have been given	d and read the information sheet regarding the above study and	
2.	I have had the	opportunity to consider it fully and ask any questions and have vered satisfactorily.	
3.	I understand the	hat my participation in this research is completely voluntary and adraw at any time without giving a reason.	
4.	I understand the	hat the information I give will be treated as completely nless I disclose anything illegal or of concern.	
5.	I understand the	hat I should not disclose the name of my foster child to the is fine for me to refer to him/her using a pseudonym.	
6.	I give permiss	ion to have five minutes of my speech tape recorded and then d reviewed as part of the study (identities will remain	
Signed	1	Date	_
Tel. N	o. I can be cont	acted on to arrange participation	•
		RECEIVE FEEDBACK OF THE RESULTS ON THE RESEARCH	
above	• •	rincipal researcher of the above named study, have supplied the ant with the information sheet and answered any questions that	
Signed	1	Date	-
Resear	Medic Norwi Email:	Tatsukunya, Doctorate Course in Clinical Psychology, School of ine, Health Policy and Practice, University of East Anglia, ch, NR4 7TJ.  S.Katsukunya@uea.ac.uk 7793115483	

#### Appendix H

#### Pre School Five Minute Speech Sample Instructions

"I'd like to hear your thoughts and feelings about (foster child), in your own words and without my interrupting with any questions or comments. When I ask you to begin I'd like you to speak for 5 minutes, telling me what kind of person (child) is and how the two of you get along together. After you begin to speak, I prefer not to answer any questions until after the 5 minutes are over. Do you have any questions before we begin?"

Prompt – once the respondent has begun to speak, the examiner may only make one comment.

"Please tell me anything about (foster child) for a few more minutes"

Daley, Sonuga-Barke, and Thompson, (2003)

#### Appendix I

Table I1 Summary of the Chi Squared  $(X^2)$  and Significance Values for Attributions and the EE Categories, as Measured by the PFMSS and the FMSS.

EE Category and	PFMSS		FMSS	
attribution	$X^2$	p	$X^2$	p
	Α	P	Α	Ρ
Initial Statement				
Internal (child)	2.98	.225	2.98	.225
External (child)	.21	.899	.21	.899
Internal (F.C)	1.49	.474	1.49	.474
External (F.C) <sup>11</sup>	7.22	.027*	7.22	.027*
Controllable (child)	4.42	.110	4.42	.110
Uncontrollable (child)	.99	.609	.99	.609
Controllable (F.C)	1.5	.474	1.5	.474
Uncontrollable (F.C) <sup>2</sup>	7.98	.018*	7.98	.018*
Personal	3.73	.155	3.73	.155
Universal	5.38	.068	5.38	.068
Stable <sup>3</sup>	7.31	.026*	7.31	.026*
Unstable	4.39	.111	4.39	.111
Warmth				
Internal (child)	.86	.652		
External (child) <sup>4</sup>	11.93	.003**		
Internal (F.C)	.36	.837		
External (F.C)	1.13	.567		
Controllable (child)	.44	.801		
Uncontrollable (child) <sup>2</sup>	6.17	.046*		
Controllable (F.C)	.78	.676		
Uncontrollable (F.C)	1.31	.519		
Personal	2.95	.229		
Universal <sup>3</sup>	6.45	.04*		

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<sup>&</sup>lt;sup>1</sup> Significant difference between initial statement and external to the foster carer attributions (PFMSS & FMSS),  $X^2$ , (2, n = 64) = 7.22, p = .027, positive>neutral\*, positive>negative, negative>neutral <sup>2</sup> Significant difference between initial statement and uncontrollable by the foster carer attributions (PFMSS & FMSS)  $X^2$ , (2, n = 64) = 7.98, p = .018, positive>neutral\*, positive>negative, negative>neutral.

<sup>&</sup>lt;sup>3</sup> Significant difference between initial statement and stable attributions (PFMSS & FMSS),  $X^2$  (2, n = 63) = 7.31, p = .026, positive>neutral\*, positive>negative, neutral>negative

<sup>&</sup>lt;sup>4</sup> Significant difference between warmth (PFMSS) and external to the child attributions  $X^2$  (2, n = 64) = 11.93, p = .003, high>low, high>moderate\*, low>moderate.

<sup>&</sup>lt;sup>2</sup> Significant difference between warmth and uncontrollable by the child attributions  $X^2$  (2, n = 63) = 6.173, p = .046, high>low, high>moderate\*, low>moderate.

EE Category and attribution	PFMSS		FMSS	
-	$X^2$	р	$X^2$	р
Stable	.68	.712		-
Unstable	.34	.843		
Relationship				
Internal (child)	1.44	.486	.87	.646
External (child)	2.7	.259	1.64	.441
Internal (F.C)	2.2	.332	1.84	.4
External (F.C)	.84	.658	.47	.791
Controllable (child)	3.37	.185	.85	.656
Uncontrollable (child)	3.59	.166	.9	.638
Controllable (F.C)	2.2	.332	.58	.75
Uncontrollable (F.C)	1.78	.411	.93	.628
Personal <sup>4</sup>	6.76	.034*	4.93	.085
Universal	3.99	.136	4.84	.089
Stable	1.2	.548	3.34	.189
Unstable	1.16	.561	.89	.64
EOI				
Internal (child)	-	-	1.69	.429
External (child)	-	-	1.37	.504
Internal (F.C)	-	-	.52	.772
External (F.C)	-	-	1.78	.41
Controllable (child)	-	-	1.38	.502
Uncontrollable (child)	-	-	.59	.746
Controllable (F.C)	-	-	.76	.683
Uncontrollable (F.C)	-	-	1.72	.424
Personal	-	-	1.05	.593
Universal	-	-	.83	.66
Stable	-	-	1.63	.444
Unstable		-	1.66	.437

<sup>&</sup>lt;sup>3</sup> Significant difference between warmth and universal attributions  $X^2$  (2, n = 62) = 6.45, p = .04, high>moderate\*, high>low\*, moderate>low.

<sup>&</sup>lt;sup>4</sup> Significant difference between relationship (PFMSS) and personal attributions ( $X^2$  (2, n = 62) = 6.76, p = .034), negative>positive, negative>neutral, neutral>positive\*.