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Foster families: Placement outcomes and psychological interventions

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Overview

This portfolio thesis comprises of three parts: a systematic literature review, an empirical study and a set of appendixes.

Part one is a systematic literature review which examines psychological interventions within foster care. An introduction to the difficulties found within foster care and its unique setting is presented, followed by a rationale of why a review of interventions in this area would be a useful addition to the field. The paper goes on to specify the methods used to identify suitable articles which met set criteria for inclusion. Finally, the main findings are presented and discussed.

Part two is an empirical study of foster families. Part one highlighted different types of interventions within foster care, and part two aims to highlight a potential area in which to intervene. This paper examines how the relationship between foster carers and children, and the child's behaviour, relate to placement quality/outcome. The research uses both carer and child ratings for the dependant variables, which are also examined for agreement and stability over time. This paper reports the results of this study, as well as discussing clinical and research implications, and limitations.

Part three is a set of appendixes to support the work in parts one and two. It contains the forms, questionnaires and ethical permissions for the study, as well as a reflective account of the research process.

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Part 1

Systematic Literature Review

Interventions in foster care: a systematic review from a UK perspective

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Please see Appendix A for the Guidelines for Authors.

Abstract

Foster care is a complex setting to provide therapeutic interventions due to the high rates of difficulty, poor outcomes and high numbers of professionals and carers involved. This systematic review aims to examine interventions that have been empirically assessed in foster care from a UK perspective. Twenty-nine papers describing nineteen interventions were included. It was found that there was good support for wraparound services and relational interventions, but little support for widely used carer training programmes. A need was identified to further research and implement wraparound services within the UK, and to empirically test interventions which may be efficacious with a foster care population.

Key words: *Foster care, Intervention, Systematic Review, Foster Care Services*

Introduction

In March 2008, approximately 42,300 children were fostered in England (Harker, 2009). The reasons why a child is fostered can range from abuse or neglect to short-term respite for parents caring for a child with disabilities. Harker (2009) reports that in March 2008, the main reason for a child becoming looked after was abuse or neglect (sixty-five percent), followed by family dysfunction (ten percent).

It can be argued that foster care is a unique setting to provide therapeutic interventions. The majority of children have suffered trauma or abuse in their early histories (Department for Children, Schools and Families, 2008). The child has also had to cope with a change, and often many changes, of caregiver. It is not surprising, therefore, that children in foster care have often experienced weak or broken attachments with their primary carer and display attachment difficulties (e.g. Howe & Fearnley, 2003). Due to the relatively high rate of placement disruption and their past experiences, the child may feel uncertainty about their current living situation and their foster carer. Indeed, it has been found that children who experience rejection and abuse from their parents find it hard to develop trust in other adults (McAuley, 2006). Equally, foster carers may also have uncertainty about whether the placement will last, meaning both parties may be unsure about how much to invest in the placement and their relationship. Additionally, there are often many services involved with the family. At the very least in the UK, families will have a social worker and parental responsibility may be shared by the biological parent, social services and foster carer.

There are also well-documented poor outcomes for foster children. For example, Meltzer et al (2003), found that in foster children in England, prevalence of mental health disorder is five times higher for children aged five to ten, and four times higher in young people aged eleven to seventeen, than children in the general population. Additionally, these statistics only include classifiable mental health conditions and it has been suggested that foster children have complex difficulties that are not well represented by classification systems (Tarren-

Sweeney, 2008), suggesting rates of difficulties in foster children may be even higher. Furthermore, children in foster care have been found to have a lower educational attainment and higher level of special educational need (Harker, 2009).

Therapeutic interventions must therefore be delivered in a system of potential uncertainty, high rates of difficulty, documented poor outcomes and often with a number of professionals and carers involved.

There have been a number of reviews examining different interventions in foster care. For example, a Cochrane Review was recently completed on cognitive behavioural training programmes for foster carers managing difficult behaviour (Turner, Macdonald & Dennis, 2007). This review found little evidence to support such programmes and that further research is needed. Dorsey et al. (2008) similarly reviewed training for foster carers, but did not specify a theoretical basis of studies for them to be included. They also found little empirical evidence to support the training carers receive in the USA. These reviews only focus on one type of intervention, so it is difficult to get an overall sense of current interventions in foster care.

A recent review by Craven and Lee (2006) examined a range of therapeutic interventions for foster children, however it has some limitations. Firstly, as few interventions were found for foster children, interventions included were designed for 'at risk' children (only six out of eighteen studies were specifically for foster care). Given the unique situation of foster children, some of the interventions may not be as effective/appropriate to a foster care setting. Secondly, the paper only focussed on interventions for foster children, not for the carers or foster family as a whole. Whilst this was a worthwhile focus, highlighting the lack of studies specifically for foster children, it may be useful to complete a more systemically-orientated review which includes interventions for other areas of the system. Thirdly, the study only assessed papers up to 2004 so it may be useful to re-review interventions for children as further studies have been published since. Racusin et al. (2005) reviewed a range

of symptom-focused and systemic interventions for foster children. This review did not appear to be systematic and also reviewed interventions that had not been tested within a foster care population. Landsverk et al (2009) also conducted a review for children in foster care. This review was a condensed form of a report for the Casey Family Programs in 2006 (Landsverk et al, 2006). Similarly to previous reviews, it did not examine interventions that had been tested with children in foster care specifically. Rather, the study looked at interventions for common mental health problems found within the foster care population, largely within the USA. Additionally, the study examines factors such as Medicaid, an aid for paying for healthcare, which is not applicable to the UK.

It therefore seems useful to comprehensively examine what interventions have been assessed within foster care in recent years, only including studies that have been explicitly tested within this population. It will also be useful to examine studies from a UK perspective, given the differences in health and social care organisation and delivery.

This leads to the following research questions:

1. What empirically-tested interventions exist for the foster care population?
2. Are these interventions effective?

Method

Data sources and search strategy

Electronic databases (PsychInfo, Medline, Web of Knowledge and The Cochrane Library) were searched for published articles evaluating psychological interventions within foster care. Searches were conducted using the following search terms (* indicates truncation): foster care, kinship care, foster child*, foster parent*, foster carer*, foster mother, foster father, foster family, out of home care, : interv*, therap*, support, counselling, cognitive behavioural therapy, psychotherapy, provision, family therapy, treatment. A limit was set of 1995 to 2009. A start date of 1995 was chosen as new legislation relating to standards of care in fostering

was released in 1999 (UK Joint Working Party on Foster Care, 1999). The working party for this legislation was set up in 1997, so this review has a slightly earlier start date in order to capture research which may have informed the standards, but with the expectation that most intervention research would have been completed after the 1999 legislation. A bibliographic review of found papers was also completed.

Study selection (inclusion and exclusion criteria)

Studies were screened against the following inclusion criteria: (1) published between 1995 and 2009, (2) published in a peer-reviewed journal, (3) included either foster carers or foster children as participants, (4) empirically evaluated an intervention using a quantitative design. The studies were not included if they met the following exclusion criteria: (1) participants were from 'institutional' backgrounds, such as Romanian orphanages, (2) interventions were only directed towards the biological parents, (3) interventions within short-term respite foster care, and (4) interventions targeted at 'therapeutic foster care' where the child has been remanded from the justice system (i.e. not in foster care due to maltreatment). Although there may be a number of overlaps in the experiences of foster children in care due to maltreatment and due to the justice system, the final exclusion criterion was included as evidence suggests non-justice referred children have a greater number of difficulties and not all justice-referred children have maltreatment histories (Nilsen, 2007).

Study Quality assessment

The quality of all studies was assessed using the Downs and Black (1998) checklist (see Appendix B). The checklist has 27 criteria, each of which is answered using 'yes', 'no' or 'unable to determine', yielding a possible score out of 27. A random sample of the papers was also evaluated by an independent researcher, and inter-rater reliability was found to be 89 percent, indicating strong positive inter-rater reliability. Any discrepancies between ratings were discussed and a shared decision reached.

Data extraction

Information collected from studies included the country in which the study was conducted, research design, target of intervention (carer/child), sample, intervention (format, components), variables studied and outcome measures, and results.

Data synthesis

Data were synthesised from a qualitative perspective as a meta-analysis was not appropriate due to the heterogeneity of the interventions and measures used.

Details of included and excluded studies

Electronic searches generated 1493 results. From titles and abstracts, 1450 of these were excluded, the main reasons for which were that the paper did not evaluate an intervention, was not within foster care and the paper was a literature review of interventions rather than a direct assessment of an intervention. The remaining forty-three papers were examined in full and a further eleven papers were excluded. Reasons for exclusion are given in Appendix C. The remaining twenty-nine papers were included for review.

Results

The search yielded twenty-nine studies commenting on nineteen different interventions. Three studies (Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008 and Price et al, 2008) report on the same RCT, but present different outcome variables in each paper. Five studies (Bruce et al, 2009; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher, Stoolmiller, Gunnar, Burraston, 2007 and Fisher, Kim & Pears, 2009) report on the same RCT but different outcome variables. Four studies (Dozier et al, 2006; Dozier, Peloso, Lewis, Laurenceau & Levine, 2008; Dozier et al, 2009 and Sprang, 2009) describe the same intervention, of which one (Sprang, 2009) describes a different sample and slightly adjusted procedures, whilst the remaining three describe different outcome variables and extensions of

the same RCT. Fisher, Gunnar, Chamberlain and Reid (2000) report a pilot study of the intervention described in Fisher, Burraston and Pears (2005) but use a different sample.

The main characteristics of studies included in the review are shown in Table 1.

Study	Country	Design	Target of intervention	Sample	Setting/format of intervention	Intervention Description	Main variables, measures and outcomes
Burry (1999)	USA	Pre and post intervention assessment	Foster carers of infants with pre-natal substance effects	88 carers	Group	Treatment (n=28): training group of 4 weekly sessions of 2.5 hours. Content: designed to enhance knowledge & skills about parenting infants with pre-natal substance effects and to enhance carers' social support. Control (n=60). Attended "regionally televised" foster parent training sessions. Content: Not described. Assessed pre and post-test.	Carers feelings of efficacy (FPPES; p) = Carers' social support (FPSSS; p) +sources of support subscale, =other subscales Specific care-giving skills (SRS; video rated by researcher) + Carer's knowledge about prenatal substance effects (SAIKI; p) + Intention to foster infants with pre-natal substance effects (IF; p) =
Bruce et al (2009)	USA	Randomised control trial	Foster children age 3 – 5 and their carers	34 foster children	Individual carer support and group for children	Treatment (n=10): 'wraparound' intervention 'Multidimensional Treatment Foster Care for Preschoolers (MTFC-P), same RCT as Fisher & Kim (2007). Control (n=13): is usual foster care (Regular Foster Care; RFC). Comparison group (n=11; CC):	Child's electrophysiological performance (ERPs) +between MTFC-P and RFC for feedback-locked ERP components. =between MTFC-P and CC for feedback-locked ERP components

						Children who have never been in the care system. Assessed post-test only.	
Callaghan, Young, Pace & Vostanis (2004)	UK	Pre and post intervention assessment	Foster children	45 Foster children	Individual	Treatment (n=45) = specialised service for foster children. Content: close links with social services, individual, family & consultation work for foster children in families & residential settings. Assessed at referral and 5 months post-referral.	Child outcomes (HoNOSCA; w) +total score Child difficulties (SDQ; c, pc) c +peer problems subscale only pc +emotion subscale only
Chamberlain at al (2008)	USA	Randomised control trial	Foster carers of children aged 5 - 12	700 foster families	Group	Treatment group (n=359): manualised intervention 'Keeping Foster Parents Trained and Supported (KEEP)'. 16 weekly, 90minute sessions. Based on Multi-Dimensional Treatment Foster Care. Content: Increasing carers' positive reinforcement relative to amount of discipline, non-harsh discipline methods and group discussion to implement	Child behaviour problems (PDR) (pc) + Proportion positive reinforcement (2 hour coded standardised interview with carer plus related items on PDR) (p) +

						strategies to individual families. Control group (n=341) of usual care. Assessed at baseline and termination (5 months posttest)	
Chamberlain, Price, Reid & Landsverk (2008)	USA	Randomised control trial	Foster carers of children aged 5 - 12	700 foster families	Group	Same RCT as Chamberlain et al (2008), 'KEEP'. Second and third phase of implementation in which original developers not involved.	Child behaviour problems (PDR) (pc), no significant difference in comparison of phases 1, 2 & 3
Dozier et al (2006)	USA	Randomised control trial	Foster carer-child dyads (child aged 3.6-39.4 months)	60 foster care dyads plus 104 children not in foster care	Individual sessions for dyads	Treatment group (n= 30): manualised intervention 'Attachment and Biobehavioural Catch-up (ABC)'. 10 weekly sessions. Based on attachment theory. Content: helping caregivers learnt to re-interpret child's behaviours, over-ride their own attachment issues and provide an environment that develops the child's regulatory abilities. Practice in sessions with foster child. Control (n=30) is a 10 week group	Child cortisol levels (saliva sampling) +between control and ABC groups, =between ABC and comparison group. Child behaviour problems (PDR) (pc)=between ABC and control

						educational program 'Developmental Education for Families (DEF)' designed to enhance cognitive development. Comparison (n=104) of children who have never been in the care system. Assessed at baseline and termination (one month post-test).	
Dozier, Peloso, Lewis, Laurenceau & Levine (2008)	USA	Randomised control trial	Foster carer-child dyads (child aged 15-24 months)	93 foster care dyads plus 48 children not in foster care	Individual sessions for dyads	Treatment group (n=46) same intervention as Dozier et al (2006) 'ABC'. Control group (n=47) same as Dozier et al (2006) 'DEF'. Comparison (n=48) of children never in the care system. Assessed post intervention only. Cortisol assessed pre-Strange Situation (SS; t1), 15- (t2) & 30-minutes (t3) post SS.	Salivary cortisol. t1: +between ABC and DEF, +between DEF and comparison, =between ABC and comparison t2 & t3: no significant increase for any group.
Dozier et al (2009)	USA	Randomised control trial	Foster carer-child dyads	46 foster care	Individual sessions for	Treatment group (n=22) same intervention as Dozier et al (2006)	Attachment behaviour (Attachment diary; pc). +in avoidance behaviour, =in levels of security

			(child aged 3.6-39.4 months)	dyads	dyads	'ABC'. Control group (n=24) same as Dozier et al (2006) 'DEF'. Assessed at baseline and one-month post-test.	
Fisher, Gunnar, Chamberlain & Reid (2000)	USA	Pre and post intervention assessment (pilot)	Foster carers of pre-school age children (age 4.4 – 5.35 years)	20 foster children (intervention delivered to carers) plus 10 children not in care	Individual carer support	Treatment (n=10) 'wraparound' intervention 'Early Intervention Foster Care (EIFC)'. Content: carers receive pre-placement training. Post-placement, carers receive support through daily phone contact, weekly home visits, weekly support group & 24hour on-call crisis intervention. Control (n=10) is usual care, Regular Foster Care (RFC). Comparison (n=10) of children not in the care system (CC). Participants not randomised. Assessed at baseline and 12-weeks post-baseline.	Parenting strategies (Child Caregiver Interviewer Impressions Form). =between EIFC and CC on rates of monitoring, consistent discipline & positive reinforcement. +between EIFC and RFC. Caregiver stress (PDR; p). =between EIFC and RFC, though decrease in EIFC & increase in RFC. Child behaviour problems (Early Childhood Inventory; pc).At baseline, EIFC had a greater number of behavioural problems that decreased over time. RFC increased over time (not significant) Salivary coritsol. Trends of EIFC converging with CC & RFC diverging, but not significant.
Fisher,	USA	Randomised	Foster carers	90 foster	Individual carer	Treatment (n=47) same as Fisher et	Number of failed permanent placements +.

Burraston & Pears (2005)		control trial	of pre-school children (age 3 – 6)	children	support	al (2000) 'EIFC'. Control (n=43) same as Fisher et al (2000) 'RFC'. This study reports on placement outcomes only (unclear at what time point outcomes were assessed).	Number of placements prior to the study related significantly to failed permanent placements for RFC but not EIFC.
Fisher & Kim (2007)	USA	Randomised control trial	Foster children age 3 – 5 and their carers	117 foster children	Individual carer support and group for children	Treatment (n=57) MTFC-P. Content: carers receive pre-placement training. Post-placement, carers received support through daily phone contact, weekly support group & 24hour on-call staff availability. Children attended weekly playgroup sessions designed to facilitate school readiness. Control (n=60) of Regular Foster Care (RFC). Assessed at baseline (t1) and 3-(t2), 6- (t3), 9- (t4) and 12-months (t5) post-baseline.	Child attachment behaviour (PAD; pc). +in secure and avoidant behaviour. =in resistant behaviour (decrease in both groups). Significant interaction between age at first placement & intervention: older age related to greater increases in secure behaviour for MTFC-P, opposite for RFC.

Fisher & Stoolmiller (2008)	USA	Randomised control trial	Foster children age 3-5 and their carers	117 foster children plus 60 children not in care	Individual carer support and group for children	Treatment (n=57), same as Fisher & Kim (2007) RCT. Control (n=60) of Regular Foster Care (RFC). Comparison (n=60; CC) of children never in the care system.	Carer stress about managing child's behaviour (PDR; p) +between MTFC-P and RFC, +between MTFC-P and CC, =between CC and RFC Carer stress related to child behaviour problems (PDR; p) RFC showed increased stress sensitivity to child behaviour problems over time, MTFC-P did not. Longitudinal association between carer stress and child cortisol levels. An increase in carer stress in response to behaviour problems was significantly associated with more blunted diurnal cortisol production.
Fisher, Stoolmiller, Gunnar & Burraston (2007)	USA	Randomised control trial	Foster children age 3 – 5 and their carers	117 foster children plus 60 children not in care	Individual carer support and group for children	Treatment (n=57) same as Fisher & Kim (2007) 'MTFC-P'. Control (n=60) same as Fisher & Kim (2007) 'RFC'. Comparison (n=60; CC) of children not in care. Assessed monthly for 12 months.	Salivary cortisol. Change over time: =between CC and MTFC-P, +between MTFC-P and RFC.
Fisher, Kim & Pears (2009)	USA	Randomised control trial	Foster children aged 3-5 and their carers	52 foster children taken from larger	Individual carer support and group for children	Treatment (n=29) same as Fisher & Kim (2007) 'MTFC-P'. Control (n=23) same as Fisher & Kim (2007) 'RFC'. Assessed during 24moths post	Placement permanency attempts. = Successful permanency attempts. + Overall permanency. + Association between maltreatment history & successful permanent placement. Not significant, so MTFC-P not

				RCT of Fisher et al (2007).		study entry	affected by maltreatment history
Kessler et al (2008)	USA	Between groups comparison	Foster children	479 adult foster care alumni placed in care as adolescents (14-18years)	'Wraparound service'	Treatment (n=111): 'wraparound' service "Casey Program". Content: Workers have lower caseloads, higher pay, higher levels of qualifications and greater access to support services than public foster care workers. The program also offers scholarships for further education. Control (n=368) of adult care alumni placed in public foster care in the same locations as the Casey Program. Assessed in interview 1-13years after leaving care.	Mental health problems in the past 12months (World Health Organisation Composite International Diagnostic Interview; c) + Physical health conditions (Chronic Condition Checklist; c) +ulcers & cardiometabolic conditions, -respiratory disorders, =pain conditions
Linares, Montalto, Li & Oza (2006)	USA	Randomised control trial	Foster carer-biological parent dyads (foster	64 dyads	Group & individual sessions for each dyad	Treatment (n=40)., two components: 1) Parenting group, 12 weekly 2hour sessions, based on adapted Incredible Years	Carer discipline attitudes, beliefs & practices (Parenting Practices Interview). +on positive discipline at termination & follow-up. +on clear expectations at follow-up.

			children age 3-10 years)			programme (Webster-Stratton, 2000). 2) Co-parenting, 12 weekly 1hour sessions aimed at facilitating co-operation and consistency between foster and biological parents. Control (n=24), usual care. Assessed at baseline, end of intervention(termination), follow-up (3months post-intervention).	Co-parenting relationship (selected items of Family Functioning Scale and Family Adaptability & Cohesion Scale; p). +at termination. Child externalising problems (CBCL & ECBI; pc). =at follow-up.
Macdonald & Turner (2005)	UK	Randomised control trial	Foster carers	117 carers	Group	Treatment (n=67) group CBT to help carers manage challenging behaviour, 4 weekly 5hour sessions. Content: information & skills training in managing behaviour (in CBT terms). Control (n=50) of usual care. Assessed at baseline and end of training (termination). Interviews conducted at baseline, termination & 6month follow-up.	Knowledge of behavioural principles (KBPAC; p). + Child behaviour (CBCL; pc). = Number of unplanned breakdowns. =
McNeil,	USA	Pre and post	Foster carer-	30	Group	Treatment (n=30) group Parent	Child behaviour problems (ECBI; pc) +

Herschell, Gurwitch & Clemens-Mowrer (2005)		intervention assessment	child dyads (child ages 0-7 years)	children		Child Interaction Therapy (PCIT), 2 day workshop. Content: use of play therapy skills & discipline skills and practice between carer and child. Assessed at baseline & one-month post-test.	
Minnis, Pelosi, Knapp & Dunn (2001)	UK	Randomised control trial	Foster carers of children aged 5-16	121 foster families	Group	Treatment (n=57) group training. 6hours a day, 2 consecutive days plus one follow-up day a week later. Content: Not explicitly stated. Control (n=64) usual care. Assessed at baseline & 9months post-test. RADS also administered at termination.	Child behaviour (SDQ;pc,c,t) = Child's self-esteem (MRS; c) = Child's attachment (RADS; pc) =termination, =follow-up Foster family's use of services (Costs of Foster Care Questionnaire; pc) =
Nilsen (2007)	USA	Pre and post intervention assessment (pilot)	Foster carers of children aged 5-12	25 foster carers	Group	Treatment (n=18) group "Fostering Futures", 2hours weekly, 12 weeks. Adapted version of Incredible Years (Webster-Stratton, 2000). Content: Parenting skills, psycho-education and social support for carers. Control (n=7) usual care. Assessed at baseline and	Child functioning (BASC; pc) =externalising and internalising scales, +conduct, aggression and hyperactivity subscales of externalising scale Carer stress (PSI; p) = Parenting knowledge and attitudes (AAPI;p) =

						termination.	
Pallett et al (2002)	UK	Pre and post intervention assessment	Foster carers of children aged under 12 and over 12 (separate groups)	60 carers	Group	Treatment (n=60) group training to manage children's behaviour, based on CBT & social learning theory. Content: social learning theory, promoting pro-social behaviour, limit-setting and problem-solving & stress management. Assessed pre and post-test.	Carer behaviour (Carer-Child Dysfunctional Interaction Scale from PSI; p) + Child behaviour (Difficult Child Scale from PSI; p) + Child behaviour (SDQ;p) +emotion subscale, =hyperactivity & conduct subscales Child behaviour (Concerns About my Child visual analogue scale; p) +
Pears, Fisher & Bronz (2007)	USA	Randomised control trial (pilot)	Foster children entering kindergarten up to second grade	24 children	Group	Treatment (n=11): therapeutic playgroup to promote socio-emotional school readiness. 2hours, twice weekly for 7weeks. Content: Social competence and emotional and behavioural self-regulation. Control (n=13): usual care Assessed at baseline & 2weeks post-test. Teachers assess at 1month post-test.	Child behaviour (CBCL; pc) +social competence subscale, =other subscales. Emotion self-regulation (Emotion Regulation Checklist; pc) +emotional liability subscale, =other subscales. Child behaviour in school (Teacher Report Form; t) =
Pithouse,	UK	Pre and post	Foster carers	106	Group	Treatment (n=53) group	Child behaviour problems (Disability Assessment

Hill-Tout & Lowe (2002)		intervention assessment	of children defined as 'challenging' in their behaviour	carers		behavioural management training, 3 consecutive days plus 1 follow-up day 3-4weeks later. Content: proactive and reactive strategies to manage the behaviour. Control (n=53) of 'non-intervention comparison group', details not described. Assessed at baseline & 5-7 weeks post-termination. Not random assignment of participants.	Schedule: modified; pc) = Child's participation outside the home (Index of Community Integration; pc) = Carers' reactions to challenging behaviour (ERCBS; p) = (though both groups significantly decreased) Carers' beliefs about causes of behaviour (CHABA; p) = Carer stress & well-being (Malaise Inventory and Spielberger Self-Evaluation Questionnaire; p) = Carer understanding of challenging behaviour (Insight Scale, developed by authors; p) =
Price et al (2008)	USA	Randomised control trial – same RCT as Chamberlain et al (2008)	Foster carers of children aged 5-12	700 carers	Group	Treatment (n=359) group same as Chamberlain et al (2008) 'KEEP' Control (n=341) of usual care. Assessed at end of study.	Placement outcome (positive or negative exit) +for positive exits, =for negative exits +effect of intervention on negative exits for children with 4 or more prior placements
Puddy & Jackson (2003)	USA	Pre and post intervention assessment	Foster carers new to fostering	82 carers	Group	Treatment (n=62) manualised group "Model Approach to Partnerships in Parenting/Group Participation and Selection of	Goals of intervention (MAPP/GRS AQ; p) +Know Your Family, Work in Partnerships, Assure Health & Safety and Make an Informed Decision subscales. =other 8 subscales.

						Foster and/or Adoptive Families" (MAPP/GPS). 10 sessions. Content: development of knowledge, attitudes & skills for foster parenting. Control (n=20) usual care. Assessed pre and post-test.	Parenting knowledge (PSQ; p) +Punishment/Rewards, -Communication, =other 7 subscales Parenting behaviour (VQ; p) +Rewards & Predicting Future Behaviours, -Identifying behaviours, =other 11 subscales.
Sprang (2009)	USA	Randomised control trial	Foster carer-child dyads (child aged 0-6 with diagnosed attachment problems)	58 dyads	Individual sessions for dyads	Treatment (n=29) same as Dozier et al (2006) 'ABC' with added support group. Control (n=29) biweekly 90minute support group of carers. Assessed at baseline and termination.	Child behaviour (CBCL; pc) + Carer stress (PSI; p) + Potential of carer to abuse child (CAPI; p) +
Strozier et al. (2005)	USA	Pre and post intervention assessment	Kinship foster carer-child dyads	72 carers with 235 children	Group for carers and individual/ group for children	Treatment (n=72 carers) 'Kinship Care Connection'. 18 weeks. Carers attend 8 fortnightly support sessions. Children have (as appropriate) mentoring & tutoring 1-2 times per week, support groups & individual counselling aimed at improving relationships, and	Child's self-esteem (HSS; c) + Carer's feelings of burden (CSE; p) +

						behavioural contracts to manage classroom behaviour. Assessed pre and post test.	
Timmer, Urquiza & Zebell (2006)	USA	Pre and post intervention assessment	Foster carer-child dyads (child aged 0-7)	163 foster care dyads plus 222 biological parent-child dyads	Individual sessions for dyads	Treatment: PCIT in individual sessions. Content: first phase aimed at enhancing the relationship, second phase aimed at improving child compliance. No set numbers of sessions, but must complete phase one to move to phase two. Comparison of effectiveness for foster dyads (n=163) and biological dyads (n=222).	Child behaviour (CBCL & ECBI; pc) +for both groups, =between groups Carer stress (PSI; p) +for both groups, =between groups Carer psychological problems (SCL-90-R; p) +for both groups, =between groups Potential of carer to abuse child (CAPI; p) +for both groups, =between groups
Weiner, Schneider & Lyons (2009)	USA	Pre and post intervention assessment of 3 interventions (pilot)	Foster children (aged 0-6, 6-12 & 13+)	109 foster children taken from "system of care" wraparo	Age 0-6 = carer-child dyad individual sessions. Age 6-12 = individual sessions for carer & child	Age 0-6 Treatment (n=53) 'Child Parent Psychotherapy' (CPP). Weekly play sessions for dyad for 1 year. Age 6-12 Treatment (n=31) 'Trauma Focused CBT' (TF-CBT). 12-20 weekly sessions	Child needs and strengths (CANS; pc) =between racial groups for each type of therapy. CPP effective across racial groups, TF-CBT effective for White and African American participants, SPARCS only significant for African American participants.

				und service in Illinois, USA.	(separately) Age 13+ = group	Age 13+ Treatment (n=15) 'Structured Psychotherapy for Adolescents Responding to Chronic Stress' (SPARCS). Groups of 6-10 children, weekly for 16 weeks. Assessment at baseline and termination.	

Table 1. Summary of the main characteristics of included studies

(p) is parent self-report, (pc) is parent report about child, (c) is child self-report, (t) is teacher report about child, (w) is professional involved report about child

+ is a statistically significant difference in the desired direction compared to baseline/control, - is a statistically significant difference not in the desired direction, = is no significant change from baseline to posttest or no significant difference between intervention and control group.

Abbreviations of measures used: AAPI=Adult-Adolescent Parenting Inventory, BASC=Behavioural Assessment System for Children, CAPI=The Child Abuse Potential Inventory, CANS= Child and Adolescent Needs and Strengths, CHABA=Challenging Behaviour Attribution Scale, CBCL=Child Behaviour Checklist, CSE=Caregiver Self-Efficacy Scale, ECBI=Eyberg Child Behaviour Inventory, ERCBS=Emotional Responses to Challenging Behaviour Scale, ERPs=Event-related potentials, FPPES=Foster Parent Parenting Efficacy Scale, FPSSS=Foster Parenting Social Support Scale, HoNOSCA=Health of the Nations Outcome Scales for Children and Adolescents, HSS=Hare Self-Esteem Scale, IF=Intent to Foster, KBAC=Knowledge of Behavioural Principles as Applied to Children, MAPP/GRSAQ=MAPP/GRS Assessment Questionnaire, MRS=Modified Rosenberg Self-esteem Scale, PDR = Parent Daily Report Checklist, PAD=Parent Attachment Diary, PSI=Parenting Stress Index, PSQ=Parenting Skills Questionnaire, RADS=Reactive Attachment Disorder Scale, SAIKI=Substance-Affected Infants Knowledge Inventory, SDQ=Strengths and Difficulties Questionnaire, SRS=Skills Rating Sheet, VQ=Video Questionnaire

Only those results pertaining to change in difficulties or ways of managing problems are given here, not measures/results relating to satisfaction with interventions.

Characteristics of foster intervention research

Overview of methodological quality of the research

The Downs and Black (1998) checklist was used to rate the quality of the papers. The overall range in rated quality was 48% (Burry, 1999) to 85% (Macdonald & Turner, 2005; Linares et al, 2006), however nineteen studies had a quality rating of 70% or over, suggesting the majority of studies were of good quality. The majority of papers clearly described the aims and main outcomes to be used. Only two studies reported a power calculation (Minnis et al, 2001; Timmer et al 2006); the remainder did not justify their participant numbers. Nine studies reported characteristics of participants lost to follow-up, however only four appeared to take these losses into account when analysing their results (Chamberlain et al, 2008; Fisher & Kim, 2007; Timmer et al, 2006; Sprang, 2009).

Study design

Only six studies used a pre/post-intervention design with no control group (Callaghan et al, 2004; McNeil et al, 2005; Pallett et al, 2002; Strozier et al, 2005; Timmer et al, 2006; Weiner, Schneider and Lyons, 2009). Six studies used a non-randomised control group in addition to a pre/post intervention design (Burry, 1999; Fisher et al, 2000; Kessler et al, 2008; Nilsen, 2007; Pithouse, Hill-Tout & Lowe, 2002; Puddy & Jackson; 2003). Seventeen studies were based on randomised control trials (RCTs; Bruce et al, 2009; Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher et al, 2007; Fisher, Kim & Pears, 2009; Linares et al, 2006; MacDonald & Turner, 2005; Minnis et al, 2001; Pears, Fisher & Bronz, 2007; Price et al, 2008; Sprang, 2009), although these seventeen report on twelve different RCTs.

Sample characteristics

Sample sizes used ranged from 20 (Fisher et al, 2000) to 700 (the 'KEEP' RCT; Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008). Thirteen studies directed the intervention solely at carers (Burry, 1999; Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Fisher et al, 2000; Fisher, Burraston & Pears, 2005; Linares et al, 2006; MacDonald & Turner, 2005; Nilsen, 2007; Minnis et al, 2001; Pallett et al, 2002; Pithouse, Hill-Tout & Lowe, 2002; Price et al, 2008; Puddy & Jackson, 2003), two solely at the child (Pears, Fisher & Bronz, 2007; Weiner et al, 2009) and seven at carer-child dyads (Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; McNeil et al, 2005; Sprang, 2009; Strozier et al, 2005; Timmer et al, 2006). The remaining seven studies describe 'wraparound' services which aim to provide comprehensive support to the whole foster family and to related services (Bruce et al, 2009; Callaghan et al, 2004; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher et al, 2007; Fisher, Kim & Pears, 2009; Kessler et al, 2008).

Ten studies stipulated that the intervention must take place at the initial placement of the child in the family (regardless of whether it was the child's first placement; Burry, 1999; Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Fisher et al, 2000; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher et al, 2007; Fisher, Kim & Pears, 2009; Kessler et al, 2008; Puddy & Jackson, 2003), of which one targeted carers new to fostering (Puddy & Jackson, 2003). The remaining studies did not require that the child or carer were in the placement for a certain period of time.

Twelve studies assessed the intervention's impact on both carer and child (Callaghan et al, 2004; Chamberlain et al, 2008; Fisher et al, 2000; Linares et al, 2006; MacDonald & Turner, 2005; Nilsen, 2007; Minnis et al, 2001; Pallett et al, 2002; Pithouse, Hill-Tout & Lowe, 2002; Sprang, 2009; Strozier et al, 2005; Timmer et al, 2006). Fourteen assessed the impact on the child only (Bruce et al, 2009; Chamberlain, Price, Reid & Landsverk, 2008; Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007;

Fisher et al, 2007; Fisher, Kim & Pears, 2009; Kessler et al, 2008; McNeil et al, 2005; Pears, Fisher & Bronz, 2007; Price et al, 2008; Weiner et al, 2009) and three assessed the impact on carer only (Burry, 1999; Fisher & Stoolmiller, 2008; Puddy & Jackson, 2003).

Summary

In summary, the majority of studies were of good quality and used an RCT design or non-randomised control group. There was a wide range of participant samples, with the majority of interventions directed towards carers. Most studies examined the impact of the intervention on the child, and approximately half assessed the impact on the carer.

Overview of interventions

Types of intervention

Broadly, the interventions fell into five categories: wraparound services, relational interventions, non-relational interventions for carer and child, carer training programmes and interventions for the foster child. The remainder of this paper will use these categories to structure the review.

Twelve of the eighteen interventions included were delivered in a group format (Burry, 1999; Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Linares et al, 2006; MacDonald & Turner, 2005; McNeil et al, 2005; Nilsen, 2007; Minnis et al, 2001; Pallett et al, 2002; Pears, Fisher & Bronz, 2007; Pithouse, Hill-Tout & Lowe, 2002; Price et al, 2008; Puddy & Jackson, 2003) of between three to four (Nilsen, 2007) and fifteen (Pithouse, Hill-Tout & Lowe, 2002) participants per group. One group intervention also included individual sessions for foster carer - biological parent dyads (Linares et al, 2006). One intervention included a group for carers and individual or group work for the child (Strozier et al, 2005). Number of sessions of group interventions ranged from four (Burry, 1999) to sixteen (Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Price et al, 2008).

Two 'wraparound' interventions involved intensive carer support and were delivered via home visits, phone calls, training and support groups (Bruce et al, 2009; Fisher et al, 2000; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher et al, 2007; Fisher, Kim & Pears, 2009). Numbers of contacts made to each family are not stated in any of the studies.

Two interventions were delivered in individual sessions for the carer-child dyad (Timmer et al, 2006; Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Sprang, 2009). The Dozier intervention was administered in ten sessions. There were not a specific number of sessions for the Timmer et al (2006) intervention as it was considered completed once the dyad met the intervention goals, however long that took. Average number of sessions was 15.95 weekly sessions.

Only one intervention specifically examined individual sessions for the child (Weiner et al, 2009), however individual sessions could form part of two 'wraparound' interventions if required (Kessler et al, 2008; Callaghan, 2004).

Intervention delivery

Except for the intervention described in Kessler et al (2008) which only involved social workers, all of the 'wraparound' interventions were delivered by multi-disciplinary teams which included professionals such as nurses, social workers and psychologists (Bruce et al, 2009; Callaghan et al, 2004; Fisher et al, 2000; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher et al, 2007; Fisher, Kim & Pears, 2009).

One intervention was delivered by both social workers and psychologists (Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009), one by only psychologists (Pithouse, Hill-Tout & Lowe, 2002) and one by only playgroup workers (Pears, Fisher & Bronz, 2007). One study used social workers, a child psychiatrist and a psychiatric nurse to deliver the intervention (Sprang, 2009), whilst another used social workers, a 'programme co-ordinator' and intern students (Strozier

et al, 2005). One intervention used paraprofessionals with experience of group work (Chamberlain, Price, Reid & Landsverk, 2008; Price et al, 2008). Two studies used staff groups; one a team at a mental health unit (Linares et al, 2006) and one foster care staff (Puddy & Jackson, 2003). Two studies only stated that the intervention was delivered by trained therapists or facilitators and did not give their profession (Chamberlain et al, 2008; Weiner et al, 2009). One study used foster carers as trainers (Nilsen, 2007).

Six studies did not specify who delivered the intervention (Burry, 1999; Macdonald & Turner, 2005; McNeil et al, 2005; Minnis et al, 2001; Pallett et al, 2002; Timmer et al, 2006).

Of the fifteen non-'wraparound' interventions, seven used a manualised intervention (Burry, 1999; Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Dozier et al, 2006; Dozier, et al 2007; Dozier et al, 2009; Linares et al, 2006; Pears, Bronz & Fisher, 2007; Pithouse, Hill-Tout & Lowe, 2002; Price et al, 2008; Puddy & Jackson, 2003; Sprang, 2009). The remaining eight either did not have a standardised intervention or did not make this clear (Macdonald & Turner, 2005; McNeil et al, 2005; Nilsen, 2007; Minnis et al, 2001; Pallett et al, 2002; Strozier et al, 2005; Timmer et al, 2006; Weiner et al, 2009).

Twenty studies describing twelve interventions highlighted that adherence to intervention delivery was checked (Callaghan et al, 2004; Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Fisher et al, 2000; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher et al, 2007; Fisher, Kim & Pears, 2009; Linares et al, 2006; Macdonald & Turner, 2005; Nilsen, 2007; Pallett et al, 2002; Pears et al, 2007; Price et al, 2008; Puddy & Jackson, 2003; Sprang, 2009; Weiner et al, 2009).

Target age range of intervention

Eleven of the nineteen interventions stated a specific target age range. Of these, one targeted children from three months to approximately three years (Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009), two targeted pre-school children (3 – 5 years; Fisher et al, 2000;

Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher et al, 2007; Fisher, Kim & Pears, 2009), three targeted children up to age seven (0 – 7; McNeil et al, 2005; Sprang, 2009; Timmer et al, 2006), two targeted children age five to twelve (Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Nilsen, 2007; Price et al, 2008), one targeted children aged three to ten (Linares et al, 2006) and one targeted children in a school transition period (kindergarten to 2nd grade; Pears, Fisher & Bronz, 2007).

Two interventions held separate groups for different ages and included both children and adolescents (Pallett et al, 2002; Weiner et al, 2009) and six did not specify an age range of the child for the intervention (Callaghan et al, 2004; Kessler et al, 2008; Macdonald & Turner, 2005; Pithouse, Hill-Tout & Lowe, 2002; Puddy & Jackson, 2003; Strozier et al, 2005).

Aims and objectives of interventions

Most of the interventions had similar aims. Ten aimed at helping carers manage and/or reduce foster children's behaviour difficulties (Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Linares et al, 2006; Nilsen, 2007; McNeil et al, 2005; Macdonald & Turner, 2005; Minnis et al, 2001; Pallett et al, 2002; Pithouse, Hill-Tout & Lowe, 2002; Price et al, 2008, Timmer et al, 2005). Two aimed to facilitate the child's developmental progress or needs (Bruce et al, 2009; Fisher et al, 2000; Fisher et al, 2007; Fisher, Burraston & Pears, 2005; Fisher & Kim, 2007; Fisher, Kim & Pears, 2009; Fisher & Stoolmiller, 2008). One of the 'wraparound' services explicitly stated its aim was to provide a targeted mental health service for foster children and to provide training to other professionals (Callaghan et al, 2004). One aimed to increase co-parenting between the biological and foster carers (Linares et al, 2006). One aimed to increase the child's readiness for school (Pears et al, 2007). One aimed to develop children's regulatory abilities (Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Sprang, 2009). One aimed to treat the child's traumatic stress symptoms (Weiner et al, 2009). One aimed to ensure foster carers were 'effective' (Puddy & Jackson, 2006). One aimed to give carers specific knowledge about parenting infants with pre-natal substance effects (Burry,

1999). One intervention aimed to reduce 'caregiver burden' and improve the child's relationships with others and their school performance (Strozier et al, 2005). Only one intervention did not make its aims explicit (Kessler et al, 2008).

Content of interventions

A summary of the content of each intervention can be found in Table 1. The level of detail about the content varied across studies, though as previously stated the majority of interventions did use a manual, suggesting any missing details could be requested from the authors.

Theoretical basis of interventions

Of the nineteen interventions described in the studies, eleven explicitly stated a theoretical basis. Two were based on social learning theory (Nilsen, 2007; Timmer et al, 2005), one on social learning theory in combination with structural family systems theory (Linares et al, 2006) and one on social learning theory in combination with cognitive behavioural therapy (Pallett et al, 2002). Three interventions were based on attachment theory (Bruce et al, 2009; Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Fisher et al, 2007; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Minnis et al, 2001). One was based on developmental theory (Fisher et al, 2000; Fisher, Burraston & Pears, 2005). One was based on a combination of cognitive problem-solving, parent management training, family therapy and multi-systemic therapy (Pithouse, Hill-Tout & Lowe, 2002). Weiner et al (2009) described three different interventions which were based on psychodynamic theory, cognitive behavioural therapy and dialectical behaviour therapy respectively. The Linares et al (2006) and Nilsen (2007) studies stated they used the Incredible Years Programme (Webster-Stratton, 2000) as a basis for their interventions. One study described the evidence for mentoring and tutoring, support groups and Maslow's hierarchy of needs (Maslow, 1954) as the basis of their intervention (Strozier et al, 2005).

One intervention, whilst not explicitly stating a theoretical basis, was developed from a wraparound intervention called Multi-dimensional Treatment Foster Care (Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Price et al, 2008).

One study explicitly stated there was no theoretical framework for the intervention (Puddy & Jackson, 2003).

Summary

The majority of interventions were delivered in a group format by a variety of professionals. Most studies checked adherence to the intervention but only approximately half made it clear if it was manualised. Just over half specified an age range, all of which were specified ages under ten. Most of the interventions had similar aims, the majority aiming to reduce children's behaviour difficulties. The interventions had a range of theoretical frameworks.

Effectiveness of the Interventions

Due the heterogeneity of studies and outcomes measured, the effectiveness of each intervention will be considered in turn. Only those outcomes related to effectiveness will be presented, not those related to participant satisfaction. A summary and information about the content of control/comparison groups can be found in Table 1.

Wraparound interventions

Wraparound services refer to interventions that target different areas of the system, for example by providing one to one interventions, support to services and family/group interventions.

- The Looked After Children's Team

This is a mental health service with close links with social service and provides individual and family work and consultation to other professionals working with families and residential settings.

This intervention was described in one study (Callaghan et al, 2004), which examined the impact of the intervention by assessing the child's behaviour using both the carer and child rated Strengths and Difficulties Questionnaire (SDQ; Goodman, 1999). Only the peer problems subscale significantly improved for the child version and only the emotional problems subscale significantly improved for the carer version. They also assessed the child's general outcomes using the Health of the Nations Outcome Scales for Children and Adolescents (HoNOSCA; Gowers et al, 1999). Significant pre to post intervention assessment differences were found. These results must be interpreted with caution, however, as no comparison or control group was used.

- Early Intervention Foster Care (EIFC)

In this intervention, carers receive pre-placement training. Post placement, carers receive support through daily phone contact, weekly home visits, a weekly support group and twenty-four hour on-call crisis intervention.

Two studies assessed the impact of this intervention, one a pilot (Fisher et al, 2000) and the other an RCT (Fisher et al, 2005).

Fisher et al (2000) assessed the impact of the intervention on carers. They evaluated parenting strategies using the monitoring, consistent discipline and positive reinforcement aspects of the Child Caregiver Interviewer Impressions Form (Chamberlain & Fisher, 1997). On all three aspects, a significant difference was found between intervention participants and controls, and no significant difference was found between intervention participants and a comparison group of non-foster carers. The Parent Daily Report Checklist (PDR; Chamberlain & Reid, 1987) was also used to measure carer stress and did not find any significant differences.

Fisher et (2000) also assessed the impact on the child's behaviour problems and their salivary cortisol. Cortisol is a stress hormone that has been to shown to have altered functioning

following an adverse early life experience (e.g. Shea et al, 2004). No significant differences were found. They assessed behaviour using the Early Childhood Inventory (ECI; Gadow & Sprafkin, 1994) but found differences were not significant.

Fisher et al (2005) assessed the intervention's impact on failed permanent placements and found that the number of failed placements following the intervention was significantly less for intervention children than controls. They also found the number of placements prior to the intervention was significantly related to failed placements after for control children but not for intervention children. This suggests the intervention may have mitigated the risk of placement failure linked to a high number of previous placements.

- Multidimensional Treatment Foster Care for Preschoolers (MTFC-P)

This intervention had the same content as EIFC above, but with a weekly playgroup for the children to facilitate school readiness.

Five studies comment on different outcomes of the same RCT (Bruce et al, 2009; Fisher & Kim, 2007; Fisher & Stoolmiller, 2008; Fisher et al, 2007; Fisher et al, 2009).

Fisher and Kim (2007) used a carer-rated Parent Attachment Diary (PAD; Stovall-McClough & Dozier, 2000; 2004) to assess the impact on children's attachment behaviour and found significant increases in secure behaviour and significant decreases in avoidant behaviour. No significant differences were found for resistant behaviour.

Fisher et al (2007) examined the impact on the child's salivary cortisol. It was found that intervention children showed significantly lower cortisol values than control children, but were not significantly different to comparison children (who had never been in the care system).

Fisher & Stoolmiller (2008) examined the impact of the interventions on carers' stress about managing children's behaviour using the PDR. They found that the intervention produced an immediate and long-term decrease in the mean and day-to-day variability of carers' stress

related to child behaviour problems and prevented an increase in the sensitivity of carer stress (found in the 'usual care' condition).

Fisher et al (2009) assessed the impact on the child's placement permanency and permanency attempts. Intervention children had significantly more successful permanency attempts and significantly greater overall permanency.

Bruce et al (2009) used electrophysiological measures (Event Related Potentials; ERPs) to assess the impact of the intervention on the child's physiological response to feedback. It was found that for feedback-locked ERPs, significant differences in amplitudes in response to negative feedback was found for the intervention and comparison (children who had never been in care) groups, but not for the 'usual care' groups. This means that the 'usual care' children were not as responsive to external feedback as children who had received the intervention, and that intervention children showed the same responses as children who had never been in the care system.

- Casey Program

In this wraparound service, workers had lower caseloads, higher pay, higher levels of qualifications and greater access to support services than public foster carers. It also offered scholarships to the young people for further education.

One study assessed the impact of the intervention on general mental and physical health using adults who had left a wraparound foster care programme (Casey Program) one to thirteen years previously (Kessler et al, 2008). An adapted version of the World Health Organisation Composite International Diagnostic Interview (Kessler & Ustun, 2004) was used to assess mental health and significantly fewer mental health difficulties in intervention than controls were found. Chronic health conditions were assessed using the Chronic Condition Checklist developed from checklists used in the US National Health Interview Survey (National Center for Health Statistics, 2004). Intervention adults had significantly fewer ulcers and cardiometabolic

conditions and significantly more respiratory disorders than controls. No significant differences were found for pain conditions. These results must be interpreted with caution due to the non-random assignment of children into the program or regular foster care and the considerable variation in follow-up time.

Carer training programmes

Carer training programmes generally involve specific teaching for carers in groups for a certain number of sessions.

- Training program for foster carers of infants with pre-natal substance effects

The authors state this intervention was designed to enhance carers' knowledge and skills about parenting infants with pre-natal substance effects and to increase their social support.

Burry (1999) assessed the impact of this intervention on the carer. They measured carers' feelings of efficacy pre and post intervention using the Foster Parent Parenting Efficacy Scale (FPPES; Dutes, 1985). Feelings of efficacy did not change significantly pre to post intervention. Carers' social support was also measured using an adapted version of the Parenting Social Support Scale (Telleen et al, 1989) called the Foster Parenting Social Support Scale (FPSSS). Carers' social support only significantly increased on the 'sources of social support' subscale and no significant differences were found on the 'need for support' and 'usefulness of support received' subscales. Total scores and other subscale scores were not reported. Changes in knowledge about pre-natal substance effects were also assessed using the Substance-Affected Infants Knowledge Inventory (SAIKI). A significant increase in knowledge pre to post intervention was found. The impact on specific practical care-giving skills with infants was measured using a video of the carer demonstrating the skills with a doll which is then rated by a researcher (Skills Rating Sheet; SRS) pre and post intervention. Carers' skills significantly increased. Additionally, the intervention's impact on carers' intention to foster children with

pre-natal substance effects was assessed using the Intent to Foster instrument, but no significant differences were found.

The results from these outcomes must be interpreted with caution as three of the questionnaires (SRS, SAIKI & IF) were developed by the researcher and no validation data is given. Additionally, the control group intervention was not adequately described so may not be an adequate comparison.

- Keeping Foster Parents Trained and Supported (KEEP)

This intervention aimed to increase carers' non-harsh discipline methods and positive reinforcement relative to the amount of discipline, and to apply these techniques in an individual way through group discussion.

Three studies assessed different aspects of the same RCT (Chamberlain et al, 2008; Chamberlain, Price, Reid & Landsverk, 2008; Price et al, 2008). Chamberlain et al (2008) and Chamberlain, Price, Reid & Landsverk (2008) assessed the impact of the intervention on the child's behaviour problems using the PDR. Both found a significant decrease in behaviour problems, the latter finding that this difference was still apparent when the original developers were no longer delivering the intervention, suggesting the intervention's effectiveness is not contingent on who delivers it. Chamberlain et al (2008) also assessed carers' use of positive reinforcement using a coded two hour standardised interview with the carer in combination with reinforcement and discipline items on the PDR. The intervention significantly increased carer's rates of positive reinforcement both on the PDR and in the interview.

Price et al (2008) assessed the impact on the child's placement permanency or failures post intervention. They classified placement endings as either positive or negative exits. Intervention children had significantly more positive exits but there was not an overall difference for negative exits. However, they found that there was a significant difference for negative exits where the child had had four or more prior placements.

- CBT training to help carers' manage challenging behaviour

This intervention taught skills to manage challenging behaviour based on CBT.

This intervention by Macdonald and Turner (2005) examined the intervention's impact on the carer's knowledge of behavioural principles, the child's behaviour and unplanned placement breakdowns. Carer's knowledge of behavioural principles pre and post intervention was assessed using the Knowledge of Behavioural Principles as Applied to Children (KBPAC; O'Dell et al, 1979). Carers in the intervention group significantly increased their knowledge more than controls. The Child Behaviour Checklist (CBCL; Achenbach, 1991a; 1992) was used to assess the child's behaviour and no significant difference between intervention and control child at termination or follow-up were found. There were no significant differences for the number of unplanned breakdowns following the intervention.

- CBT training to help carers' manage challenging behaviour

This intervention taught skills to manage challenging behaviour based on CBT and social learning theory. It also aimed to teach the carers stress management.

Pallett et al's (2002) training programme was assessed by examining the child's behaviour using a variety of scales. Significant decreases were found on the Difficult Child scale from the Parenting Stress Index (PSI; Abidin, 1997) and on the Concerns about my Child scale (Scott et al, 2001) pre to post intervention. However, no significant differences were found for behavioural difficulties on the carer-rated SDQ, though a significant decrease was found on the emotional problems subscale. Carer behaviour was also examined using the Carer-Child Dysfunctional Interaction scale from the PSI, and a significant decrease was found. No control group was used.

- Behavioural management training

This intervention also aimed to help carers manage challenging behaviour by teaching proactive and reactive behavioural strategies.

The training devised by Pithouse, Hill-Tout and Lowe (2002) was assessed by examining the child's behaviour problems and participation outside the home and the carers' reactions to challenging behaviour, beliefs about the causes of and understanding of challenging behaviour and their stress and well-being. The impact on the child's behaviour was assessed using a modified version of the Disability Assessment Schedule (Holmes et al, 1982) and no significant differences between intervention children and controls were found. A modified version of the Index of Community Integration (Raynes et al, 1989) was used to assess the child's participation outside the home and no significant differences were found. Carers' negative emotions in response to challenging behaviour were assessed using the Emotional Responses to Challenging Behaviour Scale (Hastings & Remington, 1994). A significant decrease in negative emotions was found for both intervention and control carers, suggesting it was not the intervention itself that caused this change. The Challenging Behaviour Attribution Scale (CHABA; Hastings, 1997) was used to measure carers' attributions and no significant differences were found. Carers' understanding of challenging behaviour was assessed pre and post intervention using their developed 'insight scale'. They found no significant differences. Carer stress and well-being was assessed using the Malaise Inventory (Rutter et al, 1970) and Spielberger Self-Evaluation Questionnaire (Spielberger, 1983) and again found no significant differences.

- Training on communication skills and attachment

The content of this intervention was not explicitly stated within the authors' paper.

The training by Minnis et al (2001) was assessed by measuring the impact on the child's behaviour, self-esteem and attachment and on the foster family's use of services. No

significant differences for behavioural difficulties were found on the carer-rated SDQ between intervention and control children. Similarly, no significant differences for the child's self-esteem on the Modified Rosenberg Self-Esteem Scale (MRS; Warr & Jackson, 1985). The Reactive Attachment Disorder Scale (RAD; developed by the researchers) was used to assess the impact on children's attachment and no significant differences at termination or follow-up were found. The family's use of services was assessed with the Costs of Foster Care Questionnaire, which was developed for the study. No significant differences were found.

- Model Approach to Partnerships in Parenting/Group Participation and Selection of Foster and/or Adoptive Families (MAPP/GPS)

This intervention aimed to improve the knowledge and skills of carers to parent foster children, but it was explicitly stated that there was no theoretical basis for what was taught.

Puddy and Jackson (2003) assessed the impact of this intervention on parenting behaviour and knowledge and carers' progress on specific goals of the intervention. They used the Parenting Skills Questionnaire adapted from the SOS Help for Parents Quiz (Clark, 1985) to assess general parenting knowledge. Intervention carers only significantly improved more than controls on one subscale (punishment/consequences) and controls significantly improved more than intervention carers on the communication subscale. There were no significant differences on the remaining seven subscales. To assess parenting behaviour a Video Questionnaire also developed from the SOS Help for Parents Quiz. Intervention carers improved significantly more than controls on the rewards and predicting future behaviours subscale, but control carers improved significantly more on the identifying behaviours subscale. No significant differences were found on the eleven other subscales. The MAPP/GPS Assessment Questionnaire (MAPP/GPS AQ; Bayless & Craig-Oldsen, 1991) was used to assess the intervention's goals. Significant differences were found on four of the subscales (know your family, work in partnerships, assure health and safety and make an informed decision) but not on the remaining eight subscales.

- Adapted Incredible Years

This intervention was based on the Incredible Years programme by Webster-Stratton (2000) and taught behavioural parenting skills and aimed to provide social support for carers.

Nilsen (2007) examined the impact of this intervention on the child's functioning, carers' stress and carers' parenting knowledge and attitudes. Using the Behavioural Assessment System for Children (BASC; Kamphaus et al, 1999) to assess child functioning, no significant differences on the subscales were found but significant differences arose on the conduct, aggression and hyperactivity scales of the externalising subscale. No significant difference in carer stress was found on the PSI. Carers' parenting knowledge and attitudes were assessed using the Adult-Adolescent Parenting Inventory (AAPI; Bavolek, 1990) pre and post intervention. No significant differences were found. This study was a pilot and used a convenience sample for the control group who were not randomised, so these results must be interpreted with caution.

Relational interventions

Relational interventions use the relationship between either the carer and child, or the foster carer and biological parent as their focus.

- Attachment and Biobehavioural Catch-up (ABC)

This intervention uses attachment theory as a basis to help carers to learn to re-interpret the child's behaviour, over-ride their own attachment issues and provide an environment that helps develop the child's regulatory abilities. It is delivered in individual sessions for carer-child dyads so that it is applied to the unique interaction between that particular carer and that particular child. The version delivered by Sprang (2009) also included an additional support group for the carers.

Four studies assessed the effectiveness of the ABC intervention (Dozier et al, 2006; Dozier et al, 2008; Dozier et al, 2009; Sprang, 2009).

Two studies assessed the impact on the child's behaviour. Dozier et al (2006) used the PDR and found no significant difference between intervention children and controls. Sprang (2009), however, did find a significant difference on the CBCL.

Two studies assessed the impact on the child's cortisol levels. Dozier et al (2006) used children's salivary samples to measure diurnal cortisol production and found that intervention children showed significantly lower cortisol values post intervention than control children and showed no significant difference to children who had never been in care. In an extension of this RCT, Dozier et al (2008) tried to simulate a stressful event for the child and measured cortisol values before and at two time points following the event. As in the 2006 study, cortisol values were significantly different post-intervention between intervention and control children but not between intervention and comparison children. However, no differences were found in change over time in response to the stressful event.

Dozier et al (2009) measured the impact on attachment behaviour using the PAD and found a significant improvement in avoidance behaviour but no significant difference in reported levels of security.

- Adapted Incredible Years with co-parenting component

This intervention had two components; a parenting group based on the Incredible Years programme teaching behavioural parenting methods and individual sessions for foster carer – biological parent dyads to enhance co-parenting.

Linares et al (2006) assessed the impact of this intervention by examining the carers' discipline attitudes, beliefs and practices, the co-parenting relationship and the child's externalising behaviour problems.

Carers' attitudes, beliefs and practices about discipline and their use of positive reinforcement were measured using four subscales of the Parenting Practices Interview (PPI; Webster-Stratton, 1998). At termination, intervention carers scored significantly higher on only the

positive discipline subscale of the PPI with no significant differences on the remaining subscales. At three months follow-up, significant differences were found on the positive discipline and clear expectations subscales, but not on the remaining two. The parenting relationship between biological and foster carers was assessed using five items from the Family Functioning Scale (FFS; Dunst et al, 1988) and the Family Adaptability and Cohesion Scale (FACES-III – couple version; Olson, 1986). There was a significant increase in co-parenting at termination, but this difference did not remain significant at three months follow-up. To assess the impact on child externalising problems, the CBCL in conjunction with the Eyberg Child Behaviour Inventory (ECBI; Eyberg & Pincus, 1999) was used and no significant differences in child behaviour at termination or follow-up on either questionnaire were found.

- Parent Child Interaction Therapy (PCIT)

This intervention aimed to improve the relationship between carer and child using play therapy skills and teaching discipline skills.

Two studies assessed the impact of adapted versions of PCIT; in a group format (McNeil et al, 2005) and in individual sessions for carer-child dyads (Timmer et al, 2006).

McNeil et al (2005) assessed the impact on the child's behaviour problems using the ECBI and found a significant decrease in behaviour difficulties. No control group was used.

Timmer et al (2006) assessed the impact on the child's behaviour, carer stress, carers' psychological problems and the abuse potential of the carer. The CBCL and ECBI were used to assess the child's behaviour and a significant change for both foster and biological carers was found, and no difference between the two carer groups, suggesting the intervention is as effective at improving behaviour in the fostering population as biological families. A significant decrease in carer stress for both intervention and control carers was found using the PSI, and there was no significant difference between groups. Carers' general psychological problems were assessed using the Symptom Checklist 90-R (SCL-90-R; Derogatis, 1994) and scores were

found to have significantly decreased. The Child Abuse Potential Inventory (CAPI; Milner, 1986) was used to assess the abuse potential of the carer and only a significant improvement on the abuse subscale, and not on rigidity, was found, but this may be due to foster carers' scores being quite low at baseline.

- Parent Child Psychotherapy (CPP)

This intervention involved weekly play therapy sessions for the carer-child dyad.

Weiner et al (2009) assessed this intervention across racial groups using the Child Needs and Strengths (CANS; Lyons, 2004) and found it to be equally effective across groups. However, no control group was used and so it is unclear if any changes on the CANS were due to the intervention itself.

Direct interventions for carer and child (non-relational)

These interventions were aimed at both the carer and child, but were not specifically designed to focus on their relationship.

- Kinship Care Connection

This intervention involved group support sessions for the carer and support groups, mentoring, tutoring and individual counselling for the children as appropriate.

One study (Strozier et al, 2005) examined the impact of this intervention on the child's self esteem and the carers' feelings of 'burden'. To assess self esteem, the Hare Self-Esteem Scale (HSS; Hare, 1980) was used and a significant pre-post intervention improvement was found. Carer burden was assessed using the Caregiver Self-Efficacy Scale (CSE; Boothroyd, 1997) and significant pre-post intervention increases were found. However, no control group was used in this study.

Direct interventions for the foster child

These interventions were directed towards the foster child only.

- Playgroup to promote socio-emotional school readiness

This intervention involved a group for pre-school children which aimed to develop their social competence and behavioural self-regulation in preparation for attending school.

Pears et al's (2007) pilot intervention was assessed in an RCT examining the child's behaviour as rated by the carer and by school, and the child's emotional self-regulation as rated by the carer. A significant increase was found on the social competence subscale, but not on other subscales of the carer rated CBCL. Behaviour in school was assessed using the Teacher Report Form (Achenbach, 1991b), which parallels the CBCL, and found no significant difference in scores. The child's emotional self-regulation was assessed using the Emotion Regulation Checklist (Shields & Cicchetti, 1997) and a significant improvement was found on the emotional lability subscale but not on other subscales.

- Trauma focused CBT (TF-CBT)

This intervention used trauma focused CBT to intervene with foster adolescents.

Weiner et al (2009) assessed this intervention across racial groups using the CANS, and found it to be effective for white and African American participants, but not for biracial or Hispanic participants. No control group was used and the sample size was very small with variation in the numbers in each racial group, so conclusions can only be tentative.

- Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS)

This intervention used structured psychotherapy delivered in a group for foster adolescents.

Weiner et al (2009) assessed this intervention across racial groups using the Child Needs and Strengths, and found significant effects for only African American participants and not biracial, Hispanic or white participants. Again, no control group was used and the sample was very small.

Summary of effectiveness of interventions

Wraparound services and relational interventions were generally well supported with a variety of outcome measures but most of the carer training programmes were not well supported. The direct interventions with the child did not appear to be well supported; however few interventions of this type were reviewed so conclusions can only be tentative. Only one intervention was reviewed that had separate interventions for carer and child so again, only tentative conclusions can be made.

Discussion and Implications

This review aimed to identify empirically tested interventions in foster care, including interventions targeting all aspects of the system (carer, child and services) and to assess their effectiveness. Using a systematic protocol, this review found twenty-nine studies describing nineteen interventions in foster care. The majority of studies were of high quality, though this did vary. The majority of interventions were aimed at foster carers, though most assessed outcomes related to the functioning of the child. As the studies, interventions, measures used and outcomes were diverse, it was not possible to conduct a meta-analysis. Instead, studies were examined for effectiveness qualitatively. Broadly, the interventions fell into five categories: wraparound services, relational interventions, non-relational interventions for carer and child, carer training programmes and interventions for the foster child.

Similar to reviews examining foster carer training programmes, this review found that few pure carer training interventions were well supported. The exception appeared to be the KEEP intervention (e.g. Chamberlain et al, 2008), which had good outcomes from a large-scale RCT.

This intervention was developed from a wraparound intervention (MTFC) rather than from a particular theory of behaviour management (such as CBT). Most services require foster carers to undergo training; what is interesting is that these kinds of programmes appear to have little benefit. The MAPP/GPS programme was noted by Puddy and Jackson (2003) to be widely used in the USA without any supporting evidence that it works. Indeed, their study found it to be ineffective at accomplishing its goals, even using a questionnaire specifically designed to map onto the intervention. This does not mean that foster carers should not receive training, particularly as it has been found carers want to learn new parenting skills (Hembree-Kigin & McNeil, 1995). It is possible that these interventions are ineffective because a more individualised approach is required. For example, Dozier and Sepulveda (2004) describe how it is important to attend to the carers' own attachment styles and adapt treatment to meet the carers' needs and so ultimately the needs of the specific and unique interaction between a particular carer and particular child. Group interventions may not effectively do this. Additionally, as highlighted in the introduction, many foster children have complex or multiple difficulties. It may be that short-term training groups for carers cannot adequately cover the variety and complexity of difficulties foster children may experience, so have little impact. It would be useful, therefore, to research specific groups for specific difficulties, for example attachment problems. However, it would be difficult to create different groups for every possible problem foster children and carers may encounter and it would be very time-consuming for a busy carer to attend many different groups.

It may be that training is currently often delivered in a group format for economic reasons, as it is it cheaper to deliver groups rather than individual interventions. However, as these groups seem to be ineffective, the cost is in fact wasted and families may go on to use further services (resources) regardless. It could be argued that resources could be saved by not running cheaper but ineffective groups and investing the money in more expensive individualised support. Research is required to ascertain if effective individualised approaches are more economical in the long-term (i.e. if the family then accesses less services/resources).

Further research is required to assess more effective ways of preparing carers to foster a child and to help them with specific skills, such as managing the child's behaviour.

Few interventions were found that assessed interventions directly with children in foster care so it is difficult to make conclusions about these. More research is required into direct interventions with foster children.

There was generally good support for the relational interventions included. The ABC intervention (e.g. Dozier et al 2006) significantly decreased children's cortisol levels to the extent that they were no different from children who had never been in care, whilst PCIT (e.g. McNeil et al, 2005) decreased children's behaviour problems, carer stress and the carers' abuse potential. Further research is required into these interventions due to some mixed results for the impact of ABC on children's behaviour and the lack of control/comparison groups for the assessments of PCIT. CPP (Weiner et al 2009) significantly improved the child's needs and strengths, however further research is also required here due to the small sample size and lack of control group.

One intervention was reviewed which provided separate, non-relational interventions for kinship carers and their foster children. Though this study found significant results, the lack of control group and randomisation limits the conclusions that can be made from this. Further research is required to assess this intervention.

For wraparound services, on the other hand, there appears to be more support. All of the wraparound services had good outcomes, though Callaghan et al's (2004) and Kessler et al's (2008) had methodological issues, such as lack of control groups. All of the large-scale wraparound interventions have been studied in the USA, which has very different systems of social and health care to those in the UK. As wraparound services require good integration of health and social care, there may be differences in the way they would be implemented in the UK. More research is required on these kinds of services in a UK context. Additionally, this

finding may be indicative of a need for better integration between health and social care services to gain better outcomes for foster children. If the large-scale wraparound services, such as MTFC, are not feasible/appropriate for the UK, perhaps better integration alone would improve outcomes. Callaghan et al's (2004) study may be supportive of this.

This review found more interventions for younger children, despite the fact that the majority of children in care in England are aged between ten and fifteen (Harker, 2009). This may reflect that older children in foster care tend to have more complex difficulties, which are not easily helped by single interventions. Alternatively, there may be an assumption that regular trauma or conduct interventions are as effective for foster adolescents as non-fostered adolescents with complex mental health difficulties. Further research is required to investigate if these interventions are effective for fostered adolescents.

Most of the studies were conducted in the USA. Interventions in the UK would be delivered in a different set of circumstances, particularly given that the UK has a public health system and the child welfare system differs in a number of respects. More research is required on interventions that have been evidenced in the USA in a UK context, particularly the wraparound services.

Limitations of review

Though this review did offer an overall view of the current evidence base for interventions in foster care, it may have some limitations. Firstly, the review only looked at papers from 1995 onwards, which meant that older papers that may have assessed significant or interesting interventions were excluded. Additionally, only papers in the English language published in peer-reviewed journals were included. This may mean this review was open to publication bias and there may have been studies of interest conducted in other languages which were excluded. Secondly, although search terms were discussed and inter-rater reliability was

sought, only one researcher conducted the search. This could have led to bias of initial study selection.

Conclusions

This review offers an overview of current, empirically tested interventions in foster care. Interventions varied in their target (carer, child or system) and in how and what outcomes they measured. Overall, many interventions had a positive impact on outcomes for carers and, most commonly assessed, children. A few interventions were found to have such a great impact that the child's difficulties reduced to the level of children that had never been in the care system (i.e. had not suffered significant trauma and home-life disruption). However, impact varied considerably across studies so it cannot be concluded that all interventions currently in use in the foster care system are efficacious. This is particularly the case for foster carer training programmes. More research is required to replicate interventions that appear to be effective and to further assess interventions that have, for example, only been studied in a simple pre-post test design with no control group. Additionally, as highlighted in the introduction, previous reviews have included interventions for common difficulties found in the foster care population, but that have not necessarily been tested within the population. Further research is needed on those interventions to assess if they remain as effective in foster care, particularly those addressing the needs of older children. Finally, more research is needed in the UK, particularly for wraparound interventions, as the majority of research is conducted in the USA and there are clear differences in the two countries' health and social care systems.

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Part 2

Empirical Paper

Foster Placement Outcomes: Examining the Interactions between Carers and Foster Children

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This paper is written in the format ready for submission to Clinical Child Psychology and Psychiatry.

Please see Appendix A for the Guidelines for Authors.

Abstract

This paper examined if the relationship between foster children and their carers influenced placement quality (as rated by social workers) more than the child's behaviour using both carer and child rated questionnaires. A significant relationship was found between the child's rating of the carer's communication and the placement's quality rating, but low participant numbers prevented firm conclusions being drawn. Low agreement was found between child and carer ratings of both the relationship and the child's behaviour, and ratings were found to change over a short follow-up period. This result is discussed in relation to the national collection of data on foster children's behavioural difficulties and implications for future research.

Key words: *Foster care, Foster Children, Placement Outcomes*

Introduction

The majority of children who live in foster care have turbulent histories. For example, Schofield, Beek, Sargent and Thoburn (2000) found that 81 per cent of foster children in their study had experienced three or more types of abuse or neglect, and only 10 per cent had no such history. Howe (2005) notes that the psychological defences to cope with the distress caused by abuse, neglect or having multiple caregivers may cause the development of internal working models that impair the ability to relate to others in the future. It is not surprising then, that many Child and Adolescent Mental Health Services (CAMHS) across the country include a specialist Looked After Children (LAC) team.

Poor outcomes for foster children are well documented. For example in 2003 it was found that foster children in England aged five to ten had over five times higher prevalence of mental disorder than children in the general population, and young people aged eleven to seventeen had four times higher prevalence (Meltzer et al, 2003). Furthermore, these statistics include only classifiable mental health conditions and it has been suggested that foster children have complex difficulties that are not well represented by classification systems (Tarren-Sweeny, 2008), suggesting even higher rates of difficulties in foster children.

Foster placements are, for the most part, not secure. Both children and carers have little security because the placement can be ended by a number of parties; social services, the child, the carer or the biological parent (Triseliotis, 2002). The term 'placement breakdown' refers to an unplanned ending of a placement. It has been found that between 20 and 50 per cent of long term foster placements end in breakdown (Minty, 1999). Minty (1999) notes that as foster children are already at an

increased risk for mental health and other problems, yet another separation and upheaval caused by placement breakdown should be avoided. Studies show that children who had experienced high levels of placement instability had the lowest levels of adjustment in social relationships, employment, financial management and housing (e.g. Biehal, Clayden, Stein and Wade, 1995).

A recent review and meta-analysis by Oosterman, Schuengel, Slot, Bullens and Doreleijers (2006) examined the risk and protective factors associated with placement breakdown. A key finding was a lack of evidence for a strong risk/protective factor and that several factors are associated with placement breakdown. Three main areas of importance emerged in the study of placement breakdown: carer, child and placement characteristics. Oosterman et al.'s (2006) findings for foster parent characteristics were inconclusive; however the quality of foster care-giving was a possible protective factor. 'Care-giving' is a vague concept, and may have different meanings to different people. An examination of the literature reveals four studies which appear to concern care-giving, conceptualised as an interactive framework between child and carer characteristics.

An early study examining the interaction between child and carer characteristics was that by Doelling and Johnson (1990). They investigated the temperament of both child and carer, and examined the interaction between the two. They found that both a "mismatch" of an inflexible foster mother and a child of negative mood and having a child of more negative mood than expected predicted less successful placement outcome. However, neither situation predicted all unsuccessful placements, suggesting other factors are also responsible.

A later study by Quinton, Rushton, Dance and Mayes (1998) suggested a more dynamic process in which some of the carer's characteristics altered in response to the child's characteristics. They found that some carers reduced difficult behaviour through skilled parenting, some developed skills in response to the behaviour, while others became overwhelmed and showed a decline in their parenting skills.

Sinclair and Wilson (2003) proposed an interactional model of the factors leading to the success or failure of a placement. In their mixed design study they followed 495 foster children for 14 months, using two placement success criteria: the placement had not broken down and was rated as successful by the carer and social worker. Using interviews to ascertain the views of the carer, the child's social worker and the carer's family placement social worker, they developed a model of placement outcome. This proposed that outcome depended on:

1. Child's motivation, attractiveness and difficulty
2. The carers (their 'warmth', persistence and ability to 'set limits')
3. The interaction between the two.

In the second part of their study they tested this model statistically using questionnaires. Interestingly, when examining the interaction between carer and child characteristics, they found that breakdown was only predicted by parenting and rejection scores, not the child's behaviour. They suggest that the child's behaviour has an indirect influence on breakdown through its effect on rejection. Much of the existing research suggests that the child's behaviour is an important factor in the lead up to placement breakdown (e.g. Newton, Litrownik and Landsverk, 2000). This result, however, suggests that it is the carer's reactions to this behaviour which ultimately leads to breakdown.

Wilson, Petrie and Sinclair (2003) discuss a single case study in a companion paper to that described above in order to illustrate their model. This was one of twenty-four cases studies examined in depth. They describe a child with a number of difficulties who is at seemingly high risk for placement breakdown. However, they suggest that the unexpected success of the placement was due to the foster carer's refusal to respond to poor behaviour by rejection (avoiding negative interaction 'spirals') and her firmness and reinforcement of positive behaviour.

Taken together, these four papers (Doelling & Johnson, 1990; Quinton, Rushton Dance & Mayes, 1998; Sinclair & Wilson, 2003 and Wilson, Petrie & Sinclair, 2003) suggest that although both carer and child characteristics are important, the interaction between them is key. This aspect therefore merits further investigation.

The finding that the child's behaviour itself is not the key factor in effecting breakdown, but rather its effect on the response of the carer, is a critical issue. This has important implications for preventing breakdown as it implies carer training and support could be an effective intervention. For example Sinclair and Wilson (2003) suggest developing ways of intervening early in 'negative spirals' of interaction between carer and child such as helping the carer to reframe difficult behaviour so that it does not seem like a personal attack.

None of the papers considered the child's view of the interaction. Sinclair and Wilson (2003) suggest that the child's motivation is an important factor mediating placement breakdown, but have not included the child's view of interactional processes in the

statistical analyses. Although they found a statistical difference between the behaviour and the interaction, only taking the carer's ratings of the behaviour may mean the ratings of the child's behaviour have been confounded by the carer's reactions to the behaviour. In addition, Doelling and Johnson (1990) only considered the foster mother's view of the child's temperament and not the child's own view. In fact, no research in this area has been found which quantitatively takes into account the child's view as well as carers' and professionals'. Using comparable measures for both child and foster carer would give further detail about the interactive process leading to success or breakdown.

Additionally, Sinclair and Wilson (2003) measure interaction and behaviour at one time point. As relationships are a dynamic process it would be useful to measure the interaction at more time points in order to track any changes in the interactions before taking a final outcome measure.

Therefore, this study aims to expand the findings of Sinclair and Wilson (2003) by including two extra aspects. Firstly, to include the child's perspective of the interaction and secondly to measure the interaction at more time points.

Research Questions

Primary research question:

Does the communication between the carer and foster child influence placement outcome more than the child's behaviour alone?

Other research questions:

1. Will foster children and their carers rate the communication between them, and the child's behaviour differently?
2. Will ratings of the child's behaviour or the relationship between carer and child change over time?

Method

Participants

Foster carer-child dyads were eligible to participate if the placement was planned to last for the duration of the study and if the child was aged over 11 (to meet the minimum age for the questionnaires).

As little research of this kind has been done with this population, effect sizes could not be estimated. Instead, Peduzzi et al's 'rule of thumb' of 10 events per independent variable was used. By analysing the carer and child scores separately, this meant a minimum of 50 participants were required (there are 5 variables in the carer analysis – see data analysis section).

300 information sheets explaining the study were sent through fostering social work teams in five different localities (see Appendixes D and E). Initial questionnaire packs with consent forms (see Appendix F) were sent to 74 foster care dyads who informed their social workers that they agreed to take part (24.7% response rate). Of these, 24 returned the consent form and initial questionnaires to form the sample for the study (8% response rate from initial information sheets; 32% response rate from questionnaires). Children ranged in age from 11 to 16 years (mean=14.02, SD=1.61) at

the second time-point; half were male, half were female. Time already spent in the current placement ranged from 5 months to 8 years (mean=2.75, SD=2.23).

Procedure

Ethical approval was obtained from the ethics committee at the Post-Graduate Medicine Institute of the University of Hull (see Appendix G). As detailed above, all participants were obtained through social work teams as families could not be contacted directly. Consent forms were signed by the foster carer and the social work manager. The foster child also signed the consent form to help them feel part of the research in order to encourage them to give their own answers to the questionnaires (i.e. to temper the effects of carers influencing what the child writes).

Once consent was received from the foster family and social services, the foster carer and child were sent the relevant versions of the questionnaires. Four months later, the same questionnaires were sent to the carer and child. At four months, an evaluative questionnaire and request for the outcomes of past placements were sent to the social worker. At both time points the researcher stated they could visit the family to assist in filling out the questionnaires if either the carer or child had difficulty. None of the families requested this. A short letter thanking the carer and child for taking part was also sent with the final questionnaires (Appendix H).

Measures

Predictor variables

Child's level of difficulties: The child's behaviour was assessed using the total score from the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997; Goodman et al., 1998). This measure was used as Sinclair and Wilson (2003) found that the SDQ

total score was the best predictor of outcome (compared to other child characteristics such as attachment difficulties). This is a brief questionnaire with separate versions for parental, self-, and teacher report. All versions contain 25 items which yield 5 subscales (conduct, peer problems, hyperactivity, emotional problems and pro-social behaviour) and a total score. Each item is rated as 'not true', 'somewhat true' or 'certainly true' and scored 0, 1, or 2 respectively, with some items reverse scored. The total score is a composite of all subscales except 'pro-social behaviour'. Higher scores indicate greater levels of difficulty, except for 'pro-social behaviour' where the reverse is true.

This study used both the carer and child versions and used the total score and pro-social subscale as predictors because these were used in Sinclair and Wilson's study. All the subscales and total score were used to examine carer-child differences as the same total score could be created from different methods (e.g. the carer rates emotion highly but the child rates hyperactivity highly). The SDQ has been shown to have good internal consistency (mean $\alpha = .73$) and re-retest stability after 4 to 6 months (mean = 0.62) (Goodman, 2001). See Appendixes I and J for copies of the carer and child versions of this measure.

Relationship between carer and child: A Rejection Scale (Sinclair & Wilson, 2003) was completed by the carer only (named 'R-Scale' to temper effects of social desirability). This was used in order to replicate Sinclair and Wilson's (2003) results. This scale contains 5 items which yield a total score. For four of the items, carers must rate each statement as either 'not at all true', 'somewhat true', 'to a large extent true', or 'not applicable', which is scored 0, 1, 2, 0, respectively. The final item is rated 'strongly disagree', 'somewhat disagree', 'neither agree nor disagree', 'somewhat agree', or

'strongly agree', which is scored 4, 3, 2, 1, 0 respectively. Higher scores indicate greater levels of rejection. No psychometric properties currently exist for this measure. Please see Appendix K for a copy.

However, as Sinclair and Wilson (2003) found rejection was unusual, the R-Scale was not used in isolation. The Parent-Child Communication Questionnaire (PCCQ; Thornberry et al, 1995; Loeber et al, 1998) was also used as it has been used as a measure of 'closeness' and of the relationship between carer and child in previous research (for example, Selwyn and Quinton, 2005). The PCCQ has separate versions for the carer and child. The child version has 10 items which yield 2 subscales (Parent Communication and Child Communication). Each item is rated as 'almost never', 'once in a while', 'sometimes', 'often' or 'always', and scored 1, 2, 3, 4, 5 respectively, with some items reverse scored. The carers' version has 20 items yielding 4 subscales (parent communication, child emotional expression, parent restricted topics and child's empathy/listening). Items are rated and scored in the same manner as the child version. Of the subscales, two were selected which were felt to best map onto the child subscales (Parent Communication and Child Emotional Expression). "Child Communication" will be used in this report to describe the concept measured by the child-rated 'Child Communication' subscale and the carer-rated 'Child Emotional Expression'. Higher scores on the subscales indicate greater levels of communication. The scales used on the carer version have good reliability (mean α = .72), whilst the scales on the child version have moderate reliability (mean α = .66). See Appendixes L and M for copies of the carer and child versions of this measure.

Number and result of previous placements: This information was collected so that the validity of predictor variables can be tested (i.e. if they predict only the outcome of the

current placement – particularly important for the interaction measures). See Appendix N for the form.

Outcome variables

Length of time in placement: If the placement broke down during the study, the length of placement was used as an outcome variable. The length of time the child had already been in placement at the start of the study was collected to calculate this.

Quality of placements: The Evaluation of Placement Scale (EPS; Doelling and Johnson, 1990) was used to quantitatively measure the quality of placements still on-going at the end of the study. It is completed by a social worker involved with the family. The questionnaire contains 14 items which are each rated either 'strongly disagree', 'slightly disagree', 'neither agree nor disagree', 'slightly agree', 'strongly agree', or 'not applicable', which were scored 1, 2, 3, 4, 5 respectively. The items are added to give a total score where higher scores indicate better placement quality. The authors state that items on the scale are reflective of dimensions discussed as important in evaluating placements (Wolins, 1963). This measure has good internal consistency and moderate inter-rater reliability (.65), though the authors state that inter-rater reliabilities are consistently low to moderate among foster care workers in existing research. See Appendix O for a copy of this measure.

Data analysis

The data was first examined using descriptive statistics to assess the range, means and skewness of the questionnaire responses. Each research question was then examined in turn. For the first research question, multiple regressions was planned using the EPS total as the dependant variable, and the SDQ total and pro-social scores, the rejection

scale and the carer and child communication scales as the independent variables. The carer and child ratings were to be analysed in separate regressions to allow for potential recruitment difficulties. However, due to low participant numbers and skewness of the data, Spearman's non-parametric correlations were conducted to examine if there were any relationships between the independent variables and the EPS total. A survival analysis was planned using total time in placement (until breakdown or the end of the study) as the dependant variable. However this could not be conducted as only three of the placements broke down and participant numbers were too low to complete the regression with adequate power. It was also planned that the validity of the predictor variables would be tested by performing a regression using the outcome of previous placements as the dependant variable. This would check they only predicted current placement outcomes and not previous placement outcomes. However, this could also not be completed, for the reasons given above.

For the second and third research questions, intraclass correlations were used to assess agreement between carer and child ratings and between the ratings at baseline and follow-up.

Results

Descriptives:

Range, means and standard deviations for the questionnaires are shown in Table 1 below.

			Baseline Scores				Follow-up Scores			
			N	**Range**	**Mean**	**Standard deviations**	**N**	**Range**	**Mean**	**Standard deviations**
Child ratings	SDQ	Emotion	24	0.00 , 8.00	2.71	2.26	11	0.00 , 3.00	1.09	0.94
		Conduct	24	0.00 , 9.00	2.50	2.27	11	0.00 , 5.00	2.45	1.92
		Hyperactivity	24	0.00 , 9.00	4.92	2.52	11	0.00 , 8.00	3.00	2.37
		Peer problems	24	0.00 , 7.00	3.04	1.90	11	0.00 , 4.00	1.18	1.25
		Pro-social behaviour	24	3.00 , 10.00	7.00	1.89	11	5.00 , 10.00	7.73	2.33
		Total score	24	1.00 , 23.00	13.17	5.79	11	2.00 , 16.00	7.73	3.95
	PCCQ	Parent communication	23	10.00 , 25.00	21.26	3.63	11	20.00 , 25.00	22.45	1.75
		Child communication	23	7.00 , 15.00	12.26	2.53	11	6.00 , 15.00	12.18	3.09
Carer ratings	SDQ	Emotion	24	0.00 , 10.00	2.38	2.36	11	0.00 , 8.00	1.73	2.45
		Conduct	24	0.00 , 6.00	3.00	2.13	11	0.00 , 5.00	2.00	1.48
		Hyperactivity	24	1.00 , 10.00	5.38	2.72	11	0.00 , 9.00	3.91	2.84
		Peer problems	24	0.00 , 8.00	2.83	2.48	11	0.00 , 7.00	2.27	2.80
		Pro-social behaviour	24	3.00 , 10.00	6.83	2.06	11	3.00 , 10.00	7.36	2.46
		Total score	24	3.00 , 27.00	13.58	7.26	11	2.00 , 22.00	9.91	7.23
	PCCQ	Parent communication	24	16.00 , 29.00	24.21	3.26	11	17.00 , 29.00	25.27	4.02

		Child communication	24	9.00 , 25.00	17.75	4.48	11	6.00 , 25.00	18.90	5.97
	Rejection Scale		24	0.00 , 2.00	0.46	0.66	11	0.00 , 6.00	0.73	1.85
Social worker ratings	EPS total score						18	53.0 , 70.00	62.89	5.37

Table 1. Range, means and standard deviations for questionnaires

Given the small sample size, it was also important to examine the distribution of the data using a skewness statistic. A number of subscales were found to have a skewed distribution; those that were significantly skewed are shown in Table 2 below.

Variable (rater; time point)	**Skewness statistic**	**Standard Error**
Parent Communication (child; baseline)	-1.432	.481
Child Communication (child; baseline)	-.544	.481
Child's emotional difficulties (child; baseline)	1.684	.472
Parent Communication (carer; baseline)	-1.060	.472
Carer rejection (carer; baseline)	1.165	.472
Child Communication (child; follow-up)	-.976	.661
Child's emotional difficulties (carer; follow-up)	1.875	.661
Parent Communication (carer; follow-up)	-1.220	.661
Child Emotional Expression (carer; follow-up)	-.922	.661
Carer rejection (carer; follow-up)	2.808	.661

Table 2. Significant skewness statistics for questionnaire subscales

Additionally, there was very little variation in scores for the Rejection scale which has a possible range of scores of 0 to 10 (Baseline: n=24, median=0.000, range=0 to 2; Follow-up: n=11, median=0.000, range=0 to 6). At baseline 15 of the 24 carers scored zero on this measure. At follow-up, 9 of the 11 carers scored 0 and one carer scored highly (score of 6) at follow-up, skewing the data. Although the EPS total score was not significantly skewed, all of the scores were in the high range. Possible reasons for these results will be examined in the discussion.

<u>Research Questions:</u>

1. Does the interaction between the carer and foster child influence placement outcome more than the child's behaviour alone?

A multiple regression using the EPS total as the dependent variable was planned in order to answer this question, but this was not possible due to the low numbers recruited given that there were five independent variables (rejection scores were not included due to the lack of variation). Due to the low numbers and skewness of the data, Spearman's non-parametric correlations were conducted to examine if there were any relationships between the predictor variables and the EPS total.

At baseline, there was a significant positive correlation between the child's rating of Parent Communication and the EPS total score (rho = 0.605, n= 17, *p* = 0.010). No other significant correlations between the EPS total and predictor variables were found. Correlation coefficients between the predictor variables and the EPS are shown in Table 3 below.

			Baseline			Follow-up		
			N	**Spearman's Correlation**	***p***	**N**	**Spearman's Correlation**	***p***
Child Ratings	SDQ	Pro-social behaviour	18	0.39	0.11	11	-0.28	0.41
		Total score	18	-0.15	0.65	11	-0.00	0.99
	PCCQ	Parent communication	17	0.61*	0.01	11	0.42	0.20
		Child communication	17	0.30	0.24	11	-0.02	0.96
Carer ratings	SDQ	Pro-social behaviour	18	-0.12	0.96	11	-0.18	0.60
		Total score	18	-0.14	0.57	11	-0.42	0.20
	PCCQ	Parent communication	18	0.15	0.55	11	-0.24	0.49
		Child communication	18	-0.02	0.94	11	0.04	0.92
	Rejection scale		18	-0.06	0.82	11	-0.31	0.36

Table 3. Correlation coefficients between the EPS and predictor variables. *Significant at the .05 level

A survival analysis was also planned for those placements that had broken down using total time in placement until breakdown. However this could not be completed as only three of the placements broke-down and participant numbers were too low for a regression. It also meant the validity of the predictor variables could not be tested by checking they only predicted current placement outcomes and not previous placement outcomes.

2. Will foster children and their carers rate characteristics of the placement differently?

In order to examine if carers and children agree when rating the relationship and the child's behaviour, intraclass correlations were conducted for all of the subscales of the SDQ and PCCQ. These are shown in Table 4 below.

			N	**Intraclass correlation coefficient**	**95% Confidence Intervals**
Baseline	SDQ	Emotion	24	0.553	0.201 , 0.779
		Conduct	24	0.387	-0.010 , 0.679
		Hyperactivity	24	0.601	0.269 , 0.805
		Peer problems	24	0.715*	0.445 , 0.866
		Pro-social behaviour	24	0.502	0.132 , 0.749
		Total score	24	0.552	0.200 , 0.778
	PCCQ	Parent communication	23	0.160	-0.261 , 0.530
		Child communication	23	-0.091	-0.478 , 0.325
Follow-up	SDQ	Emotion	11	-0.021	-0.590 , 0.562
		Conduct	11	0.579	0.004 , 0.866
		Hyperactivity	11	0.307	-0.327 , 0.750
		Peer problems	11	0.244	-0.386 , 0.719
		Pro-social behaviour	11	0.629	0.083 , 0.885
		Total score	11	0.420	-0.205 , 0.802
	PCCQ	Parent communication	11	0.297	-0.337 , 0.745
		Child communication	11	0.474	-0.141 , 0.825

Table 4. Intraclass correlations between carer and child ratings. *indicates strong agreement.

Only the peer problems subscale of the SDQ at baseline indicates strong agreement between carer and child ratings. At baseline, the SDQ emotion, hyperactivity, pro-social behaviour subscales and the total score showed moderate agreement. At follow-up, only the SDQ conduct and pro-social behaviour subscales showed moderate agreement. The remaining subscales at baseline and follow-up showed low agreement between carer and child.

3. Will ratings of the child's behaviour or the relationship between carer and child change over time?

Intraclass correlations were used to examine if carers and children gave the same rating to aspects of behaviour and the relationship at baseline and follow-up. These are shown in Table 5 below.

			N	Intraclass correlation coefficient	95% Confidence Intervals
Child ratings	SDQ	Emotion	11	-0.679*	-0.902 , -0.169
		Conduct	11	0.749*	0.303 , 0.926
		Hyperactivity	11	0.300	-0.333 , 0.747
		Peer problems	11	0.509	-0.095 , 0.839
		Pro-social behaviour	11	0.441	-0.181 , 0.811
		Total score	11	0.364	-0.268 , 0.777
	PCCQ	Parent communication	11	0.480	-0.133 , 0.827
		Child communication	11	0.254	-0.377 , 0.724
Carer ratings	SDQ	Emotion	11	-0.043	-0.604 , 0.547
		Conduct	11	0.000	-0.576 , 0.576
		Hyperactivity	11	0.735*	0.276 , 0.921
		Peer problems	11	0.766*	0.341 , 0.931
		Pro-social behaviour	11	0.634	0.091 , 0.886
		Total score	11	0.417	-0.219 , 0.801
	PCCQ	Parent communication	11	-0.086	-0.631 , 0.515
		Child communication	11	0.455	-0.165 , 0.817
	Rejection scale		11	-0.120	-0.651 , 0.490

Table 5. Intraclass correlations between ratings at baseline and follow-up. *indicates strong agreement.

For the child ratings, only the SDQ emotion and conduct subscales showed strong agreement. For the carer ratings, only the SDQ hyperactivity and peer problems subscales showed strong agreement.

Discussion

1. Does the interaction between the carer and foster child influence placement outcome more than the child's behaviour alone?

It is difficult to make any firm conclusions about how the relationship and child's behaviour influence placement quality as a model could not be statistically tested. However, using correlations, only the child-rated parent communication was significantly related to the evaluation of placements. As this is only a correlation, causation cannot be inferred. It may be that the child perceiving their carer to have good communication helps to create successful placements. This may lend some support to an interactional model (such as that by Sinclair and Wilson, 2003) rather than that a single characteristic of the carer or child directly relates to successful placements. However, as the correlation was only moderate, it cannot explain all of the variance in the scores.

This is also only tentative as participant numbers are low. Additionally, the range of scores for the EPS was small, with all carers scoring within the high range. This means that conclusions cannot be made about the full relationship between the EPS and predictor variables, only about the relationship at the high end of the EPS scale. There are a number of possible reasons why scores were only obtained in the high range. Firstly, social workers acted as 'gate-keepers' for participants being invited to take part in the study. They may not have invited families at risk of breakdown or who they viewed as of lower 'quality' so that further pressure was not placed on them. Gilbertson and Barber (2002) found the reason for 12.1% of foster families not taking part in research was the social worker judging the placement to be 'too fragile'. It is also possible that teams did not want placements of lower quality to be included in the

study for fear that it would reflect badly on their service. Secondly, it may be that failing placements don't consent to take part due to the difficulties or stress that family is under. This may result in a self-selecting sample of only those who feel they have the time or ability to take part; consequently only 'high quality' placements are evaluated.

Thirdly, it may be that the EPS is not sensitive enough to detect differences between placements. There does not currently seem to be another quantitative measure of placement quality or stability. Further research is required to develop a measure which could be usefully applied in both research and clinical settings.

Additionally, there was little variability in scores on the rejection scales with most carers scoring zero. Sinclair and Wilson (2003) also found that rejection was rare and positive acceptance was common, however they were able to split their participants into low and high rejection. Perhaps higher numbers of participants, such as in Sinclair and Wilson's study, are needed to detect differences in rejection due to its rarity. Low rejection scores may be that due to social desirability carers did not accurately state the extent to which they have feelings of rejection towards the child. Alternatively, it is possible that only carers who felt very warmly towards the child agreed to take part, given that the sample was largely self-selecting.

2. Will foster children and their carers rate characteristics of the placement differently?

There was not strong agreement between carers and children when they rated the child's behaviour or the relationship. This is particularly interesting for the SDQ total

score, which had only moderate agreement at baseline and follow-up and varied levels of agreement for the subscales which make up the total score. The SDQ is currently collected nationally as an indicator of the emotional health of looked after children in England (Department for Children, Schools & Families, 2009). Only the carer-rated SDQ is used. Additionally, the majority of research in this area only uses carer-rated measures (e.g. Sinclair and Wilson, 2003). This result, combined with the fact only a child-rated predictor correlated with placement quality, perhaps indicates that a more triangulated approach is needed, particularly as the SDQ has comparable versions for carer, child and the child's teacher. This may also link to a move towards more joined-up working in which all services/professionals involved with young people with complex needs work closely to meet that child's needs. For example, recent guidance was issued concerning the 'Team Around the Child' and Common Assessment Frameworks (Children's Workforce Development Council, 2009), which described how to implement this kind of practice. Research, at both an academic and auditing level, may therefore need to also implement 'joined-up working' and increased communication by including more areas of the system such as school and the child. This would bring child research in line with current evidence for good practice in clinical work (e.g. Carr, 2008). It would be useful to conduct further large-scale research which collects this triangulated data to see if different conclusions about the child's level of difficulties would be drawn. If there are significant differences, it would be important that the national collection of SDQs is increased to include either/both the child and teacher's ratings. Additionally, as stated in the introduction, foster children have complex difficulties. Using a number of raters may produce a more complete picture of the child's level of difficulties, and consequently, level or type of needs.

It would also be interesting to include child-rated SDQs into existing models such as that by Sinclair and Wilson (2003) in order to test if the child-rated scores alter or add anything, given the lack of strong agreement between carers and children.

3. Will ratings of the child's behaviour or the relationship between carer and child change over time?

Only two child and two carer rated subscales of the SDQ were reliably the same between baseline and follow-up. No other subscales or questionnaires showed strong agreement. There were only four months between baseline and follow-up, which is a relatively short period of time. There could be a number of reasons for apparently significant shifts in ratings over this short time period. Firstly, there could have been changes in the relationship or behaviour during that time period which resulted in them being rated differently. This would also link to the evidence for dynamic processes in foster family relationships (e.g. Quinton et al., 1998), suggesting at the very least that views on the carer-child relationship alter over a short period of time. If this is the case, it would therefore be important to regularly monitor placements both clinically and in research. As only those placements that were still ongoing at follow-up were included in this analysis, it is also important that seemingly stable placements are also regularly monitored. Regular monitoring would allow appropriate support to be adjusted according to the current needs of the carer or child.

Secondly, there could be problems with the questionnaires used which create these changes. For example, the questionnaires may be influenced by recent events in the household, such as a recent argument causing 'communication' to be rated differently.

It may be useful in future research to ensure questionnaires are not filled in reactively by specifying this on the questionnaire or a researcher being present when the questionnaires are completed. Alternatively, the time between baseline and follow-up may have been too short. There was a lack of information about test re-test reliability for most of the questionnaires, which may have affected repeated scores over a short time-span.

Thirdly, Table 1 indicates that scores on the SDQ at follow-up were generally lower than those at baseline, and scores on the PCCQ were generally higher (i.e. levels of difficulty were lower and level of communication were higher). It may be that families with greater levels of difficulty continue to experience, or have an increase in, difficulties so do not return the questionnaire due to stress or other priorities in the home. The lack of agreement could therefore be due to a biased sample at follow-up of families who experience moderate difficulties and good communication, compared to a more mixed sample at baseline.

Limitations

This research does have a number of limitations, the main of which is the low participant numbers. Despite recruiting from five separate localities (and needing only approximately 10 families from each) few participants were recruited. There are a number of possible reasons for this. Firstly, for ethical reasons participants could only be contacted indirectly through already busy social work teams. It has been found that 14.3% of foster families not responding to research requests was due to lack of co-operation from the social worker, and a further 8.8% was due to lack of follow-up by the social worker (Gilbertson & Barber, 2002). In one area used in the current study,

the team manager was enthusiastic about the research and consequently most participants were obtained through her. Unfortunately she left before the follow-up which dramatically reduced the number of questionnaires returned at the end of the study. The researcher had no prior links with social work teams, which may have affected the teams' willingness or trust to commit to taking time out of their busy schedules to become involved in research which had no immediate benefit for them. Clinical teams who already have strong links with social work teams seem ideally placed to conduct this kind of research, but more protected time and funding is required to allow this to happen (Cooke et al., 2008). It would also be helpful to involve social workers more in the design of studies so that they feel more ownership over the research, which may make them more inclined to take the time to participate. Secondly, the families themselves may not want to take part in this kind of research, particularly as it does not appear to have an immediate benefit for them. This may be particularly the case for those families who are struggling or where there are a high number of difficulties. Participation may be increased if some kind of incentive could be offered or if the research could be explained with obvious practical outcomes. Thirdly, this research was limited by a short timescale, allowing only six months to recruit families. In order to recruit high numbers and a wide range of foster families, a longer recruitment period is required. It may also be useful to follow a number of foster children through their placements, as this would better test the hypothesis that the specific relationships are more important than individual characteristics.

Another possible limitation is that carers may have influenced the child's ratings as the researcher was not present when they were completed. However, as there was not strong agreement on the questionnaires between carers and children, this is unlikely.

Relationships are multi-faceted and it could be argued that measuring the communication between carer and child is not an adequate measure of this, particularly as the rejection scales yielded few results. In order to quantitatively include measures of relationships, particularly complex ones such as those in foster care, further research is required into valid and reliable methods of measurement.

This research does not take account of external factors which can affect placement outcomes. For example, one social worker reported that a long-term placement in the study broke down even though they rated it highly and it appeared to be going well. They believed the breakdown was due to the child's mother returning to the area and the child's subsequent continual running away to find her. These unfortunate circumstances cannot usually be predicted or included in models of placement outcome, so it is important to remember to include this to explain some of the variance in outcomes in future research.

Conclusions

Due to low numbers of participants, this research could not provide an answer to the question of whether the relationship between carer and child influences placement outcome more than the child's behaviour. However, it did find that carers and children did not strongly agree on their ratings of these aspects of foster placements and that their ratings changed over a short period of time. This has implications for further research, particularly as the national collection of statistics only includes carers' ratings. Although there are difficulties with quantitatively including young people's

views, they need to be included more as the significant differences from carers' ratings may add further information to proposed models of foster care and to the national view of foster children's difficulties.

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Part 3

Appendixes

Appendix A: Guidelines for authors for empirical and review paper

CLINICAL CHILD PSYCHOLOGY AND PSYCHIATRY

INSTRUCTION TO AUTHORS

Peer review process. The Editor will screen manuscripts for their overall fit with the aims and scope of the journal. Those that fit will be further reviewed by two or more independent reviewers. Papers will be evaluated by the Editorial Board and refereed in terms of merit, readability and interest. Unsolicited manuscripts will not be returned to the author.

Consent and confidentiality. Disclosure should be kept to a minimum necessary to fulfil the objective of the article. All identifying details should be omitted if they are not essential. The material should be further disguised so that none of the individuals involved could recognise themselves. Some material that is particularly distinctive should be omitted or aggregated. Patient consent to publish should be sought whenever possible, even if the data are anonymized. In case reports where ensuring anonymity is impossible, written consent must be obtained from the clients described, or their legal representative, and submitted with the manuscript. Contributors to the journal should be aware of the risk of complaint by individuals in respect of defamation and breach of confidentiality. If there is concern, then authors should seek legal advice. Authors submitting research reports should confirm that approval from the appropriate ethical committee has been granted.

Conflict of interest Authors should make clear if the research has been funded, by whom, and the role of the funders in the project.

Complaints The Editor will respond promptly to complaints. Cogent criticism from readers will be taken seriously and considered for publication. Authors of criticized material will be given the opportunity to have a response published.

Submission of MSS. Articles should be submitted by email initially for the Editor's screening in the format outlined below.

Format of MSS. Manuscripts should be **typed in double spacing throughout**. All pages should be numbered. Each manuscript should contain the following, in the correct order.

(a) Title page to include the title of the paper, full name of each author, current professional position and work context, and indicators of which author will be responsible for correspondence. A word count should also be included.

(b) Abstract: should not exceed 200 words (150 for preference); up to **5 key words to be listed alphabetically on the same page.** This page should carry the title of the paper but not the author name(s).

(c) Main text: not usually to exceed 7500 words and to be clearly organized, with a clear hierarchy of headings and subheadings (3 weights maximum).

(d) References: Citation of references follows APA (American Psychological Association) style. References cited in the text should read thus: Brown (1955, pp. 63-64); (Brown, 1995, pp. 63-64; Green & Brown, 1992, p. 102, Table 3). The letters a, b,

c, etc., should distinguish citations of different works by the same author in the same year (Black, 1989a, 1989b).

All references cited in the text should appear in an alphabetical list, after the Notes section.

(e) Figures, tables, etc.: should be numbered consecutively, carry descriptive captions and be clearly cited in the text. Keep them separate from the text itself, but indicate an approximate location on the relevant text page. Line diagrams should be presented as camera-ready copy on glossy paper (b/w, unless to be reproduced - by arrangement - in colour) and, if possible, on disk as EPS files (all fonts embedded) or TIFF files, 800 dpi - b/w only. For scanning, photographs should preferably be submitted as clear, glossy, unmounted b/w prints with a good range of contrast or on disk as TIFF files, 300 dpi.

(f) Author biographies: On a separate sheet provide a one-paragraph biobibliographical note for each author - up to 100 words for a single author, but none to exceed 65 words in a multi-authored paper.

Style. Use a clear and readable style, avoiding jargon. If technical terms must be included, define them when first used. Use plurals rather than he/she, (s)he, his or hers: 'If a child is unhappy, he or she. . . ' is much better expressed as 'When children are unhappy, they. . .'.

Spelling. British or American spellings may be used ('z' versions of British spellings preferred to 's' versions, as given in the Oxford English Dictionary).

Punctuation. Use single quotation marks, with double inside single. Present dates in the form 9 May 1996. Do not use points in abbreviations, contractions or acronyms (e.g. DC, USA, DR, UNESCO).

Covering letter. Attach to every submission a letter confirming that all authors have agreed to the submission and that the article is not currently being considered for publication by any other journal. The name, address, telephone and fax number and email address of the corresponding author should always be clearly indicated.

Editorial address. Please submit an electronic version of your manuscript to the Editors: **Prof. Rudi Dallos (r.dallos@plymouth.ac.uk)** and **Prof. Arlene Vetere (drarlenevetere@hotmail.com).**

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Books for review should be sent to: John Wright,

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Appendix B: Down's & Black (1998) Quality Checklist

Study Title:

	Question	Yes	No	N/A	Rater Comments
1	Is the hypothesis/aim/objective of the study clearly described?				
2	Are the main outcomes to be measured clearly described in the Introduction or Methods section?				
3	Are the characteristics of the patients included in the study clearly described?				
4	Are the interventions of interest clearly described?				
5	Are the distributions of principal confounders in each group of subjects to be compared clearly described?				
6	Are the main findings clearly described?				
7	Does the study provide estimates of the random variability in the data for the main outcomes?				
8	Have all important adverse events that may be a consequence of the intervention been reported?				
9	Have the characteristics of patients lost to follow-up been described, if applicable?				
10	Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except where the probability value is less than 0.001?				
11	Were the subjects asked to participate in the study representative of the entire population from which they were recruited?				
12	Were those subjects prepared to participate in the study representative of the entire population from which they were recruited?				
13	Were the staff, places and facilities where the patients were treated representative of the treatment the majority of patients receive?				
14	Was an attempt made to blind study subjects to the intervention they received?				
15	Was an attempt made to blind those measuring the main outcomes of the intervention?				
16	If any of the results were based on 'data dredging' was this made clear? (i.e. retrospective unplanned analyses)				
17	In trials and cohort studies, do the analyses adjust for different lengths of follow-up of patients, or in case-control studies, is the time period between the intervention and outcome the same for cases and controls? (if differences in follow-up are ignored, state 'no')				

18	Were the statistical tests used to assess the main outcomes appropriate?				
19	Was compliance with the interventions reliable?				
20	Were the main outcome measures used accurate? (valid and reliable)				
21	Were the patients in different intervention groups (trials and cohort studies) or were the cases and controls (case-control studies) recruited from the same population?				
22	Were the subjects in different intervention groups recruited over the same period of time?				
23	Were the study subjects randomised to intervention groups?				
24	Was the randomised intervention assignment concealed from both patients and staff until recruitment was complete and irrevocable?				
25	Was there adequate adjustment for confounding in the analyses from which the main findings were drawn?				
26	Were losses of patients to follow-up taken into account?				
27	Did the study report a power calculation?				

Appendix C: Information on Excluded Studies

Study	**Reason for exclusion**
Chamberlain et al (2008)	Not an evaluation of the intervention's effectiveness
Collado & Levine (2007)	Not an empirical study – is just a description of the intervention
DeGarmo et al (2009)	Not evaluating an intervention
Lindsey et al (2009)	Not an empirical study – is just a description of a service
Price et al (2009)	Not an empirical study – reports on papers already included in review
Schuengel et al (2009)	Not an empirical study of an intervention
Taussig et al (2007)	Not an empirical study – is just a description of the intervention
Taussig et al (2009)	Not evaluating an intervention
Wotherspoon et al (2008)	Not an empirical study – is just a description of the intervention
Zeanah et al (2001)	Intervention with the biological parents only
Zetlin et al (2005)	Not an intervention

Appendix D: Information sheet for carers

Participant information sheet

Foster Placement Outcomes: Examining the Interactions Between Carers and Foster Children

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

Part 1 tells you the purpose of this study and what will happen if you take part.
Part 2 gives you more detailed information about the research.

Please ask if there is anything that is not clear or if you would like more information.

The research is being conducted by Debbie Kinsey, Trainee Clinical Psychologist at the University of Hull, as part of a Doctorate in Clinical Psychology.

Part 1.

What is the purpose of the study?
This study aims to find out what helps to keep foster placements stable by asking foster carers and foster children about different factors that might be involved. This study is looking specifically at the child's behaviour and the relationship between the carer and child, as other studies have shown these things might be important.

Do I have to take part?
No. It's up to you to decide whether or not to take part. If you do, you will be given this information sheet to keep and you will be asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time or a decision not to take part will not affect the standard of support or care you receive.

What will happen if I take part?
If you decide you would like to take part in the study, you can contact the researcher using the details given below, or tell your social worker who will give the researcher your contact details. You will then need to sign a consent form, which means you agree to take part in the study. The researcher will then send you some questionnaires and a stamped addressed envelope (SAE), or can come to your house if you would like some help filling them in. There are 3 short questionnaires for the foster carer and 2 for the child. The researcher will then send you the same questionnaires 4 months later. If you agree to take part, the researcher will also ask your social worker about how many past placements the foster child has had and the outcome of those placements. At the end of the study, the researcher will also ask your social worker to fill in a questionnaire.

Will my taking part be kept confidential?
Yes. All information about your participation in the study will be anonymous and confidential. If the researcher feels concerned about the well-being or safety of yourself or the child in your care, she will discuss with you the possibility of speaking to your key worker. Further details are included in Part 2 of the information sheet.

Contact details
If you have any further questions at this time, please do not hesitate to contact the researcher (Miss Debbie Kinsey) on 07851 420276 or email D.Kinsey@2007.hull.ac.uk

If the information in Part 1 has interested you and you are considering taking part, please continue to read the additional information in Part 2 before making any decision.

Part 2.

What will happen to the results of the study?
The data will be written up as part of professional postgraduate training at the University of Hull and will be submitted for publication in an appropriate professional journal. It is hoped that the information will be used to help find ways of helping foster carers and foster children have more stable placements. A seminar may also be held in which relevant professionals will be informed of any relevant issues highlighted by the research. If you are interested in finding out about the results of the study, the researcher will arrange a way to feed this back to you.

What will happen if I don't want to carry on with the research?
If you withdraw from the study, all identifiable materials will be destroyed, but we will need to use the data collected up to your withdrawal.

What if there is a problem?
If you have a concern about any aspect of the study, you should ask to speak with the researcher (07851 420276) who will do her best to answer your questions.

Will my taking part in the study be kept confidential?
All information which is collected about you during the course of the research will be kept strictly confidential. All information will be stored in a locked filing cabinet at the University of Hull and will have your name and address removed so you cannot be recognised from it.

Who has reviewed the study?
This study has been reviewed by the University of Hull Post Graduate Medicine Institute ethics committee.

Thank you for your time

Research Information Sheet

Would you like to take part in Debbie Kinsey's research study? It's about how the relationship between you and your foster carers makes you feel about the placement.

Debbie Kinsey is a Trainee Clinical Psychologist at the University of Hull. She is doing this research as part of her project.

Before you decide if you want to take part, look at the information on this sheet. This sheet will tell you what will happen in the study.

If there is anything you are not sure about, you can ask your foster carer, or ask them to ring or email Debbie so you can speak to her.

What is this study about?

This study is trying to find out how to help foster children by making their placements better. The study is looking at different parts of the placement to see what may be important.

Do I have to take part?

No. It's totally up to you to decide. If you decide you would like to take part, you will need to sign a form to say that you would. Even if you say you would like to take part, you can quit at any time. If you say you would like to quit then no one will mind and you won't get into trouble.

Can I ask questions before I decide?

Yes. Your carer has Debbie's email address and phone number so you can ask them to call or email her with your questions. You can talk to anyone you want to about the study if you are not sure.

What will happen if I take part?

If you decide to take part you will need to sign a form that says you want to take part. After that, Debbie Kinsey will send you 2 short quizzes for you to fill in. There will also be some quizzes for your foster carer.

The quizzes are easy to fill in and you just have to tick boxes to answer the questions. But if you find it difficult to fill in the quizzes or don't understand the questions then Debbie can come to your house to help you.

Debbie will send you the same quizzes 4 months later.

Debbie will also ask your social worker to fill in a quiz.

Will be questionnaires be kept private?
Yes. Only you and your foster carer will know you are taking part in the study. Debbie will put a special code on top of your quizzes so only she knows that it's yours. Debbie will keep the questionnaires in a locked cabinet so no one else can

The only time Debbie will have to tell someone about you is if she is worried that you are not safe. She will tell you if she needs to tell someone. She will NOT talk about you behind your back.

What will happen to the information Debbie collects?
Debbie is going to write about what she finds out. She might also talk to people that work with foster children to tell them what she has found out. If you or your carer want to know about what she has found out she will tell you.

What if there is a problem?
If you have any worries about the study, you can ask your foster carer to call or email Debbie so you can speak to her.

Thank you for reading!

Debbie Kinsey

Study Title

"**Foster Placement Outcomes: Examining the Interactions Between Carers and Foster Children**".

Appendix F: Consent form

Consent form

Foster Placement Outcomes: Examining the Interactions between Carers and Foster Children

Miss Debbie Kinsey (BSc, PGCert)

We confirm that we have read and understand the information sheet for the above study of foster placement outcomes. We have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

We understand that our participation is voluntary and that we are free to withdraw at any time, without giving a reason, without mine or my foster child's social support or legal rights being affected.

We understand that our participation, home address and phone number be will be kept strictly confidential

We agree to take part in the above study

Name of carer: ..... Name of child: .....

Date: .....

Signature of carer: .....

Signature of child: .....

Signature of social services: .....

Home Address: .....

Post code: .....

Contact telephone number: .....

Name of researcher: Debbie Kinsey

Date: .....

Signature of researcher: .....

Appendix G: Ethics Committee Approval

THE UNIVERSITY OF HULL

POSTGRADUATE MEDICAL INSTITUTE
(IN ASSOCIATION WITH HULL YORK MEDICAL SCHOOL)

SRK/JBK

6 April 2009

Ms D Kinsey
Department of Clinical Psychology
Hertford Building
The University of Hull
Cottingham Road
HULL HU6 7RX

Dear Debbie

Thank you for attending the Faculty Ethics Committee meeting on Tuesday, 31 March 2009 and explaining so coherently your research proposal to the committee. I am pleased to report that the committee approved your proposal with the following recommendations;

1. The wording on the consent form is changed to read 'we' rather than 'I' and the boxes are removed.
2. You should state on the information sheet who you are, what you are doing and why you are doing it.

May I take this opportunity of wishing you every success with your research.

Yours sincerely

STEPHEN R KILLICK
Chair - PGMI Ethics Committee

Professor Nicholas D Stafford MB FRCS
Director - Postgraduate Medical Institute
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Appendix H: Letter sent to family with final questionnaires

Dear <CARER> and <CHILD>

Thank you for participating in my research – 'Foster Placement Outcomes: Examining the Interactions between Carers and Foster Children'. These are the final questionnaires for you to fill in.

If you have any questions or concerns about the research please do not hesitate to get in touch. If you would like to know the results of the study and have not yet let me know, please ring or email me or tell your social worker. I cannot tell you your individual results, but can tell you the results from all participants as a whole. The results will be available in approximately July.

Once again, thank you for your time.

Yours sincerely

Debbie Kinsey

D.Kinsey@2007.hull.ac.uk
07851 420276

Appendix I: Strengths and Difficulties Questionnaire – Carer version (Goodman, 1997)

Strengths and Difficulties Questionnaire P 4-16

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of the child's behaviour over the last six months.

Child's Name ..... Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	☐	☐	☐
Restless, overactive, cannot stay still for long	☐	☐	☐
Often complains of headaches, stomach-aches or sickness	☐	☐	☐
Shares readily with other children (treats, toys, pencils etc.)	☐	☐	☐
Often has temper tantrums or hot tempers	☐	☐	☐
Rather solitary, tends to play alone	☐	☐	☐
Generally obedient, usually does what adults request	☐	☐	☐
Many worries, often seems worried	☐	☐	☐
Helpful if someone is hurt, upset or feeling ill	☐	☐	☐
Constantly fidgeting or squirming	☐	☐	☐
Has at least one good friend	☐	☐	☐
Often fights with other children or bullies them	☐	☐	☐
Often unhappy, down-hearted or tearful	☐	☐	☐
Generally liked by other children	☐	☐	☐
Easily distracted, concentration wanders	☐	☐	☐
Nervous or clingy in new situations, easily loses confidence	☐	☐	☐
Kind to younger children	☐	☐	☐
Often lies or cheats	☐	☐	☐
Picked on or bullied by other children	☐	☐	☐
Often volunteers to help others (parents, teachers, other children)	☐	☐	☐
Thinks things out before acting	☐	☐	☐
Steals from home, school or elsewhere	☐	☐	☐
Gets on better with adults than with other children	☐	☐	☐
Many fears, easily scared	☐	☐	☐
Sees tasks through to the end, good attention span	☐	☐	☐

Do you have any other comments or concerns?

Appendix J: Strengths and Difficulties Questionnaire – Child version (Goodman, 1997)

Strengths and Difficulties Questionnaire

S 11-16

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

Your Name ..... Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	☐	☐	☐
I am restless, I cannot stay still for long	☐	☐	☐
I get a lot of headaches, stomach-aches or sickness	☐	☐	☐
I usually share with others (food, games, pens etc.)	☐	☐	☐
I get very angry and often lose my temper	☐	☐	☐
I am usually on my own. I generally play alone or keep to myself	☐	☐	☐
I usually do as I am told	☐	☐	☐
I worry a lot	☐	☐	☐
I am helpful if someone is hurt, upset or feeling ill	☐	☐	☐
I am constantly fidgeting or squirming	☐	☐	☐
I have one good friend or more	☐	☐	☐
I fight a lot. I can make other people do what I want	☐	☐	☐
I am often unhappy, down-hearted or tearful	☐	☐	☐
Other people my age generally like me	☐	☐	☐
I am easily distracted, I find it difficult to concentrate	☐	☐	☐
I am nervous in new situations. I easily lose confidence	☐	☐	☐
I am kind to younger children	☐	☐	☐
I am often accused of lying or cheating	☐	☐	☐
Other children or young people pick on me or bully me	☐	☐	☐
I often volunteer to help others (parents, teachers, children)	☐	☐	☐
I think before I do things	☐	☐	☐
I take things that are not mine from home, school or elsewhere	☐	☐	☐
I get on better with adults than with people my own age	☐	☐	☐
I have many fears, I am easily scared	☐	☐	☐
I finish the work I'm doing. My attention is good	☐	☐	☐

Do you have any other comments or concerns?

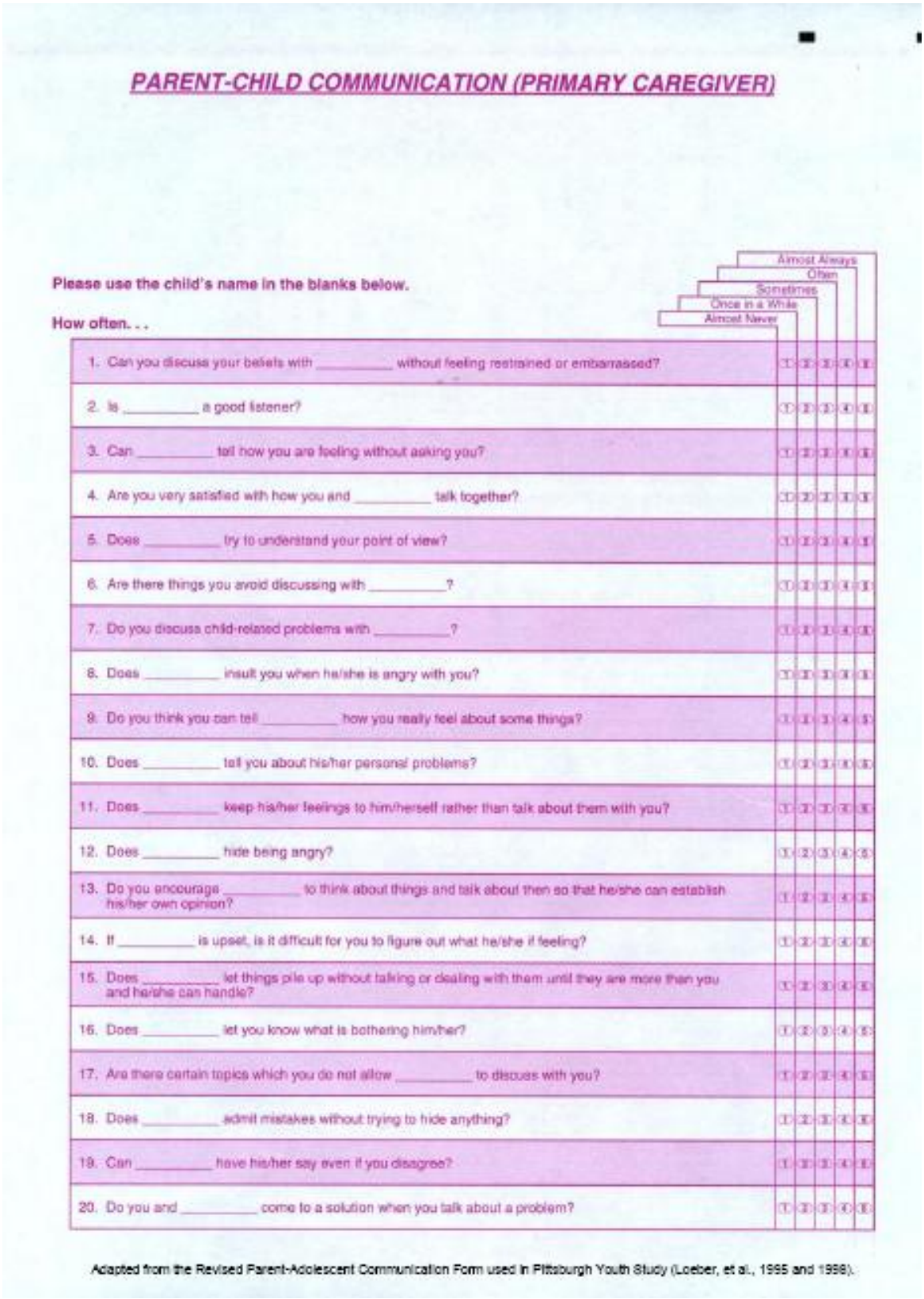
Appendix K: Rejection Scale (Sinclair & Wilson, 2003)

R Scale

	Not at all true	Somewhat true	To a large extent true	Not applicable
There is no point asking my foster child why they misbehave				
I am unsure if I can go on living with / putting up with my foster child				
There is no point telling my foster child why I do not like their behaviour				
I am fond of my foster child				

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	Not applicable
I like having my foster child here						

Appendix L: Parent Child Communication Questionnaire – Carer version (Thornberry et al, 1995)



PARENT-CHILD COMMUNICATION (PRIMARY CAREGIVER)

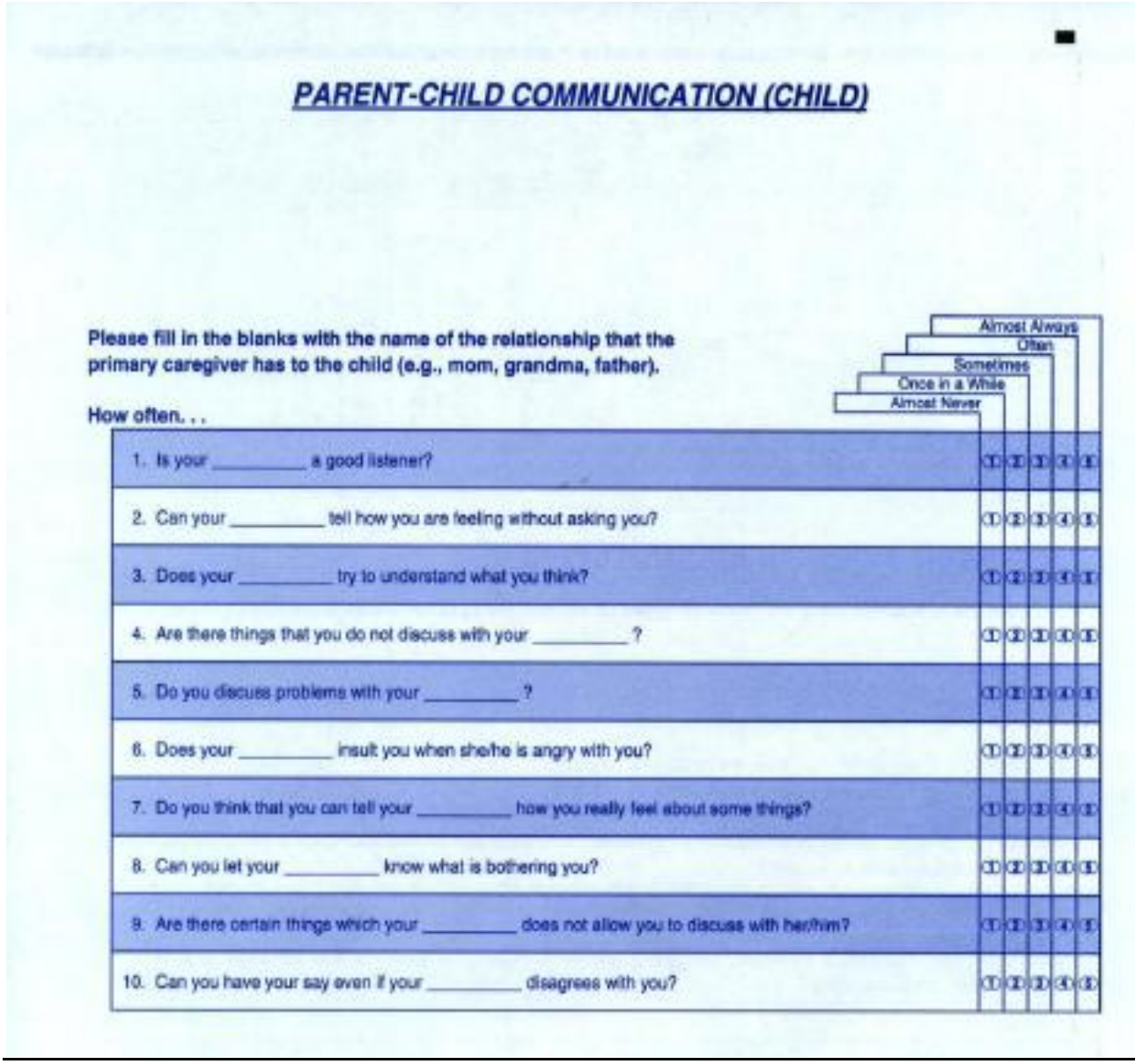
Please use the child's name in the blanks below.

How often. . .

	Almost Never	Once in a While	Sometimes	Often	Almost Always
1. Can you discuss your beliefs with _____ without feeling restrained or embarrassed?	1	2	3	4	5
2. Is _____ a good listener?	1	2	3	4	5
3. Can _____ tell how you are feeling without asking you?	1	2	3	4	5
4. Are you very satisfied with how you and _____ talk together?	1	2	3	4	5
5. Does _____ try to understand your point of view?	1	2	3	4	5
6. Are there things you avoid discussing with _____?	1	2	3	4	5
7. Do you discuss child-related problems with _____?	1	2	3	4	5
8. Does _____ insult you when he/she is angry with you?	1	2	3	4	5
9. Do you think you can tell _____ how you really feel about some things?	1	2	3	4	5
10. Does _____ tell you about his/her personal problems?	1	2	3	4	5
11. Does _____ keep his/her feelings to him/herself rather than talk about them with you?	1	2	3	4	5
12. Does _____ hide being angry?	1	2	3	4	5
13. Do you encourage _____ to think about things and talk about them so that he/she can establish his/her own opinion?	1	2	3	4	5
14. If _____ is upset, is it difficult for you to figure out what he/she if feeling?	1	2	3	4	5
15. Does _____ let things pile up without talking or dealing with them until they are more than you and he/she can handle?	1	2	3	4	5
16. Does _____ let you know what is bothering him/her?	1	2	3	4	5
17. Are there certain topics which you do not allow _____ to discuss with you?	1	2	3	4	5
18. Does _____ admit mistakes without trying to hide anything?	1	2	3	4	5
19. Can _____ have his/her say even if you disagree?	1	2	3	4	5
20. Do you and _____ come to a solution when you talk about a problem?	1	2	3	4	5

Adapted from the Revised Parent-Adolescent Communication Form used in Pittsburgh Youth Study (Loeber, et al., 1995 and 1998).

Appendix M: Parent Child Communication Questionnaire – Child version (Thornberry et al, 1995)



PARENT-CHILD COMMUNICATION (CHILD)

Please fill in the blanks with the name of the relationship that the primary caregiver has to the child (e.g., mom, grandma, father).

How often. . .

	Almost Never	Once in a While	Sometimes	Often	Almost Always
1. Is your _____ a good listener?	1	2	3	4	5
2. Can your _____ tell how you are feeling without asking you?	1	2	3	4	5
3. Does your _____ try to understand what you think?	1	2	3	4	5
4. Are there things that you do not discuss with your _____?	1	2	3	4	5
5. Do you discuss problems with your _____?	1	2	3	4	5
6. Does your _____ insult you when she/he is angry with you?	1	2	3	4	5
7. Do you think that you can tell your _____ how you really feel about some things?	1	2	3	4	5
8. Can you let your _____ know what is bothering you?	1	2	3	4	5
9. Are there certain things which your _____ does not allow you to discuss with her/him?	1	2	3	4	5
10. Can you have your say even if your _____ disagrees with you?	1	2	3	4	5

Appendix N: Form to collect placement history

Child:.....

Date of birth:.....

Please give the outcomes of any previous placements the child has been in. Outcomes can be either unplanned breakdown or planned end.

Placement	**Outcome**
E.g. Placement 1	*Unplanned breakdown*

Date the child entered their current placement:.....

Many thanks for your time.

Appendix O: Evaluation of Placement Scale (Doelling & Johnson, 1990)

The following list of statements pertains to various aspects of foster placements. Please read each item, decide how descriptive the statement is of this particular placement, and circle the appropriate number.

Thank you for your help.

1 = strongly disagree
2 = slightly disagree
3 = neither agree nor disagree
4 = slightly agree
5 = strongly agree

If the question does not apply (e.g. there are no other children in the home), please circle N/A.

The foster parent(s) spends an adequate amount of time helping the child with schoolwork	1	2	3	4	5	N/A
The foster parent(s) spends an adequate amount of time doing fun activities with the child	1	2	3	4	5	N/A
The child's academic performance has not decreased significantly since placement in the foster home	1	2	3	4	5	N/A
The child's behaviour in school has not become worse since placement in the foster home	1	2	3	4	5	N/A
The foster parent(s) handles visits with the child's natural parents well	1	2	3	4	5	N/A
The foster parent(s) treats the child equally well with regard to the other children in the home	1	2	3	4	5	N/A
Ample affection is shown between the foster mother and the child	1	2	3	4	5	N/A
Ample affection is shown between the foster father and the child	1	2	3	4	5	N/A
The child seems to enjoy spending time with the other children in the home	1	2	3	4	5	N/A
The foster parent(s) adequately takes care of the medical and other needs of the child (food, clothing, appointments, etc)	1	2	3	4	5	N/A
The foster parent(s) is able to deal effectively with difficult behaviours exhibited by the child	1	2	3	4	5	N/A
The foster parent(s) shows an attitude of acceptance toward the child regardless of his or her behaviour	1	2	3	4	5	N/A
The child appears to have adapted well to the family structure	1	2	3	4	5	N/A
The foster parent(s) is receptive to, and aware of, the child's individual needs	1	2	3	4	5	N/A

Thank you for your time

Appendix P: Reflective statement

In the first week of my looked-after children's placement, I tried to prepare for my clinical work by reading. I found a huge number of prevalence studies illustrating high numbers of difficulties for young people in the care system, but very little empirical research which went beyond this. I couldn't understand why more research wasn't conducted in such a needy area. I became determined to rectify this and contribute by conducting my doctoral thesis within this client group. I had hypothesised some of the reasons why research with this group may be difficult, such as the children having high numbers of difficulties, having shared parental responsibility (making consent difficult) and there being a number of different professionals involved. However, I felt that the large number of children in the care system in my own, and the surrounding, area would give me adequate numbers for my research. I was recruiting from five different large localities and needed only twelve from each to make my numbers. Given there were well over 100 foster children in each area, I thought this was a reasonable goal. I also thought that by anticipating potential difficulties in advance I could include ways around them in my design.

Unfortunately, I had underestimated the extent to which these difficulties would affect my recruitment. I believe my main problem was having to rely on already busy social work teams to reach my sample. In one area, the team manager was enthusiastic about the research and consequently I gained most of my participants through her. Unfortunately, she left before the follow-up, which dramatically reduced the number of questionnaires returned at the end of the study. Having an enthusiastic practitioner in a team really did make or break my recruitment, and was largely beyond my control. If I were to repeat this research, I would spend more time in the early stages with social work teams in order to give them more ownership by including them in the research design. This would hopefully increase social workers' tendency to take time out of their busy schedules to take part and find suitable

families. Free of the constraints of clinical training and timescales, I would also try to obtain more data by inviting every new foster family to take part as soon as the child is placed and track their progress for a longer time period. This would also hopefully reduce the bias of social workers 'gatekeeping' by only asking stable placements to take part.

Additionally, foster families are as busy as any other family, but also have added difficulties such as challenging behaviour and more contact with services. This may make them more reluctant to participate in studies which don't have an immediate benefit for them.

I feel I've gained a greater appreciation of why this area has comparatively little research. As an independent researcher not within the social work organisation, I found it difficult to access the data I needed. Clinical teams who already have strong links with social work teams seem ideally placed to conduct this kind of research (much more so than university research teams). However, as I found it difficult to implement and conduct this research within the time and resource constraints of my training, I can understand why already stretched clinicians don't conduct research with this group. Nevertheless, I don't believe this should preclude research from taking place. Perhaps more protected time and funding is needed to allow research to happen in clinical settings. I hope that when I start working as a qualified psychologist, I will remember to make, and fight for, time to complete research once I am in the privileged position of having better links with other professional groups.

In conducting my systematic literature review, I was surprised at the number of high quality intervention studies. Though most were conducted in the USA, it seemed to be a growing area in the UK. It was particularly interesting how carer training programmes were found to be ineffective and yet these continue to be a main method of providing support to foster families. It made me reflect on the process of research, particularly on its dissemination and how findings are then put into practice. This was something I had not given much thought to in the past, and it led me to consider how important it is that research is not an exercise in its own right but should be used to continually improve clinical practice. I chose to submit both my

papers to Clinical Child Psychology and Psychiatry for two main reasons. Firstly, the majority of research with looked after children is published in social work journals and I felt that it was important to find a journal with a wider remit. This would mean that not only social workers, but psychologists, psychiatrists and other practitioners would be more likely to access the papers. In the case of the systematic review, I felt this was of particular importance as it concerns service development and joined-up working. Secondly, I wanted a journal that had a good proportion of readership within the UK as I wrote both of my papers from the perspective of UK health and social care. I also plan to feed back to local services who participated to increase the theory-practice link.

Whilst conducting the research, I noticed that at times I became frustrated by the barriers, services and difficulties working within the foster care system. It sometimes felt as though I had to make extraordinary effort for small gains. This process is perhaps parallel to that experienced by families, young people and practitioners in the field, given the number of difficulties and services involved.

Anecdotally, there seems to be a process among some (particularly new) foster carers that 'enough love' will ultimately solve the child's problems. Unfortunately, this is not the case. At the beginning of this research, I thought that enough enthusiasm ('love') would ultimately solve the problems of doing time-limited research with foster families. Unfortunately, this was not the case. The parallel processes between client population and research are again something I had not give much thought to previously. I plan to collaborate with another trainee on investigating this further.

Like those in the system, my passion for this group never fully left me. I hope to continue to work with, and research, in this area once I qualify, taking what I have learnt from the process and results of this project with me.