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The network of care around a child with maltreatment-associated psychiatric problems (MAPP)

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Chapter 1

Interventions for pre-school children in foster care: a systematic review of the foster carer and system level outcomes from randomised controlled trials.

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Abstract

Background

Children in foster care are at increased risk of experiencing cognitive, emotional and behavioural difficulties. There is a window of opportunity for early intervention associated with developmental sensitivity in the early years. Foster parents and the systems supporting them play a central role in the child's support and intervention. This systematic review explores the effectiveness of interventions for pre-school children in foster care, in improving carer sensitivity, stress and placement stability.

Methods

Embase, Medline, CINAHL, PsycInfo and Cochrane Library databases, were searched from inception to 23rd June 2023, for all eligible publications, including any randomised controlled trials (RCTs), of interventions for pre-school children with parent or system outcomes reported. Search screening, data extraction and quality appraisal were all completed by two independent researchers and reviewed collaboratively. The quality of included articles was assessed using the Cochrane Risk of Bias (RoB2) tool and GRADE assessment procedure. Narrative synthesis with meta-analysis for some outcomes was conducted.

Results

16 articles, corresponding to 12 RCTs, and a total of 1034 foster children, met inclusion criteria. The GRADE assessment of data quality was low for all three outcome types, and risk of bias high for five studies, and 'some concerns' around risk of bias according to RoB2 for all remaining included studies. The articles reviewed seven different intervention types. There was evidence that interventions were effective in improving parental sensitivity, with the strongest evidence supporting Attachment and Biobehavioural Catch-up (ABC) and Parent Child Interaction Therapy (PCIT). There was also limited evidence that interventions may improve placements stability. Overall, there was no evidence that interventions reduce parental stress.

Conclusions

This review demonstrates the effectiveness of interventions in improving parent and system level outcomes – likely to be important mediators for change in the child. The evidence quality was low, and further high-quality research is needed to identify which interventions are most effective and in what context, with improved consistency in definition and measurement of outcomes.

Keywords Infant mental health, foster care, parental wellbeing, parental stress, placement stability, pre-school, interventions

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Introduction

Children living in foster care have commonly experienced maltreatment and neglect and often display emotional and behavioural challenges (National Institute for Health and Care Excellence (NICE), 2021). A previous meta-analysis exploring prevalence of mental health or developmental difficulties in pre-school age foster children identified that around 39% display a developmental delay (cognitive or motor); 38% meet clinical criteria for psychological difficulties; and 43% have an insecure attachment style, most commonly disorganised attachment (22%) (Vasileva & Petermann, 2018).

The early years are a period of neurodevelopmental sensitivity, and a particular opportunity for effective intervention mitigating the impact of prior maltreatment and preventing longer term adverse outcomes (Minnis, 2024).

In addition, for children in foster care there is evidence of a bidirectional relationship between child behavioural problems and placement disruption, whereby externalising behaviours in particular strongly predict placement changes, but increased placement disruption also predicts increased externalising difficulties (Maguire et al., 2024). Children with more behavioural difficulties may be more likely to experience placement breakdown due to higher levels of associated foster carer stress, as well as the foster carers' perception of their capacity to support the child appropriately and receive sufficient support from professional services (Tonheim & Iversen, 2019; Turner et al., 2023b; Whenan et al., 2009). A foster carer's parenting capacity has also been correlated with the extent of caregiver stress experienced, further highlighting the potential vicious cycle whereby children with more behavioural needs might come to receive poorer parental support (Konijn et al., 2019). Research has demonstrated that placement stability, the coordination of placement changes (i.e. sudden versus planned transitions) and foster carers relational style are correlated with the child's mental health outcomes (Hillen & Gafson, 2015). Therefore, when considering the effectiveness of interventions aiming to improve developmental and mental health outcomes for children in foster care, it is extremely important to consider the parent and system level outcomes as well as direct outcomes for the child.

Previous systematic reviews and meta-analyses have considered the effectiveness of psychosocial interventions for children in foster care and foster carers. Bergstrom (2020), reviewed interventions for children of any age in foster care, considering a wide range of outcomes including the child's mental health, physical health, education, employment outcomes and parental sensitivity, stress and stability. The review aimed to review outcomes of instruments for foster parent selection, preservice training programmes, and foster carer interventions. It identified 18 different interventions, from which ABC was indicated as improving children's attachment behaviours, Incredible Years as possibly improving parenting abilities and decreasing children's externalising behaviours and Take Charge as improving children's self-determination skills. However, there was not sufficient evidence to draw conclusions regarding comparative effectiveness of interventions (Bergström et al., 2020). Hambrick (2016), reviewed interventions for children under 12 in foster care focusing on child mental health outcomes. This review identifies 10 interventions, 6 of which were developed specifically for foster care. The main finding is a lack of rigorous evaluation of these interventions within community settings, highlighting a need for further research (Hambrick et al., 2016). Schoemaker(2020), conducted meta-analysis of the effectiveness of parenting interventions for foster and adoptive parents considering parental outcomes including sensitivity, behaviour, knowledge and parental stress as well as child focused outcomes. This review considered both randomised and non-randomised trial designs and children of any age, and found evidence of positive effects on parent outcomes and child behavioural problems, but not attachment security, child diurnal cortisol levels or placement disruption (Schoemaker et al., 2020b).

These previous reviews indicated there was some evidence supporting psychosocial interventions, however the broad age group and wide range of outcome measures captured limit more specific findings, for example comparison between interventions. Building on this, the present paper describes one of two systematic reviews, conducted in parallel, exploring the effectiveness of interventions targeting mental health, developmental or attachment related outcomes for pre-school children (age 0-7 years old) in foster care. A focus on pre-school children, who have specific needs, is required (Minnis, 2024). The decision to complete two separate reviews was made due to the diversity of outcome measure types captured in interventions with this cohort. Outcomes relating to the child wellbeing, development or child-parent attachment are considered in a separate review (Kirby et al., 2024). This review examines parental wellbeing, parenting skills and placement stability, through systematic identification and review of randomised controlled trials (RCTs) targeting mental health or developmental outcomes for pre-school children in foster care.

Methods

The systematic literature review was conducted in accordance with the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines (Page et al., 2021)and registered on the Prospective Register if Systematic Reviews (PROSERO) database, CRD42022367449.

Search Strategy

Following preliminary searches, a broad search strategy was developed, in consultation with a librarian. The search included terms relating to: children, foster care and RCTs, see *appendix 2: systematic review supplementary materials (TableS1)*, *page 88.* The search was conducted across the following databases: Embase, Medline, CINAHL, PsycInfo and Cochrane Library databases for all eligible publications from inception to 23rd June 2023. Following data extraction de-duplication was completed (Falconer, 2018). One researcher (CB) completed title and abstract screening for all identified studies (N=6815), a second researcher (NK) completed screening for 20% of studies, blinded to the first screening outcome. The inter-rater reliability on this subset of records was 0.98. Discrepancies were discussed prior to full text review of remaining articles. Full texts (N=113) were screened independently by two researchers with an inter-rater reliability of 0.97.

Eligibility criteria

All studies available in English and published prior to the 23rd June 2023 were considered for selection according to the following inclusion criteria:

- study data from an RCT of any intervention (with any comparator group) for children within foster care.
- All child participants were 7 years old or younger and living in foster or kinship care during the intervention.
- Parent or system level (e.g. placement) outcome measures were collected.

Risk of Bias assessment and Grade of Evidence

The Cochrane Risk of Bias 2.0 (RoB) tool for RCTs was used to assess the level of risk of bias within studies. Four researchers (CB, GC, MG, NK), conducted appraisal. Each paper was appraised by two independent researchers and discrepancies resolved through discussion, involving a third researcher if required. GRADE quality assessment was then completed for each outcome, and decisions were reviewed by a second researcher.

Data extraction

A team (CB, GC, MG, NK), extracted and tabulated the following descriptive data for each study: study title, author, date of publication, country of research, overall sample demographics, child placement type, sample size, intervention type, control group type, outcome measurement frequency, outcome measures, reported confounding factors, reported outcome. Data relating to outcome variables (parental sensitivity, parental stress, and placement stability) was then extracted and tabulated including sample size, mean and standard deviation pre- and post- intervention for each trial arm. Authors were contacted for additional information where required.

Data Analysis

A narrative synthesis approach following SWiM guidelines (Campbell et al., 2020) was used to analyse information available regarding placement stability due to heterogeneity in definition for this outcome measure. A pairwise random effects meta-analysis comparing psychological interventions described below with SAU was used to synthesise data for parental sensitivity and parental stress, with narrative synthesis used to incorporate studies where data available did not allow for quantitative analysis. For meta-analysis all interventions were considered together, with subgroups for different intervention types. For consistency, where outcome measures were reported at multiple time-points, only pre- (immediately before) and post- (end of intervention) measures were used. Where the mean and variance for change was not reported, it was imputed. For multi-arm RCTs, the intervention arms were combined(Higgins JPT, 2023). Both multi-arm RCTs were comparing variations of the same intervention with SAU. See *appendix 2: systematic review supplementary materials (TableS2)*, *page 88* for equations. *Hedges g* was used as a measure of effect size (ES), deemed most suitable given the small sample size in some included studies, and 95% confidence intervals. Meta-analysis was conducted using SPSS Statistics.

Results

Study Selection

A total of 9281 records were identified, 6815 after duplicates were removed. 6702 records were excluded by screening the title and abstract. Full text review was completed for the remaining 113 papers and identified 16 studies which met criteria for inclusion in this review. The reasons for exclusion after full text review were: child's age (over 7), not all included children residing in foster care, study design, and no outcome measures relating to carer or placement reported. See *figure 1.1* for PRISMA flow diagram.

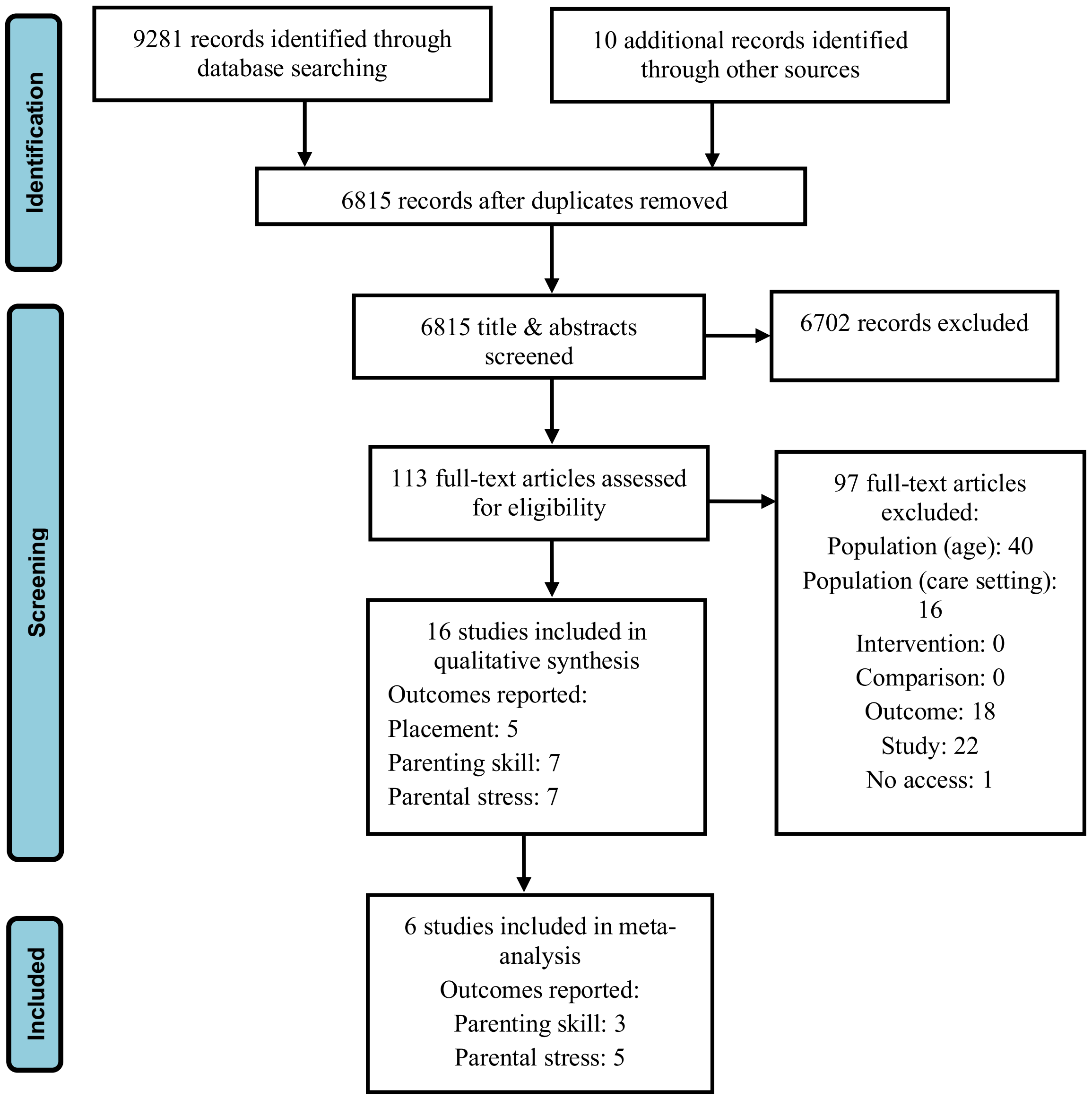


Figure 1.1: PRISMA Flow Diagram

Study Characteristics

The review includes 13 published research papers and 3 PhD dissertations(Blair, 2018; Danko, 2014; Miller, 2007). 12 included publications were based in the USA, 1 in Germany (Job et al., 2022), and 3 in the Netherlands ((Jonkman et al., 2017; Schoemaker et al., 2020a; Van Andel et al., 2016). All publications utilised data from RCTs, although not all trials were unique from one another, such that the 16 included publications correspond to 12 RCTs. The majority, 11 publications (corresponding to 7 RCTs), compared the intervention group with "services as usual" (Bick & Dozier, 2013; Blair, 2018; Conn et al., 2018; Fisher et al., 2005; Fisher et al., 2009; Fisher & Stoolmiller, 2008; Fisher et al., 2011; Job et al., 2022; Jonkman et al., 2017; Mersky et al., 2015; Miller, 2007; Van Andel et al., 2016). 2 publications (corresponding to 2 RCTs) compared with a 'waitlist control group' (Danko, 2014; N'Zi et al., 2016). 3 publications (corresponding to 3 RCTs) compared the intervention with an active 'dummy' control intervention (Bick & Dozier, 2013; Raby et al., 2019; Schoemaker et al., 2020a). Study characteristics are described in *table 1.1.*

Participants

This review includes 1034 foster children and approximately 1034 foster carers. Some studies refer to the foster family instead of foster carer (e.g. (Danko, 2014)) and one study includes families with more than one foster child (Job et al., 2022), so the exact number of foster parents across studies cannot be calculated. RCT sample size in studies ranged from 14 (N'Zi et al., 2016) to 123 (Blair, 2018; Van Andel et al., 2016). The age of children across studies ranged from 1 month (Bick & Dozier, 2013) to 95 months (Job et al., 2022) (pooled mean aged 42.63 months). The gender distribution reported was relatively balanced for most studies. For demographic information reported in studies, see *appendix 2: systematic review supplementary materials* (TableS3), page 88.

Table 1.1: Study Characteristics

Study (Author, Year)	**Publication type / Source**	**Country**	**Design**	**Intervention**	**Control Group**	**Intervention target (inclusion/ exclusions)**	**Sample Size (Overall, intervention, control)**	**Outcome measure in review**
Bick & Dozier, 2013	Journal of Infant Mental Health	USA	RCT	ABC	DEF	Foster parents caring for foster children 22 months of age or younger	N+ 96 IG =44 CG=52	Parental sensitivity: video recorded interactions, scored with coded likert
Raby et al., 2019	Developmental Science	USA	RCT	ABC-T	DEF	Children in foster care between 24 and 36 months old	N= 88 IG= 45 CG= 43	Parental sensitivity: video recorded interactions, scored with coded likert scale adapted from Observational Record of the Caregiving Environment.
Van Andel et al., 2016	American Journal of Orthopsychiatry	the Netherlands	RCT	FFI	SAU	Children under 5 years old, in foster care and expected to remain within FC for at least 6 months. Children where there was a high risk of placement breakdown without intervention, children with cognitive or other birth deficits were excluded.	N= 123 IG= 65 CG= 58	Parental stress: NOSI-R
Conn et al., 2018	Children and Youth Services Review	USA	RCT	IY(tf)	SAU	Foster parents of children aged 2-7 years	N=33 IG=16 CG=17	Parental stress: PSI-SF
Fisher et al., 2005	Child Maltreatment	USA	RCT	EIFC	SAU	3-6 year old foster children in need of a new foster placement within the catchment area, and expected to remain within care for more than 3 months	N=90 IG=47 CG=43	Placement stability: placement permanency or failure
Miller, 2008	Theses: University of Oregon	USA	RCT (sub-sample	EIFC	SAU	Children aged 3-6 years, all recently entering a new foster placement	N= 78	Placement stability

			analysis)					
Fisher & Stoolmiller, 2008	Developmental Psychopathology	USA	RCT	MTFC-P	SAU	Foster pre-schoolers aged 3–6 years who were entering new placements in a county child welfare system in the Pacific Northwest with a planned placement of at least 3 months	N= 117 IG=57 CG=60	Parental stress: computed from Parent Daily Report data
Fisher et al., 2011	Journal of Consulting and Clinical Psychology	USA	RCT	MTFC-P	SAU	Foster pre-schoolers aged 3–6 years who were entering new placements with a planned placement of at least 3 months	N= 117 IG=57 CG=60	Placement stability: placement disruptions
Fisher, 2009	Child youth services review	USA	RCT	MTFC-P	SAU	Foster pre-schoolers aged 3–6 years who were entering new placements with a planned placement of at least 3 months	N=52 IG =29 CG=23	Placement stability: placement permanency
Jonkman et al., 2017	Journal of child and family studies	Netherlands	RCT	MTFC-P	SAU	Children between 3 and 7 years, indicated for permanent foster care placement	N= 34 IG =23 IG =11	Parental stress: PSI-SF
Mersky et al., 2016	Journal of the society for social work research	USA	RCT	PCIT/ PCIT extended	WLC	Children aged 3-6 years, placed in a licensed, nonrelative foster home, and in the clinical range for externalizing problems on the Eyberg Child-Behavior Inventory (ECBI) according to foster parent ratings. Exclusions: Children with intellectual, physical, or pervasive developmental disabilities.	N=129 PCIT ext = 35 PCIT = 49 CG=46	Parental stress: PSI-SF Parenting skills: DPCICS-II
Blair, 2018	Thesis: University of Wisconsin-Milwaukee	USA	RCT	PCIT	SAU	Children aged 3-6 years, placed in a licensed, nonrelative foster home, and in the clinical range for externalizing problems on the Eyberg Child-Behavior Inventory (ECBI) according to foster parent ratings. Exclusion: children with intellectual,	N=123 IG=80 CG=43	Placement disruption and permanency outcomes

						physical, or pervasive developmental disabilities		
Danko, 2014	Thesis: DePaul University	USA	RCT	CDIT / PCIT	WLC	Foster care families with foster child between 2-5 years old, with child placed with foster parent for at least 2 months.	N= 27 IG (CDIT) =8 IG (PCIT) =7 CG =9	Parental stress: PSI-SF
N'zi et al., 2016	Child abuse and neglect	USA	RCT	CDIT	WLC	Kinship carers caring for a child between 2-7 years old, expecting the child to be residing in their home for the duration of the study and with a caregiver rating one standard deviation above the norm on Eyberg Child Behaviour Problem Scale	N=14 IG=7 CG=7	Parental stress: PSI-SF Parenting skills: DPCICS-IV
Job et al., 2020	Journal of Interpersonal Violence	Germany	RCT	TCTP	SAU	Children in foster (not kinship) care for less that 24 months, aged between 2-7 years with a primary allegation of child maltreatment or neglect as indicated by welfare files	N (families) = 81 N (children) = 87 IG (families)=44, IG (children) = 46 CG (families) = 37 CG (children) = 41	Parenting skills: DPCICS-IV And Mother-child play task observation system
Schoemaker et al., 2020	Child and Youth Services Review	Netherlands	RCT	VIPP-FC	DI	Families with foster child between 1-6 years, with expected duration of placement at least 6 months	N= 60 IG= 30 CG= 30	Parental sensitivity: video recorded interactions, scored with coded likert scale, adapted version of Ainsworth Scale of sensitivity

{ *= Studies relating to the same RCT*

ABC= Attachment and Biobehavioural Catch-Up, IY(tf)= Trauma-informed adapted Incredible Years, EIFC = Early Intervention Foster Care Program, TCTP= Triple P system for foster parents, MTFC-P = Multidimensional Treatment Foster Care for pre-schoolers, PCIT= Parent Child Interaction Therapy, CDIT= Child Directed Interaction Training, ABC-T= Attachment and Biobehavioural Catch-Up for Toddlers, VIPP-FC= Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline in Foster Care , FFI= Foster care – foster child intervention; DEF= Developmental Education for Families, SAU= service as usual, WLC= waitlist control, DI= Dummy Intervention; IG= Intervention group, CG = control group; PSI-SF= Parenting stress index short form, NOSI-R= Dutch version of Parenting Stress Index, DPCICS-IV=Dyadic Parent–Child Interaction Coding System 4th edition

Interventions

Attachment and Biobehavioural Catch-up (ABC): Two RCTs assessed ABC considering outcome measures relating to parental sensitivity (Bick & Dozier, 2013; Raby et al., 2019). ABC is a 10-session attachment based parenting intervention intended to increase sensitivity and nurturing parenting approaches through psychoeducation and structured play with video-based feedback. In both instances the ABC intervention was compared with Developmental Education of Families, also a 10-session intervention including video-based feedback but focusing on motor and cognitive development.

Foster carer – Foster child Intervention (FFI): One RCT compared FFI with SAU, considering parental sensitivity and parental stress (Van Andel et al., 2016). FFI consists of 6 90-minute home visits in which psychoeducation and video-based feedback is shared with the foster parent with the aim of increasing parental sensitivity to the child.

Incredible Years (IY): One RCT assessed a trauma-informed adaptation of IY compared with SAU, considering parental stress (Conn et al., 2018). Parents meet for 2.5-hour sessions, weekly for 13 weeks. IY is designed to build skills in positive parenting, teaching and engaging with the child.

Multi-treatment Foster Care for Pre-schoolers (MTFC-P): 3 RCTs (6 studies) assessed MTFC-P, or the previous version of this intervention Early Intervention Foster Care (EIFC) compared with SAU. The relevant outcome variable considered in 4 of these studies is placement stability (Fisher et al., 2005; Fisher et al., 2009; Fisher et al., 2011; Miller, 2007), and the final two considered parental stress (Fisher & Stoolmiller, 2008; Jonkman et al., 2017). MTFC-P is a caregiver-based preventative intervention delivered in 3 phases, which includes 12 hours of training prior to fostering a child, and then weekly individual consultation and support for parents and a skills trainer meeting directly with the child. The intervention is delivered over 9-12 months.

Parent Child Interaction Therapy (PCIT): 3 RCTs (4 studies) assessed variants of PCIT compared with SAU, considering parental sensitivity, parental stress, and placement stability (Blair, 2018; Danko, 2014; Mersky et al., 2015; N'Zi et al., 2016). PCIT consists of two stages, Child-Directed Interaction (CDI) and then Parent-Directed Interaction (PDI), in which parental skills coaching is provided (in group or individual format) to strengthen caregiver-child relationship and the child's behaviour/ parents approach to the child behaviour. N'Zi et al., 2016 describes an RCT for effectiveness of CDI element alone, and Danko et al., includes both CDI only and PCIT intervention arms. Mersky et al., 2015 also includes two intervention arms, a PCIT arm and an extended version of PCIT in which two additional contacts are provided.

Triple P (TCTP): One RCT assessed Triple P for foster care compared with SAU, considering parental sensitivity as an outcome measure (Job et al., 2022). TCTP is a parenting group intervention promoting skills in positive parenting and management of the child's behaviour, delivered across five 2.5-hour group sessions.

Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline in Foster Care (VIPP-FC): One RCT assessed VIPP-FC compared with a 'dummy intervention', considering parental sensitivity as an outcome variable (Schoemaker et al., 2020a). VIPP-FC is delivered through 6 home visits over 3–4-months, in which psychoeducation around sensitive parenting and discipline is shared as well as review of videotaped interactions between caregiver and child. The dummy intervention in this RCT consisted of phone calls and general discussion around their child's development.

Quality Appraisal and Risk of Bias

The GRADE assessment process gave a *low-quality* rating for all three outcomes, as quality was down rated due to the risk of bias and imprecision. There was an overall *high risk* or *some concern* about bias for all included studies according to the RoB2 rating tool. Given the nature of interventions assessed within these RCTs, in most cases it was not possible to blind the participants or researchers to the intervention type. See *appendix 2: systematic review supplementary materials* for risk of bias (TableS4) and quality appraisal (TableS5) assessments, page 88.

Outcomes and findings

Parental sensitivity was captured as an outcome measure in seven publications each relating to a different RCT and assessing effectiveness of the following interventions: ABC (Bick & Dozier, 2013; Raby et al., 2019), TCTP (Job et al., 2022), PCIT (Mersky et al., 2015), CDIT (N'Zi et al., 2016), VIPP-FC (Schoemaker et al., 2020a), FFI (Van Andel et al., 2016). They all used an observation (video or live) of interactions between the foster parent and foster child to rate the parental sensitivity to the child. Three studies use the Dyadic Parent–Child Interaction Coding System (DPICS), in which every verbalization from parent to child is coded and grouped into nurturing/ positive and dysfunction/negative parenting behaviours. One study used the Emotional Availability Scale (EAS), which assesses parental sensitivity as well as parent structuring, non-intrusiveness, responsivity and involvement during interaction with the child (Van Andel et al., 2016). The remaining three studies all code sensitivity within videoed interactions using likert scale measures of parental sensitivity as it is defined by Ainsworth (Bick & Dozier, 2013; Raby et al., 2019; Schoemaker et al., 2020a).

The three interventions using DPICS were combined quantitatively in meta-analysis. Two of these interventions considered PCIT related interventions, and one TCTP. The evidence demonstrated psychological intervention was significantly more effective than SAU (ES= 3.68; 95% CI: 0.28-7.29; p=0.03) for increasing the frequency of positive parenting behaviours. There was no statistically significant decrease in negative parenting behaviours when comparing psychological interventions with SAU. GRADE assessment of the quality of this evidence was low. Within the subgroup analysis, the frequency increase in positive nurturing parenting was substantially greater in the two studies considering PCIT related interventions

(ES= 6.35 & 4.23), than in the case of TCTP (ES=0.55). Although not statistically significant, there was a decrease in negative parenting behaviours associated with the PCIT related intervention. However, there was a small but statistically significant increase in negative parenting behaviours associated with TCTP. Mersky et al., 2016, which had the largest sample size of the studies included in meta-analysis did, however, report a large effect size for PCIT, and statistically significant decrease in mean frequency of negative parenting (ES=-11.57; 95% CI:-13.02 to -10.12; p<0.01).

For RCTs considering parental sensitivity but not using DPICS (not included in meta-analysis), the effect size was calculated for the likert scales reported by each article. There was no evidence of an increase in parental sensitivity associated with the VIPP-FC intervention (ES=0.135, p=0.6). There was a significant increase in sensitivity associated with ABC (ES=0.68, p<0.01), as reported by Raby et al., 2019. Bick and Dozier also report a statistically significant (p=0.05) increase in parental sensitivity associated with the intervention, although it was not possible to calculate an effect size from the data available (Bick & Dozier, 2013). Finally, a significant increase in parental sensitivity (reported effect size=0.82, p<0.05) was associated with FFI when compared with SAU (Van Andel et al., 2016).

Parental stress was captured as an outcome measure in seven publications each relating to a different RCT and assessing effectiveness of the following interventions: IY (Conn et al., 2018), variants of PCIT (Danko, 2014; Mersky et al., 2015; N'Zi et al., 2016), MTFC-P (Fisher & Stoolmiller, 2008; Jonkman et al., 2017), FFI (Van Andel et al., 2016). All studies except Fisher & Stoolmiller, 2008 use the Parenting Stress Index-Short Form (PSI-SF), or in one case (Van Andel et al., 2016) NOSI-R, which is the Dutch translation of the same tool. It was not possible to calculate an effect size for data available from Fisher & Stoolmiller 2008 or van Andel 2016. For the remaining 5 articles effect size was calculated and a meta-analysis was conducted.

Considering all intervention types together, there was no statistically significant effect on parental stress associated with these psychological interventions. However, there was a small statistically significant reduction in parent stress identified in the subgroup analysis for PCIT related interventions; *hedges g*=-0.5 (95% CI: -1.00-0.00), p=0.05). One study comparing MTFC-P to SAU reports a small but statistically significant increase in parental stress associated with the intervention (Jonkman et al., 2017). In contrast, while not included in the meta-analysis, Fisher and Stoolmiller 2008 report a statistically significant decrease in parental stress associated with MTFC-P, with the change in parental stress occurring within the first 2 months of the 12-month intervention period. Parental stress in this paper had been computed from parent daily report interviews, as opposed to a standardised measure (Fisher & Stoolmiller, 2008). GRADE assessment of the quality of this evidence was low.

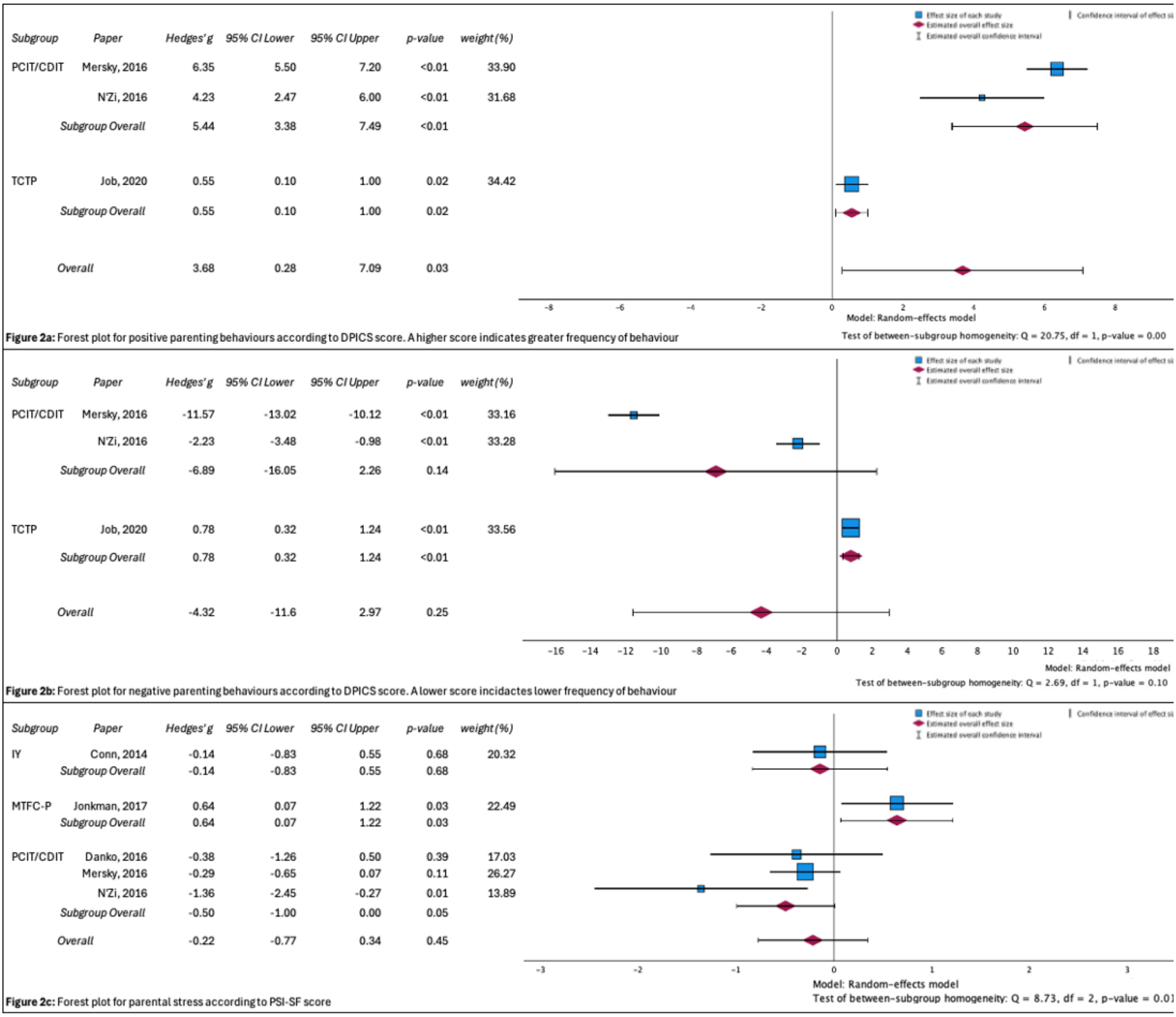
A summary of data reported relating to parental sensitivity and parental stress can be found in *table 1.2.* See *figure 1.2* for forest plots relating to meta-analysis.

Table 1.2: Tabulated findings for foster carer sensitivity and foster carer stress

Study (author, year)	Intervention	Effect Size *(Hedges g)*	95% Confidence Intervals	p-value	N *(Int: Con)*
Negative or dysfunctional parenting as scored by DPICS					
*Mersky, 2016	PCIT	-11.57	-13.02 to -10.12	<0.01	83:46
*N'Zi, 2016	CDIT	-2.23	-3.48 to -0.98	<0.01	7: 7
*Job, 2020	TCTP	0.78	0.32 to 1.24	<0.01	41: 36
Positive or nurturing parenting as scored by DPICS					
*Mersky, 2016	PCIT	6.35	5.50 to 7.20	<0.01	83:46
*N'Zi, 2016	CDIT	4.23	2.47 to 6.00	<0.01	7: 7
*Job, 2020	TCTP	0.55	0.10 to 1.00	0.02	41: 36
Parental Sensitivity					
*Schoemaker, 2020	VIPP-FC	0.13	-0.37 to 0.65	0.6	30: 30
**Van Andel 2016	FFI	0.82	Not reported	<0.05	65: 58
*Raby, 2016	ABC	0.67	0.25 to 1.11	0.02	45:43
**Bick, 2013	ABC	Hierarchical linear model indicates an increase in maternal sensitivity associated with the intervention		0.05	44: 52
Parental Stress					
**Conn, 2018	IY	-0.14	-0.83 to 0.55	0.68	14:17
*Jonkman, 2017	MTFC-P	0.64	0.07 to 1.22	0.03	35:18
*Danko, 2014	PCIT	-0.38	-1.26 to 0.50	0.39	14: 7
*Mersky, 2016	PCIT	-0.29	-0.65 to 0.07	0.11	83: 46
*N'Zi, 2016	PCIT	-1.36	-2.45 to -0.27	0.02	7: 7
Van Andel, 2016	FFI	Data not reported but paper reports no intervention effect on parental stress			65: 58
Fisher and Stoolmiller, 2008	MTFC-P	Reports three level linear growth model indicating statistically significant reduction in parental stress in intervention group			57: 60

** Effect size, 95% CIs and p values calculated from M change and imputed SD change. ** Findings as reported in paper*

ABC= Attachment and Biobehavioural Catch-Up, IY(tf)= Trauma-informed adapted Incredible Years, TCTP= Triple P system for foster parents, MTFC-P = Multidimensional Treatment Foster Care for pre-schoolers, PCIT= Parent Child Interaction Therapy, CDIT= Child Directed Interaction Training, VIPP-FC= Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline in Foster Care , FFI= Foster care – foster child intervention;



Subgroup	Paper	Hedges'g	95% CI Lower	95% CI Upper	p-value	weight (%)
PCIT/CDIT	Mersky, 2016	6.35	5.50	7.20	<0.01	33.90
	N'Zi, 2016	4.23	2.47	6.00	<0.01	31.68
	Subgroup Overall	5.44	3.38	7.49	<0.01	
TCTP	Job, 2020	0.55	0.10	1.00	0.02	34.42
	Subgroup Overall	0.55	0.10	1.00	0.02	
	Overall	3.68	0.28	7.09	0.03	

Figure 2a: Forest plot for positive parenting behaviours according to DPICS score. A higher score indicates greater frequency of behaviour

Subgroup	Paper	Hedges'g	95% CI Lower	95% CI Upper	p-value	weight (%)
PCIT/CDIT	Mersky, 2016	-11.57	-13.02	-10.12	<0.01	33.16
	N'Zi, 2016	-2.23	-3.48	-0.98	<0.01	33.28
	Subgroup Overall	-6.89	-16.05	2.26	0.14	
TCTP	Job, 2020	0.78	0.32	1.24	<0.01	33.56
	Subgroup Overall	0.78	0.32	1.24	<0.01	
	Overall	-4.32	-11.6	2.97	0.25	

Figure 2b: Forest plot for negative parenting behaviours according to DPICS score. A lower score incidactes lower frequency of behaviour

Subgroup	Paper	Hedges'g	95% CI Lower	95% CI Upper	p-value	weight (%)
IY	Conn, 2014	-0.14	-0.83	0.55	0.68	20.32
	Subgroup Overall	-0.14	-0.83	0.55	0.68	
MTFC-P	Jonkman, 2017	0.64	0.07	1.22	0.03	22.49
	Subgroup Overall	0.64	0.07	1.22	0.03	
PCIT/CDIT	Danko, 2016	-0.38	-1.26	0.50	0.39	17.03
	Mersky, 2016	-0.29	-0.65	0.07	0.11	26.27
	N'Zi, 2016	-1.36	-2.45	-0.27	0.01	13.89
	Subgroup Overall	-0.50	-1.00	0.00	0.05	
	Overall	-0.22	-0.77	0.34	0.45	

Figure 2c: Forest plot for parental stress according to PSI-SF score

Figure 1.2: Forest plots for meta-analyses for parental sensitivity and stress (systematic review)

IY(tf)= Trauma-informed adapted Incredible Years, TCTP= Triple P system for foster parents, MTFC-P = Multidimensional Treatment Foster Care for pre-schoolers, PCIT= Parent Child Interaction Therapy, CDIT= Child Directed Interaction Training,

Placement stability was considered by five publications (Blair, 2018; Fisher et al., 2005; Fisher et al., 2009; Fisher et al., 2011; Miller, 2007) relating to three separate RCTs. Blair, 2018, combines data from an RCT for Parent Child Interaction Therapy (PCIT) with child welfare data. Fisher et al., 2005 and Miller, 2007, both use data from the same RCT which is comparing Early Intervention Foster Care (EIFC) with usual care. In this RCT the number of placement changes during the trial period, and success or failure of permanent placements out of foster care (i.e. adoption or return to birth parents), were considered as placement related outcome measures. Fisher et al., 2009 and Fisher et al., 2011 both utilise data from the same RCT and consider placement stability outcomes. Fisher et al., 2009 consider success of permanent placement in the 24-month period following intervention, while Fisher 2011, considers placement disruption within foster care, defining this as placements where the child is moved at the request of the caregiver or because it is believed in the child's best interests, and not because of changes in foster carer circumstances unrelating to the child, or a transition into permanent placement or return to birthparent.

There is some evidence, based on two studies (Fisher et al., 2009; Fisher et al., 2011), both utilising data from the same RCT, that MTFC-P may reduce the risk of placement disruption or breakdown for children in foster care. Fisher et al., 2009, analyse placement outcomes for a subsample (N=52) including only children who had experienced 4 or more placements by the time of the trial. 24 months after baseline measurement a signficantly greater proportion ($p<0.01$) of the MTFC-P group had achieved placement permenancy (defined as adoption or return to biological parent) than the regular foster care group, 69% and 30% respectively. There was also a significantly greater proportion ($p<0.01$) of successful first permenant placement attempts for the MTFC-P group. Fisher et al., 2011, explore placement disruption (placements ended at request of caregiver or as deemed in childs best interests, excluding neutral or non-negative reasons for placement termination), within the full RCT sample (N=117). Within the regular foster care group is a significant linear relationship whereby the risk of placement disruption increases by 10% with each additional type of challenging behaviour after 5 behaviours. This relationship is not seen in the MTFC-P group, and the author's therefore hypothesise that MTFC-P may mitigate the impact of challenging behaviour on placement disruption. Miller, 2007 utilising a sub-sample of participants data from within the EIFC trial (Fisher et al., 2005) considered various placement stability indicators including initiation of permanent placement and the frequency of placement disruption. This showed that there were statistically significantly (p=0.017) fewer placement disruptions within 24 months for the start of the RCT in the intervention group. They also found that placement permenancy was more likely in the intervention group for the full sample analysed and also in a subgroup analysis which considered only children with four or more placement transitions prior to the study (Miller, 2007).

A similar approach integrating social care records with data from an RCT comparing PCIT with regular foster care (Mersky et al., 2015) demonstrated through logistic regression analysis that the odds of achieving placement permenance within 12 months was 2.63 times greater in the intervention (PCIT) arm compared with control group.This study did not find a significant difference in the proportion of placement disruptions between the two arms of the study (Blair et al., 2019).

Discussion

Previous systematic reviews and meta-analysis have demonstrated the effectiveness of psychological interventions for children in foster care across childhood and adolescence (Bergström et al., 2020), and under 12 years of age (Hambrick et al., 2016). In addition a previous meta-analysis has demonstrated the effectiveness of parenting interventions for foster carer skill-related outcomes across childhood and adolescence (Schoemaker et al., 2020b).

However, this review focuses specifically on the parent and placement level outcomes associated with psychological interventions targeting social, emotional and developmental needs of pre-school children, (either directly or indirectly) and to our knowledge is the first review to focus solely on these outcome measures. This systematic review and meta-analyses demonstrate some effectiveness of some of these interventions for parental sensitivity and placement stability but not for parental stress. While these are promising findings it should be noted that the quality of evidence was low for all studies included and there was a high risk of bias identified for five studies. Study sample size was modest, increasing the uncertainty around findings. Finally, calculations used to estimate effect sizes rely on assumptions which introduce imprecision to the data. Caution should therefore be applied when interpreting review findings and meta-analyses.

There are seven different therapeutic interventions described within this review. While these are distinct interventions in their materials, method of delivery, and length, they all focus on the relationship between the child and parent and are informed by similar theories, for example attachment theory and social learning theory. They also are intended to target similar areas including the parent-child relationship and atonement, and child internalising or externalising difficulties. Psychoeducation and skills training for the foster carers were included within all interventions. In some cases (PCIT, TPTC, IY) this was delivered through group sessions, in others (ABC, FFI, VIPP-FC) through individual 'coaching' sessions. MTFC-P has the least in common with the other interventions included in the review as it is delivered over a year, whereas other interventions were generally delivered over a 2–4-month period. In addition, it includes both pre-training for the foster parent and then individual support for child and foster parent. This therefore means that the time between pre- and post- intervention outcome measure for the MTFC-P group is substantially longer than other interventions included in the review. While holding these differences in mind, this review considered all the interventions together with subgroup analysis and comparison between intervention types where appropriate.

Providing care to a child who has experienced maltreatment requires specialised skills and understanding of the impact of developmental trauma on a child's relational needs and attachment (Dozier, 2003a; Vasileva & Petermann, 2018). Previous research has demonstrated the significance of parental sensitivity in relation to child behaviour (Cooke et al., 2022) and attachment (Deans, 2020). It can therefore be presumed that enhancing foster carer sensitivity and skills will impact positively on the child and should be a core target for therapeutic intervention particularly with foster children at this age (under 7). This review finds that psychotherapeutic interventions are effective in increasing parental sensitivity within this population. Comparing between interventions, the strongest evidence supports ABC and PCIT related interventions.

However, there are several factors limiting the reliability of comparison between interventions. Firstly, the conceptualisation of parent/carer sensitivity is not entirely consistent across different studies, and different outcome measures and definitions are used. Even within the three studies using the same outcome measure (DPICS) there were some differences in the definition of 'positive' and 'negative' parenting behaviour when grouping the coded parental behaviour. Furthermore, there are many other aspects of parental skill and sensitivity (for example sensitive discipline) which were not considered in this review. Secondly, while the strongest evidence within the meta-analysis was supporting PCIT related interventions, the measurement tool (DPICS) was developed for this intervention and is therefore likely to be particularly sensitive to indicators of change associated with PCIT and less sensitive to other changes in parental sensitivity.

The second carer outcome variable reviewed is carer stress. This is important with regard to carers' health and wellbeing and also because carer stress levels can impact on their sensitivity toward the child, and affect foster carers' choice to continue providing a child placement (Goemans et al., 2020). Evidence regarding the effect of interventions on carer stress was inconsistent, and meta-analysis concluded there was no effect of interventions overall on parental stress. Findings were particularly inconsistent when comparing the effect of MTFC-P on parental stress, with one study reporting a statistically significant increase in stress and another significant decrease. MTFC-P was the longest intervention (9-12 months) within this review, and one possible explanation for the increase in parental stress reported by one study, could be the stress associated with the level of commitment and time required of parents by the intervention.

Given the correlation between the child's difficulties and parental stress (Konijn et al., 2019), the limited benefit of these psychological interventions for parental stress was surprising. It could be that a reduction in parental stress is a longer-term outcome and could not be captured by outcome measures taken immediately at the conclusion of the intervention. One hypothesis supporting this suggestion is that parents are being asked to learn and implement new skills and approaches during these interventions, and there could be an initial increase in stress and uncertainty for parents associated with implementing unfamiliar strategies. Another explanation consistent with the hypothesis that benefits for parental stress might be a longer-term outcome is that if a reduction in parental stress is secondary to improvements in child behaviour and parent skill, then one would anticipate any reduction in stress coming after other changes had occurred. On the other hand, it is possible that these interventions do not improve parental stress. In fact, it might be that an increase in parental skill gained through interventions is enabling parents to 'manage' more challenging situations effectively, but that the level of stress to parents associated remains high or is increased as parents become more able.

Finally, regarding placement stability there was some evidence that MCFC-P and PCIT decrease the risk of placement disruption or increase the chance of placement permanency. However, there was a high level of variation in the way in which placement permanency was defined and measured across studies, limiting the extent to which data could be integrated within the review. This challenge has also been identified in other reviews considering placement stability (Maguire et al., 2024), and highlights a need to develop more consistent measurement of placement stability in order to assess intervention impact on this outcome. Furthermore, placement stability was only considered in a small number of published studies (two of the 5 included articles on placement stability were PhD theses rather publications in peer reviewed journals) and all bar one included study related to the MTFC-P intervention and were completed through the same research team. This finding could also be relevant to understanding the impact of interventions on parental stress, as it might illustrate an increase in the threshold of complexity and distress that would result in placement breakdown following an intervention.

Clinical implications and future research

Clinically these findings highlight the potential benefit of psychological interventions in improving parental sensitivity, an important mediating variable for longer term child focused outcomes including attachment and atonement to their caregiver. Given the high level of heterogeneity across studies and multiple intervention types included it is difficult to draw firm conclusions regarding the comparative effectiveness of these psychological interventions. This is particularly the case given that not all intervention types are considered for all outcome measures. Therefore, while PCIT and ABC show promise as interventions improving parental sensitivity, the potential benefit of MTFC-P and IY for parental sensitivity is not assessed. Similarly, only 4 of the 7 intervention types are considered for parental stress and 2 of the 7 intervention types for placement stability. The low quality of included studies according to

GRADE assessment and high risk of bias further limits the strength of evidence reported. However, these interventions do not appear to improve parental stress. Therefore, clinically it may be that parental stress requires alternative interventions, and this should be considered when assessing the needs of a foster carer and foster child.

Given the complex interaction between foster carer commitment, stress, placement stability and child outcomes, there is a need for further research and longer term follow up measures, to develop our understanding of the interaction between these constructs and which interventions are best able to meet differing specific needs (Turner et al., 2023b; Turner et al., 2022a). There are also other limitations to this review, which could be addressed by future research including literature reviews. Regarding inclusion criteria, RCTs available in English only have been included in this review, and future research could explore literature not published in English, and other study design methods. A systematic review of qualitative research in this area or qualitative studies exploring foster carers experiences of these interventions could be valuable particularly in understanding parental stress. A particular aim of this review was to focus specifically on early intervention (children under 7). However, a downside to this approach was the exclusion of other RCTs which included children under 7 but also older children, for example (Moody et al., 2020). As with any systematic review, limitations within the included articles also follow through into the review, and of relevance here was the common exclusion of certain groups including children with disabilities and the location of the included studies solely in high-resource countries.

Conclusion

There is evidence that psychological interventions aimed at foster carers improve parental sensitivity and may improve placement stability for children under 7 in foster care. It is not possible to compare between interventions since it was necessary to consider all parent and placement outcomes together, but PCIT appears beneficial for parental sensitivity in particular. There is not evidence these interventions improve parental stress. It is possible that more directly targeted intervention is required to improve parental stress, rather than hoping to see reduction in parental stress as a secondary gain from child focused interventions as reviewed here. That said, it remains important to consider the interaction between parental skills, parental stress, placement stability and child outcomes, demonstrated to impact cyclically on one another in the literature (Konijn et al., 2019). The evidence included in this review was low quality and with a high risk of bias for many included studies, findings should therefore be interpreted with caution. There is a need for larger and higher quality RCTs in this area. In addition, there is a need for further clarity around the definition and measurement of the constructs to better understand effectiveness for different outcomes, considering both short- and long-term effects.

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Chapter 2

The experience of supporting a child with maltreatment associated psychiatric problems (MAPP): an in-depth exploration of parent and professional experiences and perspectives using multi-perspectival interpretative phenomenological analysis.

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Plain Language Summary

What are the experiences of people, including parents and professionals, supporting a child with maltreatment associated psychiatric problems (MAPP)?

Background

Children who have experienced abuse or maltreatment are more likely to have mental health difficulties, attachment disorders and neurodevelopmental conditions, such as Attention Deficit Hyperactivity Disorder (ADHD). Attachment disorders affect the way the child interacts with and form relationships with other people including their caregivers. We use the term maltreatment associated psychiatric problems (MAPP) to describe the complex combination of all these different difficulties.

Treatment guidelines often consider different mental health or neurodevelopmental conditions separately and may not be suitable for children with multiple co-occurring difficulties. For children in foster and adoptive care, who are likely to have experienced maltreatment, there is growing evidence to support attachment-based interventions, but further research is needed to determine the most effective interventions for children with MAPP.

The Relationships in Good Hands Trial (RIGHT) is a randomised-controlled trial for foster / adoptive children, which is comparing an intervention called Dyadic Developmental Psychotherapy (DDP), with services as usual (SAU). DDP is an attachment-based treatment involving therapy with both the child and their parent/ carer together.

Aims and Questions

The aim of this study is to understand what supporting a child with MAPP is like for parents and professionals.

Methods

We chose six children, who had received DDP or SAU from the RIGHT project. We invited their parents and different professionals, including teachers, social workers and therapists to participate in an interview about their experience supporting the child. In total 15 interviews were conducted. We used Interpretative Phenomenological Analysis to understand participants experiences.

Main Findings and Conclusions

Our interpretation gave six themes relating to the experience supporting a child with MAPP.

1. **The nature and far-reaching impact of MAPP:** participants felt the experience of providing support was dictated by the way MAPP effected the child and those around the child.
2. **Experiences navigating and building parent – professional relationships:** a fundamental element of supporting a child with MAPP appeared to be building and navigating complicated parent – professional relationships
3. **Trying to flexibly meet the child's needs despite an inflexible system:** participants described needing to respond flexibly to the child but finding services were restrictive.
4. **Frustration and disappointment in statutory services:** participants described experiencing disappointment and a loss of faith in services available to support the child.
5. **Constantly facing difficult decisions:** participants described constantly making difficult decisions, and having to balance priorities
6. **Apprehension with hope:** participants expressed worry for the child in the future, but also a strong sense of hope.

The findings highlight how challenging it can be supporting a child with MAPP, and that many of these challenges relate to systemic issues and difficulties navigating and accessing support services. The findings suggest that to support the child effectively, you need to consider the needs of the whole support system around a child.

References

Minnis, H. (2021). Relationships in Good Hands Trial: (RIGHT) clinical and cost effectiveness of Dyadic Developmental Psychotherapy for abused and neglected young children with maltreatment-associated problems and their parents https://fundingawards.nihr.ac.uk/award/NIHR127801.

Abstract

Background: Maltreatment associated psychiatric problems (MAPP) in children and adolescents can be highly variable and commonly include both trauma related difficulties and neurodevelopmental conditions. Treatment guidelines for this population require further development. The Relationships in Good Hands Trial (RIGHT) is a multi-site randomised controlled trial comparing Dyadic Developmental Psychotherapy (DDP) with services as usual (SAU) for children with MAPP in permanent foster or adoptive care. This qualitative study is a part of the RIGHT process evaluation.

Objective: To understand the experience of supporting a child with MAPP, considering both parent and professional perspectives.

Participants and setting: Parents and professionals (social workers, therapist and teachers) supporting children with MAPP within the RIGHT trial.

Methods: Six case-studies were identified representing both trial arms at different trial sites. Qualitative interviews with parents and professionals supporting each child were conducted and interpreted using multi-perspectival Interpretative Phenomenological Analysis (IPA).

Results: Six themes were interpreted from the data: the nature and far-reaching impact of MAPP; experiences navigating and building parent – professional relationships; trying to flexibly meet the child’s needs despite an inflexible system; frustration and disappointment in statutory services; constantly facing difficult decisions; and apprehension with hope.

Conclusions: There is significant interaction between the child, parent and the wider context including statutory services. This is explored within a syndemics framework, whereby trauma related and neurodevelopmental conditions co-occurring within their context increases overall difficulties beyond that of comorbidity. Supporting the child therefore requires supporting the whole system around the child.

Keywords: child mental health, foster care, adoption, syndemics, child maltreatment

Introduction

Maltreatment-associated psychiatric problems (MAPP)

Child maltreatment includes abuse and neglect to anyone under 18, including but not limited to physical, sexual, emotional abuse, negligence or exploitation(World Health Organization (WHO), 2022). Children who have experienced maltreatment are at much higher risk than the general population of experiencing a broad range of mental health difficulties during childhood and adulthood (Engler et al., 2020; Struck et al., 2020; Vasileva & Petermann, 2018). The specific difficulties and presentation of children who have experienced maltreatment is highly complex, individually variable and can include several co-existing mental health and neurodevelopmental diagnoses. The term maltreatment-associated psychiatric problems (MAPP) describes this broad array of overlapping difficulties (Minnis, 2013).

While MAPP presentations are highly varied, there are two types of attachment disorder, which are particularly prevalent within children who have experienced maltreatment(Lehmann et al., 2020). Reactive Attachment Disorder (RAD) and Disinhibited Social Engagement Disorder (DSED) both result from a history of grossly insufficient care and difficulties present by 5 years of age(World Health Organization (WHO), 2019). Post-Traumatic Stress Disorder (PTSD) and complex PTSD are also common (Hiller et al., 2021), although these diagnoses are not specific to maltreatment, and can develop after other traumatic experiences. Research using the Adverse Childhood Experiences (ACEs) questionnaire, has demonstrated a dose-response relationship between the number of adverse experiences and risk of physical and mental health difficulties at the population level (Baldwin et al., 2021). However, this does not correspond to individual trajectories, and many children show resilience after maltreatment (Witt et al., 2019).

Rates of neurodevelopmental conditions (NDCs) including Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorder (ASD), Tic Disorders and Intellectual

Disabilities are also higher in children with MAPP than those who have not experienced maltreatment. The reasons behind this association are unclear, and one hypothesis is that maltreatment may exacerbate symptoms leading to a clinical diagnosis rather than playing a causal role (Dinkler et al., 2017). Regardless of the reason, the co-existence of NDCs and adverse childhood experiences can complicate or delay diagnostic/ treatment processes and increase stressors for already vulnerable children. The double jeopardy model has been proposed to highlight the increased health risk associated with both NDCs and childhood adversity, via an additive challenge to the stress response system (Gajwani & Minnis, 2023).

Current guidelines and evidence-base for MAPP treatment and support

The first priority for any child experiencing maltreatment is to prevent further maltreatment, and many children with maltreatment experience are therefore living in foster or adoptive care (Neil et al., 2019). There are no guidelines specific for the treatment and support of children with MAPP. However, relevant NICE guidelines include: *looked-after children and young people*; *attachment difficulties in children and young people*; and guidelines for *supporting attachment in children adopted from or in care* (NICE, 2015, 2020, 2021). Together, these highlight the importance of considering the child's relationships, attachment, and placement stability, as well as providing training for parents and teachers. However, specific guidance on the nature of information or training is limited. There is a recommendation for parent sensitivity and behaviour training, or parent-child psychotherapy to improve attachment difficulties but beyond this the guidance links to disorder specific guidelines e.g. PTSD. There is a risk that this approach will not identify children with the varied co-occurring symptoms of MAPP or that their difficulties will only be partially addressed.

Furthermore, attachment disorders can impact adversely on the child's social functioning, including their developing relationships with new caregivers (Guyon-Harris et al., 2019). Providing care and building attachment relationships with children with previous experiences of inadequate care may require more than parental sensitivity. If the adult is guided by sensitively responding to the child's cues alone this will not necessarily generate nurturing care. It may be more therapeutic for the carer to 'gently challenge' the child in order to elicit changes in their patterns of care seeking (Dozier, 2003b). That said, there is evidence that RAD symptoms in some children may decrease naturally with time spent in a foster care environment safe from maltreatment (Bruce et al., 2019), and that carer's commitment may play a role in ameliorating RAD symptoms (Turner et al., 2022b). Considering DSED there is evidence that for some children symptoms rapidly decrease within foster care but persist for others (Guyon-Harris et al., 2018). This highlights the central and complicated role for the caregiver in support and intervention for the child.

Systematic reviews have identified positive outcomes associated with attachment and relational interventions for children in foster care, particularly highlighting interventions which enhance parental attunement and sensitivity. However, they also highlight the considerable need for further research and limited evidence available not least due to the poor methodological strength of many relevant studies available to date (Kemmis-Riggs et al., 2018; Kerr & Cossar, 2014).

One such attachment-based intervention is Dyadic Developmental Psychotherapy (DDP). DDP is a family-based intervention developed to treat children with disorders of attachment (Becker-Weidman & Hughes, 2008). The intervention aims to help develop a secure attachment relationship, feelings of trust and safety between parent/carer and child, to enable recovery from previous trauma (Stock et al., 2016). This is typically achieved through a combination of intensive sessions both with the parent only and parent-child together (Hughes, 2017). DDP was initially developed for children in foster and adoptive care, and has a growing evidence base for use as a post-adoption intervention, but a randomised-controlled trial for DDP in this population is yet to be completed (Stock et al., 2016).

The Relationships in Good Hands Trial (RIGHT), a UK-based randomised controlled trial (NCT04187911) within which this study is embedded, is currently exploring the effectiveness of DDP as an intervention for children with MAPP in permanent foster or adoptive care. The trial compares DDP with service as usual (SAU), deemed the most appropriate comparator due to the variability in existing services. The trial is being conducted across three types of sites, with both DDP and SAU being delivered by a different provider each site, so as to capture the different contexts through which interventions for children are commonly provided: NHS child and adolescent mental health services (CAMHS), local authority social care services, and voluntary sector/ private practice (Minnis, 2021).

The experience of supporting a child with MAPP

Given the central role parents/ carers play in the child's support and in interventions, and previous research demonstrating the high levels of stress experienced (e.g. (Harding et al., 2018), it is important to understand their experiences. Previous research has explored various caregiver factors potentially influencing the child's mental health, including the caregiver's mental health (Goemans et al., 2020) and commitment to the child (Turner et al., 2022b). Access to mental health services and trauma-informed professional support are important mitigating factors for caregiver strain among adoptive and foster parents (Leake et al., 2019).

It is recognised that specialist and multi-agency support, beyond that of traditional services, can be required to support the complex mental health needs of children in foster and adoptive care (Golding, 2010). Considering specifically the child's mental health needs, foster and adoptive parents, have highlighted challenges associated with communication and collaboration with and between services (Barnett et al., 2018), and a lack of systemic support and barriers to supporting the child's mental health (Fergeus et al., 2019). Within the UK, studies have found foster carers confidence managing their child's emotional needs variable and reported barriers when accessing social care and mental health services (Hiller et al., 2020).

Adoptive parents' levels of dissatisfaction with CAMHS also appears to be particularly high (Woolgar et al., 2023).

This literature gives some insight to the likely experiences of parents/ carers supporting a child with MAPP in the UK. However, many of these studies are conducted within foster care settings and include both short-term/ temporary and long-term foster placements. The experiences of adoptive parents and permanent foster carers are likely to differ to some extent from the broader population of foster carers. There is also a gap in the literature relating to the experiences of professionals, who also play an important role in the child's support. Alongside parents' perspectives it is therefore also important to understand the experiences and perspectives of the professionals supporting them, to gain a fuller picture of the experience of supporting the child.

Current study

The current study addresses this gap in the literature through an in-depth exploration of six case studies, each centred around a child with MAPP and incorporating multiple perspectives from different members of each child's support network (parents and professionals). The aim of the study was to understand and compare the experiences of carers/parents and professionals when supporting a specific child with MAPP. While cases have been identified from within the RIGHT trial the phenomenon of interest for this research is the experience of supporting the child, regardless of intervention or service being received.

Methods

Research Design

Following case study methodology(Dooley, 2002), six cases were identified to explore the experience of supporting a child with MAPP in different contexts in depth. For each case, semi-structured qualitative interviews were conducted with parents and professionals within the child's network and analysed using multi-perspectival Interpretative Phenomenological

Analysis (IPA) (Larkin et al., 2018). IPA is particularly suited for exploring individual perceptions and experiences of a particular phenomenon (Smith et al., 2022), in this case the phenomenon being *supporting a child with MAPP*. A multi-perspectival approach was chosen in recognition that multiple parties support a child with MAPP, and their experiences were likely to have both shared and differing aspects. Ethical approval for the study was obtained from West of Scotland Research Ethics Committee 3 (appendix 7, page 112).

Sampling procedure and study participants

Two cases, one per intervention arm, were recruited from each of the three geographical sites involved in the feasibility phase of the multi-site randomised controlled trial: Relationships in Good Hands Trial (RIGHT.) Each site represented a different service delivery context (NHS, social care, private practice). Purposeful sampling (Patton, 2015) was used to identify cases with the aim of developing a sample which included children at a range of ages (within the age range of the trial, which is 5-12) and where parent type (foster or adoptive parent) and child gender were balanced as far as possible. For each case, parents were initially recruited through email or phone invitation. When identifying suitable cases parents were initially consented, and their guidance was sought to identify key professionals in the child's network, who were then invited to participate by telephone or email contact. A total of twelve parents were invited to participate, and six declined involvement (four from the same trial site). Of those who declined to participate reasons given were: too busy with work (1), things too difficult with children at the time (1), declined without giving a reason (3) and did not respond to communication (1).

All participants gave written informed consent to participating in the study. Interviews of 30-60 minutes were completed with fifteen participants: six parents (four adoptive, two foster parents), three DDP therapists, one CAMHS clinician, three staff from social work teams and two teachers. Two further teachers and one social worker were invited to interview but did not consent to participation within the timescale of the study. One parent asked the researcher not to contact the child's school because they wanted to protect any time the teacher had for discussions about the child for communication with health and social care professionals. Participant demographics are included in Table 2.1, children's names have been changed to anonymise the data.

Data collection

Semi-structured interview guides were developed to facilitate understanding of each participant's unique experience and perspectives relevant to the research questions. Interview schedules were designed by researcher (CB), reviewed by the RIGHT project staff and approved by the West of Scotland Research Ethics Committee 3. In line with the IPA methodology open and exploratory questions were used (e.g. '*Can you tell me about your experience of…').* Interview schedules provided a flexible guide for interviews, but the content was also guided by participants' experiences. Interviews were conducted by researcher (CB) remotely via MS Teams as one-off video interviews lasting up to 60 minutes in length between February and June 2024. Interviews were audio-recorded and transcribed verbatim for analysis. Demographic information for parents and children were available through the trial database and gathered during interviews for professionals interviewed. Interview questions can be found in table 2.2 below. For full interview schedules, including prompt questions see links in *appendix 9, page 123.*

Table 2.1: Summary demographic information for each case study, and interview participants (major research project)

Case (child name)	**Child Age at referral**	**Child Gender**	**Child ethnicity**	**Placement Type**	**Household Income**	**Trial Arm**	**Service Type**	**Participant role**	**Participant Age**	**Participant Gender**	**Participant Ethnicity**
Leo	6	Male	White British	Adopted	150,000+	DDP	Private	DDP therapist (Consultant Clinical Psychologist/ DDP)	45-55	Male	White British
								Adoptive Parent	35-45	Male	White British
Elliott	12	Male	White British	Foster Care	11,501-33,500	DDP	NHS	Foster Carer	55-65	Female	White British
								DDP Therapist (Clinical Psychologist)	35-45	Female	White Scottish
Leah	6	Female	White British	Adopted	33,501-150,000	DDP	Social Care	Adoptive Parent	45-55	Female	White British
								Senior Social Worker	35-45	Female	White British
								Senior Practitioner	35-45	Female	White Other
Sam	9	Male	White British	Adopted	33,501-150,000	SAU	Private	Adoptive Parent	45-55	Female	White British
								Teacher (Deputy Head)	35-45	Female	White British
Abigail	10	Female	White British	Adopted	33,501-150,000	SAU	NHS	Adoptive Parent	35-45	Female	White British
								Social work (Children and Families support worker)	45-55	Male	White Scottish
								CAMHS Therapist (Counselling psychologist)	55-65	Female	White Scottish
Haley	12	Female	White British	Foster Care	11,501-33,500	SAU	Social Care	Senior Social Worker	25-35	Female	Other Black Background
								Teacher (Deputy head of year)	55-65	Female	White British
								Foster Carer	45-55	Female	White British

N.B. Children’s names have been changed to anonymise data

Table 2.2: Interview Questions
Parent interviews: **Context:** Can you start by telling me a little about {insert child name}? Can you tell me about your relationship with {insert child's name}? Are there any other key members of your family involved in your child's care? Can you tell me about what it feels being X parent? **Experience supporting child with MAPP receiving services through RIGHT trial.** How would you describe the difficulties that lead you to seeking support and becoming a part of the RIGHT trial? How do you experience your child's difficulties? How do you think they impact on your relationship with your child? What was your decision-making process when looking for support for your child and when joining the RIGHT trial? What has it been like for you supporting your child to access support? **Role** How would you describe your role in relation to your child's mental health support? What has your experience of doing this (whatever role they described) been like? **RIGHT Trial** Based on your experience, how effective the support X received/ is receiving has been? Do you feel you have been able meet the needs of your child and your family? What has the experience of joining an RCT trial been like for you?
Professional Interviews: **Context:** Can you briefly describe your job and remit? Today's interview is focused on your experience of supporting {child's name}. Can you start by telling me a little about {insert child name}? Can you tell me about your relationship with {insert child's name}? Can you tell me about what it feels like performing this role with X? **Experience supporting child with MAPP receiving services through RIGHT trial.** How would you describe the difficulties that lead {child's name} to receiving support from yourself? Out the start of your work with X, how did you make decisions about how you were going to work with them and your approach? What has it been like for you supporting X and their family? How would say this case compares with your 'normal' caseload? **Role** How would you describe your role in supporting X and their family? What has your experience of doing this (whatever role they described) been like? **RIGHT Trial** Based on your experience, how effective the support X received/ is receiving has been? Do you feel you have been able meet the needs of X and their family? What has the experience of joining and RCT trial been like for you?
Teacher Interviews: **Context:** Can you just start my letting me know how you know X, how much contact you have with them and for how long you have known them? Today's interview is focused on your experience of supporting {child's name}. Can you start by telling me a little about {insert child name} from your experience? **Role** Can you briefly describe your role in relation to X? Can you tell me about what it feels like performing this role with X? How would you describe your role in supporting X and their family? What has your experience of doing this (whatever role they described) been like? **Experience supporting child with MAPP receiving services through RIGHT trial.** How would you describe any difficulties that the child experiences that you have noticed through your role? How would you describe your relationship and level of involvement with X parents or any other professionals? What is your experience of their being in treatment, and how if at all have you been involved in this? **RIGHT Trial** Based on your experience of the child, how effective or otherwise is the support X received/ is receiving has been? What has the experience of providing information and support to those supporting X on this RCT?

<u>*Data Analysis*</u>

Multi-perspectival Interpretative Phenomenological Analysis (Larkin et al., 2018) was conducted by author (CB), with regular discussion and review of emerging themes through supervision. The analysis followed the approach outlined by Smith, Flowers and Larkin(Smith et al., 2022), as described below, and illustrated in *figure 2.1*.

Each transcript was fully analysed individually before cross-case analysis. This began with reading and re-reading the transcript and making line by line annotations considering the semantic content, use of language, and the researcher's reflections and initial interpretation. Following this process the data was interpreted into *experiential statements (ES)*. All the *ES* were then visualised and manually grouped into *personal experiential themes (PETs)* interpreted for each individual participant.

Once each interview had been fully analysed individually, they were grouped into 'multi-perspectival cases' for further analysis to identify *group experiential themes (GETs)*. The multi-perspectival cases were defined according to case study (i.e. which child they were describing), and then according to the participants role in relation to the child (i.e. parent, teacher, therapist, social worker). To interpret *GETs* for each multi-perspectival case the *PETs* interpreted for relevant participants were visualised together as well as the *ESs* nested within these. The grouping of *ESs* reflected in *GETs* sometimes differed to their grouping within *PETs*. This occurred when themes appeared less significant at the individual level but recurred across multiple accounts, increasing their significance within the group experience. Finally, to interpret *GETs* for the full dataset, the process described above was repeated once more. This time the initial analysis involved comparing across *GETs* from each case study, before zooming in to explore the data at the level of *PETs* and *ES*.

Whilst described stepwise, this was not a linear process and included iterative cycles of coding and interpretation. Moving between the detailed and bigger picture focus within the analysis enables fuller understanding of both, as described by the hermeneutic cycle whereby we need the whole to understand the parts and simultaneously need the parts to understand the whole (Smith et al., 2022).

NVivo software was used to organise, visualise and store the data, following the QDA Training guide for use of NVivo for IPA (QDA Training Admin, 2023) . Nvivo concept maps were used to visualise and group *ES* into *PETs* and *GETs.* Each *ES* was represented by a different NVivo code, which were then 'nested' into top-level-codes when creating *PETs* and *GETs.*

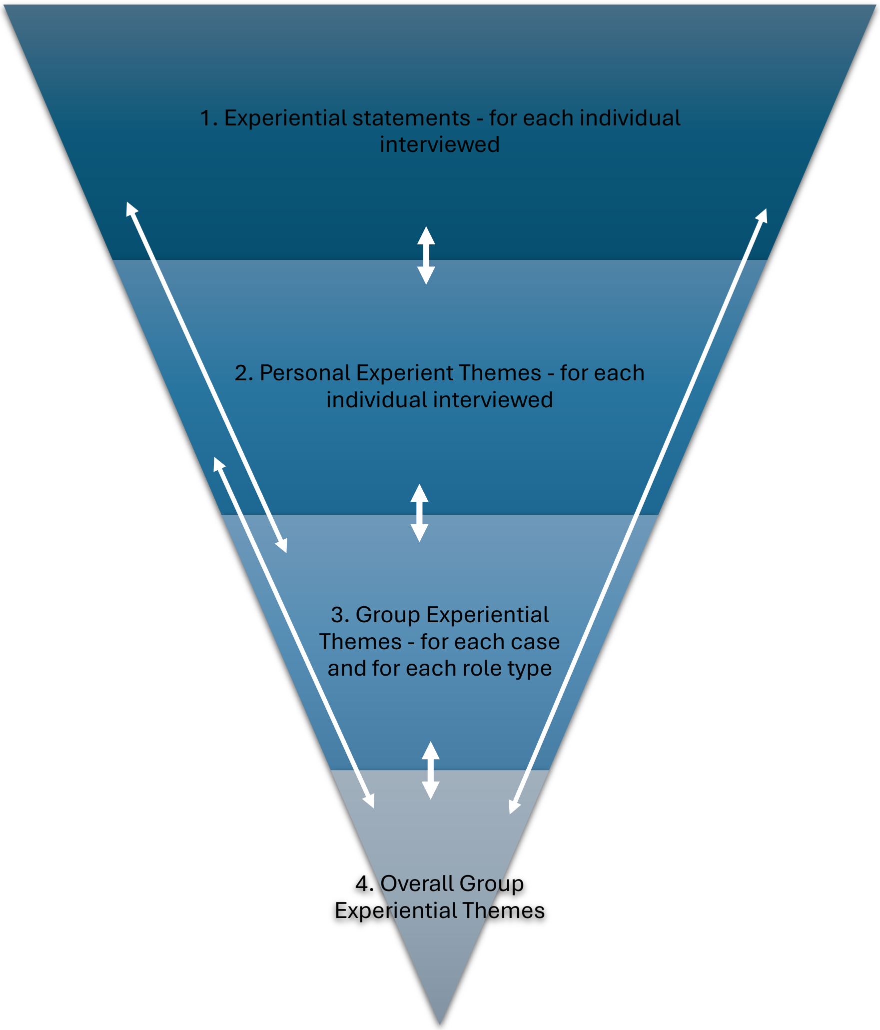

Figure 2.1: Illustration of analysis procedure. White arrow representation bidirectional interaction between each layer of analysis.

Reflexivity

Within IPA there is a 'double hermeneutic': the researcher is trying to make sense of the participant's sense making around their experience of the phenomenon of interest. The data is therefore a reflection of both researcher and participant's sense making and interpretative process. This is a dynamic process where the interpretative context is continuously changing, for instance the researcher's experience of earlier interviews may unconsciously influence later interviews (Smith et al., 2022). Reflexivity enables the researcher to actively consider their own beliefs, biases and judgements throughout the research process (Jamieson et al., 2023).

For this study, data collection and analysis were conducted by female researcher (CB), as part of a doctorate in clinical psychology. Supervision and personal reflective notes were used throughout the research process. Particularly relevant themes from these reflections included: the researcher's own experience accessing and supporting others to access services, and their current position working within health and social care services. The researcher was introduced as conducting research within the RIGHT trial, and this may have influenced information shared by participants. The interviewer was not known to the participants prior to recruitment; however, some had some had taken part in qualitative interviews with other researchers within the RIGHT trial. Regarding researcher experience, CB had MSc level qualification prior to doctoral training, received qualitative research methods teaching through the doctoral training course, and an additional training day specifically on IPA methodology.

Findings

The group experiential themes (GETs) were interpreted from across the whole participant group, including parents and professionals. Within these were areas of similarity and difference in the experiences and sense making between different individuals, some of which may be indicative of differences in their context and role to the child as well as uniqueness of their own experience. The GETs for each case study and role in relation to the child can be found in *appendix 4, page 109.*

The following six overarching themes, relating to the experience of supporting a child with MAPP, were interpreted from the data:

1. **The nature and far-reaching impact of MAPP:** There was a sense that the experience of providing support was driven by the way MAPP impacted the child and their network
2. **Experiences navigating and building parent – professional relationships:** A fundamental element of supporting a child with MAPP appeared to be building and navigating complex parent – professional relationships
3. **Trying to flexibly meet the child's needs despite an inflexible system:** Needing to be flexible and responsive but being restricted by service criteria and processes was a common support experience
4. **Frustration and disappointment in statutory services:** The experience of supporting a child with MAPP brings disillusionment and a loss of faith in services that participants felt were meant to support the child
5. **Constantly facing difficult decisions:** The experience of supporting a child with MAPP was paved with difficult decisions, dilemmas and competing priorities
6. **Apprehension with hope:** The experience of supporting a child with MAPP brings feelings of apprehension about the child's future but this exists concurrently with a strong sense of hope.

1. The nature and far-reaching impact of MAPP

To understand the experience of supporting MAPP it felt important to explore and understand MAPP as it was experienced and perceived by those supporting the child. All participants spoke readily about the child's unique difficulties and had spent time trying to understand and make sense of the child's difficulties so that they could support them. Within this theme there were three distinct subthemes: the child's unique MAPP presentation; the child's vulnerability to further difficulties due to interactions between school environmental stressors and MAPP; and the impact of MAPP on other people beyond the child.

The child's unique MAPP presentation: The expression of MAPP across the different case studies had both commonalities and considerable variability, as can be seen in Table 2.3, below. The intensity and nature of difficulties varied between children, with some children functioning well in school and daily life with relatively small adjustments and others presenting with extremely complex and longstanding difficulties affecting all aspects of their life.

Table 2.3: Summary of each child presentation (major research project)

Abigail	*OCD, emotional regulation difficulties, NDC (ASD&ADHD), relational difficulties, variable presentation between people, avoids talking about difficulties.*
Leo	*Global developmental delay, emotion regulation difficulties, relational and attachment difficulties*
Elliott	*'Shut down', child sexualised behaviour, self-neglect, poor hygiene, shame, eating difficulties, food hoarding, stealing, relational difficulties*
Leah	*Cognitive difficulties, developmental delay, sleep difficulties, queried NDC (FASD/ADHD), emotion regulation difficulties, relational difficulties*
Sam	*Attention difficulties, difficulties with change, hypervigilance, night terrors, difficult relaxing, queried NDC (ADHD), significant masking outside of home*
Haley	*Attention difficulties, affected by environment and peers, NDC (ADHD &ASD)*

Most consistently reported difficulties were *difficulty with understanding and regulating emotions,* and *relational and attachment difficulties.* Many parents described proactively supporting the child and others (including wider family) in navigating their relationships or decreasing contact between the child and extended family. All parents also described their child's presentation changing over time and being different with different people. This commonly included masking their difficulties while at school.

The child's vulnerability to further difficulties, due to interactions between school environmental stressors and MAPP: There was a sense within several case studies that the interaction between MAPP and the child's environment, particularly at school and within peer relations, was increasing their vulnerability. Elliott's case was a particularly notable example of this where he was being profoundly bullied at school, to the extent that the DDP intervention had to be paused. The bullying he was experiencing was directly related to his MAPP presentation, and the additional adversity from bullying was further compounding his presenting difficulties. Unkindness from peers about MAPP-related difficulties were also described for Leah:

'I think the behaviours we see are mainly because of what's happening in school because she feels like she can't keep up with the others and that she is different to the others because she sounds different, and she's always getting asked "why she doesn't speak English?" That seems to be what a lot of children say to her and that's kind of stuck...' Leah's parent.

Haley's presentation between primary and secondary school had substantially improved and those around her understood this to be the result of a new and more inclusive environment. There was a sense that within primary school additional stressors had been interacting with MAPP difficulties and that changing the environment was fundamental to the child's support:

'You can put however much therapy you want on top of school, but if the school's bad, then it's not, you know, it may not necessarily help.' – Haley's carer

The impact of MAPP on other people beyond the child: Finally, there was a strong sense that MAPP has an impact far beyond the child. In some cases, the child's presentation was directly impacting on those around them, for example hitting parents or siblings when distressed, or, in Elliott's case, hoarding food causing pest infestations in the home.

Parent's spoke about the significant stress they experienced because of MAPP, distinct from and exceeding other life stressors, impacting on their health and wellbeing:

‘The sort of exhaustion of it all, you know, I’ve kind of been off work a number of times with stress and we're under a sort of practitioner health thing, but they're always like, “if it wasn't for your children, you'd be fine” .... ‘– Abigail’s parent

For Abigail, Sam and Leah’s cases in particular, the child was described as having formed an extremely strong dependence on one parent. Sam’s parents described this adversely impacting their co-parenting relationship.

Changes in the parents’ social networks and dynamics with wider family were also described, including both instances of relationships becoming closer and more distant. Sam and Leo’s parents spoke specifically about the unique experience of adopting and feeling isolated, particularly during the early years. Leo’s parent described it feeling more difficult to build a support network without some of the social structures that bring new birth parents together (e.g. NCT classes). Sam’s parent on the other hand described other adoptive parents becoming her closest friends, as they understood her experience and were able to give advice and support around MAPP difficulties, in a way birth parents could not:

‘I could get on the phone and call them and ask their advice, which was amazing. […] because however many friends you've got, who've got birth children or, you know, your own parents, it’s completely different. Whatever people tell you it is completely different and it's just nice to know that I could pick the phone up and just have a chat with somebody who’d been through it 6 or 7 months before and could tell me “yeah, it's just normal”.’ – Sam’s parent.

2. Experiences navigating and building parent – professional relationships

From parent and professionals’ perspectives there was a strong sense that one of the main ways that they were supporting the child was through the relationships they had with other adults in the child’s support network, particularly the parent and professionals. Three subthemes were interpreted regarding this relationship: the need for trust between parent and professionals, the need to support the system not just the child, and complicated power dynamics.

The need for trust between parent and professionals: Participants expressed a need for trust in the parent-professional relationships to support the child. Where support was going well, it was often perceived as being because of good trusting relationships. Leo's therapist reflected on the closeness he felt with Leo's parents, and importance of this, through a familial metaphor:

'It felt like sort of joining the family for a bit and I was like some sort of uncle that was helpful but lived a long way away so wasn't going to last a long time' – Leo's DDP therapist

Haley's carer also highlighted the importance of trust in their relationship with her teachers:

'I think for the school trusting us and we're being on the same team, really feeling like the school is on the same team, and, for example, if she doesn't make it into school, we've not got lot of pressure, its like, "we know you're doing what you can, get her in when you can, that's brilliant, thank you". It's that kind of thing that's been the best, that we're not worrying, thinking "what are school going to say". '- Haley's carer

In contrast, where there were tensions and a lack of trust between parent and professionals, this was perceived as meaning the child was not being optimally supported. At times tensions appeared to be affecting decisions around the child's support, and increasing stress associated with supporting the child. Professionals spoke about the importance of taking time to build trust and where necessary repair relations with parents as part of their intervention:

'I think just that time to connect with mum and dad, to build that bond and relationship, to validate their experiences and the difficulties of their situation, I think that just helped' – Abigail's CAMHS clinician

Where the trust between parents and professionals was not well established, there was a sense of a perceived power hierarchy from parent to professional. Parents described feeling professionals would be listened to when they were not, and Haley's carer described feeling that it wasn't 'safe' for parents to decline services:

‘It really wasn't easy to turn it [an intervention] down because I felt like, oh, if I turn this down then maybe we won't get offered something else, you know, is it going to look bad that we've said, no to something if we're then still struggling later on...’ – Haley’s carer

The need to support the system not just the child: There was a consistency in perspectives across professionals in their view that supporting the child often means supporting the parent too. Therapists for several cases spoke about providing emotional support to parents, and noticing the impact and trauma experienced by the parents as well as the child:

‘I think it’s kind of being able to process and integrate the trauma together, including mum’s own trauma from times with Leah’s birth parents’ - Leah’s DDP therapist

Within SAU, professionals also described finding ways to support the parent or the whole system as part of their support to the child. Sam’s teacher described finding opportunities for homework to be completed at school to reduce pressure on his parents:

‘I think where you are asking them to conform in a school environment, you know there’s no getting away from that, there will be parts of the day that they just have to do what we ask. And I think parents then get the fallout of that because obviously if they ask him to do homework or read at home, they get the fallout whereas he wouldn’t necessarily give us that fallout. […] So, I do think that’s been one of the bigger challenges is checking that, where possible, we have the battles, or we take those battles away from parents, so they don’t have to.’ – Sam’s teacher

In addition to providing support to parents relating to their wellbeing, DDP therapists spoke about the joint process of building understanding and working together as ‘co-therapist’ with the parents, to support the child with MAPP. This was similarly reflected by parents describing the therapy process, and their growing skills in supporting their child:

‘The changes in Leo were in response to changes from us. So, we were changing our techniques as a result of what we were doing in the session, and it’s not made Leo easier, but I think it’s just helping us to navigate through….’ – Leo’s parent

Complicated power dynamics: As well as the trust and quality of established relationships between the parent and professionals there was a strong sense of the complicated power dynamics between them when interacting around the support of the child with MAPP, and different ways in which both parents and professionals took the role of 'expert' and looked to the other for expertise.

Professionals described feeling reliant on parents, particularly as a source of invaluable knowledge about the child and their experiences:

'The carer knew a huge amount about the birth parents because I think she had sort of facilitated contact so that was right back at the start in the early days and [she] knew the mum and had met her and all this kind of thing as well, so she was a bit of a wealth of information about his backstory.' – Elliott's DDP therapist

Beyond providing information about the child's history, Sam's teacher described looking to parents for guidance and information about how to support a child with his needs:

'I think in terms of the support we've kind of relied on the relationship between parent and us (school) and finding support through them.' - Sam's teacher

On the other side of this parent to professional power dynamic, parents spoke about feeling reliant on the professionals involved in their child's care:

'Social work wouldn't listen, because I'm only a foster carer, but because a professional had said it, that was it, fine.' – Elliott's carer.

Several parents described inconsistencies across services and between different professionals in the same role. There was a sense of 'luck' and that the quality of services depended on which worker you were allocated:

'I think it's really pot-luck, you know, with your social worker. So, if they're really experienced, then you might get recommended something really good, if they're slightly new then they maybe don't know everything that's out there.' – Leo's parent

The way in which these power dynamics played out, and the weight given to the parents' perspective within decision making, also appeared to differ according to the situation and people involved. Elliott's carer's perception of not being listened to by social work contrasted with the trust of Abigail's mum's assessment of her child by social work staff:

'Mum was wondering about possibly a diagnosis of ADHD or maybe ASD. I think mum is a GP so I guess she would have a good handle on that you know. '- Children and families support worker for Abigail.

3. Trying to flexibly meet the child's needs despite an inflexible system

When reflecting on the type of support the child needed a theme around flexibility, with two juxtaposing subthemes with it was interpreted: *the need for a flexible approach to the child's support* and *inflexible services with restrictive processes*, which did not facilitate adaptable responses to the child's needs.

The need for a flexible approach to the child's support: Both Haley and Sam were receiving support through SAU which appeared to be largely meeting their needs. A substantial proportion of this was being delivered through school as well as activities for children in foster or adoption support services, and in Sam's case privately sourced music therapy. In both cases, parents and teachers spoke about the importance of being flexible. In Sam's case, for instance, parents and teachers had found he benefited from sitting at the back of the classroom due to hypervigilance. Another aspect of this flexibility was providing the child a 'go to' or trusted adult who could respond to difficulties as they emerged, guided by the child:

'There are occasions where she may need to go out of lessons, and we just give her a little bit of TLC, a little bit of time.' – Haley's teacher

The need for flexibility was also described in other contexts, for example when choosing the time, frequency and location (online or in person) of therapy sessions, with one DDP therapist describing holding sessions early in the morning so as not to impact on school.

Inflexible services with restrictive processes: This need for flexibility and responsiveness was highly contrasting with descriptions of statutory services as being inflexible, restrictive and complicated. There were several examples of service criteria based on the child's attributes rather than needs, for example different therapies available for fostered but not adopted children, and services requiring a referral from social work despite already confirming the child's suitability:

'I need a CAMHS referral, they've agreed to take him on, but they can't do anything until they get the referral from social work.' – Elliott's carer

'If everything was really child centred, there maybe wouldn't be all these really defined barriers as in, you know, you can if you're foster but not adoption, or things that just seem a bit arbitrary at times.' – Abigail's parent

While this was predominantly experienced by parents, one teacher also described not being able to access advice from Virtual School because the child was not open to social work.

Some families had accessed funding for therapy through the Adoption Support Fund, a fund of up to £5000/year available to adoptive families in England. Both Leo and Sam's parents voiced frustrations around the inflexibility in this system, as the funds cannot be used for services available through statutory services, but the waiting time for statutory services is extremely long. In both cases, this had meant parents used personal funds to pay for services they needed and were then looking for other ways to spend the Adoption Support Fund:

'It's really frustrating. I mean, we were in the position where we were able to just pay for a private speech therapist and then Leo came on leaps and bounds, but you know, it's like a fire in your house, the sooner you deal with it, the better the outcome. I just think, if we'd had to wait 3 years on the NHS, it would have been really bad for Leo, and yet you had this pot of money here, but it was so tightly ring-fenced.' – Leo's parent

Finally, both Elliott’s and Leah’s parents spoke about restrictions in relation to contact with the birth family, which they perceived not to be centred around the child’s best interests:

‘They have to go for family time because obviously it's court ordered […] as Leah got older and then was getting upset about leaving me, that's when it got difficult because I didn't really want to pass over a kind of screaming baby when I knew she was going to then be in that kind of environment.’ – Leah’s parent (for context she was previously her foster carer)

4. Frustration and disappointment in statutory services

There was a strong theme of disappointment in services within both parent and professional experiences. For many a sense of disillusionment with services appeared to have built up over the years. The focus of this disappointment was interpreted within two subthemes: experiencing statutory services as too slow and insufficient, and struggling to gain access to services and support.

Experiencing statutory services as too slow and insufficient: For all parents, there was a strong sense of frustration with services not providing enough support or responding too slowly and having extremely long waiting times:

‘You're maybe a bit naive and going in you think, oh, there are all these services if you run into difficulties they will help you […] I think, maybe just over time, we’ve been doing this process for months or a year now, and are we actually any further forward, have we any support with our child? Probably not.’ – Abigail’s parent

Professionals also expressed this frustration on behalf of both the children and parents:

‘You know the waiting lists are extremely long, some families have been waiting up to two years and things like that for an assessment. And that doesn’t help families either when they are in that position you know. Its very very hard for them.’ – Children and Families Support Worker for Abigail

As well as long waiting times, there was a sense that services (and particularly traditional interventions) are not always sufficient to meet the needs of children with MAPP:

'I suppose it's the typical thing. Um, he wasn't responding to usual social learning theory approaches to behaviour, and they (his parents) were struggling to feel at times connected with him.' – Leo's DDP therapist

This was particularly apparent for the two most complex cases (Elliott and Abigail), where there was a sense from professionals of being 'stuck' when thinking about their difficulties:

'The obvious challenge was how stuck he was, so it was, it became difficult feeling like he wasn't making any progress' – Elliott's DDP therapist

In addition to being stuck with knowing how to support the child's difficulties, there was a sense of stagnancy around some relationships with parents:

'I think the parents' relationship with my colleague, who handed over to me, I think their relationships was quite stuck, hence again the acknowledgement, we need to do something for this family. We don't know what to do.'- Abigail's CAMHS clinician

Struggling to gain access to services and support: All parents also described significant challenges accessing services and that being the child's advocate and "fighting" for support was as a central part of their role in supporting their child. They described it being frustrating and exhausting experiencing the relentlessness of battling for support:

'You've got to fight tooth and nail for every inch of support, especially with the way the budgets are just now, after COVID, it is nightmare, but you've just going to keep chip, chip chipping at it. "I won't go away", you know, what I mean?' – Elliott's carer

Professionals also described this, with one professional describing supporting a parent to make a formal complaint as feeling therapeutically important, and several describing advocating for the family to try and enable access to more support. Leah's social worker described attempting to fast track a referral to occupational therapy after she had completed DDP:

'So we did end up sort of speaking to our managers to see if they could bypass the waiting list in any way but it was just not, we couldn't do it.' - Leah's social worker

5. Constantly facing difficult decisions

Both parents and professionals described experiencing dilemmas and uncertainty when weighing up priorities and making difficult decisions as part of the experience of supporting a child with MAPP. The nature of the dilemmas could be grouped into two subthemes: balancing priorities of need for the child; and competing parental responsibilities and priorities.

Balancing priorities of need for the child: There was a sense that parents are constantly weighing up and balancing multiple priorities for their child. Both Leah and Leo's parents spoke about the dilemma of taking their child out of school for therapy. Leo's parent highlighted the cost associated with missing time in school, particularly for a child who is 'catching up' developmentally. Leah's parent was also weighing up the need for therapy against the changing of routines and missing school for appointments being upsetting for Leah:

'Leah doesn't want to miss school as she really hates doing that. So, we were kind of doing it at 7.30 in the morning, but that meant we were leaving home at 6.30 am, and then she was getting into school late, which was stressing her out, because she likes routine and doesn't like things to change.' – Leah's parent

There was also a sense that interventions can be distressing for the child and at least one person from every case study highlighted that the child did not like to talk about or focus on their difficulties and this leading to dilemmas around how to support the child:

'It was like poking wounds really, that's a little bit how that felt at times. But I don't think there would have been a quick fix for those kinds of behaviours and the way they were entrenched.' – Elliott's DDP therapist

Social workers, in particular, reflected on dilemmas they experienced when trying to support the child without causing additional stress:

'Obviously, meeting social workers can be quite tricky sometimes for children so we would only meet if it was absolutely necessary' – Leah's social worker

Competing parental responsibilities and priorities: In addition to the priorities of the child parents spoke about their wider parental priorities and a need to juggle multiple competing demands and often make difficult compromises. Both Leah and Leo's families had to make a long journey to attend DDP therapy and spoke about the impact on their work and time. In addition to her DDP appointments, Leah had other health appointments to attend and mum reflected on the cumulative impact on her work, and time and energy parenting Leah:

'It's quite difficult because then I'm having to try and fit my work into other parts of the week, which I don't want to do, because Leah takes a lot of our time and energy in the evenings, because of her problems of sleep, and I want to be available for that really and it's quite hard. Then I'm kind of having to log back in, to write reports and things for work, but then I feel like it's taking my time away from her and I know this is all for her, you know, but I think it's difficult.' – Leah's parent.

Abigail's parent also spoke about having to balance her role as a parent with her role as an advocate in trying to access support for her child. There was a sense of needing to compromise when attempting to fulfil both roles with a finite amount of time and energy:

'It's trying to sometimes balance how much of your energy you put on fighting for support and how much energy you just put on parenting. There's a limited amount of energy and effort, and it's how you spread that between the different things.' - Abigail's parent

6. Apprehension with hope

The final overarching theme interpreted from across the support experiences of parents and professionals was a mixture of hope and apprehension for the child.

Hope for the child: Both parents and professionals reflected on the strengths and resilience of the children and their families. There was a sense of pride and love in the parents' descriptions of their children:

'He is very affectionate and loving to us. And he's a joy to watch with his friends, if you see him, everybody at school says what a lovely child he is, that he's very mature.' – Sam's parent

Several professionals spoke about the closeness and love they observed between the child and parent and sense of protection for the child within this relationship. In addition, all three DDP therapists commented on their faith in the parents as co-therapist and their understanding of the principals of the approach:

'Leah's mum is such a secure caregiver when you watch her, when you observe her, you are like "wow she is so good", she is so attuned.'– Leah's DDP therapist

Apprehension for the child: Alongside feelings of hope, were expressions of apprehension for the child. Both Sam and Haley's teachers expressed uncertainty about how the child would manage upcoming educational transitions. And several parent's expressed experiencing worry about their child's future, particularly in relation to their MAPP difficulties:

'I think my overarching thing is just worry for the future, because I think, you know, aged 8 years old, if he hits me it doesn't hurt that much, and there's no kind of bigger world consequence from it, but I just think I really want him to grow into being a teenager and adult being able to control himself because I don't want him one day to just hit someone, you know, when there actually will be a real world consequence.' – Leo's parent

Worry about the future was particularly notable in Leah's case. This related in part to her unique context, as Leah was likely to have a learning disability. Additionally, her mum worked as a social worker with looked after and accommodated children and so had a greater awareness of the potential for challenges and adoptive placement breakdowns:

'Three times this week, I think, I've been on duty, and we've had a case that's kind of adoption breakdowns because of behaviours and things like that. Teenage girls, and I'm not saying that's going to happen, but like I say when a referral came in for Leah's sister, that was an adoption breakdown, that was quite hard.' – Leah's parent.

Discussion

The interpretation of this data illustrates that the experience of supporting a child with MAPP as highly unique but with common facets. The experience was driven by *the nature and far-reaching impact of MAPP* on the child and their network. *Experiences navigating and building parent-professional relationships* were at the centre of the supporting role, and *trying to flexibly meet the child's needs despite an inflexible system* was a common experience, with a sense that services restrictions often prohibit child-centred working. Supporting a child with MAPP was accompanied by feelings of *frustration and disappointment in statutory services,* paved by *constantly facing difficult decisions* and feelings of *apprehension with hope*, for the child.

While these distinct themes were interpreted from the data, the themes also interact and influence one another. For instance, service inflexibility contributed to the frustration and disappointment in services and both these themes compounded the experience of difficult decision making and contributed to the significance and complexity of relationships between parent and professionals. Similarly, there was a vicious cycle whereby extremely long waiting lists and challenges accessing services lead to high levels of frustration and low trust in services for parents, and professionals in turn described needing time to build rapport and validate the parents' frustration at the start of interventions, further delaying the child focused intervention. Hopes and fears for the child were also interwoven with perceptions of those around the child, including perceptions of both parents/ carers and of services available to support them.

Throughout the six interpreted themes was a strong sense of the bi-directional relationships and interactions between the child, their supporting environment and wider context. The influence of interactions between different people and systems around the child was also clear, particularly within the theme of *experiences navigating and building parent – professional relationships*. This is in keeping with Bronfenbrenner's model, which situates a child within a context of interacting proximal and distal influencing relationships and factors(Bronfenbrenner & Morris, 2007). This data highlights an especially pivotal role of the parent in mediating interactions and processes between the child and others in their care system. Furthermore, this experience was not consistent between parents and experiences of power dynamics between the parent and professional appeared to indicate considerable differences in how services responded to the child. Therefore, in addition to considering the significance of a relationship in terms of the closeness to the child, it seems important to consider the different weight of power and influence held by different people within the child's network, and particularly how the primary caregiver influences and is influenced by wider support systems. Perceptions of power and influence between different professionals has also been explored in other recent qualitative research within this population (Turner-Halliday et al., 2017).

There are barriers and challenges within mental health services for children and adolescents globally (Carbonell et al., 2023), and specifically widespread dissatisfaction reported toward CAMHS (Newman et al., 2024). Prior research has highlighted foster carers perceptions of services as extremely limited and inconsistent (Hiller et al., 2020). Some system barriers may be accentuated for children in care, including experiencing delays in recognition of problems, foster carers not feeling listened to, and the child finding transitions (e.g. between services) difficult. It also appears engaging with services can be additionally difficult for some children in foster care, creating a risk of being 'lost' within services (York & Jones, 2017), consistent with descriptions within this data. Furthermore, system barriers impacting adversely on carers ability to support children in out-of-home-care have been highlighted particularly in relation to NDCs, where difficulties with implementing relevant assessment, diagnosis and support has been linked to unmet physical, developmental and psychological needs (Scrivens et al., 2023).

Interpretation within a syndemics framework

The common co-existence of NDCs and trauma-related difficulties for children with MAPP is being considered throughout the RIGHT evaluation as a potential syndemic (Minnis, 2021). The syndemics framework considers the scenario where two or more health conditions adversely interact under the influence of social and environmental factors. Syndemics looks beyond comorbidity as it focuses on the interaction between the co-occurring conditions and social, environmental and economic factors both relevant to the clustering and interface between the conditions (Singer et al., 2017). Before interpreting this data considering the syndemics model it is important to note that as a model originating from medical anthropology, difficulties are framed as 'diseases' or 'conditions', and thereby located within the child. For children with MAPP, a more trauma-informed position would consider the child's difficulties in the context of 'what has happened to them'(Sweeney et al., 2018). Therefore, in this context, while the syndemics framework is being used to explore the potential compounding adverse influence of societal factors and systemic responses to certain combinations of difficulties commonly experienced by children with MAPP, the intention is not to say that these difficulties come from within the child.

The co-occurrence of NDCs and trauma-related difficulties was clear within these case studies, with four of the six children having confirmed or queried NDCs. A feature of a syndemic is that the aggregation of health conditions interfacing with the social and environmental context exacerbates the deleterious impact (Singer et al., 2017). This was indeed evident amongst participant experiences and particularly represented in the theme *the nature and far-reaching impact of MAPP,* for instance in Sam's case the interaction between NDCs and trauma-related difficulties was demonstrated through interacting hypervigilance and ADHD symptoms. Furthermore, the *child's vulnerability to further difficulties, due to interactions between school environmental stressors and MAPP*, demonstrated the interaction between MAPP and broader societal and environmental factors. Previous research has shown that children who have experienced maltreatment are at increased risk of revictimization and further adversity including bullying from peers (Goemans et al., 2021). Both attachment disorders (Davidson et al., 2024) and NDCs (Leifler et al., 2022) are associated with poorer social competencies. It therefore appears probable that when the social and cognitive vulnerability associated with developmental trauma and NDCs and combined the impact may be greater than the sum of the two conditions.

The individual experience of supporting the child with their difficulties, particularly from the parents' perspective, speak clearly to the second level of this model: how MAPP is experienced by the child and their network. This was where the data showed the most variability in experiences. The experience of MAPP itself, appeared highly unique not least as each child's presentation was very different. There were still some areas of commonality, particularly the child's emotion regulation and relationship difficulties. For parents there was also a common experience of 'managing' the child's interactions with other people, sometimes leading to decreased contact with extended family, illustrating one mechanism of social thinning, frequently reported for children who have experienced maltreatment (McCrory et al., 2022).

Considering the third level of the model: how health services approach co-existing conditions, there was some evidence that the co-existence impacted on the intervention. Sam's co-existing ADHD and hypervigilance meant that contrary to frequently implemented advice to seat children with ADHD at the front of the classroom (Joanne & Horstmann, 2009), he benefited from sitting at the back. For health and social care professionals' dilemmas around the order of assessment and treatment when approaching multiple presenting difficulties, was expressed within the theme *constantly facing difficult decisions.*

The data also provided evidence of the interaction between levels of the model and the broader societal context, which was influencing the experience of supporting a child with MAPP. *Trying to flexibly meet the child's needs despite an inflexible system* could be interpreted in this way, as the experience of people supporting the child was that referral pathways and service criteria often delayed intervention, prolonging or exacerbating the child's difficulties. The child's competing needs (e.g. education versus health) and treatment dilemmas for those supporting the child then further compound the impact. The importance of flexibility and choice has been consistently raised by foster and adoptive parents (Blair et al., 2024), as well as the powerlessness experienced when systemic barriers prevent choice (Turner et al., 2023a).

Implications and conclusions

It was clear throughout the data that the experience of supporting a child with MAPP is intrinsically linked with their experience of systemic factors and challenges navigating support services. The systemic issues and inadequacies currently affecting children's mental health services have been reported frequently in the literature (Carbonell et al., 2023). Accessing support was universally experienced as frustrating, disappointing and exhausting, by parents from a range of different service contexts across the UK. While robust and trusting parent – professional relationships were described, there was a sense of 'luck' associated with this, indicating an underlying lack of faith in services. This demonstrates the urgent need for increased resourcing and improvement throughout statutory services, and in the meantime suggests interventions need to consider the systemic as well as individual level need to remain effective within the current service context. Within a clinical context this highlights the need for joined up multi-disciplinary and systemic working, as well as taking time to holistically assess both the needs of the child and the system around that child.

Strengths and Limitations

A strength of this study, is it gives voice to often under researched perspectives and draws together the varied experiences of supporting a child, recognising that their presentation and needs may vary by context. That said, for some cases it was not possible to gain perspectives from school or social work, and the role of social work was more limited than anticipated, with no involvement in several cases. Adopting a multi-perspectival approach was a strength of this study, as it enabled a fuller and more holistic understanding of the experience of supporting each child. However, there are also limitations associated with the approach as by creating a large heterogenous sample some of the individual level experiences may be lost, as well as the opportunity to explore the experience of particular groups around the child in more depth. Future research exploring experiences of different groups, such as teachers, social workers as well as parents and therapists in depth would be valuable. The perspective of the child is also notably not explored in this study and future research could consider exploring the child's experience directly. Finally, the parents interviewed within this study were mostly highly educated. Many had substantial experience working within or alongside health and social care services, and several were parent to multiple children with additional needs. While IPA looks to explore individual rather than generalisable experiences, it feels important to acknowledge that this data relates to a particularly skilled parent group, whose experiences may or may not converge with the broader population of adults supporting children with MAPP.

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Chapter 3 Appendices

Appendix 1 – Systematic Review – PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Title
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	See below
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Introduction: *Paragraph 3-4*
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Introduction: *Paragraph 4*
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Methods sections: *Eligibility Criteria & Data analysis*
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Method section: *Search Strategy*
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Method section: *Search Strategy* AND Appendix 2: *Table S1*
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Method section: *Search Strategy*
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Method section: *Data Extraction*
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Method section: *Data extraction*

Section and Topic	Item #	Checklist item	Location where item is reported
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Method section: *Data extraction*
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Methods section: *Risk of bias assessment and Grade of Evidence*
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Method section: *Data analysis*
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Methods section: *Search strategy*
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Method section: *Data analysis* *AND Appendix 2: Table S2*
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Method section: *Data extraction*
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Method section: *Data analysis*
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Method section: *Data analysis*
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	NA
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	NA
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Method section: *Data analysis*
RESULTS			

Section and Topic	Item #	Checklist item	Location where item is reported
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Results section: *Study selection AND Figure 1.1*
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	NA
Study characteristics	17	Cite each included study and present its characteristics.	Results section: *Study charecteristics AND Table 1.1*
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Results section: *Quality Appraisal and Risk of Bias AND Appendix 2: TableS4*
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Results section: *Outcomes and findings*
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Results section: *Outcomes and findings*
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Results section: *Outcomes and findings, table 1.2 AND Figure 1.2*
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Results section: *Outcomes and findings AND Figure 1.2*
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	NA
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	NA
Certainty of	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome	Results section:

Section and Topic	Item #	Checklist item	Location where item is reported
evidence		assessed.	*Outcomes and findings, table 1.2 AND Figure 1.2*
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Discussion: *Paragraphs 1-7*
	23b	Discuss any limitations of the evidence included in the review.	Discussion: *Paragraphs 1&7*
	23c	Discuss any limitations of the review processes used.	Discussion: *Paragraph 7*
	23d	Discuss implications of the results for practice, policy, and future research.	Conclusions section
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Methods *Paragraph 1*
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Methods *Paragraph 1*
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA – protocol amended
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Abstract section – funding
Competing interests	26	Declare any competing interests of review authors.	NA
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Data not publicly available.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

PRISMA 2020 for Abstract:

Section and Topic	Item #	Checklist item	Reported (Yes/No)
TITLE			
Title	1	Identify the report as a systematic review.	Yes
BACKGROUND			
Objectives	2	Provide an explicit statement of the main objective(s) or question(s) the review addresses.	Yes
METHODS			
Eligibility criteria	3	Specify the inclusion and exclusion criteria for the review.	Yes
Information sources	4	Specify the information sources (e.g. databases, registers) used to identify studies and the date when each was last searched.	Yes
Risk of bias	5	Specify the methods used to assess risk of bias in the included studies.	Yes
Synthesis of results	6	Specify the methods used to present and synthesise results.	Yes
RESULTS			
Included studies	7	Give the total number of included studies and participants and summarise relevant characteristics of studies.	Yes
Synthesis of results	8	Present results for main outcomes, preferably indicating the number of included studies and participants for each. If meta-analysis was done, report the summary estimate and confidence/credible interval. If comparing groups, indicate the direction of the effect (i.e. which group is favoured).	Yes – but not numbers and ES
DISCUSSION			
Limitations of evidence	9	Provide a brief summary of the limitations of the evidence included in the review (e.g. study risk of bias, inconsistency and imprecision).	Yes
Interpretation	10	Provide a general interpretation of the results and important implications.	Yes
OTHER			
Funding	11	Specify the primary source of funding for the review.	NA
Registration	12	Provide the register name and registration number.	Yes

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Appendix 2 – Systematic review supplementary materials

Table S1: Search Strategy

Summary of Search Terms and development process	**1.** Randomised Controlled Trials, utilising the relevant search filter developed and published by Sottish Intercollegiate Guidelines Network (SIGN)(Scottish Intercollegiate Guidelines Network (SIGN). 2023). **2.** Foster care setting, developed through author's exploration of prior systematic reviews, and in particular including relevant items used within Turner et al, 2007 systematic review(Turner et al., 2007). **3.** Children (0-7 years), utilising search items for Babies, Children and young people developed and published by the National Institute of Public Health for Quebec (INSPQ)(Tessier & Lacourse, 2023).		
Searches as completed for each database			
Embase 1947-Present, updated daily *Extracted 23/06/2023*	1	Randomized Controlled Trial/	792970
	2	controlled clinical trial/	469842
	3	multicenter study/	381029
	4	Phase 3 clinical trial/	70162
	5	Phase 4 clinical trial/	5491
	6	exp RANDOMIZATION/	100085
	7	Single Blind Procedure/	52285
	8	Double Blind Procedure/	213997
	9	Crossover Procedure/	75909
	10	PLACEBO/	415359
	11	randomi?ed controlled trial$.tw.	329121
	12	rct.tw.	54261
	13	(random$ adj2 allocat$).tw.	55255
	14	single blind$.tw.	32071
	15	double blind$.tw.	251679
	16	((treble or triple) adj blind$).tw.	1944
	17	placebo$.tw.	375098
	18	Prospective Study/	886681
	19	Clinical Trial/	1099294
	20	or/1-19	2997179
	21	Case Study/	108721
	22	case report.tw.	563927
	23	abstract report/ or letter/	1322362
	24	Conference proceedings.pt.	0
	25	conference abstract.pt.	4803490
	26	Editorial.pt.	781034
	27	Letter.pt.	1309953
	28	Note.pt.	945649
	29	or/21-28	8430819
	30	20 not 29	2178212
	31	babies.ti,ab,kf.	67852
	32	baby.ti,ab,kf.	69620
	33	infan*.ti,ab,kf.	687229
	34	neonat*.ti,ab,kf.	440023
	35	neo-nat*.ti,ab,kf.	634
	36	newborn*.ti,ab,kf.	265108
	37	new-born*.ti,ab,kf.	9388
	38	perinat*.ti,ab,kf.	130911
	39	hospitalized infant/	1047
	40	infant care/	1755

41	high risk infant/	3839
42	infant/	812061
43	small for date infant/	19707
44	prematurity/	141518
45	premature.ti,ab,kf.	205955
46	large for gestational age/	4830
47	newborn/	695122
48	boy?.ti,ab,kf.	245032
49	boyfrien*.ti,ab,kf.	964
50	boyhood*.ti,ab,kf.	117
51	child*.ti,ab,kf.	2310733
52	child/	2379140
53	child care/	42305
54	preschool child/	699691
55	school child/	433266
56	fifth-grader*.ti,ab,kf.	556
57	first-grader*.ti,ab,kf.	671
58	fourth-grader*.ti,ab,kf.	472
59	girl/	58970
60	girl?.ti,ab,kf.	252770
61	boy/	46903
62	girlfrien*.ti,ab,kf.	693
63	girlhood*.ti,ab,kf.	44
64	juvenil*.ti,ab,kf.	126368
65	kid?.ti,ab,kf.	16923
66	kindergarten*.ti,ab,kf.	9812
67	minor?.ti,ab,kf.	354013
68	"minor (person)"/	908
69	minority.ti,ab,kf.	110967
70	paediatric*.ti,ab,kf.	152085
71	pediatrics/	102712
72	pediatric*.ti,ab,kf.	623331
73	pediatrics/	102712
74	PICU.ti,ab,kf.	15719
75	preschool*.ti,ab,kf.	44464
76	preschool child/	699691
77	pre-school*.ti,ab,kf.	8823
78	second-grader*.ti,ab,kf.	428
79	seventh-grader*.ti,ab,kf.	368
80	sixth-grader*.ti,ab,kf.	621
81	stepchild*.ti,ab,kf.	361
82	step-child*.ti,ab,kf.	81
83	stepchild/	45
84	third-grader*.ti,ab,kf.	406
85	young*.ti,ab,kf.	1163953
86	toddler?.ti,ab,kf.	18699
87	(young adj2 person).ti,ab,kf.	2557
88	youngster.tw.	369
89	youth*.tw.	123320
90	juvenile/	64857
91	nursery.ti,ab,kf.	12970
92	primary school.ti,ab,kf.	15508
93	reception.ti,ab,kf.	13500
94	primary school/	17546
95	nursery/	5649
96	nursery school/	1774

	97	or/31-96	6089373
	98	exp Foster Home Care/	5689
	99	Foster care/	5689
	100	foster-care$.tw.	3218
	101	(foster adj3 care$).tw.	4181
	102	(foster adj3 parent$).tw.	975
	103	(foster adj3 mother$).tw.	794
	104	(foster adj3 father$).tw.	49
	105	(foster adj3 child$).tw.	1839
	106	((kin or kinship or kindred) adj3 care$).tw.	561
	107	((kin or kinship or kindred) adj3 parent$).tw.	253
	108	((kin or kinship or kindred) adj3 mother$).tw.	79
	109	((kin or kinship or kindred) adj3 father$).tw.	31
	110	((kinship or kindred) adj3 child$).tw.	153
	111	"living in care".tw.	402
	112	"legal guardian".tw.	531
	113	guardian*.tw.	14914
	114	("local authority" adj3 care$).tw.	150
	115	(child adj3 placement).tw.	367
	116	("out of home" adj3 placement).tw.	361
	117	("out of home" adj3 care$).tw.	839
	118	(alternat* adj3 care$).tw.	6289
	119	((relation or relative) adj3 care$).tw.	6537
	120	or/98-119	38198
	121	30 and 97 and 120	1896
Ovid MEDLINE(R) ALL <1946 to June 22, 2023>	1	Randomized Controlled Trials as Topic/	162627
	2	randomized controlled trial/	595054
	3	Random Allocation/	106940
	4	Double Blind Method/	175500
	5	Single Blind Method/	32771
	6	clinical trial/	538195
	7	clinical trial,phase i.pt.	24947
Extracted 23/06/2023	8	clinical trail, phase ii.pt.	0
	9	clinical trial, phase iii.pt.	21784
	10	clinical trial, phase iv.pt.	2419
	11	controlled clinical trial.pt.	95340
	12	randomized controlled trial.pt.	595054
	13	multicenter study.pt.	335045
	14	clinical trial.pt.	538195
	15	exp Clinical Trials as topic/	382851
	16	or/1-15	1558509
	17	(clinical adj trial$).tw.	477378
	18	((singl$ or double$ or trb$ or tripl$) adj (blind$3 or mask$3)).tw.	197474
	19	PLACEBOS/	35930
	20	placebo$.tw.	246931
	21	randomly allocated.tw.	36309
	22	(allocated adj2 random$).tw.	40071
	23	or/17-22	781328
	24	16 or 23	1905416
	25	case report.tw.	396191
	26	letter/	1220598
	27	historical article/	369327
	28	or/25-27	1967134
	29	24 not 28	1863014
	30	exp Foster Home Care/	3890
	31	Foster care/	3890

	32	Child, Foster/	191
	33	foster-care$.tw.	2765
	34	(foster adj3 care$).tw.	3514
	35	(foster adj3 parent$).tw.	825
	36	(foster adj3 mother$).tw.	616
	37	(foster adj3 father$).tw.	51
	38	(foster adj3 child$).tw.	1584
	39	((kin or kinship or kindred) adj3 care$).tw.	508
	40	((kin or kinship or kindred) adj3 parent$).tw.	219
	41	((kinship or kindred) adj3 mother$).tw.	37
	42	((kin or kinship or kindred) adj3 father$).tw.	28
	43	((kin or kinship or kindred) adj3 child$).tw.	231
	44	"living in care".tw.	280
	45	guardian*.tw.	10160
	46	("local authority" adj3 care$).tw.	113
	47	(child adj3 placement).tw.	303
	48	("out of home" adj3 placement).tw.	332
	49	("out of home" adj3 care$).tw.	758
	50	(alternat* adj3 care$).tw.	4688
	51	((relation or relative) adj3 care$).tw.	4978
	52	or/30-51	28245
	53	babies.ti,ab,kf.	41963
	54	baby.ti,ab,kf.	44677
	55	infan*.ti,ab,kf.	551213
	56	neonat*.ti,ab,kf.	313486
	57	neo-nat*.ti,ab,kf.	313
	58	newborn*.ti,ab,kf.	197449
	59	new-born*.ti,ab,kf.	5023
	60	perinat*.ti,ab,kf.	91320
	61	premature.ti,ab,kf.	141374
	62	Infant, Extremely Premature/	3866
	63	Infant, Large for Gestational Age/	4
	64	Infant, Newborn/	668485
	65	Infant, Postmature/	396
	66	Infant, Premature/	61379
	67	Infant, Small for Gestational Age/	8597
	68	Infant/	865370
	69	boy?.ti,ab,kf.	166259
	70	boyfrien*.ti,ab,kf.	747
	71	boyhood*.ti,ab,kf.	92
	72	child*.ti,ab,kf.	1672934
	73	fifth-grader*.ti,ab,kf.	546
	74	first-grader*.ti,ab,kf.	629
	75	fourth-grader*.ti,ab,kf.	463
	76	girl?.ti,ab,kf.	171616
	77	girlfrien*.ti,ab,kf.	527
	78	girlhood*.ti,ab,kf.	42
	79	juvenil*.ti,ab,kf.	95893
	80	kid?.ti,ab,kf.	10899
	81	kindergarten*.ti,ab,kf.	8178
	82	minor?.ti,ab,kf.	258733
	83	minority.ti,ab,kf.	79514
	84	paediatric*.ti,ab,kf.	85594
	85	pediatric*.ti,ab,kf.	387461
	86	PICU.ti,ab,kf.	6747
	87	preschool*.ti,ab,kf.	35604

	88	pre-school*.ti,ab,kf.	5880
	89	second-grader*.ti,ab,kf.	402
	90	seventh-grader*.ti,ab,kf.	356
	91	sixth-grader*.ti,ab,kf.	593
	92	stepchild*.ti,ab,kf.	291
	93	step-child*.ti,ab,kf.	54
	94	third-grader*.ti,ab,kf.	412
	95	toddler?.ti,ab,kf.	13949
	96	young*.ti,ab,kf.	819542
	97	youngster.tw.	201
	98	youth*.tw.	96308
	99	Child/	1910885
	100	Child, Preschool/	989207
	101	(young adj2 person).ti,ab,kf.	1418
	102	nursery.ti,ab,kf.	10660
	103	primary school.ti,ab,kf.	11619
	104	reception.ti,ab,kf.	10481
	105	primary school/	51241
	106	nursery school/	1506
	107	girl/	15181
	108	boy/	3953
	109	or/53-108	4699229
	110	29 and 52 and 109	1394
CINAHL	#	**Query**	**Results**
	S45	S10 AND S32 AND S44	3,683
	S44	S33 or S34 or S35 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43	1,706,859
Extracted	S43	TX allocat* random*	16,090
	S42	(MH "Quantitative Studies")	35,635
23/06/2023	S41	(MH "Placebos")	13,711
	S40	TX placebo*	79,431
	S39	TX random* allocat*	16,090
	S38	(MH "Random Assignment")	79,552
	S37	TX randomi* control* trial*	261,901
	S36	TX ((singl* n1 blind*) or (singl* n1 mask*)) or TX ((doubl* n1 blind*) or (doubl* n1 mask*)) or TX ((tripl* n1 blind*) or (tripl* n1 mask*)) or TX ((trebl* n1 blind*) or (trebl* n1 mask*))	1,262,393
	S35	TX clinic* n1 trial*	335,937
	S34	PT Clinical trial	113,337
	S33	MH "Clinical Trials+"	348,682
	S32	S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31	23,071
	S31	TI (relation or relative) N3 care$ OR AB (relation or relative) N3 care$	5,415
	S30	TI alternat* N3 care$ OR AB alternat* N3 care$	3,480
	S29	TI "out of home" N3 care OR AB "out of home" N3 care	890
	S28	TI "out of home" N3 placement OR AB "out of home" N3 placement	394
	S27	TI "child placement" OR AB local authority N3 care$	287
	S26	TI local authority N3 care$ OR AB local authority N3 care$	284
	S25	TI guardian* OR AB guardian*	4,225
	S24	TI "living in care" OR AB "living in care"	295
	S23	TI ((kin or kinship or kindred) N3 child$) OR AB ((kin or kinship or kindred) N3 child$)	286

	S22	TI ((kin or kinship or kindred) N3 father$) OR AB ((kin or kinship or kindred) N3 father$)	15
	S21	TI ((kin or kinship or kindred) N3 mother$) OR AB ((kin or kinship or kindred) N3 mother$)	27
	S20	TI ((kin or kinship or kindred) N3 parent$) OR AB ((kin or kinship or kindred) N3 parent$)	89
	S19	TI ((kin or kinship or kindred) N3 care$) OR AB ((kin or kinship or kindred) N3 care$)	562
	S18	TI foster N3 child$ OR AB foster N3 child$	1,935
	S17	TI foster N3 father$ OR AB foster N3 father$	39
	S16	TI foster N3 mother$ OR AB foster N3 mother$	148
	S15	TI foster N3 parent$ OR AB foster N3 parent$	888
	S14	TI foster N3 care$ OR AB foster N3 care$	4,048
	S13	TI foster care OR AB foster care	4,450
	S12	TI foster-care* OR AB foster-care*	3,567
	S11	(MH "Foster Home Care") OR (MH "Foster Parents") OR (MH "Child, Foster")	6,777
	S10	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9	1,280,771
	S9	(MH "Schools, Nursery")	1,268
	S8	MH(young person)	1,372
	S7	TI (young N2 (person)) OR AB (young N2 (person))	2,149
	S6	MH ("Child" OR "Child, Preschool")	585,018
	S5	AB (boy# OR boyfrien* OR boyhood* OR child* OR fifth-grader* OR first-grader* OR fourth-grader* OR girl# OR girlfriend* OR girlhood* OR juvenil * OR kid# OR kindergarten* OR minor# OR minority OR paediatric* OR peadiatric* OR pediatric* OR PICU OR preschool* OR pre-school* OR second-grader* OR seventh-grader* OR sixth-grader* OR stepchild* OR step-child* OR third-grader* OR toddler# OR young OR youngster* OR youth*)	706,321
	S4	TI (boy# OR boyfrien* OR boyhood* OR child* OR fifth-grader* OR first-grader* OR fourth-grader* OR girl# OR girlfriend* OR girlhood* OR juvenil* OR kid# OR kindergarten* OR minor# OR minority OR paediatric* OR peadiatric* OR pediatric* OR PICU OR preschool* OR pre-school* OR second-grader* OR seventh-grader* OR sixth-grader* OR stepchild* OR step-child* OR third-grader* OR toddler # OR young OR youngster* OR youth*)	550,796
	S3	MH ("Infant, Newborn" OR "Infant")	275,408
	S2	AB (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new -born* OR perinat*)	182,674
	S1	TI (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new-born* OR perinat*)	137,715
APA PsycInfo *Extracted* *23/06/2023*	**Query**	**Limiters/Expanders**	**Results**
	ReS91	S56 AND S78 AND S90	449
	S90	S79 or S80 or S81 or S82 or S83 or S84 or S85 or S86 or S87 or S88 or S89	167,811
	S89	TX allocat* random*	13,743
	S88	(DE "Quantitative Methods")	3,963
	S87	(DE "Placebo")	6,499
	S86	TX placebo*	45,493

	S85	TX random* allocat*	13,743
	S84	DE "Random Sampling"	955
	S83	TX randomi* control* trial*	59,247
	S82	TX ((singl* n1 blind*) or (singl* n1 mask*)) or TX ((doubl* n1 blind*) or (doubl* n1 mask*)) or TX ((tripl* n1 blind*) or (tripl* n1 mask*)) or TX ((trebl* n1 blind*) or (trebl* n1 mask*))	37,025
	S81	TX clinic* n1 trial*	84,415
	S80	PT Clinical trial	1,042
	S79	DE "Clinical Trials+" OR DE "Randomized Controlled Trials" OR DE "Randomized Clinical Trials"	1,455
	S78	S57 OR S58 OR S59 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66 OR S67 OR S68 OR S69 OR S70 OR S71 OR S72 OR S73 OR S74 OR S75 OR S76 OR S77	25,272
	S77	TI (relation or relative) N3 care$ OR AB (relation or relative) N3 care$	3,720
	S76	TI alternat* N3 care$ OR AB alternat* N3 care$	1,929
	S75	TI "out of home" N3 care OR AB "out of home" N3 care	1,447
	S74	TI "out of home" N3 placement OR AB "out of home" N3 placement	1,104
	S73	TI "child placement" OR AB local authority N3 care$	279
	S72	TI local authority N3 care$ OR AB local authority N3 care$	221
	S71	TI guardian* OR AB guardian	4,523
	S70	TI "living in care" OR AB "living in care"	300
	S69	TI ((kin or kinship or kindred) N3 child$) OR AB ((kin or kinship or kindred) N3 child$)	610
	S68	TI ((kin or kinship or kindred) N3 father$) OR AB ((kin or kinship or kindred) N3 father$)	64
	S67	TI ((kin or kinship or kindred) N3 mother$) OR AB ((kin or kinship or kindred) N3 mother$)	137
	S66	TI ((kin or kinship or kindred) N3 parent$) OR AB ((kin or kinship or kindred) N3 parent$)	275
	S65	TI ((kin or kinship or kindred) N3 care$) OR AB ((kin or kinship or kindred) N3 care$)	858
	S64	TI foster N3 child$ OR AB foster N3 child$	4,841
	S63	TI foster N3 father$ OR AB foster N3 father$	152
	S62	TI foster N3 mother$ OR AB foster N3 mother$	563

	S61	TI foster N3 parent$ OR AB foster N3 parent$	2,603
	S60	TI foster N3 care$ OR AB foster N3 care$	7,364
	S59	TI foster care OR AB foster care	7,678
	S58	TI foster-care* OR AB foster-care*	6,916
	S57	DE "Foster Care" OR DE "Foster Parents" OR DE "Foster Children" OR DE "Foster Home Care"	8,816
	S56	S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55	1,227,305
	S55	DE ("Child" OR "Child, Preschool")	194,816
	S54	DE "Nursery School Students" OR DE "Nursery Schools"	971
	S53	DE(young person)	20,742
	S52	TI (young N2 person) OR AB (young N2 person)	3,409
	S51	DE ("Child" OR "Child, Preschool")	194,816
	S50	AB (boy# OR boyfrien* OR boyhood* OR child* OR fifth-grader* OR first-grader* OR fourth-grader* OR girl# OR girlfriend* OR girlhood* OR juvenil * OR kid# OR kindergarten* OR minor# OR minority OR paediatric* OR peadiatric* OR pediatric* OR PICU OR preschool* OR pre-school* OR second-grader* OR seventh-grader* OR sixth-grader* OR stepchild* OR step-child* OR third-grader* OR toddler# OR young OR youngster* OR youth*)	1,053,707
	S49	TI (boy# OR boyfrien* OR boyhood* OR child* OR fifth-grader* OR first-grader* OR fourth-grader* OR girl# OR girlfriend* OR girlhood* OR juvenil* OR kid# OR kindergarten* OR minor# OR minority OR paediatric* OR peadiatric* OR pediatric* OR PICU OR preschool* OR pre-school* OR second-grader* OR seventh-grader* OR sixth-grader* OR stepchild* OR step-child* OR third-grader* OR toddler # OR young OR youngster* OR youth*)	540,952
	S48	DE ("Infant, Newborn" OR " Infant, Postmature" OR "Infant, Premature" OR "Infant")	47,792
	S47	AB (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new -born* OR perinat*)	130,238
	S46	TI (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new-born* OR perinat*)	59,166
	S45	S10 AND S32 AND S44	416
	S44	S33 or S34 or S35 or S36 or S37 or S38 or S39 or S40 or S41 or S42 or S43	163,208
	S43	TX allocat* random*	13,743

	S42	(MH "Quantitative Studies")	512
	S41	(MH "Placebos")	2
	S40	TX placebo*	45,493
	S39	TX random* allocat*	13,743
	S38	(MH "Random Assignment")	42
	S37	TX randomi* control* trial*	59,247
	S36	TX ((singl* n1 blind*) or (singl* n1 mask*)) or TX ((doubl* n1 blind*) or (doubl* n1 mask*)) or TX ((tripl* n1 blind*) or (tripl* n1 mask*)) or TX ((trebl* n1 blind*) or (trebl* n1 mask*))	37,025
	S35	TX clinic* n1 trial*	84,415
	S34	PT Clinical trial	1,042
	S33	MH "Clinical Trials+"	517
	S32	S11 OR S12 OR S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31	24,200
	S31	TI (relation or relative) N3 care$ OR AB (relation or relative) N3 care$	3,720
	S30	TI alternat* N3 care$ OR AB alternat* N3 care$	1,929
	S29	TI "out of home" N3 care OR AB "out of home" N3 care	1,447
	S28	TI "out of home" N3 placement OR AB "out of home" N3 placement	1,104
	S27	TI "child placement" OR AB local authority N3 care$	279
	S26	TI local authority N3 care$ OR AB local authority N3 care$	221
	S25	TI guardian* OR AB guardian*	5,282
	S24	TI "living in care" OR AB "living in care"	300
	S23	TI ((kin or kinship or kindred) N3 child$) OR AB ((kin or kinship or kindred) N3 child$)	610
	S22	TI ((kin or kinship or kindred) N3 father$) OR AB ((kin or kinship or kindred) N3 father$)	64
	S21	TI ((kin or kinship or kindred) N3 mother$) OR AB ((kin or kinship or kindred) N3 mother$)	137
	S20	TI ((kin or kinship or kindred) N3 parent$) OR AB ((kin or kinship or kindred) N3 parent$)	275
	S19	TI ((kin or kinship or kindred) N3 care$) OR AB ((kin or kinship or kindred) N3 care$)	858

	S18	TI foster N3 child$ OR AB foster N3 child$	4,841
	S17	TI foster N3 father$ OR AB foster N3 father$	152
	S16	TI foster N3 mother$ OR AB foster N3 mother$	563
	S15	TI foster N3 parent$ OR AB foster N3 parent$	2,603
	S14	TI foster N3 care$ OR AB foster N3 care$	7,364
	S13	TI foster care OR AB foster care	7,678
	S12	TI foster-care* OR AB foster-care*	6,916
	S11	(MH "Foster Home Care") OR (MH "Foster Parents") OR (MH "Child, Foster")	959
	S10	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9	1,193,785
	S9	(MH "Schools, Nursery")	1,247
	S8	MH(young person)	255
	S7	TI (young N2 (person)) OR AB (young N2 (person))	3,409
	S6	MH ("Child" OR "Child, Preschool")	45
	S5	AB (boy# OR boyfrien* OR boyhood* OR child* OR fifth-grader* OR first-grader* OR fourth-grader* OR girl# OR girlfriend* OR girlhood* OR juvenil * OR kid# OR kindergarten* OR minor# OR minority OR paediatric* OR peadiatric* OR pediatric* OR PICU OR preschool* OR pre-school* OR second-grader* OR seventh-grader* OR sixth-grader* OR stepchild* OR step-child* OR third-grader* OR toddler# OR young OR youngster* OR youth*)	1,053,707
	S4	TI (boy# OR boyfrien* OR boyhood* OR child* OR fifth-grader* OR first-grader* OR fourth-grader* OR girl# OR girlfriend* OR girlhood* OR juvenil* OR kid# OR kindergarten* OR minor# OR minority OR paediatric* OR peadiatric* OR pediatric* OR PICU OR preschool* OR pre-school* OR second-grader* OR seventh-grader* OR sixth-grader* OR stepchild* OR step-child* OR third-grader* OR toddler # OR young OR youngster* OR youth*)	540,952
	S3	MH ("Infant, Newborn" OR "Infant")	41
	S2	AB (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new -born* OR perinat*)	130,238
	S1	TI (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new-born* OR perinat*)	59,166
Cochrane Library	#1	MeSH descriptor: [Foster Home Care] this term only	179
	#2	MeSH descriptor: [Child, Foster] this term only	13

Extracted 23/06/2023	#3 (foster-care* OR foster care OR foster NEAR care OR foster NEAR parent OR foster NEAR mother OR foster NEAR father OR foster NEAR child):ti,ab,kw (Word variations have been searched) 1660 #4 (kin NEAR care OR kinship NEAR care OR kindred NEAR care OR kin NEAR parent OR kinship NEAR parent OR kindred NEAR parent OR kin NEAR mother OR kinship NEAR mother OR kindred NEAR mother OR kin NEAR father OR kinship NEAR father OR kindred NEAR father kin NEAR child OR kinship NEAR child OR kindred NEAR child):ti,ab,kw (Word variations have been searched) 89 #5 ("living in care" OR guardian OR "local authority" NEAR care OR child NEXT placement OR "out of home" NEAR placement OR "out of home" NEAR care OR alternative NEAR care):ti,ab,kw (Word variations have been searched) 7285 #6 ("living in care"):ti,ab,kw OR (guardian):ti,ab,kw OR ("local authority" NEAR care):ti,ab,kw OR (child NEXT placement):ti,ab,kw OR ("out of home" NEAR placement):ti,ab,kw (Word variations have been searched) 6058 #7 ("out of home" NEAR care):ti,ab,kw OR (alternative NEAR care):ti,ab,kw (Word variations have been searched) 1243 #8 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 8909 #9 (boy*):ti,ab,kw OR (boyfrien*):ti,ab,kw OR (boyhood*):ti,ab,kw OR (child*):ti,ab,kw AND (fifth-grader*):ti,ab,kw (Word variations have been searched) 8180 #10 (first-grader*):ti,ab,kw OR (fourth-grader*):ti,ab,kw OR (girl*):ti,ab,kw OR (OR girlfriend*):ti,ab,kw OR (OR girlhood*):ti,ab,kw (Word variations have been searched) 8957 #11 (juvenil *):ti,ab,kw OR (kid):ti,ab,kw OR (kindergarten*):ti,ab,kw OR (minor):ti,ab,kw OR (minority):ti,ab,kw (Word variations have been searched) 27647 #12 (paediatric*):ti,ab,kw OR (peadiatric*):ti,ab,kw OR (pediatric*):ti,ab,kw OR (PICU):ti,ab,kw OR (preschool*):ti,ab,kw (Word variations have been searched) 78373 #13 (pre-school*):ti,ab,kw OR (second-grader*):ti,ab,kw OR (seventh-grader*):ti,ab,kw OR (sixth-grader*):ti,ab,kw OR (stepchild*):ti,ab,kw (Word variations have been searched) 1010 #14 (step-child*):ti,ab,kw OR (third-grader*):ti,ab,kw OR (toddler#):ti,ab,kw OR (OR young):ti,ab,kw OR (youngster*):ti,ab,kw (Word variations have been searched) 2395 #15 (youth):ti,ab,kw (Word variations have been searched) 9736 #16 (babies OR baby OR infan* OR neonat* OR neo-nat* OR newborn* OR new-born* OR perinat*):ti,ab,kw 93954 #17 (young NEAR person):ti,ab,kw 731 #18 MeSH descriptor: [Infant] this term only 28623 #19 MeSH descriptor: [Infant, Newborn] this term only 20279 #20 MeSH descriptor: [Child] this term only 69223 #21 MeSH descriptor: [Child, Preschool] this term only 35097 #22 MeSH descriptor: [Nurseries, Infant] explode all trees 13 #23 #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 214116 #24 MeSH descriptor: [Clinical Trial] explode all trees 45348 #25 (Clinical Trial):ti,ab,kw 723656

	#26 (Clinic* NEAR trial*):ti,ab,kw 543306 #27 (singl* NEAR blind*):ti,ab,kw OR (singl* NEAR mask):ti,ab,kw OR (doubl* NEAR blind*):ti,ab,kw OR (doubl* NEAR mask*):ti,ab,kw (Word variations have been searched) 396643 #28 (tripl* NEAR blind*):ti,ab,kw OR (tripl* NEAR mask*):ti,ab,kw OR (trebl* NEAR blind*):ti,ab,kw OR (trebl* NEAR mask*):ti,ab,kw (Word variations have been searched) 2918 #29 (randomis* control* trial*):ti,ab,kw (Word variations have been searched) 124429 #30 MeSH descriptor: [Random Allocation] this term only 23362 #31 (placebo*):ti,ab,kw (Word variations have been searched) 366717 #32 MeSH descriptor: [Placebos] this term only 25631 #33 (allocat* NEAR random*):ti,ab,kw (Word variations have been searched) 84684 #34 #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 1088589 #35 #8 AND #23 AND #34 2056

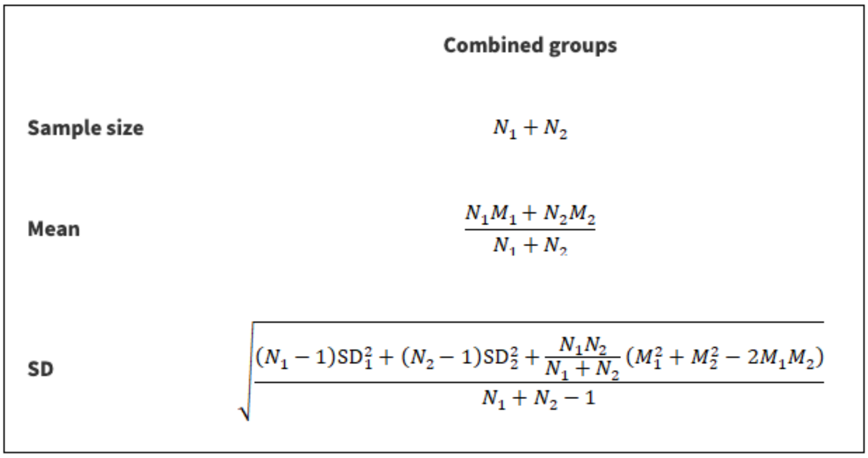
Table S2: Equations used to combine and impute data for analysis

1. *Equations used to calculate change in mean and variance for meta-analysis.*

Mean(change)	$M(post) - M(pre)$
SD(change)	$\sqrt{SDpre^2 + SDpost^2 - (2x\ cor.coef.x\ SDpre\ x\ SDpost)}$

A correlation coefficient of 0.6 was calculated from data related to parental stress reported in one study (Conn et al., 2018). This was then used an estimated correlation coefficient for all studies, an approach suggested within the Cochrane handbook.

2. *Equations used to combine interventions groups in 3 arm studies.*



	Combined groups
Sample size	$N_1 + N_2$
Mean	$\frac{N_1M_1 + N_2M_2}{N_1 + N_2}$
SD	$\sqrt{\frac{(N_1 - 1)\mathrm{SD}_1^2 + (N_2 - 1)\mathrm{SD}_2^2 + \frac{N_1N_2}{N_1 + N_2}(M_1^2 + M_2^2 - 2M_1M_2)}{N_1 + N_2 - 1}}$

Table S3: Demographic information for participants

Study (Author, year)	Child age	Child gender	Child ethnicity	Other child demographics	Caregiver demographics
Bick & Dozier, 2013	Mean age 9.9 months (SD=6.05, range 1-22 months)	48% female	59% African American, 28% White non-Hispanic, 6% Hispanic, 1% Asian American, and 6% biracial	N/A	Mean age 45 years (SD=10.7, range 24 to 74 years; 43% African American, 46% White non-Hispanic, 7% Hispanic, and 4% biracial
Blair, 2018	Mean age 4.6 years (SD=1.31)	56.9% female	Ethnicity, 56.1% African-American, 19.5% White, 12.2% Hispanic/Latino, 12.2% Other	N/A	Mean age 44.7 years (SD=11.12); 89.4% female; Ethnicity: 45.9% African-American, 48.4% White, 5.7% Other; Average length of time as a foster parent = 50 months (SD=69.02); 41.5% had a college degree, 36.4% attended some college, and 22% had a high school degree/GED.
Conn et al., 2018	Intervention: Mean age 53.33 months (SD=16.81) Control: Mean age 42.88 months (SD=12.59)	Intervention: 40% female Control: 23.5% female	Intervention: 20% Black Control: 52.9% Black	Intervention: Average age entering FC 33.14 months (SD=16.45); Average months in FC 19.07 (SD=15.72) Control: Average age entering FC 17.94 months (SD=12.73); Average months in FC 24.29 (SD=18.25)	Intervention: 81.3% female; 18.8% Black; 25% aged 18-35, 62.5% aged 36-44, 12.5% aged over 45 Control: 93.8% female; 29.4% Black; 29.4% aged 18-35, 58.8% aged 36-44, 11.8% aged over 45
Danko, 2014	Mean age 3.56 years (SD=0.99, range 2.08-5.67)	74.1% male	66.7% African American, 11.1% Latino, 3.7% Caucasian, 3.7% Asian, 14.8% Multiracial	Mean child's age at start of placement 1.93 years (SD=1.37, range 0.17-5)	92.6% female; Mean age 44.11 years (SD=13.12 range 23-81); Ethnicity 66.7% African American, 14.8% Latino, 18.5% Caucasian; Average no years education 14.69 (range 4 - 22 years); Average household income between $30,001 and $40,000; 26.9% single, 3.8% cohabitating, 34.6% married, 3.8% separated, 15.4% divorced, and 15.4% widowed; Mean no. years as a foster parent 4.6 (SD=4.48, range 0.33-15).
Fisher & Stoolmiller, 2008	Mean age at baseline 4.4 years (range = 4.3–4.5 years)	Intervention 49% male Control 58% male	89% European American, 5% Latino, 5% Native American, 1% African American	N/A	Not reported

Study (Author, year)	**Child age**	**Child gender**	**Child ethnicity**	**Other child demographics**	**Caregiver demographics**
Fisher et al., 2005	Intervention: Mean age at study start = 4.50 (0.86) Control: Mean age at study start = 4.22 (0.74)	Intervention: 66% male Control: 60% male	Intervention: Ethnicity: 79% white, 3% native american, 18% hispanic or latino Control: Ethnicity: 92% white, 4% Native American, 4% Hispanic or Latino	N/A	Not reported
Fisher et al., 2011	Intervention: Mean age = 4.54, SD= 0.86 (range 3.01-6.78) Control: mean age= 4.34, SD= 0.83 (range 3.10-5.91)	Intervention: 49.1% male Control: 58.3% male	Intervention: 82.5% Caucasian, 10.5% Hispanic, 5.3% native American, 1.8% African American Control: 93.4% Caucasian, 3.3% Hispanic, 3.3% native America	Intervention: 19.3% entering foster care for the first time, 14% recentring foster care, 66.7% moved to new foster home Control: 26.7% entering foster care for the first time, 18.3% recentering foster care, 55% moved to new foster home	Not reported
Fisher, 2009	Age at first placement, mean = 2.42 years (SD = 1.32, range 0-5 years)	Male n=27 Female n=25	Ethnicity = 90.4% European American	Mean number of transitions = 5.79 (SD = 1.66); Mean numbers of prior placement transitions: Intervention = 6.21 (SD=1.59) Control = 5.26 (SD=1.63)	Not reported
Job et al., 2020	Intervention: Mean age 42.8 months(SD=18.1, range 24-91) Control: Mean age 50.6 months (SD=19.8, range 24-95)	Intervention: 43% female Control: 54% female		Intervention: Mean duration of stay in current foster family 17.3 months (SD=8.3, range 3-25) Control: Mean duration of stay in current foster family 18.2 months (SD=8.5, range 2-40)	Intervention: Mothers' mean age 40.4 years (SD=7.1, range 25-57); Fathers' mean age 44.8 years (SD=6.6, range 32-58) Control: Mothers' mean age 43 years (SD=6.2, range 29-56); Fathers' mean age 45.4 years (SD=6.7, range 34-62)
Jonkman et al., 2017	Mean age 63.51 months (SD= 12.11)	64% male		Average age in months at first out of home placement 36.26 (SD=20.72) ; mean time in current family in months 6.54 (SD=13.57);	

Study (Author, year)	Child age	Child gender	Child ethnicity	Other child demographics	Caregiver demographics
Mersky et al., 2016	Mean age 4.6 years	54% female	70% racial and ethnic minorities (61% African American)	Mean number of children per household 2.96	89% female; 51% racial and ethnic minorities 52% married; Median length of experience as a foster parent 2 years
Miller, 2008	Mean age in years 4.33 (range 3.00-5.92)	44.9% female	85.9% European American, 7.7% Hispanic or Latino, 5.1% Native American, 1.3% African American	Mean number of days in foster care at start of study 162.64 (range 20-860). Average number of transitions 3.68 (range 1-9 transition)	
N'zi et al., 2016	Mean age 5.2 years (range 2.0-7.5)	50% female	Ethnicity 64% Caucasian, 22% African American, 7% Hispanic, 7% biracial	Mean length of placement 3.01 years (range 3 months - 7.5 years); 14% of children adopted, 29% in permanent guardianship, 43% temporary guardianship, 14% informal guardianship arrangements (outside of court or CWS involvement)	86% grandmothers, 14% great-grandmothers, mean age 56.5 years (range 45.9-73.0); 7% less than high school education, 7% completed high school; 36% completed some college; 36% completed college, 14% graduate degree; Mean annual family income $40,304 (range $11,000-$80,000; median $35,000), 29% lived below the poverty line
Raby et al., 2019	Intervention age at assessment 52.1 months (SD=9.1) Control age at assessment 51.4 months (SD=8.7)	Intervention 46.7% female Control 51.2% female	Intervention: 31.1% Caucasian, 46.7% African American, 8.9% Hispanic, 13.3% Other Control: 25.6% Caucasian, 51.2% African American, 7.0% Hispanic, 16.3% Other		Intervention: Age at intervention 47 years; 86.7% female; 50% Caucasian, 43.2% African American, 4.5% Hispanic, 2.3% Other Control: Age at intervention 48 years; 97.7% female; 33.3% Caucasian, 50% African American, 7.1% Hispanic, 9.5% Other
Schoemaker et al., 2020	Mean age 3.63 years (SD=1.35, range 1–6 years)	45% male		Mean time living with current family = 27.56 month (SD=15.98, range 5-63 months)	Mean age 45.43 years (SD=7.42, range 31-61 years) 83% female, 73% non-kinship foster families
Van Andel et al., 2016	Intervention: Age in months: M (SD): 19.8 (14.4) Control: Age in months: M (SD): 17.9 (14.7)	Intervention: Male (49%) Control: Male (51%)		Intervention: 77% in first or second placement; 85% in non-kinship foster care; 65% long-term placements; 93% maltreatment experience Control: 88% in first or second placement; 83% in non-kinship foster care; 62% long-term placements; 89% maltreatment experience	Intervention: 68% no prior experience as foster carers, 58% other children within family, 79% contact with biological parents Control: 63% no prior experience as foster carers, 74% other children within family, 88% contact with biological parents

Table S4: Risk of Bias as assessed using Cochrane Risk of Bias 2 (RoB2)

Study (Author, Year)	***Randomisation process***	***Deviations from intended interventions***	***Missing outcome data***	***Measurement of the outcome***	***Selection of reported results***	***Overall bias***
Bick & Dozier, 2013	Some concerns	High Risk	Low risk	Low risk	Some concerns	High risk
Blair, 2018	Some concerns	High risk	Low risk	Low risk	Some concerns	High risk
Conn et al., 2018	High risk	High risk	High risk	Some concerns	Low risk	High risk
Danko, 2014	Low risk	Low risk	Low risk	Low risk	Some concerns	Some concerns
Fisher et al., 2005	High Risk	Low risk	Low risk	High risk	Some concerns	High risk
Fisher & Stoolmiller, 2008	Some concerns	Low risk	low risk	Some concerns	Low risk	Some concerns
Fisher, 2009	High risk	High risk	Low risk	Low risk	Some concerns	High risk
Fisher et al., 2011	Some concerns	Low risk	Some concerns	Low risk	Low risk	Some concerns
Job et al., 2020	Some concerns	Low risk	Low risk	High risk	Low risk	Some concerns
Jonkman et al., 2017	Some concerns	Low risk	Low risk	Some concerns	Low risk	Some concerns
Miller, 2008	Some concerns	Some concerns	Low risk	Low risk	Some concerns	Some concerns
Mersky et al., 2016	Low risk	Low risk	Some concerns	Low risk	Low risk	Some concerns
N'zi et al., 2016	Low risk	Some concerns	Low risk	Some concerns	Some concerns	Some concerns
Raby et al., 2019	Some concerns	Some concerns	Low risk	Low risk	Some concerns	Some concerns
Van Andel et al., 2016	Low risk	Some concerns	Low risk	Some concerns	Low risk	Some concerns

Table S5: GRADE Assessment of overall quality

Outcome	**Number of studies**	**Number of unique participants**	**Design**	**Risk of bias**	**Inconsistency of results**	**Indirectness of evidence**	**Imprecision**	**Publication Bias, all possible confounding, dose gradient response**	**Overall quality estimate**
Parental sensitivity	*7*	*587*	*RCT*	*-1*	*Heterogeneity explained*	*Direct evidence*	*-1*	*NA*	*Low Quality*
Parental stress	*7*	*488*	*RCT*	*-1*	*Heterogeneity explained*	*Direct evidence*	*-1*	*NA*	*Low Quality*
Placement stability	*5*	*330*	*RCT*	*-1*	*Heterogeneity explained*	*Direct evidence*	*-1*	*NA*	*Low Quality*

Appendix 3 – Major Research Project – COREQ

Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Topic	No.	Guide questions/description	Report Page No.
Domain 1: Research team and reflexivity			
Personal Characteristics			
Interviewer/ facilitator	1	Which author/s conducted the interview or focus group?	48
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	51
Occupation	3	What was their occupation at the time of the study?	51
Gender	4	Was the researcher male or female?	51
Experience and training	5	What experience or training did the researcher have?	51
Relationship with participants			
Relationship established	6	Was a relationship established prior to study commencement?	51
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	51
Interviewer characteristics	8	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	51
Domain 2: study design			
Theoretical framework			
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	46
Participant selection			
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	47
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	48
Sample size	12	How many participants were in the study?	47
Non-participation	13	How many people refused to participate or dropped out? Reasons?	47
Setting			
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	47
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	NA
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	50
Data collection			

Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	48/ appendix
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	52
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	48
Field notes	20	Were field notes made during and/or after the interview or focus group?	51
Duration	21	What was the duration of the inter views or focus group?	48
Data saturation	22	Was data saturation discussed?	NA
Transcripts returned	23	Were transcripts returned to participants for comment and/or correction?	NA
Domain 3: analysis and findings			
Data analysis			
24. Number of data coders	24	How many data coders coded the data?	48
25. Description of the coding tree	25	Did authors provide a description of the coding tree?	48-49
26. Derivation of themes	26	Were themes identified in advance or derived from the data?	48-49
27. Software	27	What software, if applicable, was used to manage the data?	49
28. Participant checking	28	Did participants provide feedback on the findings?	NA
Reporting			
29. Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	51-65
30. Data and findings consistent	30	Was there consistency between the data presented and the findings?	51-65
31. Clarity of major themes	31	Were major themes clearly presented in the findings?	51
32. Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	51-65

Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. International Journal for Quality in Health Care, 19(6), 349-357. https://doi.org/10.1093/intqhc/mzm042

Appendix 4 – Major Research Project Supplementary material

Table summarising the Group Experiential Themes (GETs) interpreted for each case study and according to each role with relation to the child.	
Abigail	*1. MAPP is having a huge impact on Abigail and her family* *2. Finding hope in systemic protective factors* *3. A huge pressure and responsibility is sitting with Mum* *4. Complex difficulties and services not meeting her needs* *5. Uncertain. The whole system is struggling* *6. The relationship between family and services is difficult*
Leo	*1. Parents supporting change, guided and empowered by professionals* *2. An experience of apprehension and loneliness for parents* *3. Accessing the right intervention at the right time is challenging* *4. Feeling 'lucky' to have trusting relationships (professionals: parents)*
Elliot	*1. Supporting a child with a complex MAPP presentation* *2. Feeling stuck, trying to understand but nothing is helping* *3. Support being restricted by ongoing environmental stressors (bullying)* *4. Feeling a need to protect him, a child who could be overlooked* *5. Looking to relationships. Importance and influence of his carer*
Haley	*1. Understanding individual needs and MAPP presentation* *2. Experiencing a sense of trust and stability between family and services* *3. Needing to be flexible and responsive. She needs a safe 'go to' adult* *4. Supporting via 'managing' her environment / environmental stressors* *5. Noticing a growing maturity and resilience over time*
Leah	*1. Supporting a MAPP presentation where ongoing vulnerability is likely* *2. Maintaining and supporting a close and attuned relationship with mum* *3. Constantly balancing priorities, being adaptable and accommodating* *4. Finding that services are difficult to access* *5. Collaborating. Supporting Leah's network is part of supporting Leah*
Sam	*1. 'trial and error', learning as you go and problem solving* *2. Disappointment in services (too slow, can't access, inconsistent)* *3. Trying to be flexible and adaptable but finding services not child oriented* *4. Collaborating and 'sharing the load' across the adults involved* *5. A unique experience, changes everything (adopting + MAPP)*
Parents	*1. A challenging experience – lots of responsibility, balancing priorities, and worrying* *2. Disappointment and frustration when dealing with and navigating services* *3. MAPP and child having broad impact on their whole life (social/ family/ work…)* *4. Problem solving and creating an environment that meets child's needs*
Therapists	*1. Feel commitment to family, and trying to be as adaptable as possible* *2. Thinking relationally and systemically. Looking beyond traditional models* *3. Supporting the child through working with parents and care systems* *4. Trying to understand the child's often complex MAPP presentation* *5. Having faith in parents and noticing their strengths*
Social work	*1. Creating stability and considering needs across the family unit* *2. The difficulties are not related to current welfare, so social work need is low* *3. Trust and faith in parents, having a coordinating role while minimising involvement*
Teachers	*1. Understanding the child's unique presentation and needs* *2. Providing a 'secure base' at school and collaborating with parents* *3. Being flexible and adaptable. Always planning ahead and problem solving* *4. Collaborating with the child. Noticing their strengths, and getting 'buy-in'*

Appendix 5 – Major Research Project Proposal

See link to download: https://osf.io/rz5wu

Appendix 6 – Major Research Project – Letter of Approval to proceed

University of Glasgow
School of Health & Wellbeing

BC/CL

16th December 2022

Camilla Biggs
xxxxxxxx@student.gla.ac.uk

Dear Camilla,

Major Research Project Proposal

The network of care around a child with maltreatment-associated psychiatric problems (MAPP): an in-depth exploration using case study methodology to understand the experiences families and professionals within the Relationships in Good Hands Trial (RIGHT).

The above project has been reviewed by your University Research Supervisor and by a member of staff not involved in your project and has now been deemed fit to proceed to ethics.

Congratulations and good luck with the study.

Yours sincerely

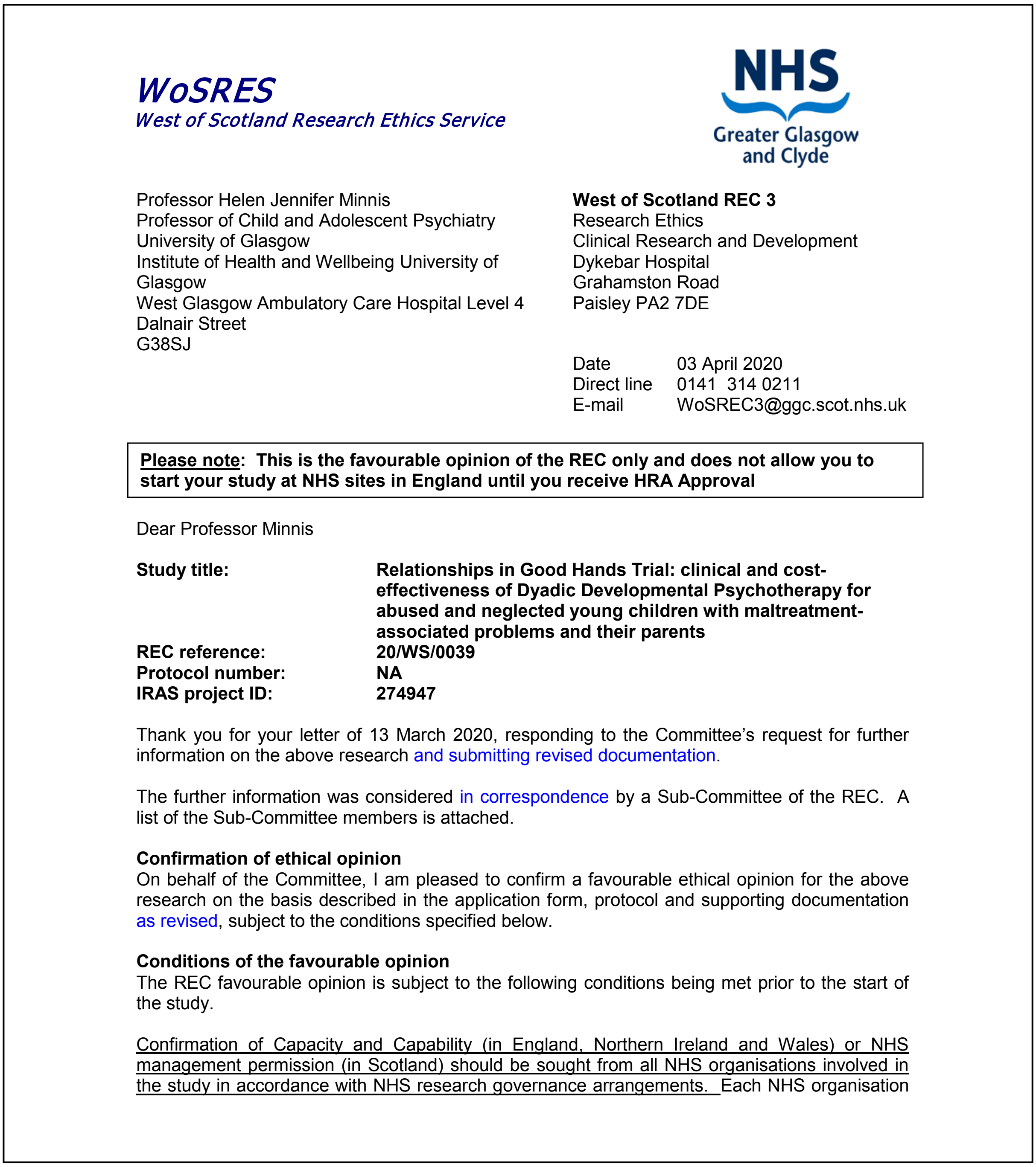
Dr Breda Cullen
Senior Lecturer in Clinical Psychology
DClinPsy Research Director

School of Health & Wellbeing
College of Medical, Veterinary and Life Sciences
University of Glasgow
Mental Health and Wellbeing, Admin Building, Gartnavel Royal Hospital
1055 Great Western Road, Glasgow G12 0XH
Phone: 0141 211 3927

The University of Glasgow, charity number SC004401

Appendix 7 – Major Research Project - Ethical Approval

Ethical approval for the study is incorporated into ethical approval for Relationships in Good Hands Trial. Included below: Initial Research Ethics Committee approval for the trial, and amendment approval, which included amendments relevant to this study, including interview schedule approvals.



WoSRES
West of Scotland Research Ethics Service

NHS
Greater Glasgow
and Clyde

Professor Helen Jennifer Minnis
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Date 03 April 2020
Direct line 0141 314 0211
E-mail WoSREC3@ggc.scot.nhs.uk

Please note: This is the favourable opinion of the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

Dear Professor Minnis

Study title:	**Relationships in Good Hands Trial: clinical and cost-effectiveness of Dyadic Developmental Psychotherapy for abused and neglected young children with maltreatment-associated problems and their parents**
REC reference:	**20/WS/0039**
Protocol number:	**NA**
IRAS project ID:	**274947**

Thank you for your letter of 13 March 2020, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information was considered in correspondence by a Sub-Committee of the REC. A list of the Sub-Committee members is attached.

Confirmation of ethical opinion
On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Conditions of the favourable opinion
The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or NHS management permission (in Scotland) should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for HRA and HCRW Approval (England and Wales)/ NHS permission for research is available in the Integrated Research Application System.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials
It is a condition of the REC favourable opinion that **all clinical trials are registered** on a publicly accessible database. For this purpose, 'clinical trials' are defined as the first four project categories in IRAS project filter question 2. Registration is a legal requirement for clinical trials of investigational medicinal products (CTIMPs), except for phase I trials in healthy volunteers (these must still register as a condition of the REC favourable opinion).

Registration should take place as early as possible and within six weeks of recruiting the first research participant at the latest. Failure to register is a breach of these approval conditions, unless a deferral has been agreed by or on behalf of the Research Ethics Committee (see here for more information on requesting a deferral: https://www.hra.nhs.uk/planning-and-improving-research/research-planning/research-registration-research-project-identifiers/

As set out in the UK Policy Framework, research sponsors are responsible for making information about research publicly available before it starts e.g. by registering the research project on a publicly accessible register. Further guidance on registration is available at: https://www.hra.nhs.uk/planning-and-improving-research/research-planning/transparency-responsibilities/

You should notify the REC of the registration details. We will audit these as part of the annual progress reporting process.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

After ethical review: Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:
- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study, including early termination of the study
- Final report

The latest guidance on these topics can be found at https://www.hra.nhs.uk/approvals-amendments/managing-your-approval/.

Ethical review of research sites
NHS/HSC sites
The favourable opinion applies to all NHS/HSC sites listed in the application subject to confirmation of Capacity and Capability (in England, Northern Ireland and Wales) or management permission (in Scotland) being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS/HSC sites
I am pleased to confirm that the favourable opinion applies to any non-NHS/HSC sites listed in the application, subject to site management permission being obtained prior to the start of the study at the site.

Approved documents
The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only)		24 July 2019
GP/consultant information sheets or letters [Letter to GP]	1.0	30 January 2020
Interview schedules or topic guides for participants [Interview Schedule]	1.0	30 January 2020
Interview schedules or topic guides for participants [Focus Group Topic Guide]	1.0	30 January 2020
IRAS Application Form [IRAS_Form_31012020]		31 January 2020
Letter from funder		22 October 2019
Letters of invitation to participant [Invitation for Interview _ SDS]	1.0	30 January 2020
Letters of invitation to participant [Invitation for Focus Group_SDS]	1.0	30 January 2020
Other [TSC Charter Draft]		
Other [Sponsor Protocol Signature]		
Other [Cover Letter]		31 January 2020
Other [Cover Letter]		
Participant consent form [Consent_ Routine Data]	1.0	30 January 2020
Participant consent form [Consent _SDS_Interview]	2.0	15 March 2020
Participant consent form [Consent _SDS_Focus Group]	2.0	15 March 2020
Participant consent form [Consent _Parent Phase 2-3]	2.0	15 March 2020
Participant consent form [Assent_Child 8-12_Phase 2-3]	1.0	15 March 2020
Participant consent form [Assent Child 5-7_Phase 2-3]	1.0	15 March 2020
Participant consent form	2.0	15 March 2020
Participant consent form [Consent_Parent Phase 2-3 Focus Group]	2.0	15 March 2020
Participant information sheet (PIS) [PIS_Service Delivery Staff_Interview]	1.0	30 January 2020
Participant information sheet (PIS) [PIS_Service Delivery Staff_Focus Group]	1.0	30 January 2020
Participant information sheet (PIS) [PIS_Parent_Phase 2-3]	1.0	30 January 2020
Participant information sheet (PIS) [PIS _Parent_Phase 2-3_Interview]	1.0	30 January 2020

Participant information sheet (PIS) [PIS_Parent _Phase 2-3_Focus Group]	1.0	30 January 2020
Participant information sheet (PIS) [PIS Child 8-12]	2.0	15 March 2020
Participant information sheet (PIS) [PIS _Child 5-7]	1.0	15 March 2020
Research protocol or project proposal [Protocol]	1.0	29 January 2020
Summary CV for Chief Investigator (CI) [CV Helen Minnis]		10 December 2019
Summary, synopsis or diagram (flowchart) of protocol in non technical language [Plain English Summary]	1.0	30 January 2020
Validated questionnaire [Data collection tool (Strengths and Difficulties Questionnaire)]		
Validated questionnaire [Data collection tool (Brief Assessment Checklist for Children)]		
Validated questionnaire [Data collection tool (Carer Questionnaire)]		
Validated questionnaire [Reference Publication (Parenting Stress Index-Short Form)]		
Validated questionnaire [Data collection tool (PedsQL 5-7 years)]		
Validated questionnaire [Data collection tool (ICECAP-A measure V2)]		
Validated questionnaire [Data collection tool (EQ-5D-5L)]		
Validated questionnaire [Data collection tool (Child Health Utility 9D)]		
Validated questionnaire [Data collection tool (RADA Interview)]		
Validated questionnaire [Data collection tool ("This Is My Baby" Interview Questions)]		
Validated questionnaire [Data collection tool (Middle Years Development Instrument)]		
Validated questionnaire [Reference Publication (DDP Resource Use - health economic feasiblity)]		
Validated questionnaire [Reference Publication (Likert scales PROMS)]		
Validated questionnaire [Reference Publication (My World Game - Uses of Bronfenbrenner)]		
Validated questionnaire [Reference Publication (WRO paper)]		
Validated questionnaire [Reference Publication (Emotional Availability Scales)]		

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/

HRA Learning
We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities – see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

IRAS project ID: 274947 Please quote this number on all correspondence

With the Committee's best wishes for the success of this project.

Yours sincerely

For
Dr Anne-Louise Cunnington
Chair

Enclosures: List of names and professions of members who were present at the meeting and those who submitted written comments
"After ethical review – guidance for researchers" [SL-AR2]

Copy to: Dr Colette Montgomery Sardar
nhsg.NRSPCC@nhs.net

West of Scotland REC 3

Attendance at Sub-Committee of the REC meeting on 31 March 2020

Committee Members:

Name	*Profession*	*Present*
Dr Anne-Louise Cunnington	Consultant Geriatrician and Chair	In Correspondence
Ms Karen McIntyre	Director	In Correspondence
Mr Gerry Speirs	Volunteer Park Ranger	In Correspondence

Also in attendance:

Name	*Position (or reason for attending)*
Mrs Moyra Evans	REC Manager
Dr Judith Godden	Scientific Officer/Manager

WoSRES
West of Scotland Research Ethics Service

Ms Lorna Ginnell
Trial Manager
Mental Health and Wellbeing, University of Glasgow
Clarice Pears Building, 90 Byres Rd, Glasgow G12 8TAEmail

West of Scotland REC 3
West of Scotland Research Ethics Service
Ground Floor Ward 11
Dykebar Hospital
Grahamston Road
Paisley PA2 7DE

Date 13 September 2023
Direct line 0141 314 0212
E-mail WoSREC3@ggc.scot.nhs.uk

<u>Please note: This is the favourable opinion of the REC only and does not allow</u> the amendment to be implemented at NHS sites in England until the outcome of the HRA assessment has been confirmed.

Dear Ms Ginnell

Study title:	**Relationships in Good Hands Trial: clinical and cost-effectiveness of Dyadic Developmental Psychotherapy for abused and neglected young children with maltreatment-associated problems and their parents**
REC reference:	**20/WS/0039**
Protocol number:	**NA**
Amendment number:	**IRAS 274947 L19083 SA07 31.08.2023 (REC Ref AM13)**
Amendment date:	**31 August 2023**
IRAS project ID:	**274947**

The above amendment was reviewed at the meeting of the Sub-Committee held in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	*Version*	*Date*
Completed Amendment Tool [RIGHT 274947 L19083 SA07 Amendment 31.08.2023]	v1.6	31 August 2023
Interview schedules or topic guides for participants [RIGHT_Parent Interview Topic Guide_Phase 3_v1.0_21.08.2023]	1.0	21 August 2023
Interview schedules or topic guides for participants [RIGHT_Topic Guide_Social Workers_Phase 3_v1.0_21.08_2023]	1.0	21 August 2023
Interview schedules or topic guides for participants [RIGHT_Topic Guide_Teachers_Phase 3_v1.0_21.08.2023]	1.0	21 August 2023

Document	*Version*	*Date*
Interview schedules or topic guides for participants [RIGHT_TopicGuide_Practitioners_Phase 3_v1_21.08.2023]	1.0	21 August 2023
Interview schedules or topic guides for participants [RIGHT_TopicGuide_Practitioners_CarePathways_Phase 3_v1_21.08.2023]	1.0	21 August 2023
Interview schedules or topic guides for participants [RIGHT_recruitment flyer_v01_21.08.2023]	01	21 August 2023
Participant consent form [RIGHT_CONSENT (Parent_Phase 2,3)_v8.0_21.08.2023]	8.0	21 August 2023
Participant consent form [RIGHT_CONSENT (Parent_Phase 2,3)_v8.0_21.08.2023_tracked]	8.0	21 August 2023
Participant information sheet (PIS) [RIGHT_PIS (Parent_Phase 2-3) v7.0_21.08.2023]	7.0	21 August 2023
Participant information sheet (PIS) [RIGHT_PIS (Parent_Phase 2-3) v7.0_21.08.2023_tracked]	7.0	21 August 2023
Participant information sheet (PIS) [RIGHT_PIS_Professional Interview_v3.0_21.08.2023]	3.0	21 August 2023
Participant information sheet (PIS) [RIHGT_PIS_Professional Interview_v3.0_21.08.2023_tracked]	3.0	21 August 2023
Research protocol or project proposal [RIGHT - NIHR127801_Protocol v8.0 21.08.2023]	8.0	21 August 2023
Research protocol or project proposal [RIGHT - NIHR127801_Protocol v8.0 21.08.2023_changes tracked]	8.0	21 August 2023

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

Working with NHS Care Organisations

Sponsors should ensure that they notify the R&D office for the relevant NHS care organisation of this amendment in line with the terms detailed in the categorisation email issued by the lead nation for the study.

Amendments related to COVID-19

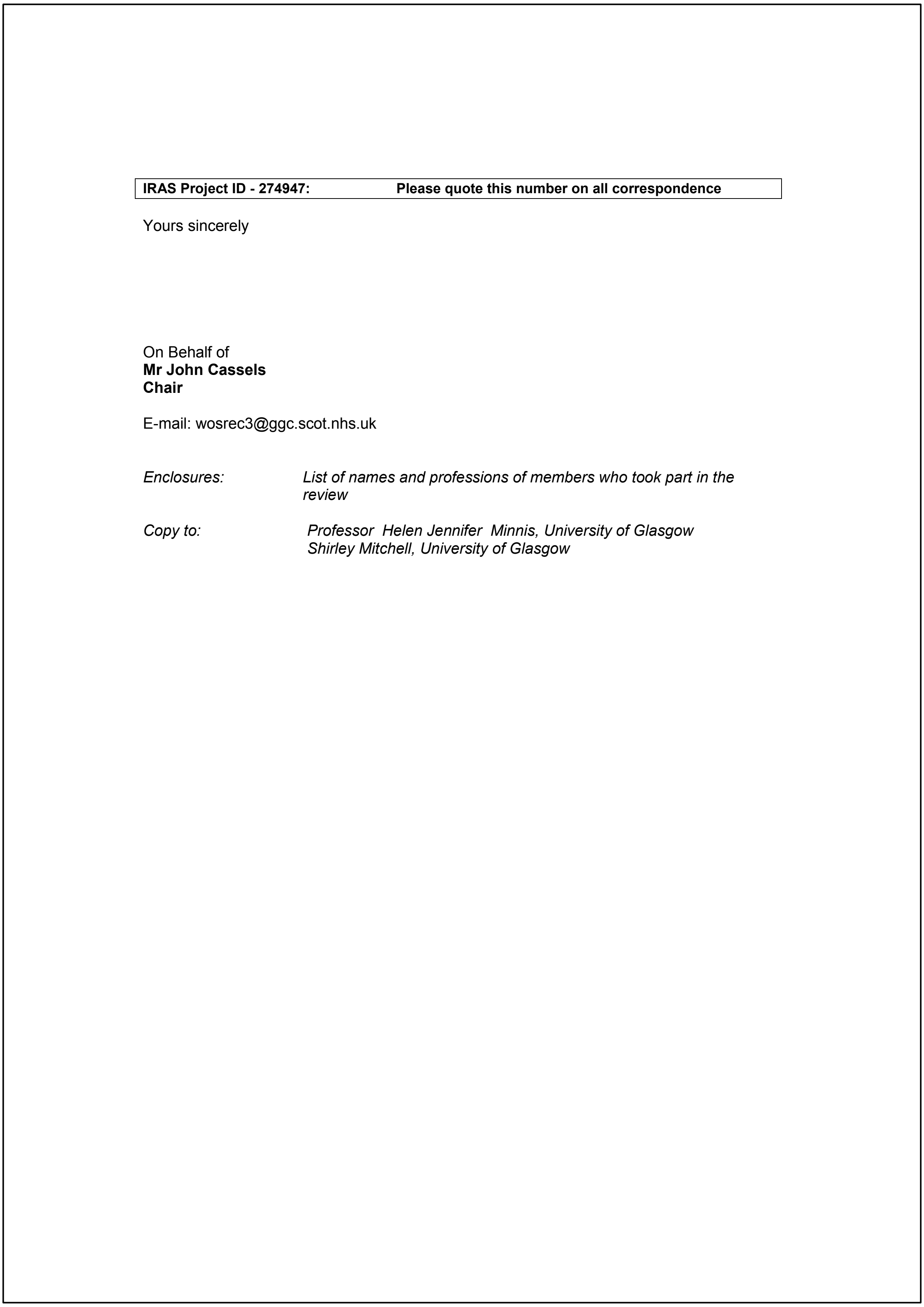
We will update your research summary for the above study on the research summaries section of our website. During this public health emergency, it is vital that everyone can promptly identify all relevant research related to COVID-19 that is taking place globally. If you have not already done so, please register your study on a public registry as soon as possible and provide the HRA with the registration detail, which will be posted alongside other information relating to your project.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities– see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/



IRAS Project ID - 274947: Please quote this number on all correspondence

Yours sincerely

On Behalf of
Mr John Cassels
Chair

E-mail: wosrec3@ggc.scot.nhs.uk

Enclosures:	*List of names and professions of members who took part in the review*
Copy to:	*Professor Helen Jennifer Minnis, University of Glasgow* *Shirley Mitchell, University of Glasgow*

West of Scotland REC 3

Attendance at Sub-Committee of the REC meeting on 14 September 2023 *Decision issued 13 September 2023

Committee Members:

Name	*Profession*	*Present*	*Notes*
Dr Kenneth Harden	Retired GP	Yes	
Dr John Murphy	Consultant Haematologist (Retired)(Alternate Vice-Chair)	Yes	(Chair of meeting)

Also in attendance:

Name	*Position (or reason for attending)*
Mrs Ashley Nisbet	REC Manager

Appendix 8 – Major Research Project – Participant Information Sheet and Consent forms

See links to download:

Parent Consent form: https://osf.io/ht2uv

Parent Participant information sheet: https://osf.io/gcnpt

Professional Consent form: https://osf.io/x2fzv

Professional Participant Information sheet: https://osf.io/7acdf

<u>Appendix 9 – Major Research Project – Interview Schedules</u>

See links to download:

Parent interview schedule: https://osf.io/qjbyd

Health and social care professional interview schedule: https://osf.io/rbkjs

Teacher interview schedule: https://osf.io/xn4ey