

A pragmatic review of psychodynamic and attachment-based parenting interventions for under-fives and their common elements.

Authors: Nicole Creasey^a, Tom Kingab, Beth Barker^{a*}, Morgan Healy^{a*}, Natalie Kirby^{a*}, Sophie Phillips^{a*}, Katharine Selby^{a*}, Zhiyu Zhao^{a*}, Kirsten Barnicot^c, Karen Bateson^d, Robert Bode^b, Wendy Browne^a, Aleisha Clarke^e, Sally Hogg^f, Eliane Young^b, Paul Ramchandani^a, Christine O'Farrelly^a

^a Centre for Research on Play in Education, Development and Learning (PEDAL), Faculty of Education, University of Cambridge

^b Paediatric Psychological Medicine Team, Cambridge University Hospitals, NHS Foundation Trust

^c School of Health and Medical Sciences, Department of Population Health and Policy, City St George's, University of London

^d Oxford Parent Infant Project

^e Department of Health, Ireland

^f Start Strong

* These authors contributed equally.

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CONTENTS

Introduction	4
Section I. Identifying effective psychodynamic and attachment-based parenting interventions for under-fives.....	9
Pragmatic review methods	9
Pragmatic review results	11
Section II. An overview of evidence-based psychodynamic and attachment-based parenting interventions for under-fives	17
Section III. The common elements of evidence-based psychodynamic and attachment-based parenting interventions for under-fives	23
Methods for common elements analyses	23
Results of common elements analyses	26
Discussion	35
Intervention evidence and the 0–5 pathway	35
UK evidence and service relevance	35
Common elements across effective interventions	36
Limitations.....	38
Implications for a coherent 0–5 offer	38
What is needed to build an evidence informed 0–5 offer.....	39
Conclusion	40
References.....	41
Appendices.....	46
Appendix A: Pragmatic review supplementary materials	46
Appendix B: Intervention catalogue	95
Appendix C: Common elements supplementary materials.....	126

Introduction

Understanding what works: Evidence for mental health interventions for babies and young children aged 0-5 years

Good mental health in the earliest years matters for children's wellbeing now and for their futures. The relationships babies and children have with their caregivers offer one of the most important ways we can support babies and young children's mental health and family wellbeing (1). When babies and children are cared for in consistent, responsive and nurturing relationships they learn that they are loved and valued, how to relate to others, how to recognise, navigate and manage their emotions, and be confident in exploring the world around them.

These caregiving relationships are influenced by the whole system around a family including the baby/young child and families' own characteristics as well as wider social, economic, and environmental factors (2). Consequently, a strong early mental health system requires mental health promotion and intervention that is grounded in relational approaches that support the caregiving relationship, as well as efforts to reduce pressures on families and address social determinants of mental health (2,3). A holistic, whole system approach to mental health development in the first five years can help to ensure that mental health needs are addressed as early as possible, reducing the risk of later mental health problems and helping children and families to thrive, right from the start.

Despite a compelling ethical and economic case for the importance of children's early mental health, the translation of evidence into equitable, scalable, and effective services remains uneven (4). There are a variety of underlying factors at play including the time and cost required to deliver interventions, and design features that may not reflect the priorities, needs or complexity of real-world contexts of babies/young children, caregivers, and practitioners (5). As a result, the interventions with the strongest evidence for supporting early caregiving and children's mental health can be the least likely to reach families (6).

This challenge is especially pressing in the UK context. To date most service development has focused on children and young people aged 5–25 years. This has resulted in a relative gap in provision for families during pregnancy and for babies and young children (aged 0–5 years), alongside limited clarity on effective interventions for this age group. Commissioners, service leads, and practitioners therefore need to make decisions based on a fragmented evidence base, with limited resources, and within complex multi-agency systems.

Current policy frameworks such as the NHS 10 Year Plan and the NHS Operational Planning guidance for 2025/26 have set a clear commitment to both expand access to and reduce inequalities in children and young people's (CYP) mental health services (7,8). Realising these ambitions requires a clear appraisal of the evidence base to guide implementation and practice.

Purpose of the report

This report aims to address this 'evidence to implementation gap' by providing a clear, structured synthesis of the evidence base for mental health interventions for 0–5s. It focuses on attachment-based interventions and psychodynamic (including psychoanalytic and mentalisation-based) interventions, complementing PEDAL's Golden Threads project, a companion study of the common elements of brief caregiving interventions.

The report has two main aims:

Aim 1. To provide an overview of interventions with the strongest evidence base for supporting mental health outcomes in children 0 to 5 years of age defined as meeting a predetermined evidence-threshold¹. For each the overview covers the strength of the UK evidence, underpinning theoretical frameworks, intervention models, delivery formats, and workforce requirements.

Aim 2. To identify the features that reoccur most frequently across successful interventions, known as ‘common elements’. In the context of parenting interventions this includes 1) ‘practice elements’, which are concrete behaviours or techniques caregivers can learn or adjust to enhance their caregiving skills and support children’s mental health and development (e.g., ‘notice and be curious about baby/child’), 2) ‘delivery elements’, which are strategies practitioners use to deliver the practice elements to families (e.g., ‘modelling’), and 3) ‘implementation elements’, which are the guidance and skills practitioners need to ensure the practice elements land with caregivers and increase the likelihood that they become part of their everyday caregiving (e.g., ‘Provide reassurance and normalise the caregiver’s emotions and experiences’).

Within attachment and psychodynamic approaches, practice elements include not only observable caregiving behaviours, but also the emotional and relational capacities that underpin them. This includes caregivers’ capacity to reflect on their own and their child’s internal experiences and to regulate their own emotions so that they can respond in an attuned and sensitive way in interactions with their baby/child (see PEDAL’s Thriving Together Framework for an overview of the key caregiving skills that support children’s mental health (1)).

By synthesising the evidence and identifying the components that recur most consistently across effective interventions, this report provides policy makers, commissioners, service leads, and practitioners with a clear and practical foundation for decision-making. It also offers a common framework for considering the evidence that underpins everyday practice, supporting more explicit and nuanced interpretation of what works. This, in turn, enables more consistent application across interventions and service contexts to help reduce variation in care.

This report complements wider initiatives and research within the NHS England’s Children and Young People’s Mental Health and Perinatal Mental Health team and PEDAL’s early intervention research programmes. The overall goal of this work is to support the development of a comprehensive, coherent and equitable 0–5s offer (see PEDAL/UNICEF toolkit to support local action on infant and early mental health (2)), one that is grounded in evidence, responsive to the priorities of families and realities of service delivery, and capable of meeting the diverse needs of babies, young children and their families.

It is important to note that this synthesis focuses on interventions that are sufficiently specified and documented to enable systematic review and therefore does not capture the full range of therapeutic work delivered through individualised, non-manualised approaches tailored to the needs of specific families.

Why focus on attachment-based and psychodynamic interventions?

¹ Interventions were categorised as having sufficient evidence where two or more controlled trials with a sample of 50 families or above showed a favourable result on at least one relevant outcome. See Table 1 and Section I for full criteria.

This report focuses specifically on attachment-based and psychodynamic interventions, reflecting the importance of the relational environment as a key pathway through which early mental health is supported. The principles, theories, and approaches underpinning these interventions have relevance across the intervention spectrum (see **Figure 1**). Notwithstanding this, psychodynamic interventions are typically found at the more intensive end of the intervention spectrum, where focused work on the caregiver–baby/child relationship is required. In contrast, interventions grounded in attachment theory feature across preventive and treatment contexts.

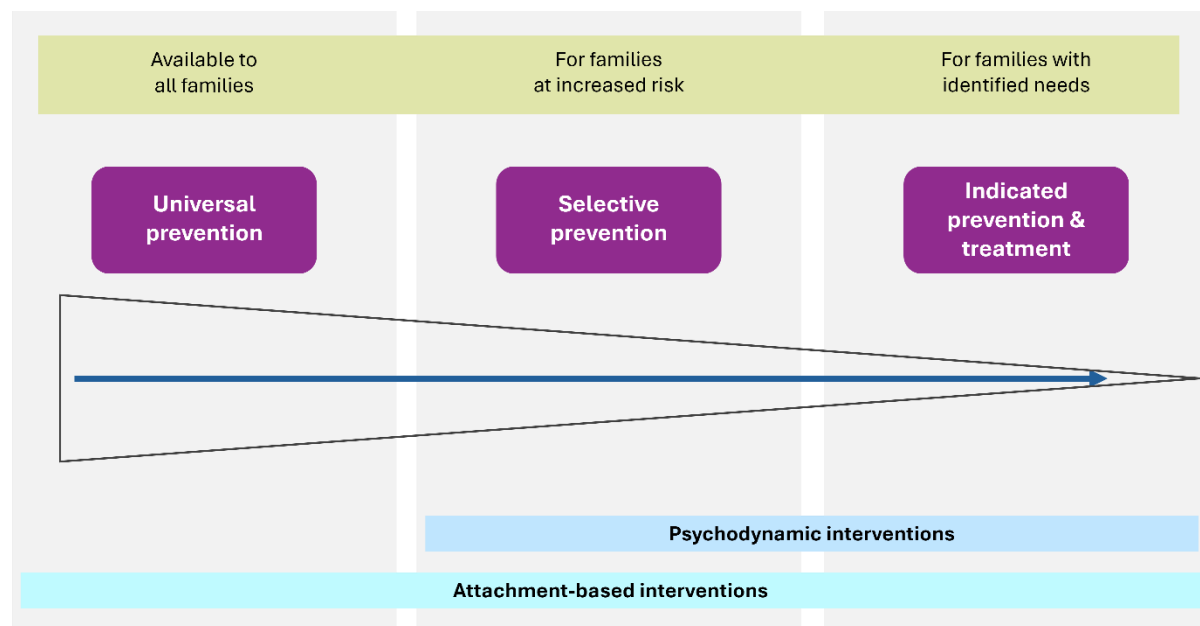


Figure 1. Psychodynamic and attachment interventions across the intervention spectrum

When used in specialist pathways, attachment-based and psychodynamic interventions are most often delivered by specialised parent–infant relationship teams, perinatal services and 0–5 pathways within Child and Adolescent Mental Health Services (CAMHS), as well as voluntary sector organisations with expertise in infant and early mental health. In these contexts, they are typically used to support caregivers and infants and young children whose needs stem from relational difficulties, early adversity, or emerging attachment or behavioural concerns. They are designed to provide a resource for families experiencing complex or entrenched relational challenges, including intergenerational trauma, complementing other preventive supports. In selective (i.e., targeted) and indicated preventive contexts, attachment-based interventions can be delivered by practitioners from a range of backgrounds (e.g., nursery nurses, early help/family support/parenting practitioners, and peer support workers) where there may be more moderate family wellbeing needs, parenting difficulties or some concern about the child’s behaviour or emotional wellbeing. Together, these interventions aim to support healthy development by promoting caregivers’ reflective capacity, emotion regulation, and sensitive responding.

A complementary PEDAL project, Golden Threads, examines the common elements of brief caregiving interventions, including both attachment-based interventions and approaches not included in this report, such as those grounded in social learning theory. Golden Threads uses a similar evidence threshold and methodology but focuses specifically on interventions delivered

in 16 sessions or fewer. The findings will be reported separately in a forthcoming companion report. These projects are best considered alongside each other. This report provides depth in relation to attachment-based and psychodynamic approaches, while Golden Threads offers broader insight into the common caregiving and delivery processes that support infant and early mental health across the intervention spectrum.

Our approach: Combining a pragmatic review and common elements analysis

This report is underpinned by two approaches to evidence synthesis. Firstly, we use a pragmatic review to identify the interventions that meet an evidence threshold based on effects on relevant outcomes for children and families and study quality. Secondly, we apply a common elements analysis to the resulting evidence-based interventions to identify the practice, delivery, and implementation elements that occur most frequently across these interventions. We have combined these approaches to provide the best possible overview of the evidence. However, each approach brings strengths and limitations that are important to keep in mind when reading this report and its findings.

The pragmatic review draws on a traditional ‘gold standard’ approach to evidence synthesis that is often used to identify evidence-based interventions using pre-established evidence thresholds. Notably, applying eligibility criteria based on a set evidence threshold does not account for nuance across the evidence base. For example, some interventions which meet the evidence threshold based on certain studies, may have failed to show effects in others. This inconsistency includes interventions that have failed to replicate effects in a UK context. Effects can also vary in magnitude, and the evidence threshold does not account for this. We address this challenge by providing an overall summary of the evidence for each intervention foregrounding the evidence base in UK contexts and providing details as to whether these interventions have demonstrated effectiveness in the UK. We also report banded effect sizes for each outcome, where available, so that readers can see and compare the magnitude of effects across studies and outcomes of interest.

A common elements approach offers several strengths for identifying what intervention features might be particularly consequential in driving outcomes. Common elements analysis is an increasingly utilised approach in intervention research that examines patterns across multiple evidence-based programmes to identify shared strategies and techniques that may underpin positive outcomes (9–12). In this study we adopt a fine-grained approach to the analysis (developed by Baker and colleagues (13)) that is especially designed to characterise the concrete strategies that can be used in practice to support caregiving skills. By identifying the specific strategies, techniques, and delivery features that appear across multiple successful interventions, findings can highlight *possible* ‘active ingredients’ that underpin benefits for families. These features can feed into wider decision making on which interventions to commission, as well as guiding adaptation of interventions to local contexts. For example, if practitioners need to tailor an intervention because of practical constraints, the needs of different communities, or for an individual family, common elements can help to provide information on which features of the intervention to retain and which might be adapted (14). Evidence from the review can also help practitioners apply evidence-informed techniques across different settings using consistent language and strategies (see [PEDAL’s Helping Little Minds Thrive project](#)).

However, the approach also has limitations. Setting a high bar for an evidence threshold can miss interventions that may generate positive benefits but are yet to be subject to robust trials –

a lack of robust evidence does not mean a lack of impact. To address this, we also profile interventions that reach a threshold for more limited or ‘preliminary’ evidence. Furthermore, as noted earlier this approach focuses on interventions that are fully specified (i.e. manualised), which does not extend to tailored individualised therapy, although the findings may also be valuable for this work.

Common elements analysis also identifies patterns rather than causal effects. As such, the review cannot determine definitively which elements cause change or demonstrate how combinations of elements interact in practice – this can be better understood in micro-trials that compare discrete elements (15). The approach may also underrepresent the importance of relational, cultural, and contextual factors that shape how interventions are implemented and experienced in practice (14). For these reasons, common elements should complement, rather than replace robust mechanistic studies and evaluation of complete interventions.

Layout of the report

The report includes three sections:

Section I describes the **methods and results of the pragmatic review** identifying effective psychodynamic and attachment-based parenting interventions for under-fives. Trial characteristics and a summary of the overall results are presented and discussed.

Section II provides **an overview of the parenting interventions with sufficient evidence** of effectiveness based on the pragmatic review, including links to a comprehensive intervention catalogue found in the appendices. The catalogue contains information for each intervention on the strength of the UK evidence, underpinning theoretical frameworks, intervention models, delivery formats, costs, and workforce requirements.

Section III reports on the **common elements of the same parenting interventions**, including the practice elements that appear most often across interventions, the prevalence of different strategies used to deliver them, and the most common guidance and skills that practitioners employ to help the content land with families.

Section I. Identifying effective psychodynamic and attachment-based parenting interventions for under-fives

Pragmatic review methods

We conducted a pragmatic review process to identify attachment-based and psychoanalytic parenting interventions with a sufficient evidence base in families of children under five for effects on caregiving and/or child or caregiver mental health. We did this in three stages as follows.

First, we scoped three recent systematic reviews of parenting interventions used in children aged 0-5 years (6,16,17), one of which included an additional UK survey of interventions used in practice (6). In addition, we conducted additional checks of clearing houses (i.e., [Foundations, Home Visiting Evidence of Effectiveness](#), [California Evidence-Based Clearinghouse for Child Welfare](#), and [Title IV-E Prevention Services Clearinghouse](#)). We compiled all parenting interventions identified through the scoping process and each intervention was assessed to establish whether it was attachment-based or psychodynamic by two reviewers. Designation to these categories was based on descriptions of the interventions included in published articles or on their official websites, alongside the expert knowledge of the research team.

Second, attachment-based and psychodynamic interventions were taken through to assessment for evidence of effectiveness. To do this, we compiled articles reporting on trials for each intervention using the same three systematic reviews (6,16,17) and conducted additional hands-on searching. The articles were screened for eligibility according to the criteria outlined in **Table A1**. In brief, the article had to report on a randomised controlled trial (RCT) or quasi-experimental trial (QET) with a sample of more than 50 families, and a child mean age of less than 5 years. The trial had to include a control group (active or passive) and must have reported on outcomes for child mental health, parent mental health, or parenting (e.g., parenting practices, parent sensitivity, parent cognitions). Interventions that were delivered prenatally were included if outcomes were measured at least once postnatally before age five. We also flagged trials with 20-50 participants to consider for our list of interventions with preliminary evidence.

Third, we grouped together articles that reported on the same trial and assessed whether there was at least one favourable result on a relevant outcome for each trial. After which, we categorised the interventions into one of three categories for effectiveness (**Table 1**).

Interventions were categorised as having sufficient evidence where two or more controlled trials with a sample of 50 families or above showed a favourable result on at least one relevant outcome, and preliminary evidence where two or more trials met this standard with samples of 20 to 49 families. Interventions with 'sufficient evidence' were taken through to common elements coding and analysis. Summaries were prepared for those interventions with sufficient evidence and 'preliminary evidence', resulting in a catalogue of interventions described in Section II.

Trial details were extracted from each eligible article to a pre-piloted form by the review team, and all entries were checked independently. For favourable results, we extracted or calculated the effect sizes, where possible, and categorized them by size to allow comparability (i.e., very

small, small, moderate, large/very large) based on cut-offs suggested by Cohen (18). In addition, we extracted quality/risk-of-bias ratings for each article from the original systematic reviews (6,16,17). Where more than one quality rating was available for a given article, we choose the majority rating or, if no majority was reached, we took the most conservative rating. For seven articles without available ratings, we assessed each article with the EPHPP Quality Assessment Tool for Quantitative Studies (19,20). All quality ratings were standardised as ‘weak’, ‘moderate’, or ‘strong’.

Table 1. *Evidence categories*

Evidence category	Criteria
Sufficient evidence	Two or more controlled trials with a sample size above 50 families that demonstrate favourable results on one or more relevant outcomes. ^a
Preliminary evidence	Two or more controlled trials with a sample size above 20 families that demonstrate favourable results on one or more relevant outcomes ^a , but that do not meet criteria for the sufficient evidence category.
Insufficient evidence	One or no controlled trials with 20 or more families that demonstrate favourable results ^a on one or more relevant outcomes.

^a Relevant outcomes included measures of parenting, child mental health, and parent mental health (see Table A1 for further details)

Pragmatic review results

Interventions with sufficient and preliminary evidence

During the pragmatic review process we identified 255 parenting interventions, of which 81 were predominantly attachment-based and/or psychodynamic (see **Table A2**). After screening 335 publications, we identified 51 eligible trials (75 publications). In total, **12 interventions met our criteria for sufficient evidence to be taken through to common elements coding and analysis** (see **Table 2**). A single intervention had preliminary evidence (Video Interaction Guidance; VIG) with one eligible trial with favourable results, one trial with favourable results in a smaller sample (N=31), and one eligible trial with null results. Most interventions were attachment-based (n = 8), while the psychodynamic interventions fell into two categories: mentalisation-based (n = 2) and psychoanalytic (n = 2). The results did not change when the interventions were assessed based only on articles rated as moderate or strong in quality.

Table 2. *Interventions meeting criteria for common elements analysis*

Intervention	Dominant approach	N eligible trials	Trials with favourable results
Attachment and Biobehavioral Catch-up (ABC)	Attachment	5	5
Child adult relationship enhancement in primary care (PriCARE)	Attachment	4	4
Circle Of Security Parenting (COS-P)	Attachment	5 ^b	4
Mother–Infant Transaction Program (MITP)	Attachment	3	3
Parent-Child Interaction Therapy (PCIT)	Attachment	4 ^{bc}	4
Promoting First Relationships (PFR)	Attachment	4	4
Tuning Into Kids (TIK)	Attachment	8	8
Video-feedback Intervention to promote Positive Parenting (and Sensitive Discipline; VIPP-SD)^a	Attachment	5	5
Minding The Baby (MTB)	Psychodynamic (mentalisation)	2	2
Mothering from the Inside Out (MIO)	Psychodynamic (mentalisation)	2	2
Child/Toddler-Parent Psychotherapy (CPP/TPP)	Psychodynamic (psychoanalytic)	4 ^c	3
Parent/Mother-Infant Psychotherapy (PIP/MIP)	Psychodynamic (psychoanalytic)	7	7

^a Both Video-feedback Intervention to promote Positive Parenting – Sensitive Discipline (N favourable trials = 3) and Video-feedback Intervention to promote Positive Parenting (N favourable trials = 2) met the criteria. Given that VIPP-SD includes all the themes modules included in VIPP it was taken through to the common elements analysis.

^b Includes a 3-arm trial (COS-P, PCIT, waitlist), which for the purpose of this review was treated as two trials with each intervention group compared separately to the waitlist group only

^c Includes a non-inferiority trial of CPP and PCIT

Overview of trials for interventions with sufficient and preliminary evidence

Trial design and sample characteristics for interventions with sufficient and preliminary evidence are presented in **Table A3** and summarized below.

Trial context

Most trials were conducted in the United States of America (38.9%), followed by Australia (16.7%) and the United Kingdom (11.1%). The remainder were conducted in European countries other than the UK (22.2%), China (5.6%), Iran (3.7%), and Turkey (1.8%). Based on the available data, 18.5% of trials began in the last decade (2016 onwards), 33.3% in the decade before (2006-2015), 13.0% more than two decades ago (1990-2005), and 35.2% of trial dates were not reported. Publication date could not be used as a proxy for trial date as we found some recent articles reported on trial data collected several decades earlier. All interventions included at least one trial with favourable results conducted in the last two decades.

Design

Most trials employed a randomized design (i.e., 44 RCTs and 7 cluster RCTs), while only 7 trials included a non-randomized control group. Slightly fewer trials included an active control group (27.8%) than a care-as-usual (38.9%) or waitlist control group (33.3%). All trials conducted in the UK employed a randomized design with a care-as-usual control group. While 40% of trials included a post-test assessment only, the remainder included 1-3 additional follow-up assessments of child and/or parent outcomes. There was considerable heterogeneity in the timing of assessments with post-tests occurring from 3 weeks to 70 weeks from baseline, and follow-up assessments occurring from 8 weeks to 9 years from baseline across trials. This makes it difficult to make fair comparisons of intervention effects on outcomes across trials.

Sample size

The largest trial (N=300) tested Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD) in the UK and retained over 90% of the sample (21,22). A sample of approximately 160 participants would be recommended to detect a moderate intervention effect when comparing groups in an intention-to-treat analysis ($d = 0.5$, $\alpha = 0.05$, 80% power, 10% attrition) and only 32% of trials exceeded this sample size. Moreover, this estimate does not account for the larger sample sizes required for non-randomized designs, trials with more attrition, analyses that include covariates, and multiple testing. As such, false negatives are to be expected among the trial results, as well as some over-estimation of effect sizes in smaller trials with significant results. We found that the reporting of attrition was often ambiguous and differed between reports of the same trial, therefore we do not present this data due to concerns about accuracy.

Sample characteristics

Figure 2 shows the age range of children at baseline assessment across trials for each intervention. Half of the interventions included trials that started during pregnancy or at birth. Attachment-based interventions were tested across a wider age range (second trimester up to age 7) than mentalisation-based and psychoanalytic interventions (second trimester up to age 5). While most trials were fairly balanced in terms of child gender at baseline, the same cannot be said for caregivers. Female caregivers comprised over 80% of the sample in all but 2 trials that reported on caregiver gender, with over half of the trials including only female caregivers. One trial of Tuning into Kids (TIK) included only male

caregivers and tested an adapted version of the intervention (23), while in one trial of VIG around half of the sample were male caregivers as the intervention was delivered to triads (24).

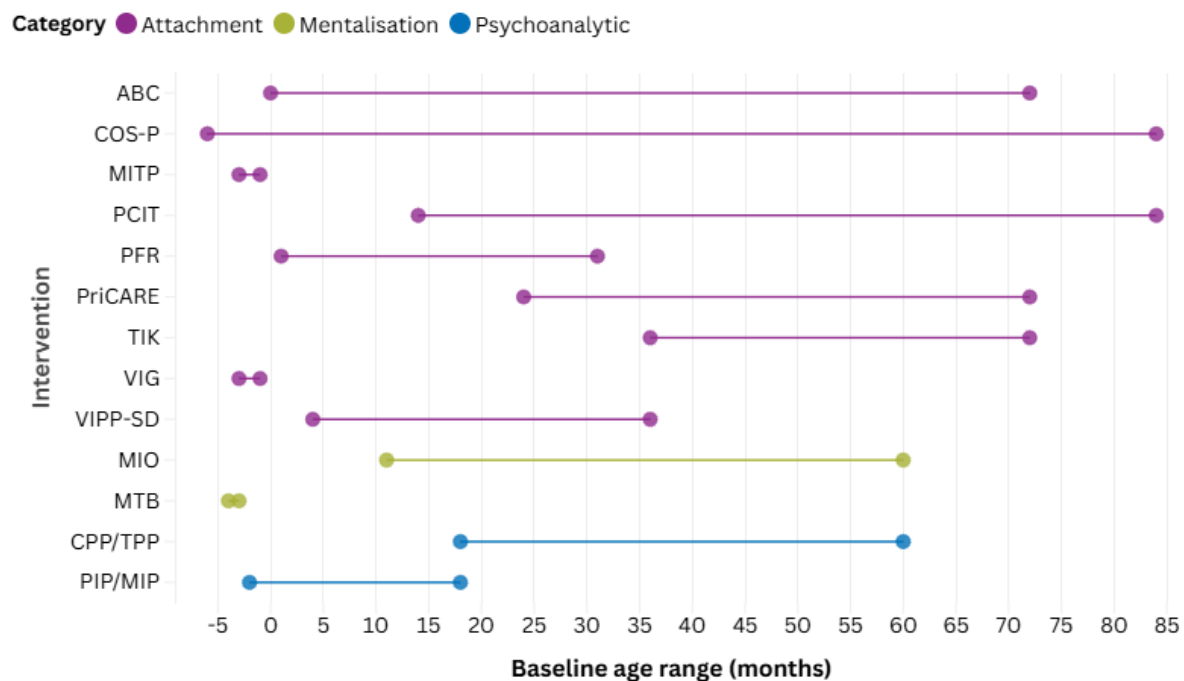


Figure 2. Child age range at baseline across trials for interventions with sufficient/ preliminary evidence

Prevention level

As shown in **Figure 3**, over half of the trials targeted families with risk factors that may impact child mental health or development (i.e., selective prevention), while three trials recruited families with risk factors and/or emerging child problems (i.e., combining a selective and indicated prevention approach). Across trials, risk factors included parent mental health problems or substance abuse problems, involvement of the child in the care system or child protection services, low income, premature birth, and poor living conditions (e.g., domestic conflict, residing in prison, homelessness). Notably, two attachment-based interventions (Promoting First Relationships, PFR; Mother-Infant Transaction Program, MITP) and both mentalisation-based interventions (Minding The Baby, MTB; Mothering from the Inside Out, MIO) were only trialled as selective prevention. Just under a fifth of trials targeted families with children showing emerging mental health or behaviour problems (i.e., indicated prevention) and only 5% were conducted as treatment for a diagnosed child mental health disorder. The remaining 16% of trials were universally offered and included trials of only four attachment-based interventions (Child adult relationship enhancement in primary care, PriCARE; TIK; VIG; VIPP-SD). Most universal prevention trials excluded children with psychological or developmental disorders. The UK-based trials tested interventions as either selective (5 trials) or indicated prevention (1 trial), with no interventions tested as universal prevention or treatment in a UK context.

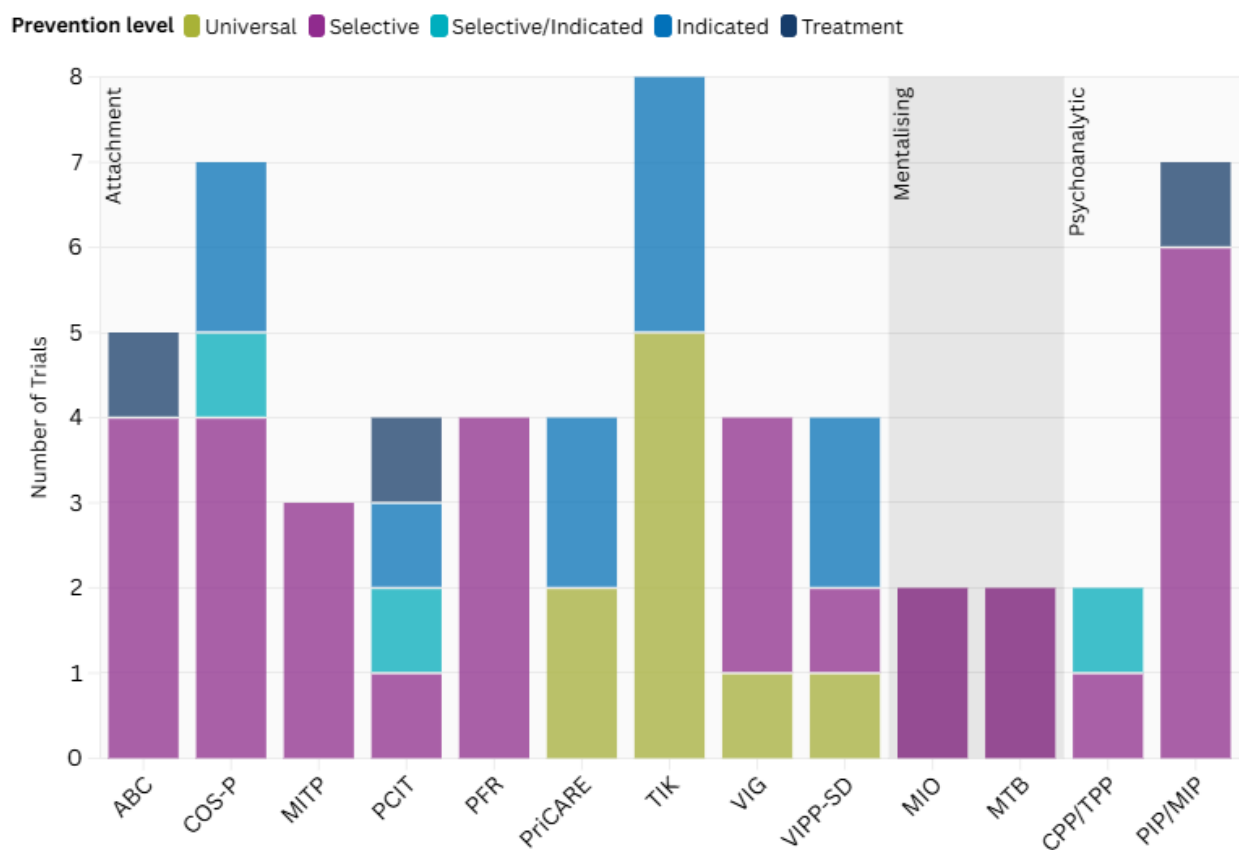


Figure 3. Number of trials at each prevention level for interventions with sufficient and preliminary evidence

Trial outcomes for interventions with sufficient and preliminary evidence

There is no common outcome set for parenting interventions, and different trials measured different outcomes. A general summary of the combined evidence for each intervention's effects on child, parent, and parenting outcomes is provided below and displayed in **Figure 4**. A full summary of trial results can be found in **Table A4**, including information on instruments, effect sizes, and trial quality. The figure shouldn't be taken as a definitive summary of intervention effectiveness. Given the considerable differences in characteristics across trials, for decision making each intervention's evidence base should be carefully considered in its own right with the target population and implementation context in mind. To support this, a narrative overview of the interventions and their evidence base across contexts and within the UK can be found in Section II.

Child outcomes

Half of the interventions reported consistently favourable effects on at least one child outcome, which included interventions within each of the three main categories (i.e., attachment-based, mentalising, and psychoanalytic). All interventions included some child outcomes where evidence was mixed, i.e., where a favourable effect was found for an outcome on at least one test, but a null effect was found when the same outcome was tested at another assessment timepoint, with another instrument, or in another trial of the same intervention. Children's socioemotional competence and challenging behaviour were the most tested child outcomes across interventions, while children's self-regulation was the least studied despite being a key predictor of later mental health (25). Surprisingly, attachment-based interventions showed no effect on attachment outcomes where tested², while two psychodynamic interventions showed mixed evidence for improvements in attachment (MTB and Child/Toddler-Parent Psychotherapy, CPP/TPP).

Dyadic outcomes

For ease of interpretation, dyadic outcomes were placed into three main categories: relationship quality, engagement, and interaction quality (including caregiving sensitivity and emotional availability). Two attachment-based interventions showed consistently favourable effects on parent-child interaction quality. Specifically, for Parent Child Interaction Therapy (PCIT; 30,31), increases in maternal sensitivity were reported in a trial of children with maltreatment risk and behaviour problems (mean age 4.5 years at baseline and 5.5 years at post-test) and in a trial of children with emotional or behavioural problems (mean age 1.5 years at baseline and 2.25 years at post-test). Notably, the latter trial also tested effects on attachment type at the same timepoint, but found no significant intervention effects. Additionally, a selective prevention trial of MITP initiated in pregnancy reported increases in both maternal sensitivity and overall quality of mother-infant interaction measured over the first two years from birth, but did not report on subsequent child attachment type (28).

Parent and parenting outcomes

No intervention showed consistent evidence for improvements in parent mental wellbeing or emotion regulation, and this held when only considering studies conducted in parents with mental health problems. However, there was consistent evidence for reductions in parenting stress for five interventions (Attachment and Biobehavioral Catch-Up, ABC; MITP; PriCARE; MTB; CPP/TPP) and for improvements in parenting self-efficacy in two others (TIK;

² Attachment type was measured in trials for 4 of the 9 attachment-based interventions (COS-P, PCIT, PFR, VIPP-SD) and all psychodynamic interventions.

Parent/Mother-Infant Psychotherapy, PIP/MIP). Several attachment-based interventions showed consistent effects in increasing positive regard and warmth towards the child (COS-P and VIG) and positive parenting behaviours (PCIT, PriCARE, VIPP-SD) but not in reducing negative parenting behaviours (e.g., harsh punishment). These parenting outcomes were not tested very often in trials of mentalisation-based and psychoanalytic interventions, however null results were found when they were tested. Interestingly, the mentalisation-based interventions showed only mixed evidence in improving parent mentalising and empathy, while the evidence was favourable for PriCARE, TIK, and CPP/TPP.

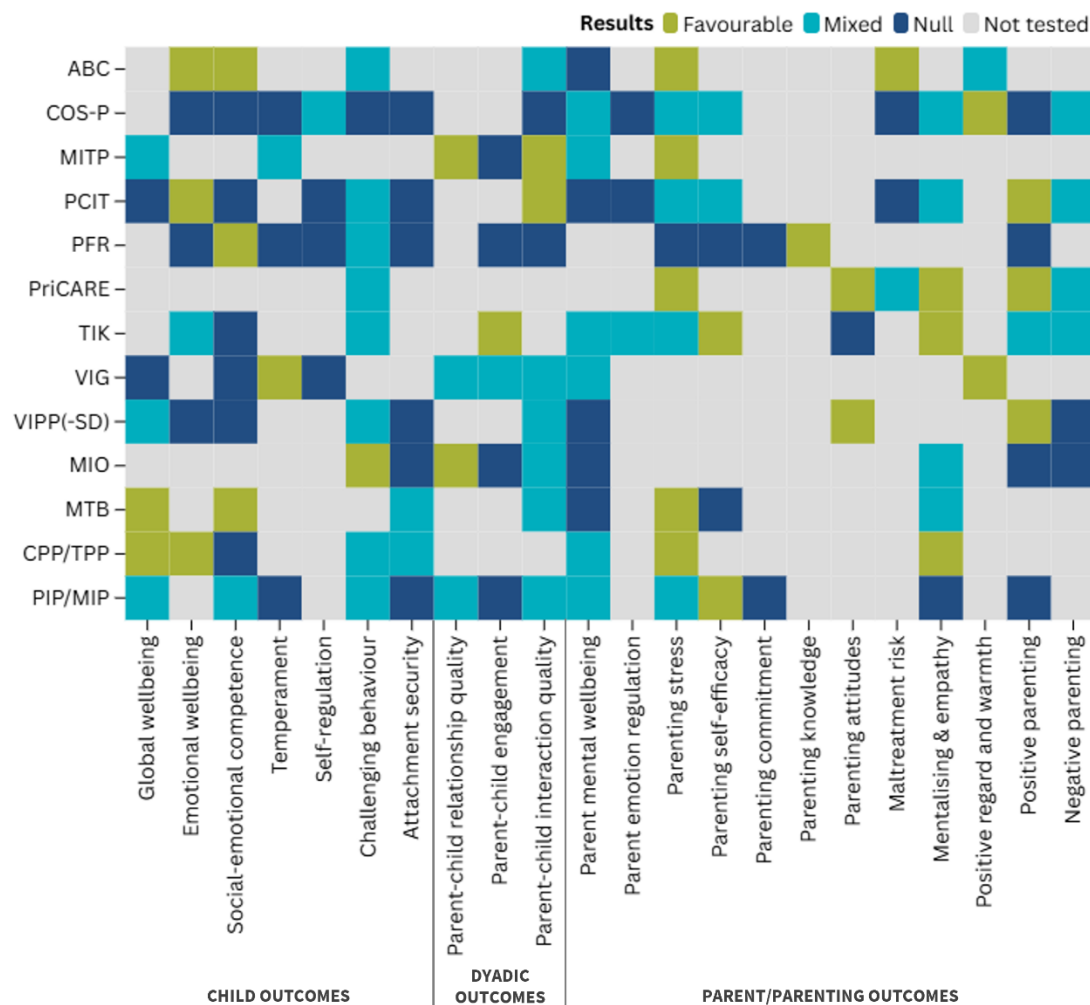


Figure 4. Summary of evidence for key outcomes across trials for interventions with sufficient and preliminary evidence

Section II. An overview of evidence-based psychodynamic and attachment-based parenting interventions for under-fives

This section provides a narrative overview of the 13 interventions identified as evidence-based in the pragmatic review, alongside VIG, which is profiled separately as an intervention with preliminary evidence. Appendix B contains detailed descriptions of each intervention, including its theoretical background and theory of change, target population and intended outcomes, delivery methods, practitioner training requirements, cost and cost-effectiveness information, and UK and global evidence base.

Although all interventions included in the main analysis met the review's evidence threshold, they should not be interpreted as equally effective or equally applicable to UK services. The strength, consistency, and context of evidence varied across programmes, including whether effects have been replicated in UK settings.

The summary below draws out key similarities and differences across programmes, focusing on target populations, outcomes, delivery intensity, training requirements, UK availability, and cost information (where available).

Target age

The target child age range across interventions spans infancy to around 10 years, although this review focuses on evidence relevant to children aged 0–5. Several interventions may be of particular interest to perinatal and parent–infant relationship services. We found in our review that MITP, MTB, and VIG were positively evaluated in trials that started prenatally, although no official target age ranges are given for these interventions. In addition, five interventions are targeted for and/or have been positively evaluated in infants under one year (i.e., ABC, MIO, PFR, PIP, VIPP-SD). Of note, VIPP-SD is often used in the toddler and preschool periods, but VIPP adaptations also extend to younger infants from around 3 months, including in perinatal mental health contexts. Moreover, while MIO is indicated for caregivers of children aged 0–5 years, it has only been trialled in infants from 11 months of age upwards and is specifically targeted at mothers being treated for substance use disorder.

Other interventions, including CPP/TPP, PCIT, and PriCARE, focus primarily on toddlers and preschool children (ages 2–5 years), where behavioural, relational, or trauma-related difficulties may be more clearly identified. Meanwhile, TIK is indicated and positively evaluated from age 3 into the early school years, during which time parent-child emotional communication becomes particularly important to children's mental health. Finally, COS-P has one of the largest indicated age ranges (4 months to 6 years), however evaluations were not positive in a recent UK perinatal trial nor an Australian trial in toddlers (27,29,30). Age range should therefore be considered alongside presenting need, developmental stage, and the intervention's intended mechanism.

UK evaluation evidence and implementation readiness

UK evaluation evidence is limited and uneven, and this may have important implications for service planning. VIPP-SD currently has the clearest UK implementation-relevant evidence in this set for families of toddlers at risk of behavioural difficulties. The Healthy Start, Happy Start pragmatic multisite RCT, delivered largely through NHS health visiting services, found

improvements in child behavioural problems, with long-term follow-up suggesting small but sustained effects (31,32). VIPP also has a developing evidence base for perinatal mental health contexts, with feasibility and acceptability evidence for adaptations with younger babies and a large BOOST-3 trial underway. MTB and the New Beginnings version of PIP provide further UK-based evidence in relevant specialist contexts. MTB showed significant improvements in child behavioural problems in a UK cluster RCT with young first-time mothers (33), while New Beginnings has shown positive relational effects, particularly around parental reflective functioning and parent–infant interaction in prison contexts (34). By contrast, COS-P has been tested at scale in NHS community perinatal mental health services, but the COSI trial found no added clinical benefit over treatment as usual (29).

Some interventions without UK trials nevertheless have substantial international evidence. ABC has one of the stronger evidence bases in the review with 5 trials from the US but lacks UK evaluation. PFR is also noteworthy as a brief, attachment-based intervention with supportive US evidence (5 trials) and modelled cost-benefit findings, including effects on parental sensitivity and child externalising behaviour, but it has not yet been evaluated or implemented at scale in the UK. TIK is an Australian-developed programme with strong evidence (5 trials in the global north and 3 other trials), particularly for improving emotion coaching and a broad range of caregiver and child outcomes (see Table A4). While it has not yet been formally tested in a UK context and is less directly perinatal, TIK is already offered by one UK local authority through Parent Family Support Advisors and Home-Start.

Notably, VIG is widely used in UK services and has a preliminary evidence base, but it falls below the sufficient evidence threshold used in this review. For the remaining interventions (CPP/TPP, MIO, MITP, PCIT, PriCARE) the evidence base is largely international, context-specific, or less clearly supported by UK implementation infrastructure. For interventions without UK trial evidence, commissioning decisions would need to weigh evidence strength against UK transferability, workforce requirements, training availability and the need for local evaluation.

Target groups and intended outcomes

The interventions vary not only in target population, but also in where they sit across the continuum of support, from universal prevention through to specialist therapeutic provision. Several attachment-based interventions, including VIPP-SD, PFR, TIK, PriCARE and VIG, can be delivered to families where there are early concerns about sensitive caregiving, parent–child interaction, or emerging behavioural difficulties. These interventions are generally briefer and may be more feasible for universal and targeted delivery through 0-5 pathways, provided appropriate training, supervision, and fidelity support are available. However, they differ from each other in their evidence base and intended mechanisms of change and should not be treated as directly interchangeable.

Several interventions are designed for families with a specific identified need or risk profile, although these vary in intensity and in where they sit on the service continuum. CPP is targeted at young children and caregivers affected by trauma, including family violence; PCIT is designed for children with disruptive behaviour or conduct problems; MIO is for caregivers in treatment for substance use disorders; MITP is for families of preterm or low-birth-weight infants; and MTB is a long-term home-visiting model for young first-time mothers facing psychosocial adversity. Psychodynamic parent–infant interventions, including New Beginnings/PIP and TPP, sit toward the specialist end of the continuum and are typically focused on dyadic relational difficulties, reflective functioning, and parent–infant/toddler relationship quality and attachment concerns.

Across the interventions, intended outcomes cluster around a set of common relational and caregiving targets including caregiver sensitivity and responsiveness, reflective functioning or mentalisation, parent–child communication and relationship quality, reducing harsh or insensitive responses, and improving caregivers’ confidence and emotional regulation. Importantly, several interventions have also demonstrated effects on child outcomes, including child behavioural problems and socio-emotional functioning. For example, VIPP-SD has UK evidence for reducing behavioural problems in toddlers with emerging symptoms (34,38), while ABC has US-based evidence for reducing behavioural and emotional problems in child with attachment issues in preschoolers (39). Other interventions, including PCIT, MTB, PFR, TIK and PriCARE, have also demonstrated effects on child behavioural or socio-emotional outcomes in specific populations or contexts. This distinction is notable because some interventions primarily target and assess caregiver processes as the route to change, while others have stronger evidence for measurable changes in child-level outcomes.

Intervention choice should therefore be guided by a clear formulation of family need rather than by programme availability alone. This includes considering the child’s age and developmental stage, the nature and severity of presenting difficulties, caregiver mental health and adversity, the quality of the caregiver–child relationship, safeguarding or trauma concerns, and the level of intensity the family is likely to require. Services also need sufficient capacity and expertise to assess and formulate need, match families to an appropriate level of intervention, and step up or step-down support where required. Without the appropriate means to assess need there is a risk that briefer targeted interventions are used for families requiring specialist therapeutic work, or that intensive specialist interventions are commissioned where a lower-intensity relational or caregiving intervention may be sufficient.

Programme delivery and intensity

The interventions vary substantially in intensity, format, and delivery setting. Briefer interventions such as PriCARE, TIK, COS-P, VIPP-SD and VIG are typically delivered over ~3–10 sessions or cycles, while more intensive therapeutic or home-visiting models such as CPP, TPP and MTB extend over several months or longer. Session length also varies, generally ranging from around 50 minutes to two hours. However, session number alone does not fully capture implementation burden. Many interventions include quality-supporting components such as preparation, video review, supervision, fidelity monitoring, accreditation, or reflective consultation alongside direct contact with families. These are likely to strengthen delivery but require dedicated workforce time and resourcing.

Delivery formats also differ. Some interventions are designed for home visiting, including ABC, MTB and PFR; others are typically delivered in clinic, community settings, groups, or paediatric primary care. VIPP-SD and VIG use video feedback and shared review of caregiver–child interactions, while COS-P and TIK are commonly delivered as structured group programmes. Some interventions are designed for highly specific contexts, such as New Beginnings/PIP in prison-based mother and baby units, or MITP in neonatal and post-discharge settings with preterm or low-birth-weight infants. Several programmes now offer online or hybrid training and/or delivery options, although this varies by intervention and provider. In our review, only two interventions used live online delivery (TIK and PriCARE) and both reported favourable results. Online delivery could be explored further in the UK given promising results from a recent meta-analysis, which showed consistent non-inferiority of parenting support delivered online for children aged 2-12 years in relation to child and parenting outcomes (37).

Practitioner training and supervision

Training requirements vary widely across interventions. Some programmes can be delivered after relatively brief facilitator training (e.g., TIK), while others require prior professional qualifications, specialist therapeutic training, or substantial experience in mental health, social work, nursing, psychology or related disciplines (see Table 3 for details).

Many interventions also include supervised practice, accreditation, fidelity monitoring, consultation, or reflective supervision after initial training. These components are particularly important in models involving video feedback, live coaching, therapeutic formulation, trauma, safeguarding concerns, or complex relational difficulties. They support delivery quality and practitioner skill but require dedicated workforce time and resourcing.

Training availability in the UK is uneven. Some interventions have established UK or online training routes, while others rely on international providers or have no clearly identified UK training infrastructure.

Costs

Cost information is incomplete and not directly comparable across interventions. UK delivery-cost estimates were identified for only a small number of programmes, including COS-P and VIPP-SD. Some interventions have US-based delivery estimates or modelled cost-benefit analyses, while for many interventions delivery-cost data were not publicly available.

Training costs were also inconsistently available. Where reported, figures varied depending on whether they included supervision, accreditation, fidelity monitoring, licensing, or implementation support. Cost figures should therefore be interpreted as indicative rather than directly comparable across interventions.

Table 3. Characteristics of evidence-based attachment-based and psychodynamic parenting interventions for children aged 0–5 and their caregivers

Intervention		Target population	Target outcomes	No. of sessions	Session length	Training setting	Training duration	UK evaluation	UK delivery cost	UK training available	Training costs
Attachment-based	ABC	Caregivers of children aged 6–48 months facing early adversity	Child attachment & regulation Caregiver nurturance and sensitivity	10	~1hr	In person (US) / online	2 days in person / 3 half-days online	No	N.A.	Online only	N.A.
	COS-P	Caregivers of children aged 4 months–6 yrs at risk for insecure attachment	Caregiver attunement, empathy, & ability to soothe distress	8–10	15–2 hrs	In person / online	4 days*	Yes: Null ^c	£343 pp.	Yes	\$1k–\$1.5k pp. exc. fidelity /supervision
	MITP	Caregivers with low-birthweight or preterm infants	Caregiver sensitivity Caregiver–infant interaction Caregiver coping Infant behavioural regulation & development	11	N.A.	N.A.	N.A.	No	N.A.	N.A.	N.A.
	PCIT	Children aged 2–7 with disruptive behaviour/conduct problems and their caregivers	Child behaviour Positive parenting Caregiver–child interaction/relationship quality	12–20	1hr	Online	5 days +12–18m supervised practice†	No	N.A.	Online only	~\$5.5k pp. inc. supervision
	PriCARE	Caregivers 2–6-yr-olds in paediatric primary care settings	Positive parenting Reduced parenting stress Reduced harsh parenting/ maltreatment risk	6	~80 min	N.A.	N.A.	No	N.A.	N.A.	N.A.
	PFR	Caregivers 0-5-yr-olds requiring support with sensitive caregiving	Caregiver sensitivity Mentalisation Caregiver–child relationship quality	10	1hr	In person / online	14 hrs + mentorship	No	US est. \$1,817 per family	No	\$680 exc. mentorship
	TIK	Caregivers of 3–10-yr-olds	Emotion coaching Caregiver emotion regulation Caregiver–child emotional communication	6–8	2 hrs	In person (Aus) / online	2 days (14 hrs)	No	~<£100 pp.	Online only	~AUD\$1149 inc. ongoing support
	VIG	Families across developmental stages, inc. perinatal and mental health contexts, often with relational or behavioural difficulties	Caregiver sensitivity Caregiver confidence Caregiver–child relationship quality	3-14	Variable	In person / online	2.5 days + supervised practice	Yes: Prelim ^d	N.A.	Yes	~£425–500 exc. Supervision & accreditation

Intervention		Target population	Target outcomes	No. of sessions	Session length	Training setting	Training duration	UK evaluation	UK delivery cost	UK training available	Training costs
	VIPP-SD	Caregivers of 1-7-yr-olds at risk of behavioural difficulties / needing support with sensitive caregiving Adapted for infants ~3 months	Caregiver sensitivity Sensitive discipline & limit-setting Child behaviour problems Child-caregiver attachment	6-7	15 hrs	In person / online	4 days + supervised practice	Yes: Positive ^e	~£1,450 per family	Yes	~£2k inc. supervision & accreditation
Mentalisation-based	MTB	Young first-time mothers facing social adversity/psychosocial risk and their infants	Mentalisation Infant attachment Caregiver mental health	91 ^a	1hr	In person	4 days + supervised practice [†]	Yes: Positive ^e	N.A.	No	N.A.
	MIO	Caregivers of 0-5-yr-olds in treatment for substance use disorder	Mentalisation Caregiver sensitivity Caregiver mental health	12	~50 min	In person / online	16 hours didactic training*	No	N.A.	No	N.A.
Psychoanalytic	CPP	Primarily 0-5-yr-olds who have experienced trauma and their caregivers	Interrupt family violence Address PTSD Improve attachment	20-32	1-15 hrs	In person / online	3 days + 1-2 yr mentorship [†]	No	US est. \$5,113	Not widely	~£2.5k pp.
	TPP	Caregivers of toddlers aged 18-36 months experiencing attachment difficulties	Caregiver representations Attachment/relationship quality	~32	1-15 hrs	In person	92 hrs [†]	No	N.A.	No	N.A.
	PIP	Mothers and infants in prison-based mother and baby units	Mentalisation Caregiver-infant relationship quality Attachment security	8	2 hrs	N.A.	N.A. [†]	Yes: Positive ^g	N.A.	N.A.	N.A.

Note. ABC = Attachment and Biobehavioral Catch-up, COS-P=Circle Of Security Parenting, MITP=Mother-Infant Transaction Program, PCIT=Parent-Child Interaction Therapy, PriCARE=Child adult relationship enhancement in Primary CARE, PFR=Promoting First Relationships, TIK=Tuning Into Kids, VIG=, VIPP-SD=Video-feedback Intervention to promote Positive Parenting (and Sensitive Discipline), MTB=Minding The Baby, MIO=Mothering from the Inside Out, CPP=Child-Parent Psychotherapy, TPP=Toddler-Parent Psychotherapy, PIP =Parent/Mother-Infant Psychotherapy (New Beginnings version), N.A. = (Information) not available, N.S. = Not specified

* Relevant bachelor's degree is a prerequisite (see intervention catalogue in Appendix B for details)

[†] Specific master's degree / postgraduate training is a prerequisite (see intervention catalogue in Appendix B for details)

^a Weekly from the third trimester until age 1, then fortnightly until age 2

^b Each cycle usually includes a video-recording visit and a shared-review

^c A large UK trial published after the pragmatic review process reported null effects on all tested outcome measures (see the COS-P catalogue entry in Appendix B for details)

^d A very small UK trial (N=31) reported favourable effects on child difficult behaviour but null effects on all other child and caregiving outcomes (see Tables A3 and A4 for details)

^e A large UK trial reported favourable effects on child conduct and total problems but null effects on other child, caregiving, and caregiver mental health problems (see Tables A3 and A4 for details)

^f A medium-sized UK trial reported favourable effects on child total problems and parenting stress but null effects on other child, caregiving, and caregiver mental health outcomes (see Tables A3 and A4 for details)

^g A medium-sized UK trial reported favourable effects on caregiver reflective functioning and dyadic attunement but null effects on other dyadic, caregiving, and caregiver mental health outcomes (see Tables A3 and A4 for details)

Section III. The common elements of evidence-based psychodynamic and attachment-based parenting interventions for under-fives

Methods for common elements analyses

Intervention manual acquisition

We attempted to acquire official manuals for all 12 interventions identified as having a sufficient evidence base in our pragmatic review. Where no manual was publicly available, we contacted the intervention developers, commercial owners, and/or article authors. We were able to obtain manuals for 8 of the interventions (69%)³. Where the manual was not available, we coded publicly available materials including articles identified in the review, published books on the intervention, intervention websites, and clearing house entries for the interventions.

Training and development of the coding approach

The research team (COF, BB, MH, NK) were trained in common elements analysis by Dr Aleisha Clarke across three workshops. Training was based on the analysis approach that underpins the PEDAL/Foundations Early Years Library (13). Dr Natalie Kirby delivered training to new team members (NC, TK).

We developed 1) a caregiving skills framework and 2) a codebook to support the analysis. A caregiving skills framework was required because it sets out the key skills that interventions aim to support or promote in caregivers. We were then able to map ‘practice elements’ (i.e., the specific caregiving behaviours and techniques that interventions teach and/or enhance) onto the caregiving skills in the framework.

The caregiving skills framework, PEDAL’s *Thriving Together Framework* (1), was developed based on a review of available theoretical and practice-based models of caregiving/parenting, theories of change of evidence-based parenting interventions, common parenting outcome measures, and available literature on children’s perspectives of parenting and wellbeing. The framework was reviewed by the Helping Little Minds Thrive expert advisory group and several additional reviewers. We specifically included reviewers with expertise in developing and/or delivering attachment and psychodynamic interventions to ensure the framework was appropriate to these approaches. The final Thriving Together framework sets out three key domains of caregiving *Nurturing the Caregiver-Child Relationship*, *Supporting Children’s Behaviour*, and *Supporting Children’s Skill Development* as well as caregivers’ *Supporting Skills*, i.e., their own social, emotional, and cognitive skills (**Table 4**). Each domain contains a set of skills within which we were able to place more specific practice elements during the coding process. By way of example, an intervention may support caregivers to ‘be curious and attend to the child’s cues’ (practice element) as a way of promoting the *caregiver’s sensitivity* (skill), which *nurtures the parent-child relationship* (caregiving domain).

A codebook was developed iteratively during the training and piloting. The codebook is designed to identify common elements as they appear in text describing how interventions are

³ We were unable to obtain manuals for ABC, COS-P, MITP, and PriCARE.

delivered (i.e. manuals, protocols, articles, book chapters). These common elements are the units of analysis in a common elements analysis. Our coding approach includes three element types: 1) discrete caregiving practices or 'practice elements' (e.g., "Be curious and attend to the child's cues"), 2) strategies used to deliver the practice elements or 'delivery elements' (e.g., "modelling", "practice and rehearsal"), 3) tips on how to help the practice elements land with parents or 'implementation elements' (e.g., "provide reassurance and normalise the parent's emotions and experiences").

The team (COF, BB, NK, MH) coded one intervention chapter independently alongside the trainer (AC) to refine the coding framework and ensure a robust coding approach. The team then coded one intervention (Promoting First Relationships) independently, interspersed with regular meetings to discuss discrepancies, refine the framework, and ensure a reliable coding approach across the team. Four interventions were then coded in pairs to ensure ongoing reliability, with coding compared at regular intervals. Discrepancies were resolved through team coding meetings. Following this, interventions were assigned to an individual coder (NK, MH, and following training, NC and TK).

Identification of common elements

First, we reviewed all coding data and clustered any practice elements that were very closely aligned to ensure each practice element was sufficiently discrete. A quality check was then performed to check the code for each entry remained correct after clustering, and any inconsistencies were discussed and resolved among the team. Next, we calculated a percentage prevalence based on the proportion of interventions each practice element was present in, for example an element coded in 6 out of the 12 interventions would have a prevalence of 50%. Practice elements with a prevalence of 50% or higher were considered common elements. We then performed the same procedure for the delivery elements and implementation elements. For implementation elements, we calculated prevalence based only on those interventions that were coded directly from the manual as we found that implementation elements were typically not addressed in sufficient depth in other sources.

Table 3. *Caregiving skills of the Thriving Together framework*

Domains of Caregiving		
Nurture the caregiver-baby/child relationship		
Sensitive responding: Being curious in interpreting the baby/child's cues and mental states and making efforts to respond to their needs in a timely way. Allowing the baby/child to take the lead and being responsive to their pace. Giving positive attention by showing interest without interfering in exploration. Making efforts to repair and reconnect when there are inevitable disruptions to the caregiver-baby/child connection.	Expressing warmth and positive regard: Providing comfort and expressing warmth, affection, and positive regard towards the baby/child. Conveying acceptance and encouragement.	Playful: Sharing playful and enjoyable interactions that are baby/child-led, developmentally appropriate, and suitable in their timing and intensity.
Support baby/child's behaviour		
Positive behaviour support: Encouraging accepted and preferred behaviours through practices such as praise, compliments, and rewards.	Behaviour management: Responding to the child's challenging or risky behaviour in a consistent, non-harsh way. Intentionally using strategies that help to reduce the occurrence of difficult and challenging behaviours.	Proactive and protective caregiving: Creating plans, establishing routines, setting clear rules and boundaries. Monitoring the baby/child and creating a safe and predictable environment and network of relationships. Keeping the baby/child healthy (e.g., nourished) and safe, while protecting them from abuse, neglect, and maltreatment.
Support baby/child's skill development		
Support for child's social and emotional skills: Supporting the baby/child to feel safe in expressing a range of emotions. Making efforts to co-regulate the baby/child's emotions and guiding them towards self-regulation. Supporting the baby/child to interact effectively with and show empathy towards others. Helping the baby/child to develop and maintain peer relationships including support to manage conflict.	Support for child's skills for learning, cognition, and language: Guiding the child in developing skills related to learning and executive function (e.g., planning and staying focused). Responding to the baby/child's verbal cues and talking frequently to the baby/child. Interacting and talking with the baby/child in a way that enriches their exploration and learning (e.g. labelling what the baby is looking at when sharing a book together).	Autonomy support: Supporting the baby/child to make independent choices and decisions. Providing encouragement and assistance to the baby/child as they explore, navigate tasks, and solve problems.
Caregivers' own social, emotional, and cognitive skills		
Emotional and behavioural regulation skills: Monitoring, understanding, and regulating one's own thoughts, feelings (including physical states), and behaviours. This includes being able to maintain a regulated state when interacting with the baby/child, especially during times when the baby/child is distressed or showing challenging behaviour. This may also include taking a compassionate approach to monitoring, supporting, and nurturing one's own well-being.	Understanding and empathising with others' perspectives, feelings and behaviour: Recognising and considering the perspectives of others. Attempting to understand and share the baby/child's feelings with compassion. Being able to reflect on and connect one's own and others' behaviours to possible emotions, desires and mental states. Making reasonable interpretations about the baby/child's behaviour in the context of their development and in terms of possible feelings, desires, needs and intentions (e.g., why the baby might be crying).	Problem-solving skills: Anticipating and identifying problems, generating possible solutions, taking action, and seeking assistance. This may involve setting goals, persisting, and coping with challenges.
Effective communication skills: Expressing one's emotions, needs, and desires effectively and without negatively impacting the baby/child or others. Actively listening to the baby/child and to others involved in their care.	Self-efficacy: Having a sense of self-confidence in one's caregiving skills. This includes being able to create and hold onto a personal sense of self-assurance and motivation. Being compassionate with oneself when navigating mistakes and challenges.	

Results of common elements analyses

Common practice elements

In total, we identified 22 discrete practice elements that were common across attachment and psychodynamic parenting interventions, as shown in **Table 5**. Of these, seven practice elements centred on nurturing the parent-child relationship, six on managing child behaviour, four on supporting child's skill development, and five on building the caregivers' own social, emotional, and cognitive skills.

Two practice elements emerged as the most prevalent practice elements and were both included in 92% of the interventions. The first was supporting the caregiver to *'be curious and attend to the child's cues'*, which is part of sensitive responding and involves the caregiver paying attention to the baby/child, being curious about what they may be trying to communicate and trying to make sense of the baby/child's cues. The second was supporting caregivers to *'consider possible reasons behind the child's behaviour'*, which is part of building a caregiver's own skills for empathy, perspective-taking, and mentalizing. It involves the caregiver reflecting upon and trying to understand the causes and motives behind the baby/child's behaviour and avoiding misattributions, such as seeing the baby/child behaviour as being intentionally manipulative or hurtful towards them as a caregiver.

Further details about all the common practice elements are provided in Table 6 under their respective caregiving domains and skills, while the prevalence of all coded practice elements across the interventions can be found in Table C1.

Table 4. Common practice elements of effective psychodynamic and attachment-based interventions

Caregiving domain	Caregiving skill	Practice element	Prevalence across interventions
Nurture the relationship	Sensitive responding	Be curious and attend to the child's cues	92%
		Respond in an attuned, timely and individualised way to the child	83%
		Be a secure base for the child	50%
	Expressing warmth and positive regard	Affirm the child's importance and individuality	75%
		Offer the child appropriate physical touch	50%
	Playful	Create time and opportunities for play in daily life	67%
		Be an engaged and responsive play partner	83%
Support child's behaviour	Positive behaviour support	Give the child positive attention for constructive and cooperative behaviour	50%
	Behaviour management	Use proportionate non-harsh responses to challenging behaviour	50%
	Proactive and protective caregiving	Establish routines and support transitions	67%
		Carefully set clear and consistent limits	67%
		Monitor what the child is doing	50%
		Protect the child from abuse and neglect	50%
Support child's skill development	Support child's socioemotional development	Accept and share in all the child's feelings	75%
		Provide co-regulation and emotional support	83%
		Help the child to name and understand their own and others' emotions	58%
	Support child's skills for learning	Engage in language-rich stimulating interactions	83%
Caregiver's supporting skills	Emotional and behavioural regulation skills	Monitor your own feelings and actions	67%
	Understanding and empathising with others' perspectives, feelings and behaviour	Infer the child's emotions and needs	83%
		Consider possible reasons behind the child's behaviour	92%
		Recognise the effect of your own emotional states and actions on the child	67%
		Reflect on your caregiving expectations and experiences	67%

Table 5. *Descriptions of the common practice elements*

Nurture the relationship		
Sensitive responding	Be curious and attend to the child's cues	Caregivers are supported to notice and pay attention to the baby/child's cues and signals including subtle or quiet forms of communication. They are encouraged to adopt a curious and non-judgemental mindset when observing what the baby/child might be trying to communicate. Caregivers are supported to develop their observation skills regularly tuning into the child so they can learn about the baby/child's unique personality and characteristics.
	Respond in an attuned, timely and individualised way to the child	Caregivers are supported to respond sensitivity to the baby/child's cues, needs, and attempts to interact in a timely way. For babies, this could include subtle responses such as connecting with baby's gaze, nodding, and smiling. For older children, this includes caregivers giving the child their full attention and being a supportive, attentive, and appreciative presence without asking too many questions or directing the interaction unnecessarily. Caregivers are encouraged to follow the baby/child's lead and interests and adjust their pace and interactions to the baby/child's unique temperament, personality and needs.
	Be a secure base for the child	Caregivers are supported to consistently welcome the baby/child back when they need comfort, attention, help, protection, or emotional refuelling so that the baby/child can regain a sense of safety and confidence before returning to exploration.
Expressing warmth and positive regard	Affirm the child's importance and individuality	Caregivers are encouraged to communicate to the baby/child how valued they are by expressing genuine delight through play and warm attention (e.g., blowing kisses, smiling, waving). They are encouraged to recognise, accept, admire, and celebrate the baby/child's individuality, including the baby/child's characteristics, preferences, interests, and cultural background. This can include using the baby/child's name and other positive attention to highlight their identity and sense of belonging in the family.
	Offer the child appropriate physical touch	Caregivers are encouraged to use touch to help soothe and calm the baby/child when they are distressed, and to support emotional regulation and a sense of safety, as well as to express warmth, connection, and enjoyment during play and everyday interactions. Caregivers are encouraged to use touch in ways that are attuned to the baby/child's signals and are appropriate for their age, comfort level, and preferences. This may include promoting skin-to-skin contact between caregiver and baby, including kangaroo care or baby massage.
Playful	Create time and opportunities for play in daily life	Caregivers are encouraged to intentionally make time and space to play with the baby/child every day. They are encouraged to provide the baby/child with toys, everyday objects, and activities that are engaging and developmentally appropriate. They may also be encouraged to engage in pretend play with the baby/child, to make everyday routines fun, and to allow the baby/child to explore different kinds of play.
	Be an engaged and responsive play partner	Caregivers are encouraged to gently join and support the baby/child's play at the baby/child's physical and developmental level. This includes noticing and repeating things the baby/child is enjoying, following the baby/child's lead, and adapting to their pace. Caregivers are encouraged to have fun with the baby/child in the moment and monitor the baby/child's mood for play.

Support child's behaviour		
Positive behaviour support	Give the child positive attention for constructive and cooperative behaviour	Caregivers are encouraged to give the baby/child timely, consistent, and frequent positive attention when the baby/child shows constructive and cooperative behaviours. This may include giving labelled praise (e.g., "Thanks for sharing your toys so nicely!") or a physical gesture (e.g., high fives, claps, hugs) promptly after the baby/child displays a behaviour they want to promote.
Behaviour management	Use proportionate non-harsh responses to challenging behaviour	Caregivers are supported to understand that consequences for challenging behaviour should be used <u>sparingly</u> and in a way that is proportionate, non-vindictive, and non-violent. This may include techniques such as sensitive time-out, natural consequences, or loss of privileges. Caregivers are encouraged to give the child enough time and support to cooperate in the first instance, to give a warning before acting on a consequence, and to carefully explain to the child why their behaviour resulted in a consequence without shaming them. They are also encouraged to reflect on what techniques work for the child and consider alternatives if an approach is not working.
Proactive and protective caregiving	Establish routines and support transitions	Caregivers are encouraged to structure the baby/child's day and environment so that they know what to expect and to announce upcoming changes to the baby/child. They are encouraged to adjust routines to fit the baby/child's needs (e.g., for eating, napping, playing, and going to bed) and to create a sense of consistency and predictability by using rituals (e.g., sharing a book before every bedtime), limiting multiple changes at once, and letting the baby/child know that they will move to a new activity soon.
	Carefully set clear and consistent limits	Caregivers are encouraged to set clear limits and rules about appropriate and inappropriate behaviour. They are encouraged to give clear explanations to the child about why something is or is not okay, to be selective and age-appropriate in setting limits and rules, and to be consistent with upholding them. Caregivers are taught that it takes time for the child to learn a new rule and are encouraged to introduce new rules gradually. They are also encouraged to gently remind the child what is expected of them ahead of going somewhere or doing something.
	Monitor what the child's doing	Caregivers are encouraged to monitor what the child is doing, and intervene when necessary, to ensure that the child's behaviour or play remains safe for everyone. This also applies to times when the caregiver is implementing a discipline strategy (e.g., time out) by ensuring that they can still see the child. In situations where they choose to intervene, caregivers are encouraged to clearly explain to the child why they are intervening without shaming them.
	Protect the child from abuse and neglect	Caregivers are supported to protect the baby/child from harsh criticism, anger, physical harm, violence and neglect. They are supported to understand how physical discipline, frightening responses, or shaming can undermine children's sense of safety and their confidence that they can learn and do better next time. They are taught that neglecting the baby/child's emotional and physical needs can also be harmful to their development.

Support child's skill development		
Support for child's socioemotional development	Accept and share in all the child's feelings	Caregivers are supported to understand that all emotions are valid and to accept and share in the baby/child's full range of feelings, including intense or uncomfortable emotions. They are encouraged to remember that babies/children are still developing the ability to manage big feelings, to remain patient, and to avoid dismissing or criticising feelings. This includes helping caregivers view emotional outbursts as a signal of unmet needs and emerging self-regulation skills, rather than behaviour directed at them.
	Provide co-regulation and emotional support	Caregivers are encouraged to provide a calm presence when the baby/child is distressed, to soothe and comfort the baby/child, to support self-soothing where developmentally appropriate (e.g., using an object like a blanket or pacifier), and to provide strategies to help the baby/child calm down or express their emotions in acceptable ways.
	Help the child to name and understand their own and others' emotions	Caregivers are supported to talk to the baby/child about emotions and how they are connected to actions and behaviour. They are encouraged to acknowledge and name the baby/child's emotions, to describe and give possible explanations for the emotions and actions of others (including fictional characters), and to explain how the baby/child's actions may affect others' emotionally.
Support child's skills for learning	Engage in language-rich stimulating interactions	Caregivers are supported to actively talk, sing, and interact with the baby/child throughout daily routines. This includes describing what they are doing and seeing, naming people and objects, using the baby/child's name, and taking turns in back-and-forth language exchanges. For babies, this can include imitating coos, babbles, and gestures, and using 'parentese' to draw and sustain the baby's attention. Parentese involves conversing in a grammatically correct, slow-tempo way with exaggerated facial expressions and more repetition. It also includes using a higher-pitch voice for those using spoken language, or closer and larger signs with physical attention-getters for those using sign language.

Caregivers' own social, emotional, and cognitive skills		
Emotional and behavioural regulation skills	Monitor your own feelings and actions	Caregivers are encouraged to observe and manage their own thoughts, feelings, and actions while interacting with the baby/child and in daily life as a caregiver. This may include using mood charts, behaviour trackers, and self-assessments. They are encouraged to be mindful of their own needs and how these can be met in the present moment, and to notice the connection between their current mental and physical state and their caregiving. Caregivers are supported to understand that observing and monitoring their own state can help them choose more helpful responses in difficult caregiving situations.
Understanding and empathising with others' perspectives, feelings and behaviour	Infer the child's emotions and needs	Caregivers are encouraged to wonder about and take a "best guess" about what the baby/child may be feeling and what they may need based on their cues. Caregivers are encouraged to communicate these inferences to the baby/child. They are given reassurance that "little misses" are a natural part of this process. In some instances, caregivers may be supported in this through more general psychoeducation about the typical landscape of babies/children's emotions and needs at different developmental stages and how these may differ depending on other factors such as a baby/child's temperament.
	Consider possible reasons behind the child's behaviour	Caregivers are encouraged to reflect upon and try to understand the possible causes and motives behind the baby/child's behaviour considering the baby/child's developmental stage and temperament. This includes inhibiting a tendency to misattribute babies/children's challenging behaviours as manipulative or intentionally hurtful towards them as a caregiver. In some instances, caregivers may be supported in this through more general psychoeducation about typical baby/child behaviour at different developmental stages and how this may differ depending on other factors such as a baby/child's temperament.
	Recognise the effect of your own emotional states and actions on the child	Caregivers are supported to consider and understand how their own feelings, mood, decisions, and behaviour affect the baby/child, either directly through caregiver-baby/child interactions or by shaping the baby/child's environment in a particular way. This can include considering effects on the baby/child's feelings, mood, behaviour, wellbeing, or development.
	Reflect on your caregiving expectations and experiences	Caregivers are encouraged to reflect on their expectations and experience of caregiving and being/becoming a caregiver. For instance, they are given space to consider their expectations around caregiving, how the baby/child's behaviour and emotions make them feel as a caregiver, and to consider how their own experiences of being parented may be impacting them in the current day. They are also encouraged to acknowledge and manage negative feelings about the baby/child (e.g., competitiveness, resentment) without self-judgement.

Delivery of the practice elements

Table 7 shows the prevalence of strategies used to deliver the practice elements across interventions with the most common strategies highlighted in bold. We identified 18 discrete delivery strategies, of which 11 were present in at least half of the interventions. The delivery strategies fell into four broad categories:

- 1) *Talking it through*: Practitioners introduce and explore intervention content with caregivers using various techniques, such as didactic teaching, open or structured conversation, and motivational interviewing
- 2) *Seeing it in action*: Practitioners demonstrate content by modelling practices, providing video feedback, or by using instructional videos or vignettes.
- 3) *Putting it into practice*: Practitioners give caregivers an opportunity to try out content either in the session (e.g., using role play or through direct practice with their child with/without immediate feedback) or through at-home activities.
- 4) *Supporting materials*: Practitioners provide visual summaries (e.g., drawing content on a whiteboard/flipchart), present content in the form of hardcopy or digital handouts, give out worksheets for completion in-session or at-home, or provide play materials that can be used for practising content.

Table 6. *Delivery strategies used by effective psychodynamic and attachment-based interventions*

Category	Delivery Strategy	Prevalence across interventions
Talking it through	Didactic teaching	100%
	Reflective/open discussion	83%
	Structured/topical conversation	75%
	Group discussion	33%
	Motivational interviewing	25%
Seeing it in action	Modelling	67%
	Video feedback	58%
	Instructional videos/vignettes	50%
Putting it into practice	At-home practice	67%
	Practice and rehearsal	50%
	In-the-moment feedback	50%
	Play-based activities	42%
	Role plays and group practice	33%
Supporting materials	Handouts	67%
	Visual reminders and summaries	42%
	At-home worksheets and behaviour trackers	42%
	In-session worksheets	25%
	Provision of play-based materials	25%

We found that each intervention employed between 3 to 15 delivery strategies, with an average of 9 strategies per intervention. All interventions used some *didactic teaching*, whereby practitioners directly deliver structured content through presentation. *Reflective/open discussion* and *structured/topical conversation* were the next most common ways practitioners introduced and explored content with caregivers. In addition, all interventions included at least one strategy that encouraged caregivers to try out the content either in the session or at home, with *at-home practice* being the most common. All but one intervention also gave caregivers the chance to see the content in action in some way, which was mostly done through *modelling* by the practitioner. The use of supporting materials was less consistent across interventions; however accompanying *handouts* were provided to parents in two thirds of the interventions.

Making intervention content land

As well as content related to caregiving practices and how these are supported, the intervention manuals contained much information about how practitioners can make sure that intervention content lands with families and becomes part of everyday caregiving. These ‘implementation elements’ included guidance to assist the practitioner in delivering content with fidelity and to apply a skillset that improves the likelihood that the intervention content is appropriate, accessible, and acceptable to families. **Table 8** shows the implementation elements that were common across interventions, which we placed into two main categories: practitioner guidance and practitioner skills.

For practitioner guidance, we found 13 discrete implementation elements that appeared in at least half of the manuals, of which 2 elements appeared in all manuals. First, all intervention manuals offered practitioners case studies and examples of how the practice elements can be used in specific everyday situations. In addition, all manuals included specific instructions or tools to ensure the intervention is delivered with high fidelity (e.g., information on what content is obligatory versus optional, explicit instructions on how specific content should be delivered, or guidance on how the delivery of materials can be flexed if necessary). It was also common for manuals to contain information and references that give the practitioner a strong foundation in the rationale, principles, and learning goals of the program. Practitioners were also typically provided with delivery aids, such as pre-intervention assessment forms, discussion and observation prompts, checklists of materials and content, and scripts they can follow.

For practitioner skills, we found 23 common implementation elements that we further categorised as relational, motivational, practical, or reflective skills to aid interpretation. Most interventions emphasized several important relational skills. These included, for example, getting to know the family and maintaining a connection, engaging in careful and accepting listening, being able to show empathy and acknowledge the different perspectives within a family, and providing reassurance and normalising caregivers’ emotions and experiences without judgment.

Several implementation elements related to encouraging the caregiver’s motivation for change and improving caregiving self-efficacy. Foremost, all intervention manuals guided practitioners to emphasise the actual or expected effects of caregiving change on the caregiver and child. Other common elements included positioning the parent as the expert when it comes to their child, carefully giving feedback and praising the caregivers’ strengths and improvements, encouraging caregivers to persist with the content, and acknowledging where the caregiver might struggle and helping them to pre-emptively problem solve.

On a practical level, all interventions required practitioners to tailor content to the needs of the family and two-thirds of the manuals highlighted the importance of considering family culture and background in this process. All intervention manuals also highlighted the importance of the practitioner being able to model the skills they were teaching, either with the child or through their relational interactions with the caregiver. Additionally, many of the interventions required practitioners to be able to synthesize content from different parts of the intervention and generalise it to everyday caregiving situations. Other practical skills needed to support intervention delivery included, for example, being able to set expectations about the program, observe caregiver-child relationships, and signpost to other support or services.

Finally, all intervention manuals indicated that the practitioner should be able to engage in a reflective practice, for example being able to reflect on their own competence and where they

can improve, on how their practice is influenced by their own experiences of parenting and being parented, and on whether their own background and culture influences their practice and how they relate to the caregivers they are supporting.

Overall, these results highlight that interventions share many commonalities around how to land intervention content with caregivers, involving not only practical guidance but also a set of relational, motivational, practical, and reflective skills required of the practitioner.

Table 7. Common implementation elements of effective psychodynamic and attachment-based interventions

Category		Implementation element	Prevalence across interventions
Practitioner guidance		Case studies or examples	100%
		Fidelity guidance or fidelity measure	100%
		Core guiding principles for intervention delivery	88%
		Goals & learning objectives	88%
		Checklists	75%
		Discussion prompts	75%
		Extra learning material (e.g., books, online resources)	75%
		Pre-intervention assessment	75%
		Research evidence to increase buy-in	63%
		Scripts	63%
		Observation prompts	50%
		Extra resources for the child's wider caregiving network	50%
		Provision of intervention keepsakes	50%
Practitioner skills	Relational	Empathise and consider the caregiver's and child's perspective	100%
		Provide reassurance and normalise caregiver's emotions and experiences	100%
		Take time to get to know each other	100%
		Be a 'secure base' and create a 'safe haven' for the caregiver	88%
		Engage in active, careful, and accepting listening	88%
		Make time for regular discussion, interaction, and reflection	88%
		Provide reassurance about your role, knowledge, and experience	50%
	Motivational	Emphasise the effects of change on the caregiver and child	100%
		Give effective feedback	88%
		Acknowledge barriers and support problem solving	75%
		Position the caregiver as the expert	75%
		Encourage confidence and persistence in applying content	63%
		Provide the caregiver with praise and positive feedback	63%
	Practical	Model the intervention content	100%
		Tailor the content and approach to each family	100%
		Set expectations and support caregiver engagement with the programme	88%
		Support generalisation of skills to everyday life	88%
		Ask open-ended questions	75%
		Observe the caregiver-child relationship	75%
		Provide additional support and signposting	75%
		Show awareness of family background and culture	63%
		Synthesise messaging from across the intervention	63%
	Reflective	Engage in a reflective practice	100%

Discussion

Intervention evidence and the 0–5 pathway

This review aimed to address the gap between evidence and implementation in babies' and young children's mental health service provision in two ways. First, it identified attachment-based and psychodynamic interventions with the strongest available evidence. Second, it examined the common elements that recur across these interventions. The report provides a catalogue of interventions that meet an evidence threshold as well as a synthesis of the caregiving practices, delivery strategies, and practitioner skills that are shared among these interventions. While the pragmatic review identified established interventions capable of improving outcomes for some young children and their caregivers, the evidence base varies in strength, consistency, target population, outcome focus and UK applicability. Careful consideration is therefore needed regarding what each intervention has been shown to improve, for whom, and in which service contexts, so that the system can map a coherent offer across universal, targeted, and specialist provision.

There is no common outcome set for parenting interventions, and different trials measured different outcomes. Across the trials included here, effects were most consistent for what caregivers do with their children and for their experience of parenting: five interventions showed consistent reductions in parenting stress, and several showed gains in positive parenting behaviours and warmth. Half of the interventions showed consistently favourable effects on at least one child outcome. Parental mental wellbeing and emotion regulation were an exception, with no intervention showing consistent improvement, including in trials with parents experiencing mental health problems. The picture is less clear for attachment and parent mentalising. Attachment showed no effect where tested in attachment-based interventions, though two psychodynamic interventions showed mixed evidence; mentalising improved consistently in three interventions, but showed only mixed evidence in the mentalisation-based ones. Beyond this review, meta-analyses pooling across a wider set of trials show different patterns for some interventions and outcomes, including gains in attachment security.

UK evidence and service relevance

A small number of interventions appear particularly relevant for UK service development. VIPP-SD currently has the clearest UK implementation relevant evidence. A pragmatic trial delivered through NHS health visiting services showed modest effects sustained six years after families received the intervention(34,35). VIPP also has a developing evidence base in UK perinatal mental health contexts(41).

Minding the Baby and New Beginnings/PIP have promising UK evidence in more specialist or context specific settings. For New Beginnings/PIP this should be read alongside wider reviews of parent-infant psychotherapy, which suggest potential benefits, particularly for attachment-related outcomes, but also highlight the limited size and variable quality of the evidence base (16,39). New Beginnings therefore adds important UK evidence in a highly specific context but does not resolve the wider question of PIP effectiveness across settings. Notably, despite its wide use, COS-P showed no added benefit over treatment as usual in a large-scale trial in NHS community perinatal mental health services(32).

Although not yet evaluated in the UK, ABC has a strong US efficacy evidence base in our review, particularly for improvements in quality of caregiver-child interactions and child emotional/behavioural outcomes. TIK had the strongest international evidence base, including

several RCTs in Australia, but has also not been evaluated in the UK. It has international evidence for improving how parents communicate around their children's emotions, parent mental health, and children's emotional and behavioural problems. While TIK has been implemented in one region of the UK and is relatively low cost to deliver, it is only suitable for families of children aged 3 and over and has been tested predominantly as a universal offer and in children with emerging behavioural or anxiety problems. Another intervention, PFR, also has supportive international evidence and may be relevant to UK service development, although UK transferability and implementation infrastructure need careful consideration.

VIG occupies a slightly different position. It is already widely used in UK services and aligns closely with the relational and video feedback mechanisms identified in this review, but its evidence base remains preliminary when judged against the RCT/QET threshold used here. Given its existing reach in UK practice, larger scale UK evaluation of VIG would be valuable, particularly to understand for whom and in which settings it is most effective.

Common elements across effective interventions

The common elements analysis examined the practice, delivery, and implementation elements within each intervention. Practice elements were the discrete caregiving behaviours, capacities, or strategies that caregivers are supported to develop and were classified as common if they appeared in at least 50% of interventions. The most prevalent practice elements were linked by a shared focus on strengthening the caregiver–baby/child relationship. These elements centred on caregiver sensitivity and play, reflective functioning, and co-regulation and emotional support.

Nurturing the relationship through sensitivity, play and positive regard

Supporting caregivers to be curious about and attend to their child's cues (92%), respond in an attuned, timely and individualised way (83%), and be an engaged and responsive play partner (83%) maps closely onto the wider evidence base on caregiver sensitivity and relationship building. This is consistent with meta-analytic evidence showing that sensitivity is a key target for early childhood prevention and intervention (42). Interventions with responsive caregiving content have stronger effects on parenting and child development outcomes (43), and interventions that improve parental sensitivity are more likely to improve attachment security (44).

The prominence of responsive play is also notable and aligns with other common-elements work (11). This supports the interpretation that play is not simply a delivery context. It is a priority for babies and children (Thriving Together Framework), and a key relational space in which sensitivity, shared attention, and co-regulation can be experienced (45). The inclusion of affirming the child's importance and individuality (75%) suggests that attuned responding, play and positive regard are closely intertwined, working together to help babies and young children feel seen, understood and valued.

Supporting caregiver reflection and emotional availability

Inferring the child's emotions and needs was present in 83% of interventions and considering possible reasons behind the child's behaviour in 92%. These elements indicate that interventions often support caregivers to wonder about what the child may be feeling, needing or communicating, especially when behaviour is perceived as challenging. Their appearance alongside attuned, responsive, and individualised caregiving suggests that caregivers may need support both to understand the child's experience and to translate that understanding into sensitive caregiving behaviour, so that the child has a felt experience of being understood and

responded to. This aligns with evidence that parental mentalisation and sensitivity are distinct but related contributors to attachment security (46).

Common elements also focused on caregivers' own emotional and relational capacities. These included monitoring their own feelings and actions (67%), recognising the effect of their own emotional states and actions on the child (67%), and reflecting on caregiving expectations and experiences (67%). Together, these elements suggest that caregiver reflection supported caregivers to understand the child's experience while also noticing how their own feelings, expectations and past experiences may shape caregiving in the present. These capacities may help caregivers remain emotionally available and responsive through both rewarding and difficult moments in caregiving.

Co-regulation and accepting feelings

Co-regulation and emotional support were present in 83% of interventions and accepting and sharing in all the child's feelings in 75%. Across interventions, caregivers were supported to stay emotionally available when babies and young children were distressed. This included accepting intense or uncomfortable feelings, understanding outbursts as signals of unmet need or emerging self-regulation, and responding with calm, comfort and developmentally appropriate support. In this way, caregivers lend their own regulation to babies and young children before they can manage emotional experiences independently, gradually strengthening the baby/child's emerging capacity for self-regulation.

Relationally informed behavioral support

Behaviour focused elements also appeared frequently, including giving positive attention for constructive behaviour (50%), establishing routines and supporting transitions (67%), setting clear and consistent limits (67%), and responding to challenging behaviour safely and proportionately (50%). Although attachment, relational, and behavioural approaches are often discussed as separate intervention traditions, our results show that effective attachment-based and psychodynamic interventions also included practical support for behaviour. This aligns with arguments that attachment difficulties and behaviour problems often co-occur, and that relationship building and behaviour management processes may be mutually reinforcing rather than competing approaches (45). It also resonates with qualitative evidence that parents value parenting support when it helps them gain practical knowledge, skills, and understanding, while at the same time feeling accepted, supported, and able to apply changes in everyday family life (46,47). The key distinction is that behavioural strategies are framed relationally and connected to an understanding of the child's needs and the caregiver's context.

Delivery processes and practitioner skill

The common elements analysis also highlighted shared delivery and implementation processes. Importantly, there were no interventions that relied on just one technique with some using up to 15 different ways of delivering content. All interventions used some didactic teaching (100%), and most included reflective or open discussion (83%) and structured or topical conversation (75%), indicating that practitioners commonly introduce content through both structured explanation and reflective dialogue. Many interventions also supported caregivers to see or practise content in action, including through modelling (67%), video feedback (58%), at home practice (67%) and practice or rehearsal (50%). To support caregiver's understanding and engagement with programme content, there is still further work to be done to understand the most appropriate delivery methods for specific practice elements and the delivery methods that might be more suitable for different populations and settings.

Implementation elements similarly pointed to the importance not only of giving practitioners sufficient guidance (e.g., scripts, checklists) but also of developing key practitioner skills to help content land. For example, all manuals emphasised the practitioner should be able to empathise and consider the caregiver and child's perspective, provide reassurance and normalise caregivers' emotions and experiences, tailor content to each family, model intervention content, and engage in reflective practice. Intervention effects are therefore likely to depend not only on *what* caregivers are supported to do but also on *how* they are supported by the practitioner in order for content to land – to the extent that it is relational, tailored, and usable in everyday caregiving.

Limitations

Several limitations should be considered when interpreting these findings. Some have been set out in the introduction. The pragmatic review focused on interventions that were sufficiently specified and documented to enable systematic comparison. It therefore does not capture the full range of individualised, non-manualised therapeutic work delivered in practice. The review also focuses on attachment-based and psychodynamic interventions and therefore provides only a partial view of the wider 0–5 offer. Other brief parenting and caregiving interventions, including those grounded in social learning theory and those more closely aligned with universal provision, will be considered in the companion Golden Threads report.

The evidence threshold was useful for identifying interventions with a stronger trial base, but it may exclude promising approaches that have not yet been robustly evaluated. Conversely, meeting an evidence threshold does not mean that an intervention will be effective in every population or service context. There was considerable heterogeneity between intervention trials (e.g., in design, context, sample, outcome measures, and reporting), which limits our ability to draw firm conclusions about the overall effects of a single intervention or to make fair comparisons without considering context. Moreover, the review does not provide a comparative synthesis of effect sizes, which would be inappropriate given the trial heterogeneity, so the findings should not be read as a ranking of intervention impact. It should also be noted that while trials may have met the sufficient evidence threshold based on favourable results for some outcomes, most trials reported null results on a number of other outcome measures, and these findings should be given equal importance when selecting programmes.

The common elements analysis identifies patterns across interventions with evidence of effectiveness, but does not establish which elements cause change, how elements interact, or which combinations are necessary for which families. Common elements are best used as hypotheses to guide adaptation and implementation, alongside other forms of evidence such as mechanisms of change, mediation analyses, micro-trials, implementation studies, practitioner expertise, local service intelligence and family priorities.

Implications for a coherent 0–5 offer

- **Prioritise interventions with the strongest and most relevant evidence.** A coherent 0–5 offer should include a range of supports, but interventions should not be treated as equivalent. Investment should be guided by evidence strength, UK applicability, fit with local need, and implementation feasibility, alongside what matters to babies, young children, families and practitioners.
- **Use evidence in planning a differentiated pathway.** Different interventions are likely to serve different functions across universal, targeted, and specialist provision. Services

should use evidence strategically to match support to developmental stage, presenting need, wider family circumstances, and the intensity of support required.

- **Create a clear, developmentally informed pathway for identifying need and matching families to support.**

Services need a shared, evidence informed approach to identifying family need and assessing the right level and type of support, taking account of the caregiver–baby/child relationship, infant and child mental health need and development, caregiver mental health, wider adversity, and the safeguarding context.

- **Invest in workforce capability, supervision and implementation support.** Effective delivery requires practitioners who can observe interactions, reassure caregivers, build trust, tailor support, model and coach caregiving practices, and work reflectively. Training alone is unlikely to be sufficient without supervision, fidelity support, caseload capacity, and time for reflective practice.
- **Use common elements to build a shared language and strengthen universal provision.** Sensitivity, reflective functioning, play, co-regulation and relationally framed behavioural support can help connect practice across the 0–5 pathway. Companion Golden Threads work can help translate these relational principles into brief, scalable support for universal settings, without replacing targeted and specialist interventions where these are needed.

What is needed to build an evidence informed 0–5 offer

The 0-5 sector requires a whole-system research strategy that goes beyond intervention by intervention evaluation. Within this

- **Strengthen implementation and equity evidence for interventions with stronger evidence.** Interventions with the strongest evidence need further work on how they can be delivered at scale, including workforce requirements, supervision models, fidelity demands, costs, sustainability, equity and reach in routine services.
- **Rigorous evaluation of widely used or promising interventions with limited trial evidence.** Approaches with strong practice uptake or a compelling value proposition, such as VIG, need larger scale UK evaluation to understand whether, for whom, and in which contexts they are effective.
- **Strategic UK evaluation across the 0–5 system.** Large scale evaluation will not be feasible or necessary for every intervention. Future work should identify priority gaps in the current 0–5 offer, including where there are limited evidence-based options for particular ages, needs, populations or settings, and target evaluation where it can most improve decision making. Investment in evaluation infrastructure that supports consistent measurement and data sharing would increase the value of individual evaluations. It would allow evidence to be combined across studies and enable analysis techniques that can better clarify what works, for whom and in which contexts.
- **Understand which caregiving targets drive which outcomes.** Where feasible, future studies should examine whether changes in specific caregiving capacities, such as sensitivity, reflective functioning, co-regulation, emotion coaching or relationally framed behavioural support, are associated with different child and caregiver outcomes. This would help services understand which components may be most important for different presenting needs, without assuming that all common elements contribute in the same way.

- **Improve knowledge mobilisation and decision support.** Commissioners, service leads and practitioners need usable evidence summaries, implementation guidance and tools that integrate trial evidence, mechanisms, practitioner expertise, local service intelligence, and family priorities.

Conclusion

This report shows that attachment-based and psychodynamic interventions with a sufficient evidence base are available for babies, young children, and their caregivers, including some with UK evidence. However, the evidence base remains uneven. These interventions vary in their target populations, outcomes, and implementation requirements, but share a focus on helping caregivers notice, understand, and respond to babies' and young children's cues, emotions, and behaviour. Building a coherent 0 to 5 mental health offer will take more than selecting interventions one at a time. It requires a whole-system approach to evidence, implementation and workforce development that shows where provision is strongest, where gaps remain, and what is needed to close them, so that families have the best chance to thrive now and in the future.

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Appendices

Appendix A: Pragmatic review supplementary materials

Table A1. Article eligibility criteria for the pragmatic review

Eligibility category	Criteria details
Publication type	• Peer and non-peer reviewed empirical reports published in English • Exclude conference abstracts, protocol papers, meta-analyses, and reviews
Publication date	Published since 2000
Population	Children: • Mean age below 5 years at baseline • The intervention must be delivered in or after pregnancy up until child age 5 years • For interventions delivered (partly/solely) postnatally, outcomes can be at any age of the child (including adulthood) • For interventions delivered during pregnancy, outcomes should be measured after birth and before child age 5 years Parent/caregiver: • No age restriction • Parent refers to biological parents, adoptive parents, foster parents or another legal guardian (e.g. a relative that provides primary care for the child) • Exclude families who are delivered the intervention to manage a single, specific healthcare situation (e.g. to reduce pre-operative anxiety, the emotional impact of infant tube feeding, or to cope with child/parent cancer diagnosis)
Intervention	Parenting interventions predominately based on attachment, psychoanalytic or psychodynamic theory Must be delivered to at least one parent involved in the child's care No restriction on number of sessions or time frame of delivery Must include at least 50% content that targets parenting
Comparison	Active or passive control group
Outcome	Child variables (any of): • Internalising symptoms (e.g. anxiety, depression, somatic complaints) • Externalising symptoms (e.g. disruptive behaviour, aggression, non-compliance, hyperactivity, inattention)

Eligibility category	Criteria details
	• Socio-emotional development (e.g. social skills/competence, prosocial behaviour, emotion regulation) • Attachment Parent variables (any of): • Mental health symptoms (e.g. anxiety, depression, stress/parenting stress) • Parenting practices and parent-infant interaction ratings (e.g. parent sensitivity, positive/harsh discipline, positive reinforcement, dyadic mutuality) • Parenting cognitions (e.g. parenting knowledge, parenting self-efficacy, parenting attitudes) • Parental reflective functioning/reflexivity and mentalization measures
Study design	Randomized controlled trial or quasi-experimental trial. For quasi-experimental trials, the study must include baseline measures of the outcomes and the difference in change overtime between groups should be directly modelled.
Sample size	≥50 families at baseline. Flag studies with 20-50 families.

Table A2. Overview of all interventions identified in the pragmatic review with evidence category

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Attachment and Biobehavioral Catch-up (ABC)		✓	✓		Yes	Sufficient
Child-Parent Psychotherapy (CPP)/Toddler-Parent Psychotherapy (TPP)	✓	✓			Yes	Sufficient
Circle of Security Parenting (COS-P)	✓	✓	✓		Yes	Sufficient
Minding the Baby	✓	✓			Yes	Sufficient
Mother–Infant Transaction Program			✓		Yes	Sufficient
Mothering from the inside out (MIO)	✓	✓	✓		Yes	Sufficient
Parent/Mother-Infant Psychotherapy (PIP/MIP)	✓	✓	✓		Yes	Sufficient
Parent-Child Interaction Therapy (PCIT)			✓		Yes	Sufficient
PriCARE (Child Adult Relationship Enhancement in Primary Care)			✓		Yes	Sufficient
Promoting first relationships			✓		Yes	Sufficient
Tuning into kids			✓		Yes	Sufficient
Video-feedback Intervention to promote Positive Parenting (VIPP)		✓			Yes	Sufficient
Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline (VIPP-SD)			✓		Yes	Sufficient
Video Interaction Guidance (VIG)		✓			Yes	Preliminary
‘Make the Connection’ parenting skills programme			✓		Yes	Insufficient
‘Right from the Start’			✓		Yes	Insufficient

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
ATTACH (Attachment and Child Health)	✓				Yes	Insufficient
Attachment and Biobehavioural Catch-up for Toddlers (between the ages of 24 and 48 months)			✓		Yes	Insufficient
Attachment based family therapy		✓			Yes	Insufficient
Blended Infant Massage-Parenting Enhancement Program			✓		Yes	Insufficient
Care for Child Development			✓		Yes	Insufficient
Child FIRST				✓	Yes	Insufficient
Circle of Security – Intensive		✓			Yes	Insufficient
Circle of security adapted for psychiatric in-patients			✓		Yes	Insufficient
Circle of Security–Home Visiting—4		✓			Yes	Insufficient
Developmental Individual-Difference, Relationship-Based/Floortime (DIR/FT)	✓				Yes	Insufficient
DUET Parenting Model	✓				Yes	Insufficient
Dyadic Developmental Psychotherapy (DDP)		✓			Yes	Insufficient
Filming Interactions to Nurture Development (FIND)			✓		Yes	Insufficient
Foundations for Attachment		✓			Yes	Insufficient
Group Attachment Based Intervention (GABI)			✓		Yes	Insufficient
Hand in Hand Parenting		✓			Yes	Insufficient
Hitkashrut			✓		Yes	Insufficient
HUGS group-based mother-infant interaction intervention			✓		Yes	Insufficient

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Infant Behavior Program (home-based adaptation of the child-directed interaction phase of parent–child interaction therapy; PCIT-CDI)			✓		Yes	Insufficient
Infant mental health home visiting (IMH-HV) - "the Michigan Model"	✓				Yes	Insufficient
Lighthouse Parenting Program	✓				Yes	Insufficient
Mentalisation-based therapy for children (MBT-C)		✓			Yes	Insufficient
Mentalisation-based therapy for families		✓			Yes	Insufficient
Mentalisation-informed group therapy			✓		Yes	Insufficient
Mentalization Based Ultrasound Sessions	✓				Yes	Insufficient
Mom Power (MP)	✓		✓		Yes	Insufficient
Msingi Bora, a responsive parenting intervention			✓		Yes	Insufficient
My Baby and Me				✓	Yes	Insufficient
Neurophysiological psychotherapy (NPP)		✓			Yes	Insufficient
Newborn Behavioural Observation			✓		Yes	Insufficient
NICU 1-session video-feedback			✓		Yes	Insufficient
Non-Violent Resistance (NVR)		✓			Yes	Insufficient
Nurture And Play (NaP)	✓				Yes	Insufficient
Nurturing Attachments Course		✓			Yes	Insufficient
Parental Training for Lone Mothers Guided By Educators (PALME)	✓				Yes	Insufficient
Parent–Child Attachment Play (PCAP)		✓			Yes	Insufficient

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Parent–Child Care (PC–CARE)			✓		Yes	Insufficient
Parent-Child Interaction Therapy (PCIT) - Brief foster care. 2-day in-person & 8-week phone calls.			✓		Yes	Insufficient
Parent-Child Interaction Therapy (PCIT) - Intensive foster care. 2-day in-person, 8-week phone calls, & booster			✓		Yes	Insufficient
Parent-Child Interactions (PCI)			✓		Yes	Insufficient
Partners in Parenting Education (PIPE)		✓			Yes	Insufficient
Play and Learning Strategies			✓		Yes	Insufficient
PremieStart parent-sensitivity training program (MITP type intervention)			✓		Yes	Insufficient
Relational savoring			✓		Yes	Insufficient
REST Routine: Reassurance, Empathy, Support, and Time-out			✓		Yes	Insufficient
Sensory attachment intervention		✓			Yes	Insufficient
Solihull Approach		✓			Yes	Insufficient
Strengthening Bonds			✓		Yes	Insufficient
Sugira muryango (Strengthening Intervention for Early Childhood Development and Violence Prevention)			✓		Yes	Insufficient
Systematic Training for Effective Parenting (STEP)			✓		Yes	Insufficient
The Clinician Assisted Videofeedback Exposure Session (CAVES)	✓				Yes	Insufficient
The Fussy Baby Network® intervention			✓		Yes	Insufficient
Theraplay		✓			Yes	Insufficient

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Thula Sana (early childhood maternal-infant attachment intervention)			✓		Yes	Insufficient
Video feedback intervention programme using the Marte Meo method				✓	Yes	Insufficient
Video feedback of infant–parent interaction (VIPI)			✓		Yes	Insufficient
Video-feedback Intervention to promote Positive Parenting for Parents with Learning Difficulties (VIPP-LD)				✓	Yes	Insufficient
Video-feedback Intervention to promote Positive Parenting - Representations (VIPP-R)	✓	✓			Yes	Insufficient
Video-feedback Intervention to promote Positive Parenting - Visual (VIPP-V)				✓	Yes	Insufficient
Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline - adapted with an additional attachment-based Parenting Capacity Assessment (PCA)			✓		Yes	Insufficient
Video-feedback Intervention to promote Positive Parenting and Sensitive Discipline-Autism (VIPP-AUTI)				✓	Yes	Insufficient
Video-feedback Intervention to promote Positive Parenting iBASIS (iBASIS-VIPP)			✓		Yes	Insufficient

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Video-feedback Intervention to promote Positive Parenting-Foster Care/Adoption (VIPP-FC/A)			✓		Yes	Insufficient
Watch Me Play!		✓			Yes	Insufficient
Watch, Wait and Wonder (WWW)		✓			Yes	Insufficient
(Individual) Play therapy / Attending or special play / Ball Throwing/Game Play		✓			No	N/A
3Ts-home visiting			✓		No	N/A
ACT Raising Safe Kids program			✓		No	N/A
Adapted Responsive Teaching			✓		No	N/A
Adaptive mentalisation based therapy (AMBIT)		✓			No	N/A
All Babies Cry			✓		No	N/A
Approaches		✓			No	N/A
ARC (The attachment Research Community)		✓			No	N/A
Art (psycho)therapy / Mandala		✓			No	N/A
Attachment Aware		✓			No	N/A
Auditory-tactile-visual-vestibular intervention and kangaroo care			✓		No	N/A
BABY BEATS Advanced Bionics		✓			No	N/A
Baby Bonding		✓			No	N/A
Baby massage		✓			No	N/A
Baby Newsletters			✓		No	N/A
Baby Steps Wellbeing web program			✓		No	N/A
Baby wearing / carrying		✓			No	N/A
Banking Time	✓				No	N/A
Brief Behavior Parent Training Vietnam			✓		No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Building underdeveloped sensory systems (BUSS)		✓			No	N/A
CBT		✓			No	N/A
Cellphone enhanced Planned Activities Training (CPAT)			✓		No	N/A
Cellular phone–supported version (PCI-C) of the Parent-Child Interactions (PCI) intervention			✓		No	N/A
Chicago parenting program			✓		No	N/A
Child Centred Integrative Approach		✓			No	N/A
Child Parent / Group Relationship Model (Filial Model/Therapy)		✓			No	N/A
Child-Oriented Play group (from Child's Game part of Helping the noncompliant child)			✓		No	N/A
Children and Parents DBT Skills		✓			No	N/A
Circle of Security (COS)		✓			No	N/A
Cognitive analytic therapy (CAT)		✓			No	N/A
Collaborative Problem Solving approach		✓			No	N/A
Compétences parentales et Attachement dans la Petite Enfance: Diminution des risques liés aux troubles de santé mentale et Promotion de la résilience - Parental Skills and Attachment in Early Childhood: reducing mental health risks and promoting resilience			✓		No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Cool Little Kids			✓		No	N/A
Cool Little Kids Online			✓		No	N/A
COPEing with Toddler Behavior			✓		No	N/A
COPING (COnfident Parent INternet Guide) program			✓		No	N/A
Creating Opportunities for Parent Empowerment			✓		No	N/A
Cues program			✓		No	N/A
Dandelion Time Model		✓			No	N/A
Day by Day Program			✓		No	N/A
Defiant Children: A Clinician's Manual for Assessment and Parent Training			✓		No	N/A
Developmental Cognitive Analytic Therapy (CAT)		✓			No	N/A
Dialectical booksharing program			✓		No	N/A
Dramatherapy		✓			No	N/A
Dyadic Group Psychotherapy	✓				No	N/A
Early pathways program			✓		No	N/A
Easy Peasy			✓		No	N/A
Empowering Parents, Empowering Communities			✓		No	N/A
eMums Plus			✓		No	N/A
Enhancing Parenting Skills			✓		No	N/A
Enhancing the development of families: parent and child training (Entwicklungsförderung in Familien: Eltern- und Kinder-Training; EFFEKT)			✓		No	N/A
Explorer Baby			✓		No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Eye movement desensitisation and reprocessing (EMDR)		✓			No	N/A
Fagus framework		✓			No	N/A
Families OverComing Under Stress-Early Childhood (FOCUS-EC)			✓		No	N/A
Family Check-Up (FCU)			✓		No	N/A
Family Connects			✓		No	N/A
Family First Parenting Groups		✓			No	N/A
Family Foundations			✓		No	N/A
Family Foundations - home visiting			✓		No	N/A
Family Foundations delivered online			✓		No	N/A
Family Integrated Care			✓		No	N/A
Focused Coparenting Consultation			✓		No	N/A
Gestalt therapy		✓			No	N/A
Getting Ready			✓		No	N/A
Gordon Neufeld Approach		✓			No	N/A
Gro Brain		✓			No	N/A
Group Well Child Care Visits			✓		No	N/A
Growing as a Couple and Family			✓		No	N/A
Happy mother - healthy baby (HMHB)			✓		No	N/A
Happy Parenting Program			✓		No	N/A
Happy Talk			✓		No	N/A
Healthy Families (Durham) Programme		✓			No	N/A
Healthy Nests			✓		No	N/A
Healthy Steps for Young Children Program			✓		No	N/A
Helping Our Toddlers, Developing Our Children's Skills (HOT DOCS)			✓		No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Here's Looking at you Baby		✓			No	N/A
Incredible Years		✓			No	N/A
Incredible Years BASIC			✓		No	N/A
Incredible Years Parent and Babies program			✓		No	N/A
Incredible Years Parents and Teachers Program			✓		No	N/A
Incredible Years Toddler Parenting Program			✓		No	N/A
Individual Child Psychotherapy (ICP)		✓			No	N/A
Infant Behavioral Assessment and Intervention Program			✓		No	N/A
internet-based and telephone-assisted Finnish Strongest Families Smart Website (SFSW) parent training intervention			✓		No	N/A
Interpersonal psychotherapy		✓			No	N/A
Irie Homes Toolbox			✓		No	N/A
Japanese Infant Mental Health Program			✓		No	N/A
Learning through PlayPlus (LTP+)			✓		No	N/A
Learning Through PlayPlus for Dads (LTP+Dads) - 12 instead of 10 sessions			✓		No	N/A
Letting the future in (NSPCC post abuse programme)		✓			No	N/A
Life Story Play Therapy / Therapeutic life story work		✓			No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Masayang Pamilya Para Sa Batang Pilipino Parenting Programme (“Happy Family for Filipino Children”) adapted from Parenting for Lifelong Health for Young Children			✓		No	N/A
MBSR adapted for parenting		✓	✓		No	N/A
MBSR adapted for parenting			✓		No	N/A
Mentalisation-based art therapy group		✓			No	N/A
Mentalisation-based therapy (MBT)		✓			No	N/A
Mentalisation-based therapy parenting group		✓			No	N/A
Mindfulness-Based Childbirth and Parenting (MBCP; Bardacke, 2012)			✓		No	N/A
Mind-Mindedness intervention		✓			No	N/A
Mom-net internet-facilitated intervention			✓		No	N/A
Mothers and Babies Course (MB) cognitive behavioral group-based enhancement to Healthy Families America and Parents as Teachers home visiting (HV/CBT)			✓		No	N/A
Mothers and toddlers program (MTP)	✓	✓			No	N/A
MotherWise			✓		No	N/A
Music therapy		✓			No	N/A
Narrative attachment therapy		✓			No	N/A
NESSie (Parent training forums)		✓			No	N/A
Neurosequential Model		✓			No	N/A
New Forest Parenting Program			✓		No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
New Hope program			✓		No	N/A
Non-directive counselling (mother)		✓			No	N/A
Non-directive Play Therapy		✓			No	N/A
Nurture Groups		✓			No	N/A
Nurtured Heart Approach		✓			No	N/A
Nurturing Families Programme		✓			No	N/A
Online mindful parenting training (based on Mindful Parenting training developed by Bögels and Restifo (2013) and the Mindful with your toddler training)			✓		No	N/A
Parent and Infant Relationship Support			✓		No	N/A
Parent Corps			✓		No	N/A
Parent in the playroom		✓			No	N/A
Parent–child therapy		✓			No	N/A
Parenting interventions		✓			No	N/A
Parenting Matters			✓		No	N/A
Parenting Our Children to Excellence program			✓		No	N/A
Parenting with Depression (PWD), a social media-based parenting program			✓		No	N/A
Parents Plus Early Years Programme			✓		No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Parents Under Pressure (targeting multiple domains of family functioning including the psychological functioning of individuals in the family, parent-child relationships, and social contextual factors and includes mindfulness skills)			✓		No	N/A
Planned Activities Training (PAT)			✓		No	N/A
Play and interaction groups		✓			No	N/A
Play2Sleep			✓		No	N/A
PlayNicely			✓		No	N/A
Positive Parenting for Oppositional Preschoolers (PPOP)			✓		No	N/A
Practical Resources for Effective Postpartum Parenting (PREPP)			✓		No	N/A
Prevention and Relationship Enhancement Program			✓		No	N/A
Promoting Holistic Development of Young Kids (Poly Kids),			✓		No	N/A
Psychotherapy / Psychodynamic therapy		✓			No	N/A
Puppet/Acting out		✓			No	N/A
Reading to Share Program Protocol			✓		No	N/A
Reflective Parenting		✓			No	N/A
Reminiscing and Emotion Training intervention			✓		No	N/A
Remote/online interventions		✓			No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Research-based and Developmentally Informed- Parent home visiting program (REDI-P)			✓		No	N/A
School interventions		✓			No	N/A
Signposts for Building Better Behaviour			✓		No	N/A
SOS (helps for parents) Program			✓		No	N/A
Strong Families			✓		No	N/A
Strong Military Families			✓		No	N/A
Strongest Families Smart Website (SFSW)			✓		No	N/A
Supporting Father Involvement intervention			✓		No	N/A
Systematic family therapy		✓			No	N/A
technology-based peer-support intervention program (PIP)			✓		No	N/A
technology-based supportive educational parenting program (SEPP)			✓		No	N/A
Therapeutic Parenting (National Association of Therapeutic Parenting)		✓			No	N/A
Thrive Approach		✓			No	N/A
Time-intensive cognitive-behaviour therapy (iCBT)		✓			No	N/A
TMT, a newly developed five-session couple-focused intervention			✓		No	N/A
ToP+ program			✓		No	N/A
Trauma focused CBT		✓			No	N/A
Trauma informed approach (Beacon House Polyvagal Theory)		✓			No	N/A

Intervention	Source				Attachment/ psychodynamic intervention	Evidence category ^a
	Sleed et al.	Wright et al.	Phillips et al.	Additional scoping		
Trauma informed schools		✓			No	N/A
Trauma informed/focused therapy		✓			No	N/A
Trauma recovery model (ECM)		✓			No	N/A
Triple P (Positive Parenting Programme)		✓			No	N/A
Triple P for Baby			✓		No	N/A
Triple P Stepping Stones			✓		No	N/A
TripleP discussion			✓		No	N/A
TripleP group (level 4)			✓		No	N/A
TripleP online			✓		No	N/A
TripleP online with telephone calls			✓		No	N/A
TripleP primary care			✓		No	N/A
TripleP self-directed			✓		No	N/A
UCLA Family Development Project		✓			No	N/A
What Were We Thinking			✓		No	N/A
WHO Caregiver Skills Training for Families of Children with Developmental Delays and Disabilities			✓		No	N/A
Whole Family Team (WFT) Parenting Work		✓			No	N/A

^aCriteria for evidence categories can be found in Table 1.

Table A3. *Trial characteristics for interventions with sufficient or preliminary evidence*

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
Attachment and Biobehavioral Catch-up	1(1,2)	United States	NR	RCT	Active (DEF)	Home visits	10	14	96 (44)	Selective	Children in foster care	0-22 (M=17.7)	50	93
	2(3)	United States	NR	RCT	Waitlist	Home visits	NR	10	58 (29)	Treatment	Maltreated children with attachment problems	0-72 (M=42.5)	49	81
	3(4,5)	United States	Apr 2009-May 2017	RCT	Active (DEF)	Home visits	10	14	131 (65)	Selective	Internationally adopted children	0-36 (M=22.3)	53	94
	4(6,7)	United States	May 2013-Jul 2016	RCT	Active (BOW)	Home visits	10	14	208 (104)	Selective	Low income latinx families	6-18 (M=12.9)	51	93
	5(8)	United States	Jan 2016-Nov 2018	RCT	Waitlist	Home visits	10	31	200 (100)	Selective	Low-income families	6-21 (M=11.8)	51	96
Child adult relationship enhancement in Primary CARE	1(9)	United States	2014-2015	RCT	Waitlist	In-person group	6	9, 16	120 (80)	Indicated	Children with behaviour problems	24-72	37	99
	2(10)	United States	2017-2018	RCT	Waitlist	In-person group	6	10	100 (50)	Universal	Children without a behavioural/ developmental condition	24-72 (M=30.8)	47	93
	3(11)	United States	2016-2018	RCT	Care-as-usual	In-person group	6	19	174 (119)	Indicated	Children with behaviour problems	24-72 (M=40.8)	43	97
	4(12)	United States	2020-2022	RCT	Waitlist	Online group	6	12	182 (92)	Universal	Children without a behavioural/ developmental condition	24-72 (M=49.2)	40	94
Child/Toddler-Parent Psychotherapy	1(13-16)	United States	1992-1996	RCT	Care-as-usual	Home visits	M=45	70, 112, 420	130 (66)	Selective	Mothers with a history of major depressive disorder	NR (M=20.3)	56	100

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
	2(17-19)	United States	1996-2003	RCT	Active (Case management and referral)	In-person individual	M=32	50, 76	113 (80)	Selective /Indicated	Child-mother dyads exposed to marital violence referred for child behaviour problems or parenting issues	24-60 (M=49.8)	52	100
	3(20)	United States	NR	RCT	Active (Case management and referral)	In-person individual	M=32	52, 78	NR	Indicated	Child-mother dyads exposed to marital violence referred for child behaviour problems	36-60 (M=48.7)	52	100
	4(21)	United States	Aug 2017-Aug 2021	RCT	Active (PCIT)	In-person individual	12	21	144 (74)	Selective	Child-mother dyads experiencing homelessness	18-60 (M=41.8)	43	100
Circle of Security Parenting	1(22)	United States	NR	RCT	Waitlist	In-person group	10	19	164 (73)	Selective	Low-income families	36-60 (M=50.9)	58	100
	2(23)	Australia	NR	QED	Waitlist	In-person group	8	8	221 (169)	Selective	Mothers with postnatal depression	0-72 (M=21.4)	50	100
	3(24)	Denmark	Jun 2017-Nov 2018	RCT	Care-as-usual	Home visits	9	61	76 (38)	Selective	Pregnant women with mental health problems and/or poor social networks	3-5 GA	NR	100
	4(25)	Australia	2017-2020	RCT	Waitlist	In-person individual	8	8	85 (51)	Selective /Indicated	Families at child maltreatment risk/ experiencing high parenting distress and/or child behaviour problems	12-84 (M=41.4)	47	85

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
	5(26,27)	Australia	May 2018-Jul 2021	RCT	Waitlist ^a	In-person individual	8	8	60 (30)	Indicated	Children with emotion regulation/behaviour problems	14-24 (M=19.1)	50	100
Minding The Baby	1 Phase 1(28,29) Phase 2 (30)	United States	Mar 2010-Mar 2011	cRCT	Care-as-usual	Home visits	91	35, 70, 122	P1: 105 (60) P2: 164 (82)	Selective	Low-income, ethnic-minority, healthy first-time mothers aged 14-25 yrs	20-24 wks GA	48	100
	2(31)	United Kingdom	Apr 2014-Nov 2018	cRCT	Care-as-usual	Home visits	91	46, 72, 124	148 (75)	Selective	Healthy first-time mothers < 19 yrs or 20-25 yrs with social-economic disadvantage	20-24 wks GA	NR	NR
Mother–Infant Transaction Program	1(32,33)	Norway	Mar 1999-Aug 2002	RCT	Care-as-usual	Hospital/home visits	12	26, 52, 469	146 (72)	Selective	Preterm infants	28-32 wks GA	48	NR
	2(34)	Norway	2005-2006	RCT	Care-as-usual	Hospital/home visits	11	4, 17, 26	106 (56)	Selective	Preterm infants	NR	42	100
	3(35)	China (Hong Kong)	2018-2019	RCT	Care-as-usual	In-person individual	4	3, 13, 26	60 (30)	Selective	Preterm infants	32-36 wks GA	NR	100
Mothering from the Inside Out	1(36)	United States	NR	RCT	Active (Psycho-education)	In-person individual	12	12, 24, 52	87 (40)	Selective	Mothers receiving outpatient Treatment for substance abuse	11-60 (M=27.6)	47	100
	2(37)	United States	Jan 2015-Dec 2019	RCT	Active (Psycho-education)	In-person individual	12	12	94 (53)	Selective	Mothers receiving outpatient Treatment for substance abuse	11-60 (M=30.0)	50	100

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
Parent/Mother- Infant Psychotherapy	1(38,39)	United Kingdom	Jan 1990-Aug 1992	RCT	Care-as-usual	Home visits	10	20, 39, 78, 260	102 (50)	Selective	Mothers with postpartum depression	2	NR	100
	2(40-42)	Sweden	2005-2008	RCT	Care-as-usual	In-person individual	29	26, 182, 234	80 (40)	Selective	Mothers with self-reported parent-infant relationship problems	0-18 (M=5.0)	59	100
	3(43)	Switzerland	Jul 2006-Jul 2007	QED	Care-as-usual	In-person individual	4	13, 26	129 (40)	Selective	Mothers with perinatal depression	29 wks GA	NR	100
	4(44)	United Kingdom	2007	RCT	Care-as-usual	In-person individual	M=16	26, 52	76 (38)	Selective	Mothers with mental health problems and social adversity	0-12 (M=3.9)	37	100
	5(45) ^b	United Kingdom	NR	cRCT	Care-as-usual	In-person group	8	5, 13	163 (88)	Selective	Mother-child dyads co-residing in prison	0-18 (M=4.7)	61	100
	6(46)	Germany	Feb 2014-Mar 2018	RCT	Care-as-usual	In-person individual	4	12	154 (81)	Treatment	Children with early regulatory problems	4-15 (M=8.6)	44	100
	7(47)	China	May 2016-June 2018	QED	Care-as-usual	In-person group	12	12, 24	280 (82)	Selective	Mothers experiencing low mood / parenting distress	1-16 (M=8.6)	46	100
Parent-Child Interaction Therapy	1(48)	Australia	NR	RCT	Waitlist	In-person individual	12	12, 38	40 (22)	Treatment	Children with clinical behaviour problems	36-71 (M=46.8)	30	NR
	2(49,50)	Australia	2006-2013	RCT	Waitlist	In-person individual	12	12	192 (138)	Selective /Indicated	Children at maltreatment risk with behaviour problems	36-84 (M=54.8)	33	92

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
	3(21)	United States	NR	RCT	Active (CPP)	In-person individual	12	21	144 (70)	Selective	Mother-child dyads living in homeless shelters	18-60 (M=41.8)	43	100
	4(26,27)	Australia	NR	RCT	Waitlist ^a	In-person individual	14	8	56 (30)	Indicated	Children with emotion regulation / behaviour problems	14-24 (M=19.5)	50	100
Promoting First Relationships	1(51)	United States	2007-2010	RCT	Active (EES)	Home visits	10	15, 40	210 (105)	Selective	Children in care	10-24 (M=18.0)	44	NR
	2(52,53)	United States	2011-2014	RCT	Active (Resource and referral service)	Home visits	10	18, 30, 44	247 (124)	Selective	Parents under investigation for child maltreatment	10-24 (M=16.4)	46	91
	3(54,55)	United States	2015-2019	cRCT	Active (Resource and referral service)	Home visits	10	19, 45	252 (127)	Selective	Low-income mothers with mental health problems	1-3 (M=1.8)	48	100
	4(56)	United States	2017-2019	RCT	Active (Resource and referral service)	Home visits	10	13, 26	162 (81)	Selective	Parent-caregiver dyads living in a reservation-based community	10-31 (M=20.1)	50	93
Tuning Into Kids	1(57,58)	Australia	2006-2008	cRCT	Waitlist	In-person group	8	10,36	218 (107)	Universal	Children without a developmental condition	46-68 (M=56.3)	48	96
	2(59)	Australia	NR	RCT	Waitlist	In-person group	8	28	128 (62)	Universal	Parents of children attending government-funded preschool within a low- to high-SES area	48-71 (M=50.3)	48	92

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
	3(60)	Australia	2012-2014	cRCT	Waitlist	In-person group	8	40	162 (87)	Universal	Fathers of children attending preschool	48-71 (M=53.3)	46	0
	4(61)	Australia	NR	RCT	Care-as-usual	In-person group	8	6, 32	54 (31)	Indicated	Children with behaviour problems	48-71 (M=59.3)	22	100
	5(62)	Iran	NR	RCT	Waitlist	In-person group	8	6, 12	54 (27)	Indicated	Children with behaviour problems	36-72 (M=52.0)	NR	100
	6(63)	Iran	NR	cRCT	Waitlist	In-person group	8	6, 24	56 (30)	Indicated	Children with high anxiety	48-72 (M=52.8)	42	100
	7(64)	China	NR	RCT	Waitlist	In-person group	6	6, 8	89 (45)	Universal	Parents and children without a psychological condition	36-72 (M=59)	42	100
	8(65)	Switzerland	2021-2022	RCT	Waitlist	Online group	6	12, 38	141 (70)	Universal	Children not receiving Treatment for a psychological condition	36-72 (M=59.4)	43	88
Video-feedback Intervention to promote Positive Parenting (and Sensitive Discipline)	1(66,67)	Netherlands	NR	RCT	Care-as-usual	Home visits	4	18, 144	55 (28)	Selective	First-time mothers screened for insecure attachment	4-4 (M=6.8)	51	100
	2(68)	Netherlands	May 2001-NR	RCT	Active (Check-in calls)	Home visits	6	52	237 (120)	Indicated	Children with behaviour problems	12-36 (M=27.0)	44	100
	3(69)	Lithuania	NR	RCT	Active (Child development phone interviews)	Home visits	5	26	54 (26)	Universal	Healthy, non-working, primary caregiving mothers of intact families with a high school education	6-6 (M=6.1)	48	100
	4(70,71)	United Kingdom	Jul 2015-Apr 2019	RCT	Care-as-usual	Home visits	6	22, 104	300 (151)	Indicated	Children with behaviour problems	12-36 (M=23.0)	46	96

Intervention	Trial	Country	Dates	Design	Comparator	Delivery	Sessions	Assessments (months from baseline)	Sample size at baseline (intervention)	Prevention level	Population	Child age (months)	% girls at baseline	% female caregivers
	5(72)	Turkey	NR	RCT	Active (Child development phone interviews)	Home visits	4	8, 21	79 (46)	Universal	Non-working, primary caregivers of intact families who are not educated to degree level	9-30 (M=20.0)	44	100
Video Interaction Guidance	1(73)	Netherlands	2009-2012	RCT	Care-as-usual	In-person individual	3	4, 13, 26	150 (75)	Selective	Preterm infants	25-37 wks GA	44	51
	2(74)	Ireland	2012-2014	RCT	Care-as-usual	In-person individual	3	39, 52	80 (42)	Selective	Preterm infants	NR	54	100
	3(75)	United Kingdom	NR	RCT	Care-as-usual	Home visits	3	9	31 (16)	Selective	Preterm infants	NR	39	94

Note. NR = Not reported, (c)RCT = (Cluster) Randomised controlled trial, QED = quasi-experimental design, DEF = Developmental Education for Families, EHS = Early Head Start, BOW = Book-of-the-week (a book each week for 10 weeks), EES = Early Education Support, GA = gestational age

^aThe trial comprised 3-arms (COS-P, PCIT, waitlist) but for the purpose of this review it was treated as two trials with each intervention compared separately to the waitlist only.

^b*New beginnings* protocol

Table A4. Summary of trial results for interventions with sufficient or preliminary evidence

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Attachment and Biobehavioral Catch-up	1	(1)	No	No	N/A	N/A	Child behaviour problems (PDR/IT) T1	Moderate
		(2)	NR	Yes	Parent sensitivity (10-minute play interaction) T1●	N/A	N/A	Weak
	2	(3)	Yes	Yes	Parent child abuse potential (CAPI) T1▲ Parenting stress (PSI/SF) T1▲ Child internalising (CBCL) T1● Child externalising (CBCL) T1▲	N/A	N/A	Strong
	3	(4)	Yes	Yes	Parent sensitivity (play interaction) T1● Parent intrusiveness (play interaction) T1▲ Parent positive regard (play interaction) T1▲	N/A	N/A	Weak
		(5)	Yes	Yes	Child social-emotional competence (BITSEA) T1▲	N/A	N/A	Weak
	4	(6)	Yes	Yes = Dyadic mutuality No = child behaviour problems	Dyadic mutuality (Three Bags Task) T1●	N/A	Child behaviour problems (BITSEA) T1	Moderate
		(7)	Yes	Yes	Parent sensitivity/responsiveness (Three Bags Task) T1● Parent intrusiveness (Three Bags Task) T1▲ Parent positive regard (Three Bags Task) T1●	N/A	N/A	Strong
	5	(8)	Yes	Yes	Parent sensitivity (play interaction) T1●	N/A	Parent intrusiveness (play interaction) T1 Parent positive regard (play interaction) T1 Parent depression (CES-D) T1	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Child adult relationship enhancement in Primary CARE	1	(9)	Yes	Yes	Child behaviour problems (ECBI: intensity & problem) T0-T2 Parent empathy towards child's needs (AAPI2) T0-T2 Parent belief in the use of corporal punishment (AAPI2) T0-T2 Parental value of child's autonomy (AAPI2) T0-T2	N/A	Child maltreatment risk / Parenting attitudes: inappropriate expectations of child; reversing parent-child roles; oppressing power & independence (AAPI2) T0-T2	Moderate
	2	(10)	Yes	No	Child behaviour problems (ECBI problem & intensity scores) T1 Parenting discipline strategies: total, laxness, over-reactivity, verbosity (PS) T1	N/A	N/A	Moderate
	3	(11)	Yes	Yes	Child behaviour problems (ECBI problem scores only) T1 Parenting stress (PSI) T1	N/A	Child behaviour problems (ECBI intensity scores) T1 Child maltreatment risk / Parenting attitudes: inappropriate expectations of child; lack of empathy for child's needs; strong belief in corporal punishment; reversing parent-child roles; oppressing power & independence (AAPI2) T1	Moderate
	4	(12)	Yes	Yes	Parent dysfunctional discipline strategies (PS) T1 Parent dysfunctional discipline strategies: hostility subscale (PS) T1 Child behaviour problems (ECBI problem & intensity scores) T1 Parent verbalisations: more labelled praise, reflections, behavioural descriptions; less questions (DPICS) T1 Child abuse potential: rigidity (CAPI) T1	N/A	Child abuse potential: abuse, distress, unhappy, problem child & self, problem other (CAPI) T1	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Child/Toddler-parent Psychotherapy	1	(13)	NR	No	Secure attachment (Strange Situation) T1 ★ Disorganised attachment (Strange Situation) T1 ▲	N/A	Avoidant attachment (Strange Situation) T1 Resistant attachment (Strange Situation) T1 Parent depressive symptoms (BDI) T1	Strong
		(14)	Yes	No	Secure attachment (Strange Situation) T2 ★	N/A	Child problem behaviour (CBCL) T2 Disorganised attachment (Strange Situation) T2	Strong
		(15)	Yes	Yes	Parent child-related stress (PSI) T1 ▲	N/A	Parenting stress (PSI) T1	Strong
		(16)	No	No	N/A	N/A	Child peer relations (TCPR) T3	Strong
	2	(17)	NR	Yes	Child internalising (CBCL) T1○ Child externalising (CBCL) T1○ Child total problems (CBCL) T1○	N/A	N/A	Moderate
		(18)	Yes	Yes	Child total problems (CBCL) T1● Parent PTSD avoidant symptoms (CAPS) T1 ▲	N/A	Parent global PTSD symptoms (CAPS) T1 Parent psychiatric symptoms severity (SCL-90-R) T1 Parent PTSD reexperiencing (CAPS) T1 Parent PTSD hyperarousal (CAPS) T1	Moderate
		(19)	Yes	NR	Child total problems (CBCL) T2●	N/A	Parent psychiatric symptoms (SCL-90-R Global Severity Index) T2	Moderate
	3	(20)	Yes	Yes	Child PTSD symptoms (DC: 0-3) T1★ Child depression (DC: 0-3) T1▲ Child total problems (CBCL) T1 and T2 ▲ Parent PTSD symptoms (CAPS) T1●	N/A	Parent depression (SCL-90-R) T1 Parent depression (SCL-90-R) T2	Moderate
	4	(21))	Yes	Yes	N/A	N/A	Child PTSS symptoms (CATS-C) T1	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Circle of Security Parenting	1	(22)	Yes	Only variables measured at baseline: parent (un)-supportive responses, child internalising & externalising	Parent unsupportive responses to child distress (CTNES) T1● Child inhibitory control (Dimensional Change Card Sort) T1●	N/A	Child attachment security (Strange Situation) T1 Child attachment avoidance (Strange Situation) T1 Parent supportive responses to child distress (CTNES) T1 Child internalising (CBCL) T1 Child externalising (CBCL) T1	Moderate
	2	(23)	NR	Yes	Parental mentalising (CCQ) T1▲ Parent affection (CCQ) T1● Parent empathy (CCQ) T1▲ Caregiving helplessness (CCQ) T1● Parent hostility (CCQ) T1▲ Parent depressive symptoms (EPDS) T1●	N/A	Child difficulty (CCQ) T1	Weak
	3	(24)	Yes	Only for parent depressive symptoms & well-being	Parenting stress (PSI-SF) T1▲	N/A	Parent depressive symptoms (EPDS) T1 Parent wellbeing (SWEMWBS) T1 Parent sensitivity (CIB) T1 Child socio-emotional development (ASQ-SE) T1 Parental reflective functioning (PRFQ) T1	Weak
	4	(25)	Yes	Yes	Parent attachment anxiety (ECR) T1★	N/A	Child externalising (BASC-2) T1 Child internalising (BASC-2) T1 Parenting stress (PSI-SF) T1 Parent reflective functioning (PRFQ) T1 Positive parenting (PPM) T1 Negative parenting (PPM) T1 Parent attachment avoidance (ECR) T1 Parent depressive symptoms (BDI) T1	Strong

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
	5	(26)	NR	Yes	N/A	N/A	Parent emotion regulation difficulties (DERS) T1 Parent negative talk ratio (DPICS) T1 Parent emotion dismissing ratio (DECS) T1 Child distress (Lab-TAB) T1 Child emotion regulation (Lab-TAB) T1 Child dysregulation (CBCL) T1 Child externalising (CBCL) T1 Child negative verbalisations (DPICS) T1	Moderate
		(27)	Yes	Yes	N/A	N/A	Positive child directed verbalisations (DPICS) T1 Negative child directed verbalisations (DPICS) T1 Parent sensitivity (20-min parent-child interaction) T1 Parent mentalisation (DRFS and interaction task) T1 Parent empathy (TOPSE) T1 Parent emotion regulation difficulties (DERS) T1 Caregiving helplessness (CHQ) T1 Parenting hostility (LSAC hostility subscale) T1 Child abuse potential (BCAP) T1 Parenting stress (PSI-SF) T1 Child attachment (Attachment Q-set) T1 Child internalising (CBCL) T1 Child externalising (CBCL) T1 Child social emotional and behavioural issues (BITSEA) T1 Child social competence (BITSEA) T1 Child compliance (DPICS) T1 Child relationships (DECA) T1 Child initiative (DECA) T1 Child self-regulation (DECA) T1 Child emotion-regulation (frustration task) T1	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Minding The Baby	1	(28)	NR	Yes except attachment & parent-infant affective communication	Child secure attachment (Strange Situation) T2● Child disorganised attachment (Strange Situation) T2● Parent-infant affective communication (AMBIANCE) T1●	NA	Parent depression (CES-D) T0-T2 Parent psychological distress (BSI) T0-T2 Parent global psychological symptom severity (BSI) T0-T2 Parent depression (BSI) T0-T2 Parent anxiety (BSI) T0-T2 Parent somatic symptoms (BSI) T0-T2 Parent reflective functioning (PI & PDI) T0-T3	Moderate
		(29)	No	Yes = Reflective functioning No = child behaviour	Child externalising problems (CBCL) T4★	NA	Parental reflective functioning (PI) T0-T4 Child internalising problems (CBCL) T4 Child total problems (CBCL) T4	Moderate
		(30)	Yes	No	Parent reflective functioning (PI & PDI) T0-T3 Child disorganised attachment (Strange Situation) T2● Child secure attachment (Strange Situation) T2●	NA0	Parent-infant affective communication (AMBIANCE) T1 Parent depression (CES-D) T3 Parent PTSD symptoms (CMS) T3	Moderate
	2	(31)	Yes	No except parent mental health, mastery, & parenting stress measures	Child total problems (CBCL) T3▲ Parenting stress (PSI-SF) T0-T3	NA	Parent sensitivity T2 & T3 averaged Child attachment security (AQS) T3 Parent reflective functioning (PDI) T2 Parent depression (EPDS) T0-T3 Parent anxiety (STAI) T0-T3 Parent sense of mastery (MSM) T0-T3	Strong

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Mother-Infant Transaction Program	1	(32)	Yes	No	Parenting stress (mothers) T1▲ and T2● Parenting stress (fathers) T2 (not measured at T1)●	NA	NA	Strong
		(33)	NR	NR	Child QoL: subscales emotional well-being (parent-reported, KINDL) T3●	NA	Child QoL: subscales emotional well-being, self-esteem, friends (child-reported, KINDL) T3 Child QoL: subscales self-esteem, friends (parent-reported, KINDL) T3	Weak
	2	(34)	NR	No	Parent somatic symptoms (CES-D) T1● Parent depression (CES-D) T1● Infant temperament: Activity (IBQ) T2●	Infant temperament (IBQ): Smile and Laughter T2, T3	Parent depression (CES-D) T2, T3 Parenting stress (PSI) T2, T3 Infant temperament (IBQ): Distress to limitations, Approach, Duration of orientation, Soothability T2, T3	Moderate
	3	(35)	NR	Yes	Maternal sensitivity (5-min play interaction) T0-T3▲ Quality of Mother-Infant interaction (5-min play interaction) T0-T3● Parenting stress (PSI) T0-T3▲ Maternal depression (EPDS) T0-T3● Infant temperament (IBQ) T0-T3▲	NA	NA	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Mothering from the Inside Out	1	(36)	Yes	Only psychiatric symptoms	Parent reflective functioning (PDI) T2● Parent working model of child (WMCI) T1● & T2▲ Parent sensitivity (CDI on curiosity box task) T3● Dyadic reciprocity (CDI on curiosity box task) T3▲	N/A	Parent reflective functioning (PDI) T1 Parent sensitivity (CDI on curiosity box task) T1 & T2 Child involvement (during free play) T1, T2, T3 Dyadic reciprocity (CDI on curiosity box task) T1 & T2 Child secure attachment (Strange Situation) T1 Child insecure/disorganised attachment (Strange Situation) T1 Parent psychiatric symptoms (BSI) T1	Strong
	2	(37)	Yes	Yes	Parental reflective functioning - certainty subscale (PRFQ) T1○ Child compliance (CDI on curiosity box task) T1○ Child clarity of cues (NCAST) T1● Child contingency (NCAST) T1●	N/A	Parent reflective functioning - mean, child, self, prementalising, interest & curiosity (PRFQ) T1 Parent sensitivity (CDI on curiosity box task) T1 Parent intrusiveness (CDI on curiosity box task) T1 Parent limit setting (CDI on curiosity box task) T1 Parent negative emotionality (CDI on curiosity box task) T1 Child involvement (CDI on curiosity box task) T1 Child withdrawal (CDI on curiosity box task) T1 Dyadic reciprocity (CDI on curiosity box task) T1 Dyadic negative states (CDI on curiosity box task) T1 Parent response to child distress (NCAST) T1 Parent social-emotional fostering (NCAST) T1 Parent cognitive growth fostering (NCAST) T1 Parent contingency (NCAST) T1 Child responsiveness (NCAST) T1 Child secure attachment (Strange Situation) T1 Parent depressive symptoms (BDI) Parent psychiatric symptoms (BSI)	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Parent/Mother-Infant Psychotherapy	1	(38)	Yes	Yes	Parent depressive symptoms (EPDS) T1●	N/A	Parent depressive symptoms (EPDS) T2, T3, T4	Strong
		(39)	NR	Yes, except child attachment and child behaviour	Parent-child relationship problems T1▲ Child behaviour problems (BSQ) T3▲	N/A	Parent difficulties managing infant behaviour T1 Parent sensitivity (5-min play task) T1 Child attachment (Strange Situation) T3 Child behaviour problems: parent & teacher report (Rutter A ² Scale/PBCL) T4	Strong
	2	(40)	Yes	Yes	Parent depressive symptoms (EPDS) T1● Parent-infant relationship (PIR-GAS) T1▲ Parent sensitivity (EAS) T1●	N/A	Child social emotional development (ASQ-SE) T1 Parenting stress (PSI) T1 Parent psychological distress (SCL-90) T1 Parent structuring (EAS) T1 Parent non-intrusiveness (EAS) T1 Child responsiveness (EAS) T1 Child involvement (EAS) T1	Strong
		(41)	Yes	Only for child socio-emotional development	Child socioemotional development (CGAS) T3▲ Child psychological wellbeing (Ideal types; Ok vs troubled) T3★	N/A	Child socioemotional development (ASQ-SE) T0-T3 Child total difficulties (SDQ parent-reported) T3 Child total difficulties (SDQ teacher-reported) T3 Child attachment (SSAP) T3	Strong
		(42)	Yes	Yes, except working model of the child	Parent depressive symptoms (EPDS) T0-T3●	N/A	Parent working model of the child (WMCI) T3 Parent sensitivity (EAS) T0-T3 Parent structuring (EAS) T0-T3 Parent non-intrusiveness (EAS) T0-T3 Child responsiveness (EAS) T0-T3 Child involvement (EAS) T0-T3	Strong
	3	(43)	NR	Yes	Parent depressive symptoms (EPDS) T0-T1★ & T0-T2★	N/A	N/A	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
	4	(44)	Yes	Yes, except attachment	Parent representational risk: helpless (PDI-ARR) T0-T2● Parent depressive symptoms (CES-D) T0-T2▲ Total parenting stress (PSI) T0-T2● Parent-child dysfunctional interaction (PSI) T0-T2▲ Parent self-mastery (SMS) T0-T2●	N/A	Parent-infant dyadic attunement (CIB) T0-T2 Parent positive engagement (CIB) T0-T2 Child involvement (CIB) T0-T2 Parent sensitivity (EAS) T0-T2 Parental reflective functioning (PDI-Parental RF) T0-T2 Child social-emotional development (ASQ) T0-T2 Parent global psychiatric symptoms (BSI) T0-T2 Parent positive psychiatric symptoms (BSI) T0-T2 Parental distress (PSI) T0-T2 Child difficulty (PSI) T0-T2 Parent internal working model: warmth & invasion (MORS) T0-T2 Infant attachment (Strange Situation) T0-T2	Moderate
	5	(45)	Yes = RF, dyadic attunement, positive engagement = all others	Yes	Parent reflective functioning (PDI-Parental RF) T0-T2 Dyadic attunement (CIB) T0-T2	N/A	Parent positive engagement with child (CIB) T0-T2 Child Involvement (CIB) T0-T2 Parent depressive symptoms (CES-D) T1 Parent internal working model: warmth & invasion (MORS) T1	Weak
	6	(46)	Yes	Yes	Infant's regulatory symptoms (QCFS) T1● Parent psychiatric symptoms severity (SCL-90-R) T1▲ Parent depressive symptoms (SCL-90-R) T1▲	N/A	Parenting stress (PSI) T1 Parent self-efficacy (MSES) T1 Parent reflective functioning (PRFQ) T1 Child emotional availability (EAS) T1 Parent emotional availability (EAS) T1	Strong
	7	(47)	Yes	Yes	Parent depressive symptoms (EPDS) T0-T2● Parent-infant closeness (MIBS) T0-T1● & T0-T2▲ Parental adjustment to caregiving (MIBS) T0-T1● Parent confidence (MIBS) T0-T1▲ & T0-T2▲ Parent-infant bonding (MIBS) T0-T1● & T0-T2●	N/A	Parent depressive symptoms (EPDS) T0-T1 Parent depressive symptoms (BDI-II) T0-T1 & T0-T2 Parental adjustment to caregiving (MIBS) T0-T2 Parent commitment (MIBS) T0-T1 & T0-T2	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Parent-Child Interaction Therapy	1	(48)	NR	Yes	Child behaviour problems (ECBI - maternal reports) T1★ Parent sense of competence (PSOC) T1▲ Parent sense of control (PLOC) T1★ Overreactive discipline techniques (PS) T1★ Parent verbalisations: more praise, less commands, less criticism (DPICS) T1★ Child compliance (DPICS) T1★	N/A	Child behaviour problems (ECBI - paternal reports) T1 Parenting stress (PSI) T1 Parent laxness and verbosity (PS) T1 Child externalising (CBCL) T1 Child deviance (DPICS) T1	Weak
	2	(49)	Yes	Yes	Child internalising (CBCL) T1● Child externalising (CBCL) T1● Child behaviour problems (ECBI) T1● Parenting stress due to child (PSI) T1● Parent sensitivity (10-min interaction, modified EAS) T1● Parent verbalisations: more praise & descriptions/reflections; less questions, commands, negative talk (DPICS) T1★	N/A	Parenting stress due to parent (PSI) T1 Parent child abuse potential (CAPI) T1 Parent depressive symptoms (BDI) T1	Moderate
		(50)	Yes	Yes	Child externalising (CBCL) T1○ Child internalising (CBCL) T1○ Child behaviour problems (ECBI) T1○ Parenting stress due to child (PSI) T1○	N/A	Parenting stress due to parent (PSI) T1	Moderate
	3	(21)	Yes	Yes	Parent negative verbalisations (DPICS) T1★ Parent positive verbalisations (DPICS) T1★ Child externalising (ECBI) T1● Parenting stress (PSI) T1●	N/A	Child PTSS symptoms (CATS-C) T1	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
	4	(27)	Yes	Yes	Positive parenting verbalisationss (DPICS) T1 Negative parenting verbalisationss (DPICS) T1 Parent sensitivity (20-min parent-child interaction) T1 Parent mentalisation: non-attuned (interaction task) T1	N/A	Parent mentalisation: attuned (interaction task) T1 Parent mentalisation (DRFS) T1 Parent empathy (TOPSE) T1 Parent emotion regulation difficulties (DERS) T1 Caregiving helplessness (CHQ) T1 Parenting hostility (LSAC hostility subscale) T1 Child abuse potential (BCAP) T1 Parenting stress (PSI-SF) T1 Child attachment (Attachment Q-set) T1 Child internalising (CBCL) T1 Child externalising (CBCL) T1 Child general social emotional and behavioural issues (BITSEA) T1 Child social competence (BITSEA) T1 Child compliance (DPICS) T1 Child relationships (DECA) T1 Child initiative (DECA) T1 Child self-regulation (DECA) T1 Child emotion-regulation (frustration task) T1	Moderate
		(26)	NR	Yes	N/A	N/A	Parent emotion regulation difficulties (DERS) T1 Parent negative talk ratio (DPICS) T1 Parent emotion dismissing ratio (DECS) T1 Child distress (Lab-TAB) T1 Child emotion regulation (Lab-TAB) T1 Child dysregulation (CBCL) T1 Child externalising (CBCL) T1 Child negative verbalisationss (DPICS) T1	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Promoting First Relationships	1	(51)	Yes	Yes, except child internalising , externalising , sleep, & other problems	Parent sensitivity (NCATS) T1● Understanding of toddlers (RAB) T1● Child competence (BITSEA) T1●	N/A	Parent sensitivity (NCATS) T2 Parent support (IPCI) T1 & T2 Parent commitment T1 & T2 Understanding of toddlers T2 Parenting stress: due to difficult child (PSI-SF) T1 & T2 Parenting stress: dysfunctional interaction (PSI-SF) T1 & T2 Child attachment security (TAS-45) T1 & T2 Child engagement (IPCI) T1 & T2 Child orientation/engagement (BRS) T2 Child problem behaviour (BITSEA) T1 & T2 Child emotion regulation (BRS) T2 Child internalising (CBCL) T2 Child externalising (CBCL) T2 Child sleep problems (CBCL) T2 Child other problems (CBCL) T2 Child orientation (BRS) T2	Weak
	2	(52)	Yes	No	Parent knowledge of infant/toddler social-emotional needs and developmentally appropriate expectation (RAB) T1 Parent sensitivity (NCATS) T1 Child atypical affective communication (TAS-45) T1	N/A	Parent-child dysfunctional interaction (PSI-SF) T1 Parent feelings of competence (PSI-SF) T1 Child emotion-regulation (BRS) T1 Child engagement/exploration (BRS) T1 Child secure base behaviour (TAS-45) T1 Child social-emotional competence (BITSEA) T1 Child behaviour problems (BITSEA) T1	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
		(53)	NR	No	N/A	N/A	Child secure base behaviour (TAS-45) T3	Moderate
	3	(54)	Yes	Yes except ITSEA	Parent sensitivity (NCATS) T1● & T2● Parent understanding of infant/toddler behaviour (RAB) T1● & T2● Child externalising (ITSEA) T2●	N/A	Dyadic synchrony (ICI) T1 & T2 Maternal confidence (MCQ) T1 & T2 Child difficultness (ICI) T1 & T2 Child internalising (ITSEA) T1 & T2 Child dysregulation (ITSEA) T1 & T2 Child externalising (ITSEA) T1	Strong
		(55)	Yes	Yes except child externalising	Parent sensitivity (NCATS) T1● & T2● Understanding of toddlers (RAB) T1● & T2▲ Child externalising (ITSEA) T2●	N/A	Maternal confidence (MCQ) T1 & T2	Moderate
	4	(56)	NR	Yes	Parent-child interaction (NCATS total) T0-T2▲ Parenting knowledge of infant/toddler social-emotional needs and developmentally appropriate expectation (RAB) T0-T2▲	N/A	Parent depressive symptoms (CES-D) T0-T2 Child externalising (ITSEA) T0-T2	Moderate

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Tuning Into Kids	1	(57)	NR	Yes	Parent emotion coaching (PESQ) T1★ Parent emotion dismissing (PESQ) T1★ Child behaviour problems (ECBI intensity) T1▲	N/A	Parent emotion regulation (DERS) T1 Parent psychological wellbeing (GHQ-28) T1	Weak
		(58)	Yes	Yes	Parent emotion regulation (DERS) T0-T2 Parent emotion dismissing (PESQ) T0-T2 Parent emotion coaching (PESQ) T0-T2 Parent empathy/connection (PESQ) T0-T2 Parent emotion labels (story-telling task) T0-T2 Parent emotion exploration (story-telling task) T0-T2 Child problem behaviour: parent & teacher reported (ECBI intensity) T0-T2	N/A	Child emotion knowledge (EST) T0-T2	Weak
	2	(59)	NR	Yes	Parent emotion dismissing (MESQ) T1 Parent emotion coaching practices (CCNES) T1 Parenting: positive involvement (APQ involvement and positive parenting scales) T1	N/A	Parent emotion coaching beliefs (MESQ) T1 Parenting: inconsistent discipline (APQ) T1 Child behaviour problems (ECBI intensity & problem, parent-reported) T1 Child anger-aggression (SCBE teacher-reported) Child social competence (SCBE teacher-reported) T1 Child total protective factors (DECA; i.e., initiative, self-control, attachment; parent-reported) T1	Weak
	3	(60)	NR	Yes	Parent empathy (PESQ) T1★ Parent emotion dismissing beliefs & practices (PESQ★ & CCNES▲) T1 Parent expressive encouragement (CCNES) T1▲ Parenting satisfaction (PSOC) T1● Parenting efficacy (PSOC) T1● Parent psychological distress (partners; K6) T1● Child total difficulties (SDQ) T1●	N/A	Hostile parenting (LSAC) T1 Parent psychological distress (fathers; K6) T1 Child prosocial skills (SDQ) T1	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
	4	(61)	NR	Yes	Parent empathy (PESQ) T0-T2	N/A	Parent emotion coaching (PESQ) T0-T2 Parent emotion dismissing (PESQ) T0-T2 Parent emotion regulation (DERS) T0-T2 Child behaviour problems (ECBI intensity & problem) T0-T2	Moderate
	5	(62)	NR	Yes	Child behaviour problems (ECBI problem) T0-T2★ Parent emotion dismissing (PESQ) T0-T2▲	N/A	Parent emotion coaching (PESQ) T0-T2 Parent psychological wellbeing (GHQ) T0-T2	Strong
	6	(63)	Yes	Yes	Child anxiety: total (PAS) T0-T2★ Child anxiety: generalised anxiety (PAS) T0-T2★ Child anxiety: social phobia (PAS) T0-T2▲	N/A	Child anxiety: separation anxiety, obsessive compulsive fears, physical harm fears (PAS) T0-T2	Moderate
	7	(64)	NR	Yes	Parenting: positive involvement (APQ) T1★ Parent emotion dismissing (MESQ) T1★ Parent emotion coaching (MESQ) T1★ Parent psychological wellbeing (GHQ) T1★ Coping with children's negative emotions: expressive encouragement; emotion-focused reactions (CCNES) T1★	N/A	Parenting: Inconsistent discipline (APQ) T1 Parenting: Punitive parenting (APQ) T1 Child emotional problems (SDQ) T1 Child conduct problems (SDQ) T1 Child hyperactivity (SDQ) T1 Child peer problems (SDQ) T1 Coping with children's negative emotions: distress reactions; punitive reactions; problem-focused reactions; minimisation reactions (CCNES) T1	Moderate
	8	(65)	NR	Yes	Parent emotion dismissing (MESQ) T0-T2● Parent emotion disapproving (MESQ) T0-T2● Inconsistent parenting (APQ) T0-T2● Harsh discipline (APQ) T0-T2● Child internalising (SDQ) T0-T2● Child externalising (SDQ) T0-T2● Child total problems (SDQ) T0-T2●	N/A	Parent laissez-faire emotion style (MESQ) T0-T2 Parent emotion coaching (MESQ) T0-T2 Coping with children's negative emotions: punitive reactions, parental distress reactions, emotion-focused reactions, problem-focused reactions, minimisation reactions, expressive encouragement (CCNES) T0-T2 Parent attachment to child (PSI) T0-T2	Weak

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Video-feedback Intervention to promote Positive Parenting (and Sensitive Discipline)	1	(66)	NR	No	N/A	N/A	Child total problems (CBCL) T2 Child internalising T2 Child externalising T2 Child aggressive behaviour (CBCL) T2 Child anxious behaviour (CBCL) T2 Child overactive behaviour (CBCL) T2 Child sleep problems (CBCL) T2 Parent sensitivity (EAS) T2	Strong
		(67)	NR	Yes	Parent sensitivity (free play) T1● & T2●	N/A	Child secure attachment (Strange situation) T2	Weak
	2	(68)	NR	Yes except parenting attitudes	Parenting attitudes towards sensitivity T1 ▲ Parenting attitudes towards sensitive discipline T1● Parent positive discipline (10-min don't task) T1●	N/A	Parent maternal sensitivity (play tasks) T1 Parent negative discipline (10-min don't task) T1 Child externalising (CBCL) T1	Weak
	3	(69)	NR	Yes	Parent sensitivity (free play) T1 ▲	N/A	Child attachment security (AQS) T1	Weak
	4	(70, 71)	Yes	Yes	Child total problems (PPACS) T1● Child conduct (PPACS) T1●	N/A	Child total problems (PPACS) T2 Child total problems (CBCL; SDQ teacher & parent report) T1 & T2 Child conduct problems (PPACS) T2 Child conduct problems (SDQ) T1 & T2 Child aggression (CBCL) T1 & T2 Child externalising (CBCL & SDQ) T1 & T2 Child internalising / emotional problems (CBCL & SDQ) T1 & T2 Child attention problems (CBCL, PPACS) T1 & T2 Child hyperactivity (SDQ) T1 & T2 Child peer problems (SDQ) T1 & T2 Child prosocial behaviour (SDQ) T1 & T2 Ineffective parenting (RDAS) T1 & T2 Parent depressive symptoms (PHQ-9) T1 & T2 Parent anxiety symptoms (GAD-7) T1 & T2	Moderate
	5	(72)	Yes	Yes	Parent sensitivity (10-min free play) T0-T2 ▲ Parent physical intrusiveness (10-min free play) T0-T2 ▲	N/A	N/A	Strong

Intervention	Trial	Article	ITT	Adjusted for baseline	Favourable effects	Iatrogenic effects	Null effects	Quality rating
Video Interaction Guidance	1	(73)	Yes	Yes for sensitivity scales, unclear for other variables	Parent sensitivity (daily caregiving moments; mothers● and fathers▲) T1 Parent withdrawal (daily caregiving moments; mothers) T1● Parent responsiveness (MBI-ER; fathers) T2 Parent affiliative behaviour (YIPTA; mothers & fathers) T1 Parent compulsive checking (YIPTA; fathers) T1 Parent bonding problems (PBQ; fathers) T1 & T3	NA	Parent sensitivity (daily caregiving moments; mothers and fathers) T3 Parent withdrawal (daily caregiving moments; mothers) T3 Parent withdrawal (daily caregiving moments; fathers) T1 & T3 Parent intrusiveness (daily caregiving moments; mothers and fathers) T1 & T3 Parent responsiveness (MBI; mothers) T2 Parent compulsive checking (YIPTA; mothers) T1 Parent attachment representations (YIPTA) T1 Parent bonding problems (PBQ; mothers) T1 & T3 Parent worry (MBI, mothers and fathers) T2 Parent separation anxiety (MBI; mothers and fathers) T2 Parent freq of thoughts & worries (YIPTA; mothers and fathers) T1 Parent distress caused by thoughts & worries (YIPTA; mothers and fathers) T1 Parent anxiety (STAI; mothers and fathers) T1 Parent anger (STAI12; mothers and fathers) T1 Parent depression (EPDS; mothers and fathers) T1	Strong
	2	(74)	Yes	No	NA	NA	Parent synchrony (CARE-index) T1 Parent sensitivity (CARE-index) T1 Child total problems (ASQ-SE) T2 Child self-regulation (ASQ-SE) T2 Child affect (ASQ-SE) T2 Child interaction (with others;ASQ-SE) T2	Strong
	3	(75)	Yes	Yes, except parent sensitivity	Child difficult behaviour (CARE-index) T1★	NA	Parent sensitivity (CARE-index) T1 Parent controlling behaviours (CARE-index) T1 Parent unresponsiveness (CARE-index) T1 Child cooperativeness (CARE-index) T1 Child passiveness (CARE-index) T1	Strong

Note. ITT = intention-to-treat analysis, NR = not reported, N/A = not applicable, T1 = post-test assessment, T2-T4 follow-ups after post-test, acronyms for outcome measures are listed in Table A5. Effect sizes (where available/calculable): ○ = very small, ● = small, ▲ = moderate, ★ = (very) large.

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Appendix B: Intervention catalogue

ATTACHMENT AND BIO-BEHAVIOURAL CATCH-UP (ABC)	
General information	
Program developer	Professor Mary Dozier, University of Delaware
Manual information	The manual for ABC is not publicly available. See instead: Dozier, M., & Bernard, K. (2019). <i>Coaching Parents of Vulnerable Infants: The Attachment and Biobehavioral Catch-Up Approach</i> . Guilford Press.
Official website	https://www.abcparenting.org/
Clearing house information	ABC-Infant is listed as ‘well-supported’ in The California Evidence-Based Clearing House (CEBC) (last reviewed Dec 2024) and Title-IV Prevention Services Clearing House (last reviewed Mar 2025). ABC-Early Childhood (ABC-EC) is listed as ‘promising’ in CEBC (last reviewed Feb 2025) and ‘supported’ in Title-IV Prevention Services Clearing House (last reviewed Mar 2025).
Available languages	English, German, Mandarin, Norwegian, Russian, Spanish, Swedish
Underlying theoretical framework	Attachment theory
What does the intervention aim to do, and for whom?	
Theory of change?	Yes. ABC aims to strengthen caregiver nurturance, sensitivity and delight, and to reduce frightening or overwhelming caregiving behaviours. A central mechanism is the practitioner’s use of frequent “in-the-moment” comments during caregiver-child interaction, helping caregivers notice and repeat behaviours that support attachment and regulation.
What happens during the ABC intervention?	ABC is typically delivered through home-visiting sessions. The parent coach works with the caregiver to respond appropriately to their child’s cues and behaviours using in-the-moment comments, video feedback, and homework. They support caregivers to provide nurturance when children are distressed, follow the child’s lead with delight, and avoid behaviours that may frighten or overwhelm the child.
Target Population	ABC-Infant is indicated for ages 6–24 months and ABC-EC is indicated for ages 24–48 months. ABC is used with caregivers of infants/young children who have experienced, or are at heightened risk of, early adversity, including maltreatment, care system involvement, or other family stressors (e.g., low income). Children may show difficulties with regulation or attachment-related behaviours, such as pushing caregivers away when distressed or difficulty being soothed. It is suitable for caregivers who have their own adverse caregiving experiences and may need support to provide nurturing, sensitive and predictable care.
Targeted outcomes	There are a range of parent and child outcomes that ABC aims to impact. For children, these include increasing child attachment quality (e.g. attachment security, decreasing disorganized attachment) and increasing behavioural and biological regulation. For caregivers, these are increasing nurturance, sensitivity, and delight, alongside decreasing frightening or overwhelming caregiving behaviours.

How is the intervention delivered to parents?	
Delivery	ABC is delivered directly to parents/caregivers over 10 weekly sessions, typically in the home.
What are the requirements for service providers and practitioners?	
Cost of delivery	No UK delivery-cost estimates were identified.
Education/experience requirements to become a practitioner	ABC uses a screening process to identify candidates likely to be suitable for parent coach training. Publicly available provider information describes this as an online screening appointment, usually lasting around 45 minutes.
Training requirements	Training for ABC can be held in-person (US only) or virtually. Training to become an ABC practitioner takes 2 full days in-person, or 3 half-days virtually. Initial training is followed by six months of supervision.
Training costs	Not available.
Supervision	Practitioners require six months of supervision after their training to become a certified parent coach. These supervisions take place twice per week via video-conferencing software, including a General Clinical Supervision (lasting 1 hour) and an In-the-Moment Commenting Supervision (lasting 30 minutes).
Is the intervention cost-effective?	
Cost-effectiveness	No peer-reviewed cost-effectiveness evaluation of ABC was identified for in a recent systematic review .
What does the evidence show?	
Evaluations conducted in the UK?	No. All existing randomised controlled trials (RCTs) in this population have been conducted outside of the UK.
Overall evidence	ABC has a large US evidence base, particularly as a selective prevention in families with identified risk and as a treatment in children with attachment problems (see Tables A3 and A4). In our review, some trials showed small but significant increases in maternal sensitivity and positive regard, and moderate improvements in child mental health and behaviour. Other trials found no effects on parent-child interactions and child behaviour despite sufficient sample sizes. Study quality was varied with weak ratings given to 3 of the 5 trials.

CHILD ADULT RELATIONSHIP ENHANCEMENT IN PRIMARY CARE (PRICARE)	
General information	
Program developer	Dr. Joanne Wood and Dr. Samantha Schilling
Manual information	Manual not able to be obtained by study team. Some information on the PriCARE intervention is available here .
Clearing house information	There is no clearing house information about the PriCARE intervention.
Available languages	English, Spanish
Underlying theoretical framework	Attachment theory
What does the intervention aim to do, and for whom?	
Theory of change	No published theory of change.
What happens during the intervention?	The PriCARE intervention is a modification of an existing intervention called CARE (Child-Adult Relationship Enhancement) from the Mayerson Center for Safe and Health Children. Within PriCARE, caregivers can practice their caregiving skills around behaviour management (e.g., limit setting) and bonding with their child (e.g., following the child's lead during play).
Target Population	PriCARE is open to all caregivers of children aged 2-6 years. Although the intervention includes content on the management of behavioural issues, a child does not need to have them for the family to take part.
Targeted outcomes	PriCARE targets a range of outcomes for both the child and caregiver. For the caregiver, the aim of the intervention is to decrease parental stress, learn positive parenting skills, increase empathy towards their child, learn to encourage the child's independence, and reduce child maltreatment and corporal punishment. The aim is also to strengthen the parent-child relationship overall by providing the caregiver with better tools to communicate with their child. For children, there are a range of desired outcomes, such as improving their behaviour (by reinforcing positive behaviours and limit-setting around disruptive behaviours), increasing compliance, and reducing anxiety levels.
How is the intervention delivered to parents?	
Delivery	PriCARE is delivered over 6 sessions to small groups of caregivers. These groups typically take place in paediatric primary care settings and last around 80 minutes each. Live feedback is provided to caregivers to teach them to use age-appropriate communication tools.
What are the requirements for service providers and practitioners?	
Cost of delivery	This information is not publicly available.
Education/experience requirements to become a practitioner	There is limited information available about the education or experience levels required prior to becoming a PriCARE practitioner. In an RCT of PriCARE , the intervention was delivered by two licensed clinical social workers who had completed the PriCARE facilitator training.
Training requirements	PriCARE facilitator training is available, however there is little published information on what this involves in terms of content, setting, and duration.
Training costs	This information is not publicly available.
Supervision	This information is not publicly available.
Is the intervention cost-effective?	
Cost effectiveness	There are currently no studies that evaluate the cost-effectiveness of PriCARE.
What does the evidence show?	

Evaluations conducted in the UK	There are currently no evaluations of PriCARE in a UK context.
Overall evidence	Our review identified four RCTs conducted in the US in either a general population or in children with behavioural problems, of which three were rated as moderate in quality and one weak. In the two indicated prevention trials of moderate quality, there was uneven results with favourable results on some caregiving and child behaviour measures (no effects sizes given), but not on others. In the moderate-quality universal prevention trial, the results showed short-term reductions in child behaviour problems and improvements in discipline strategies (no effect sizes given and no follow-up assessments).

CHILD-PARENT PSYCHOTHERAPY (CPP)	
General information	
Program developer	Alicia Lieberman, PhD and Patricia Van Horn, J.D, PhD
Manual information	Lieberman, A. F., Ghosh Ippen, C., & Van Horn, P. (2015). <i>Don't hit my mommy: A manual for Child-Parent Psychotherapy with young children exposed to violence and other trauma</i> (2nd ed.). Zero to Three.
Official website	https://childparentpsychotherapy.com/
Clearing house information	Foundations rate CPP as 3+, indicating a short-term positive impact from at least one rigorous study and preliminary evidence of improving a child outcome compared to a comparison group (last reviewed 2016). CPP is listed by CEBC as 'well-supported' as an infant/early child health mental health program (last reviewed Jun 2024) and as 'promising' by The Title IV-E Prevention Services Clearing House (last reviewed Oct 2021).
Available languages	English, Hebrew, Norwegian, Spanish, Swedish
Underlying theoretical framework	Psychodynamic theory (psychoanalytic)
What does the intervention aim to do, and for whom?	
Theory of change?	Yes – the intervention logic is described narratively. CPP is a relationship-based and trauma-informed intervention. It is based on the idea that trauma, adversity and caregiver experiences can affect the caregiver-child relationship and the child's emotional, behavioural and developmental functioning. CPP works through the caregiver-child relationship, helping caregivers and children make sense of traumatic experiences, strengthen emotional safety, and develop more responsive patterns of interaction. Over time, this is expected to support child mental health, attachment security, emotional development, and caregiver responsiveness.
What happens during the intervention?	CPP is delivered in three phases. The foundational phase involves assessment, engagement, and formulation. The core intervention phase involves weekly sessions with the caregiver and child, with parent-only, or collateral work where needed. The practitioner works with the dyad to address the effects of trauma and adversity, strengthen emotional safety, improve the caregiver-child relationship, and help caregivers understand and respond to the child's emotional and behavioural cues. The closing phase reviews progress and supports transition or next steps.
Target Population	CPP is indicated for children aged 3-5 who have experienced trauma/adversity, or have mental health, attachment or behavioural difficulties, and their caregivers.
Targeted outcomes	CPP aims to reduce the impact of trauma and adversity on young children and to interrupt intergenerational patterns of harm. For children, targeted outcomes include reduced trauma-related, emotional and behavioural symptoms, improved attachment-related outcomes, strengthened caregiver-child relationships, and improved developmental functioning. For caregivers, targeted outcomes include reduced negative attributions about the child, improved responsiveness and capacity to provide emotional and physical safety, reduced unhelpful or harsh parenting strategies, and improved caregiver wellbeing where trauma or adversity affects the relationship.
How is the intervention delivered to parents?	

Delivery	CPP is delivered in weekly dyadic sessions with the caregiver and child, usually lasting 1–1.5 hours. The total number of sessions varies according to family need (e.g., symptom severity, trauma complexity and safety concerns) but typically lasts 20–32 sessions and can extend to around 12 months. Sessions usually involve the caregiver and child together, with additional parent-only or professional/network meetings where needed. CPP can be delivered in home, clinic, community, child welfare, shelter, school or virtual settings, depending on family need and service context.
What are the requirements for service providers and practitioners?	
Cost of delivery	Two US-based studies have estimated costs associated with CPP delivery or implementation. A Washington State Institute for Public Policy analysis estimated the cost of delivering CPP at \$5,113. A separate implementation feasibility review reported initial costs of approximately \$2,750 per clinician, including 18-month training and consultation.
Education/experience requirements to become a practitioner	Experience as a mental health professional is a pre-requisite for CPP training alongside relevant post-graduate training at master's degree level.
Training requirements	There are 3 types of training model available for CPP: • CPP Learning Collaborative (LC) - an extended training model that includes an initial 3-day didactic training, two competency-building workshops, delivery of CPP cases, consultation and supervisory feedback. • CPP Agency Mentorship Program (CAMP) – An agency that has completed the initial training (LC) identifies team of CPP trainers to train new CPP providers. • Endorsed CPP internship – 1–2-year training programs integrated into existing programs for students within a mental health field who have completed graduate coursework.
Training costs	The cost of training a CPP practitioner has been estimated at around \$2,750 per individual in a US context. Information for training in the UK could not be identified.
Supervision	Reflective supervision is an essential component of CPP for mental health providers and is typically built into training and ongoing implementation.
Is the intervention cost-effective?	
Cost effectiveness	A meta-analysis evaluated the cost-effectiveness and cost-benefit of CPP in a US context. In its findings, it found that the total financial benefits (to taxpayers, participants, others, and indirect) amounted to \$80,208, against a net program cost of \$5,113. This means that the total benefit is \$75,095 and the benefit to cost ratio is \$15.69:1.
What does the evidence show?	
Evaluations conducted in the UK?	No. All existing RCTs have been conducted outside of the UK.
Overall evidence	Child–Parent Psychotherapy (CPP; ages 3-5yrs) sit under the same umbrella as Toddler–Parent Psychotherapy (TPP; ages 18m-3yrs). The age range of trial samples often spanned across the indicated ages of TPP and CPP, and therefore CPP and TPP trials were evaluated together. CPP/TPP met the review's threshold for sufficient evidence, with four eligible US-based RCTs of which three showed favourable results on child emotional and behavioural problems and some parent mental health outcomes. One trial also reported favourable effects on attachment type. Effect sizes varied from very small to large across outcomes, as did study quality from

	weak to strong (Table A4). Trials targeted young children and caregivers affected by adversity, caregiver depression, and/or child behavioural problems (Table A3). One trial was exclusively conducted in children aged 3-5 years, and showed the same pattern of results, although child attachment was not tested.
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CIRCLE OF SECURITY - PARENTING (COS-P)	
General information	
Program developer	Glen Cooper, Kent Hoffman, and Bert Powell.
Manual information	Cooper, G., Hoffman, K., & Powell, B. (2009). <i>Circle of Security Parenting: A relationship-based parenting program. Facilitator DVD Manual 5.0.</i> Circle of Security International.
Official website	https://www.circleofsecurityinternational.com/
Clearing house information	Foundations rates COS-P as 2+, indicating some preliminary but not causal evidence of impact (last reviewed Jan 2021). This entry predates the results of the COSI trial which found no evidence of additional benefit when compared with usual care in UK perinatal services. CEBC lists COS-P as ‘not able to be rated’ (last reviewed Jul 2025), while Title-IV-E Prevention Services states that COS-P does not currently meet criteria (last reviewed Oct 2021).
Available languages	English, Japanese, Danish, Italian, Spanish, Chinese, Traditional Chinese, Mandarin, French, Cantonese, Czech, Norwegian, Swedish, Romanian
Underlying theoretical framework	Attachment theory
What does the intervention aim to do, and for whom?	
Theory of change?	Yes. The theory of change for COS-P states that caregiver-child relationships can improve and be more satisfying through caregivers attuning to their child’s attachment needs and responding sensitively. This can be enhanced by increasing their awareness and ability to regulate their own emotional states, and through reflective discussions and didactic teaching around forming positive attachments. This model aims to create both short- and long-term positive effects on the child-caregiver relationship and the child’s long-term mental health and resilience.
What happens during the intervention?	COS-P is typically delivered in group settings, although it can also be delivered individually, with couples, or during home visits. The programme is structured around watching and discussing video excerpts of caregiver–child interactions. Facilitators pause the videos at specified points and ask questions from the delivery manual to support reflection and discussion. The intervention consists of eight “chapters” delivered across 8–10 sessions, with each chapter lasting around 90 minutes.
Target Population	COS-P is indicated for universal and targeted delivery. When targeted, it is designed for caregivers of children aged 4 months to 6 years where there may be increased risk of difficulties in the attachment relationship. This may include caregivers experiencing difficulties with emotional regulation or impulse control, caregiver mental health or substance misuse problems, economic disadvantage, young parenthood, or caring for babies who are irritable or difficult to soothe.
Targeted outcomes	COS-P aims to improve caregiver outcomes that support secure attachment. These include caregivers’ ability to identify and respond appropriately to their child’s emotional cues, increase empathy for their child, soothe their own and their child’s distress, show curiosity about the child’s behaviour and motivations, reduce negative attributions, and repair ruptures in the caregiver–child relationship.
How is the intervention delivered to parents?	
Delivery	COS-P is typically delivered in group settings over 8–10 sessions of 1.5–2 hours each, although it can also be delivered individually, with couples, or

	during home visits. Groups usually include 8–15 caregivers. The programme includes a small homework element, where caregivers are asked to reflect on an example from the session and recall it at the next meeting. COS-P can be delivered online or face to face in a range of settings, including birth family, adoptive, foster or kinship care homes; outpatient clinics; community-based organisations; group or residential care; school or early years settings; and virtual formats.
What are the requirements for service providers and practitioners?	
Cost of delivery	An economic evaluation in the UK estimated the per-recipient cost of delivering COS-P was £343.10 in 2023.
Education/experience requirements to become a practitioner	An undergraduate degree and experience in parent education are required to train as a COS-P practitioner. A master's qualification or higher in social work, psychology, psychotherapy, family therapy, or another helping profession is also common, but not required.
Training requirements	Training for COS-P requires 4 days whether online or in person.
Training costs	Circle of Security International listings show COS-P facilitator training at around USD \$1,200 per person, with early registration sometimes available at USD \$1,000. Costs appear similar for online and in-person training, although prices may vary by location and provider.
Supervision	Ongoing supervision does not appear to be mandatory for registered COS-P facilitators. Registered facilitators have access to ongoing resources, updates, and continued learning opportunities through Circle of Security International. Reflective supervision may be arranged locally but is not listed as a formal registration requirement
Is the intervention cost-effective?	
Cost effectiveness	When added to treatment as usual in NHS perinatal mental health services, COS-P increased costs but did not improve quality-adjusted life years and was not found to be cost-effective at NICE's usual thresholds.
What does the evidence show?	
Evaluations conducted in the UK	A large RCT conducted in the UK found no significant effect of COS-P, compared with treatment as usual, on perinatal mental health difficulties over 12 months. It also found no significant effects on parent–infant bonding, parental emotion regulation, child development, parental sensitivity or child attachment.
Overall evidence	A recent robust UK evaluation of COS-P in NHS community perinatal mental health services found no evidence of benefit compared with treatment as usual. The authors concluded that COS-P should not be offered as part of NHS community perinatal mental health services. In our review, we identified five trials of COS-P outside of the UK—with some small to moderate effects reported on caregiver and child outcomes in selective intervention trials but null effects in trials conducted as indicated prevention for child behaviour problems. More null results were seen in trials of higher quality (see Tables A4 and A5).

MINDING THE BABY (MTB)	
General information	
Program developer	Arietta Slade, PhD; Lois Sadler, PhD, PNP-BC, FAAN; Denise Webb, MSN, PNP; Tanika Simpson, MSW; Nancy Close, PhD
Manual information	Arietta Slade, PhD; Lois Sadler, PhD, PNP-BC, FAAN; Denise Webb, MSN, PNP; Tanika Simpson, MSW; Nancy Close, PhD. (2018) <i>Minding the Baby home visitation program. Treatment Manual Intervention and Training Guide. Fifth Edition.</i> Yale University: New Haven, Connecticut.
Clearing house information	Foundations rates MTB as 3, indicating it has evidence of a short-term positive impact on child outcomes from at least one rigorous evaluation (last reviewed Feb 2023).
Available languages	English
Underlying theoretical framework	Mentalisation theory
What does the intervention aim to do, and for whom?	
Theory of change?	Yes. Young parents/caregivers may experience challenges that affect their capacity for sensitive and responsive caregiving. MTB provides health support and focuses on strengthening mothers' reflective functioning. An improved ability to reflect on both the mother's and the child's mental states support a greater ability of the caregiver to attune to their child's needs. This leads to more positive caregiver-infant interactions, which in turn contributes to improved infant attachment security.
What happens during the intervention?	A nurse and social worker alternate home visits to provide prenatal care and support across health education, wellbeing, and social support networks. Practitioners aim to improve the mother's reflective practice around themselves and their child, particularly with regard to each other's needs and wellbeing, as well as how they interact.
Target Population	MTB is targeted at young mothers who are raising their first child and have a history of adversity, trauma, or additional social stressors (e.g. poverty, low education, isolation).
Targeted outcomes	MTB targets a range of maternal and child outcomes, spanning mental health, physical health, and the mother-child relationship. For caregivers, these include promoting positive and sensitive parenting practices and increasing rates of secure parent-child attachment. For children, these include supporting the child's social, emotional, and mental health and wellbeing; improving child developmental outcomes, including socioemotional development; and promoting healthy physical development and preventing childhood obesity.
How is the intervention delivered to parents?	
Delivery	This home-visiting intervention is delivered at varying levels of frequency from pregnancy until the child turns two years old. Sessions are initially delivered weekly from the mother's second or third trimester up to the child's first birthday. This decreases to one session every fortnight until the child's second birthday. Intervention sessions typically last one hour and are delivered by a nurse and social worker who alternate visits.
What are the requirements for service providers and practitioners?	
Cost of delivery	Information not available.
Education/experience requirements to become a practitioner	A prospective facilitator must be qualified to at least master's degree level in their discipline prior to pursuing MTB training.
Training requirements	MTB training is delivered face-to-face with additional virtual educational session with the program developers. Training consists of a 4-day

	education program followed by closely supervised clinical practice with monthly education sessions for up to three years.
Training costs	Information on the cost of MTB training is not available.
Supervision	Supervision is provided on a weekly and monthly basis and covers discipline and content specific to the Minding The Baby programme.
Is the intervention cost-effective?	
Cost effectiveness	Foundations indicate that set up and delivery cost are not available or have not been calculated.
What does the evidence show?	
Evaluations conducted in the UK	Yes. A high-quality cluster-RCT evaluated MTB compared to a control group who received care-as-usual and reported reductions in caregiving stress and moderate improvements child behavioural problems. Null results were reported for caregiving sensitivity, attachment, reflective functioning and parent mental health.
Overall evidence	Alongside the cluster-RCT showing favourable effects of MTB on caregiving stress and child behaviour in UK perinatal settings, we found an additional cluster-RCT conducted in the US in our review. This moderate-quality RCT conducted in families with social-economic disadvantage, did show some small effects on caregiver's reflective functioning and children's attachment, but conversely null results for child outcomes.

MOTHER-INFANT TRANSACTION PROGRAM (MITP)	
General information	
Program developer	Professor Virginia Rauh
Manual information	Reference not able to be obtained.
Clearing house information	No clearing house information available.
Available languages	English
Underlying theoretical framework	Attachment theory
What does the intervention aim to do, and for whom?	
Theory of change	No published theory of change available.
What happens during the intervention?	Caregivers are trained in parental sensitivity that covers a range of areas concerning the infant: homeostatic, motoric, distress, and alert behaviours; repertoires of playing behaviours; care-taking routines; and temperament. The aim of this it to ensure that the infant's surroundings and environment are set up to support the infant's ability to cope, thus ideally not leading to dysregulation.
Target Population	MITP is delivered to caregivers with low-birth-weight infants.
Targeted outcomes	The Mother-Infant Transaction Program aims to enhance parent sensitivity for caregivers with a preterm infant. Caregivers are encouraged to employ simulation activities with their child, focusing on their ability to provide this rather than on that of specialist staff.
How is the intervention delivered to parents?	
Delivery	This intervention comprises two periods of intervention: seven one-to-one sessions in the week leading up to discharge from hospital following birth, and a further four home visits over the next three months. The caregiver is centred as the therapist and their relationship with the child is central.
What are the requirements for service providers and practitioners?	
Cost of delivery	Information not publicly available. No response from intervention developer when contacted.
Education/experience requirements to become a practitioner	Information not publicly available. No response from intervention developer when contacted.
Training requirements	Information not publicly available. No response from intervention developer when contacted.
Training costs	Information not publicly available. No response from intervention developer when contacted.
Supervision	Information not publicly available. No response from intervention developer when contacted.
Is the intervention cost-effective?	
Cost effectiveness	No cost-effectiveness evaluations available.
What does the evidence show?	
Evaluations conducted in the UK?	No. All existing RCTs have been conducted outside of the UK.
Overall evidence	This review identified three RCTs conducted in Norway and China, which all targeted caregivers of premature infants. Results were uneven. One Norwegian trial reported sustained but small effects of MITP on caregiving stress, while another Norwegian trial found some immediate small effects on parent mental health but no effects on caregiving stress. In both trials, there were small favourable effects some sub-measures of child

	outcomes, but not all. On the other hand, an RCT in China reported small-moderate effects on all tested outcomes (see Table A4)
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MOTHERING FROM THE INSIDE OUT (MIO)	
General information	
Program developer	Dr. Nancy Suchman
Official website	https://www.motheringfromtheinsideout.org/
Manual information	Suchman, N., Decoste, C., Legow, N., Castiglioni, N., & Mayes, L. C. (2018). <i>The Mother and Toddlers Program: An individual therapy for mothers in substance abuse treatment [Therapist Manual]</i> . Yale School of Medicine. Lowell, A. F., & Suchman, N. E. (In press). <i>Mothering from the Inside Out: Therapist manual (Revised) [Treatment Manual]</i> . Yale School of Medicine.
Clearing house information	MIO is listed as 'promising' by CEBC as an infant and early childhood mental health program (last reviewed Feb 2026).
Available languages	English
Underlying theoretical framework	Attachment and mentalisation theory.
What does the intervention aim to do, and for whom?	
Theory of change	There is no published Theory of Change for MIO. MIO specifically targets the mentalizing domain of parental reflective functioning (RF; i.e. the capacity to recognise and make sense of emotional states). Caregivers are taught skills to enable reflection on their own and others' mental states to support their ability to respond sensitively in times of child dysregulation or arousal. By learning to make sense of her own emotional distress during difficult parenting situations, the mother can then regulate her own emotions and attend to her child's emotional needs.
What happens during the intervention?	MIO involves five core treatment components: therapeutic alliance; attachment-based developmental guidance; mentalising stance; child-focused mentalisation; and maternal self-focused mentalisation. Each session is caregiver-led, and the facilitator is encouraged to follow what is on the caregiver's mind. The focus of MIO is to first help mothers develop an awareness and make sense of their own strong emotions, before developing skills to recognise and respond to their child's emotions. The aim is to help caregivers to more accurately make sense of their child's emotional cues in the moment, without heightening their own stress responses. The desired outcome is that by supporting the caregiver's ability to connect with their child's emotions, the child will be better able to use of them as an attachment figure. In turn, this strengthens the child's attachment security.
Target Population	The target population of MIO is caregivers of children aged 0-5 years old, who being treated/recovering from a substance use disorder. The program was designed to be an adjunct to substance use treatment.
Targeted outcomes	MIO targets a range of outcomes for caregivers and children. For the caregiver, these are to: increase parental reflective functioning; improve caregiving sensitivity; improve parent-child interactions; decrease caregiver depression; and decrease caregiver substance use. For the child, the intervention also aims to improve child attachment security.
How is the intervention delivered to parents?	
Delivery	MIO is typically delivered over 12 weekly visits of ~50 minutes. MIO can be delivered across a range of settings, including birth family home, outpatient clinic, community-based agency or provider, or virtually (such as online, smartphone, Zoom, telephone, video call etc).
What are the requirements for service providers and practitioners?	

Cost of delivery	There are currently no studies that have estimated the costs of MIO in the UK or other contexts.
Education/experience requirements to become a practitioner	Practitioners require an existing bachelor's degree or higher in psychology, social work, or a related field. Experience in substance use counselling, clinical or counselling psychology, social work, or a related clinical discipline is also required.
Training requirements	Training involves 16 hours of didactic/classroom training either online or in-person at a trainee organization followed by 6 months of consultation. There are currently no MIO trainers in the UK. Those interested in training can enquire via the MIO website.
Training costs	Information not available.
Supervision	Practitioners are required to undertake 20 hours of clinical consultation over approximately 6 months. This involves weekly meetings in groups of 4-5 clinicians. For accreditation, clinicians are required to attend a minimum of 70% of the consultation meetings, begin providing MIO to two caregivers as 'training cases', and discuss 6 brief, de-identified audio clips from recorded consultations.
Is the intervention cost-effective?	
Cost effectiveness	There are no studies of the costs of MIO.
What does the evidence show?	
Evaluations conducted in the UK?	No. All existing randomised controlled trials have been conducted outside of the UK.
Overall evidence	Two US-based RCTs of moderate-strong quality were identified in our review (Tables A4 and A5). Both were targeted at mothers receiving outpatient treatment for substance abuse. Results were uneven with very-small to small favourable effects found on some sub-measures of caregiver-child interaction quality and caregiver reflective functioning. Null results were found for parent mental health outcomes across both studies, although the sample sizes may not have been large enough to detect effects.

PARENT-CHILD INTERACTION THERAPY (PCIT)	
General information	
Program developer	Dr. Sheila Eyberg
Official website	https://www.parentchildinteractiontherapy.com/
Manual information	Eyberg, S., & Funderburk, B. (2011) <i>Parent-Child Interaction Therapy protocol: 2011</i> . PCIT International, Inc. Niec, L. N. (Ed.). (2018). <i>Handbook of Parent-Child Interaction Therapy: Innovations and applications for research and practice</i> . Springer.
Clearing house information	PCIT is listed as 'well-supported' by Title-IV-E Prevention Services clearing house (last reviewed Feb 2020) and by CEBC as a program to address child behaviour problems (last reviewed May 2026).
Available languages	English, Spanish
Underlying theoretical framework	Attachment and social learning theory
What does the intervention aim to do, and for whom?	
Theory of change	No published theory of change. PCIT practitioners use in the moment feedback to guide changes in caregiver-child dyadic interactions. This enables the caregivers to learn and practice skills under supervision, with the aim to improve the quality of the relationship, manage disruptive behaviours, and encourage positive behaviours.
What happens during the intervention?	PCIT sessions are centred around the observation of play interactions between caregiver and child. The dyad is observed participating in a structured play session together, while the PCIT practitioner provides feedback and coaching in real time. This enables the caregiver to learn and practice skills that help to both reinforce positive behaviour and manage disruptive or undesired behaviours with their child in real time. The caregiver is also taught Child Directed Interaction (CDI) skills. These include guidance to follow their child's lead in play, to develop positive communication skills, to give specific praise for positive behaviour, to reflect the child's talk back to them, to describe the child's behaviour to them, and to avoid commands, questions, or criticism.
Target Population	PCIT is indicated for children aged 2-7 years old with behavioural problems and where there are relational issues with their caregiver. The intervention is conducted with caregiver-child dyads, which can include parents, foster parents, or other caregivers.
Targeted outcomes	PCIT targets a range of child and parent-child relationship outcomes. For the child, these include improving child behaviour; increasing social skills and co-operation; improve the child's sense of safety and security in their relationships; increasing self-esteem; and decreasing frustration and anger. For the caregiver, PCIT aims to provide education to enable them to improve their communication with their child, including minimising caregiver frustration. It also targets caregiver-child interact and aims to improve the quality of the attachment relationship.
How is the intervention delivered to parents?	
Delivery	The delivery of PCIT varies from 10-20 sessions, with an average number of 14 sessions. The end point of treatment is decided once caregivers are deemed to have mastered the intended skills and their child's behaviour has improved. Sessions are delivered once or twice weekly and typically last 1 hour. PCIT is delivered directly to caregiver-child dyads. It can also be delivered to small groups of 3 or 4 families. There is also a homework component for families to complete outside of sessions, consisting of short, daily practices for caregivers during play interactions with their

	child. The intervention can be delivered in a range of settings, including outpatient clinics and community-based agencies, organizations, or providers.
What are the requirements for service providers and practitioners?	
Cost of delivery	It has been estimated that the total cost to set up a PCIT room , including all necessary equipment, is between \$4,500 and \$9,500 in the USA. One study estimated that the start-up costs of delivering PCIT are around \$14,000, plus \$1,000 for the delivery of the intervention to each client after set-up.
Education/experience requirements to become a practitioner	To be eligible to train to deliver PCIT, practitioners must have existing knowledge of, and training in, cognitive behavioural therapy (CBT), child behaviour therapy, and therapy process skills. While training is included in some established graduate clinical training programs, any training outside of these requires the equivalent of a master's degree and license as a mental health provider.
Training requirements	Training for PCIT practitioners can be delivered either on- or off-site. The training program typically lasts for 5 days for a total of 40 hours, as well as two supervised cases. Supervisors need to complete a minimum of 4 cases and 'trainer training'.
Training costs	The total cost of training for a practitioner and providing subsequent supervision has been estimated at \$5,500 .
Supervision	Practitioners require supervision of two cases before they can practice independently. This supervision must be conducted by an official PCIT supervisor who has undergone additional training for this role.
Is the intervention cost-effective?	
Cost effectiveness	A meta-analysis evaluated the cost-effectiveness of PCIT and three adapted versions in a US context. Standard small -group PCIT was found to be the least cost-effective option for reducing child disruptive behaviours and increasing child compliance. Intensive PCIT and large-group PCIT were the most cost-effective adaptations across different outcomes, including increasing positive parenting and child compliance, and reducing child disruptive behaviours, parenting stress, and negative parenting skills.
What does the evidence show?	
Evaluations conducted in the UK	No. All existing randomised controlled trials have been conducted outside of the UK.
Overall picture	We identified three Australian-based and one US-based RCT of PCIT during our review, of which two were rated weak in quality. Two moderate-quality Australian trials reported favourable effects on positive/negative caregiver verbalisations and improvements in caregiver sensitivity in populations of children with emerging emotional/behavioural problems. However, evidence for effects on caregiving stress, caregiver reflective functioning, and child emotional/behavioural problems were more mixed. Effect sizes weren't consistently reported. PCIT had no effect on caregiver potential for child abuse or caregivers' mental health in either trial.

PARENT-INFANT PSYCHOTHERAPY (PIP) VERSION: NEW BEGINNINGS	
General information	
Versions of PIP	Parent-Infant Psychotherapy (PIP) is an umbrella term for several psychotherapeutic interventions that operate under a similar theoretical framework. Some examples of these are Infant Parent Psychotherapy (IPP) and Mother-Infant Psychotherapy (MIP). Treatment manuals may vary despite shared qualities and identification as a PIP intervention, as can be seen in systematic reviews . Following review of the available evaluations and through consultation with colleagues involved in PIP delivery and evaluation we decided to code the New Beginnings manual, a PIP-based treatment evaluated across several trials, as a proxy for PIP. However, studies of other variants of PIP-based interventions have been included in our pragmatic review under the broader PIP framework.
Program developer	Tessa Baradon, PhD; Anna Freud Centre, London; New Bridge
Manual information	Baradon, T. (2006). <i>New beginnings for mothers and babies in prison</i> . Anna Freud Centre: London.
Clearing house information	No clearing house information.
Available languages	English
Underlying theoretical framework	Psychodynamic theory (psychoanalytic)
What does the intervention aim to do, and for whom?	
Theory of change	No published theory of change.
What happens during the intervention?	A sequence of themes is discussed throughout the course of the intervention, from the mother's pregnancy experiences, family history, and childhood to their experiences of motherhood and thoughts and feelings about their baby. Time for mothers and babies to engage in shared play is set aside at the beginning and end of each session. The theme of separation also plays a part in group discussions, given the inevitable separations between mother and baby within a prison mother-baby unit.
Target Population	New Beginnings was developed as a targeted intervention for mothers and babies in prison.
Targeted outcomes	A research paper on the development of the program outlines some key tenets of its design. New Beginnings aims to enhance the mother's ability to mentalise, i.e. to see their child as a separate person and notice and appropriately respond to their needs. This is achieved in part by discussing the parent's past and their own experiences. Improving the caregiver's ability to mentalise, is intended to lead to a more secure attachment.
How is the intervention delivered to parents?	
Delivery	New Beginnings involves the delivery of 8 two-hour session over four weeks. The sessions are delivered to groups of 6 mothers and their babies within a prison setting. All sessions are delivered within the Mother Baby Unit (MBU) of the prison site.
What are the requirements for service providers and practitioners?	
Cost of delivery	There are currently no studies that have estimated the costs of New Beginnings.
Education/experience requirements to become a practitioner	Practitioners require psychodynamic training and therapeutic experience prior to training.
Training requirements	Not available.

Training costs	Not available.
Supervision	New Beginnings practitioners are required to undergo supervision by a host supervisor and an external supervisor alongside clinical practice. This should take place at least fortnightly, or after each session if required. This may involve a de-brief on the session itself, their delivery dynamics (when co-facilitating), and planning for the next session. Practitioners are also encouraged to discuss stressful experiences encountered during their groups as part of the broader supervision available. Supervision is recommended to be unstructured to allow for spontaneous discussion and exploration of themes.
Is the intervention cost-effective?	
Cost effectiveness	No evidence for the cost-effectiveness of the intervention was identified and the intervention has not been cost rated by Foundations.
What does the evidence show?	
Evaluations conducted in the UK	Our review identified three RCTs that evaluated PIP in a UK context (Tables A3 and A4). One cluster-RCT of the New Beginnings version of PIP was conducted in mother infant dyads co-residing in prisons and reported effects on caregiver reflective functioning and dyadic attunement, but no effects on other caregiver/dyadic outcomes (no effect sizes given). Another UK RCT reported small to moderate effects of PIP ⁴ on some dyadic and caregiver outcomes in mothers experiencing mental health problems and social adversity. In 1990, another version of PIP was trialled in the UK for mothers of 2-month-olds with depression ⁵ . The RCT results reported small effects on caregiver depression and moderate effects on caregiver-infant relationship problems after the intervention, with long-term moderate effects on child behaviour problems at around age 6.
Overall picture	PIP refers to a family of closely related psychotherapeutic interventions grounded in a shared theoretical framework, rather than a single, standardised programme. Variants such as Infant-Parent Psychotherapy (IPP), Mother-Infant Psychotherapy (MIP) and Brief PIP differ in manuals and delivery, but retain common core components, as reflected in systematic reviews of the evidence base. Aside from the UK trials outlined above, our review highlighted two other RCTs and two quasi-experimental trials (QETs) from the international evidence, which differed in protocol, session number (ranging 4-16), and quality rating. There was no clear pattern of results across these trials (see Tables A3 and A4).

⁴ Manualised version: Baradon, T., Bland, K., Carrington, P., Grindell, V., Montgomery, H., & Urquhart, I. (2005). Psychoanalytic Parent–Infant Psychotherapy: Manual for Clinical Practice.

⁵ No specific manual.

PROMOTING FIRST RELATIONSHIPS (PFR)	
General information	
Program developer	Monica Oxford, MSW, Ph.D.
Official website	https://pfrprogram.org/
Manual information	Kelly, J. F., Zuckerman, T. G., Sandoval, D., & Buehlman, K. (2003, 2008, 2016). <i>Promoting First Relationships®: A program for service providers to help parents and other caregivers nurture young children's social and emotional development</i> . Parent-Child Relationship Programs at the Barnard Center for Infant Mental Health and Development, University of Washington.
Clearing house information	PFR is listed as 'supported by research evidence' by CEBC as an infant/child mental health program and as program to address child behaviour problems (last reviewed Apr 2025).
Available languages	English, Somali, Spanish
Underlying theoretical framework	Attachment theory and a strengths-based approach
What does the intervention aim to do, and for whom?	
Theory of change	Yes, available here. PFR adopts a strengths-based, relational approach to promote the parent-child relationship. The programme aims to support caregivers' reflective capacity and confidence so that they can gain insights to transform their relationship with their child. The caregiver-child relationship is seen as the focal point of intervention to lead to changes in the child's development. The caregiver is positioned as the expert, and change is encouraged through self-reflection and video observation on how they interact with their child. Practitioners take a strengths-based approach, ensuring that they provide positive feedback to the caregiver and avoid ignoring, dismissing, advice-giving, or judging.
What happens during the intervention?	The PFR intervention is a home visiting intervention/prevention program. Practitioners use unedited video recordings of caregiver-child interactions to provide feedback to caregivers. This feedback takes place in reflective observation sessions. Handouts are used in order to help explain key concepts around attachment, emotion regulation, and socio-emotional development. Additional parental caregivers can also join PFR sessions.
Target Population	This intervention is targeted at parents and caregivers of young children (birth to 5 years old) who require development in their skills to sensitively and appropriately respond to their child's needs, feelings, and cues. This also includes those who may have difficulty handling their child's challenging behaviours and emotions.
Targeted outcomes	PFR aims to target a range of parenting, child, and relational outcomes. Some outcomes relate to improving interactions between the child and caregiver, such as how to develop a positive and mutually reinforcing relationship and increase security and trust in the relationship. For caregivers, outcomes include understanding and responding to the child's socio-emotional needs, increasing competence and confidence in their caregiving skills, and being able to appropriately address challenging child behaviours. For the child, some outcomes include learning how to regulate emotion and increasing the child's competence.
How is the intervention delivered to parents?	
Delivery	Promoting First Relationships is a 10-session intervention delivered in weekly 1-hour sessions. The intervention can be delivered either in-person or online. PFR is delivered to caregiver-child dyads, either 1:1 or in groups of 6-8 dyads. The intervention can be delivered in a range of settings,

	including birth/adoptive/foster homes, outpatient/paediatric clinics, early learning and other community-based centre.
What are the requirements for service providers and practitioners?	
Cost of delivery	There are no costs reported for delivery in the UK. One study in the US study reports a benefit cost analysis, identifying the average total cost of delivering PFR as \$1817 per family.
Education/experience requirements to become a practitioner	PFR training is designed for professionals already working with young children and families. This includes those working in early years settings and home visiting, health visiting, infant mental health services, family support workers and social workers.
Training requirements	There are 3 levels of training for Promoting First Relationships practitioners: • The Level 1 ‘Learner workshop’ provides introductory training in relevant theory and concepts core to the PFR curriculum. The workshop is 14 hours in total, delivered either virtually (over 4 half days) or in-person (over 2 days). • The Level 2 ‘Certified Provider Training’ builds on this foundational knowledge and allows facilitators to practice skills in infant mental health observation, reflection, and working with caregiver-child dyads. Video feedback is used to support this training. • The Level 3 training is by invitation only and is only for existing certified trainers to become an ‘Agency Trainer’. This stage involves 15 weeks of mentoring from a PFR ‘Master Trainer’ alongside work with a caregiver-child dyad.
Training costs	NHS Education for Scotland report that PFR is currently not delivered in the UK. Costs of receiving training in the US are outlined below: Level 1 training: \$640 per person to attend a Learner workshop Level 2 training: \$350 per learner Level 3 ‘Agency Trainers’: Additional costs apply to fidelity assessments and supervision.
Supervision	Agency Trainers require monthly reflective consultation with a PFR Master Trainer.
Is the intervention cost-effective?	
Cost effectiveness	No cost-effectiveness data are available for the UK. One US-based study examined the ‘avoided victim costs’ (i.e. long-term costs related to child victimisation, abuse, or neglect) of delivering PFR. Within this study, the average total cost of delivering PFR was \$1817 per family. Delivering PFR was shown to be cost-beneficial, with long-term benefits to the child projected to exceed the cost of the intervention.
What does the evidence show?	
Evaluations conducted in the UK	The intervention is not currently implemented in the UK and no evaluation has yet taken place in a UK context.
Overall evidence	Our review identified 4 RCTs, which tested PFR delivered by home visits against an active control in the US (see Table A3 and A4). Three of the RCTs had moderate-strong quality ratings. Of these, one RCT in low-income mothers with mental health problems showed small yet significant short-term improvements in caregiver sensitivity and toddler understanding, as well as reduced child behaviour problems at the 8-month follow-up. Another RCT targeted parent-caregiver dyads living in a reservation-based community, moderate effects on caregiver-child interactions and caregiver knowledge at the 4-month follow-up were found, but no effects on child behaviour. Similar findings were reported

	from an RCT in caregivers involved in child protection, although there were some favourable effects on child affective communication (no effect size given) despite null results for other child outcomes.
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TODDLER-PARENT PSYCHOTHERAPY (TPP)	
General information	
Program developer	Alicia Lieberman, PhD
Manual information	Lieberman, A. F., Ghosh Ippen, C., & Van Horn, P. (2015). Don't hit my mommy: A manual for Child-Parent Psychotherapy with young children exposed to violence and other trauma (2nd ed.). Zero to Three.
Clearing house information	Foundations rates TPP as 2+ indicating some preliminary but not causal evidence of impact (last reviewed Jul 2016).
Available languages	English, Hebrew, Norwegian, Spanish, Swedish, Mandarin, Cantonese
Underlying theoretical framework	Psychodynamic theory (psychoanalytic)
What does the intervention aim to do, and for whom?	
Theory of change?	Yes, available here . TPP is within the same intervention family as CPP, so the theory of change is similar. TPP is designed for younger children and their caregivers. Like CPP, TPP is built upon the idea that consistent, responsive interactions between parents and toddlers support the development of secure attachment. Parents who have faced significant adversity or have an insecure attachment pattern themselves may find it more difficult to understand and respond appropriately to their child's emotional and behavioural cues.
What happens during the intervention?	During the intervention, the practitioner explores the caregiver's own childhood experiences, reflecting on how this has influenced their current parenting practices and beliefs. The caregiver is guided by the practitioner to identify their child's cues and respond without allowing attributions from their previous experiences to interfere. The practitioner interacts with both the caregiver and the toddler to model and discuss behaviours and ways of relating to one another.
Target Population	TPP is suitable for families who have a toddler (18 months to 3 years old) at risk of insecure attachment, primarily due to the caregiver's own history and attachment difficulties. TPP targets caregivers who are depressed, anxious, traumatised, or at risk of maltreating their child.
Targeted outcomes	TPP offers therapeutic support to help parents form positive representations of their child. It targets outcomes related to the caregiver-child relationship, including improved interaction and reduced risk of an insecure attachment. Long-term outcomes for infants may be the development of positive expectations of themselves and others, and lower risk of developing mental health problems or experiencing maltreatment.
How is the intervention delivered to parents?	
Delivery	TPP is delivered in 32 sessions of 1-1.5 hours over a year. Sessions are attended by both the caregiver and child.
What are the requirements for service providers and practitioners?	
Cost of delivery	Foundations indicate that set up and delivery cost are not available or have not been calculated.
Education/experience requirements to become a practitioner	TPP practitioners require at least a master's level degree in counselling, psychology, or social work.
Training requirements	TPP requires 92 hours of training. This includes a combination of in-person training (totalling 7 days) and a36 hours of phone consultation.
Training costs	Information is not available.
Supervision	Supervision is available for TPP practitioners to support them with clinical, skills, and case-management issues.
Is the intervention cost-effective?	

Cost effectiveness	No evidence for the cost-effectiveness of TPP was identified.
What does the evidence show?	
Evaluations conducted in the UK?	No. Foundations reports that TPP is not available nor has been tested in the UK.
Overall evidence	Toddler–Parent Psychotherapy (TPP; ages 18m-3yrs) sits under the same umbrella as (Child–Parent Psychotherapy (CPP; ages 3-5yrs). The age range of trial samples often spanned across the indicated ages of TPP and CPP, and therefore CPP and TPP trials were evaluated together. CPP/TPP met the review’s threshold for sufficient evidence, with four eligible US-based RCTs of which three showed favourable results on child emotional and behavioural problems, and some parent mental health outcomes. One trial also reported favourable effects on attachment type. Effect sizes varied from very small to large across outcomes, as did study quality from weak to strong (Table A4). Trials targeted young children and caregivers affected by adversity, caregiver depression, and/or child behavioural problems (Table A3).

TUNING IN TO KIDS (TIK)	
General information	
Program developer	Professor Sophie Havighurst, Ann Harley.
Manual information	Havighurst, S. S., & Harley, A. (2007). <i>Tuning in to Kids: Emotionally intelligent parenting program manual</i> . University of Melbourne
Official website	https://tuningintokids.org.au/
Clearing house information	Foundations rates TIK as 2+ indicating some preliminary but not causal evidence of impact (last reviewed Feb 2023). Note one RCT for TIK in our review was published after the last Foundations update.
Available languages	English, Arabic, Cantonese, Somali, Vietnamese
Underlying theoretical framework	Attachment and emotion socialisation theory
What does the intervention aim to do, and for whom?	
Theory of change?	Yes, available here . The aim of TIK is to prepare caregivers to support the development of their child's early emotional competence, which is a key element of behavioural self-regulation and prosocial behaviours. The intervention aims to teach caregivers strategies to regulate their own emotions and recognise, accept, and address those of their children.
What happens during the intervention?	Caregivers are taught skills in 'emotion coaching', whereby they learn how to recognise emotional cues in their children and respond appropriately. This involves a process of reflection on how they manage their own emotions and their own experiences of being parented.
Target Population	TIK is indicated for caregivers of children aged 3-10 years.
Targeted outcomes	TIK works with parents and caregivers to target a range of caregiver and child outcomes. For the caregiver, these are to learn and develop skills in emotion coaching to help improve their child's emotional, social, and behavioural functioning; understand the distinction between emotion coaching and emotion dismissing behaviours, leading to a decrease in dismissive responses to children's emotions; and increase caregiver emotion awareness and regulation. For the child, TIK aims to improve behavioural functioning and emotional competence (i.e., their ability to understand and regulate emotions) and improve caregiver-child connection.
How is the intervention delivered to parents?	
Delivery	TIK is delivered to groups rather than on an individual basis and the recommended intensity is for 2-hour weekly sessions. A total of 8 sessions is required for those with higher needs, while 6 sessions is suggested for those with lower needs. Recommended group size varies depending on population from 6 participants (higher/clinical needs) up to 14 participants (lower needs). An additional 1-2 booster sessions every 2 months are recommended for those of all need levels. The intervention can be delivered in a range of settings, for example in early years or community centres, hospitals/outpatient clinics, or virtually.
What are the requirements for service providers and practitioners?	
Cost of delivery	There are no studies of the costs of delivering TIK in the UK and/or other settings. Foundations assigned a cost rating of 1, meaning that the set up and delivery of the intervention is low cost and equivalent to an estimated unit cost of less than £100.
Education/experience requirements to become a practitioner	TIK is delivered by trained facilitators who have a background in a range of caring professions, such as psychologists, counsellors, educators, social workers, and family support workers. It is preferred that practitioners have

	a university qualification in one of these disciplines prior to training, although not a requirement.
Training requirements	TIK training can be completed live online (UK time zone friendly trainings are available) or at an in-person course (Australia). Training is typically delivered over 2 days for a total of 14 hours. Organisations (20+ staff) can request an in-person/online workplace training.
Training costs	Training costs are available on the TIK website : AUD \$1149 per individual to attend training, which also includes the training manual and additional implementation support.
Supervision	All TIK practitioners can attend free supervision sessions each month. A specific workshop for practitioners before they deliver their first TIK session is also offered.
Is the intervention cost-effective?	
Cost effectiveness	No cost-effectiveness studies have been carried out in the UK or other settings.
What does the evidence show?	
Evaluations conducted in the UK	Tuning in to Kids is available for delivery in the UK but it has not been tested in a UK context.
Overall evidence	While TIK is designed for parents and caregivers of children aged 3-12 years old, we identified 8 RCTs in our review that reported favourable outcomes in children under 5 years old (see Tables A3 and A4). TIK was tested in 3 trials as indicated prevention for child behaviour problems and child anxiety. An Australian RCT reported increases in caregiver empathy following TIK but no other effects on caregiver or child outcomes, while an Iranian RCT reported a large effect in reducing children's behaviour problems. An Iranian cluster-RCT reported that TIK had large effects on children's anxiety scores at follow-up. These trials were rated as moderate-strong in quality. All of the five universal prevention trials reported some evidence of moderate-large effects on caregiver's emotional communication practices, with some RCTs also reporting wider effects on caregiving. However, only 2 RCTs reported small to moderate effects on children's emotional/behavioural problems. Of note, one trial of TIK was specifically delivered to fathers and showed moderate-large effects on improving fathers' empathy and emotional communication, small increases in parenting satisfaction and self-efficacy, and a small reduction in child total difficulties. While null results were reported for father's psychological distress in the same RCT, a small effect was found in reducing their partner's psychological distress. All but one of the trials conducted as universal prevention were rated as weak in quality, although this may reflect that our instruments are not well-designed for rating universal trials.

VIDEO-FEEDBACK INTERVENTION TO PROMOTE POSITIVE PARENTING AND SENSITIVE DISCIPLINE (VIPP-SD)	
General information	
Program developer	Marian Bakermans-Kranenburg, Marinus van IJzendoorn, and Femmie Juffer.
Manual information	Juffer, F., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2008). Promoting positive parenting: An attachment-based intervention. Lawrence Erlbaum
Official website	https://www.vipp-sd-international.org/
Clearing house information	HomVEE has reviewed evidence for VIPP-SD and 3 were rated high or moderate quality.
Available languages	English, Dutch, Spanish, German, French
Underlying theoretical framework	Attachment and social learning theory
What does the intervention aim to do, and for whom?	
Theory of change?	Yes, available here . VIPP-SD promotes parental sensitivity and sensitive discipline (which includes non-harsh, consistent and developmentally appropriate limit-setting) which are expected to support secure child-parent attachment and help prevent or reduce externalising behaviour problems. The programme uses video feedback within a supportive working relationship with the practitioner to help parents recognise and respond sensitively to their child's signals, take the child's perspective, and use calm, consistent and non-coercive discipline strategies.
What happens during the intervention?	VIPP-SD is delivered through structured sessions using videorecording and video-feedback of caregiver-child interactions. In each session, the practitioner films everyday interactions, such as play, mealtime or limit-setting situations, which are then reviewed with the caregiver in the following session. Feedback focuses on moments of sensitive caregiving and positive caregiver-child interaction, while also drawing attention to the child's signals and cues. Practitioners use techniques such as pausing and replaying video clips and 'speaking for the child' to support caregivers to interpret the child's signals, take the child's perspective, and reflect on their own responses. Strategies for sensitive discipline, such as distraction, praise for positive behaviour and consistent limit-setting, are introduced and discussed. The practitioner aims to work collaboratively with the parent to notice positive moments of interaction as well as addressing any challenges.
Target Population	VIPP-SD is targeted at parents or primary caregivers of infants and young children, typically aged 12–72 months. VIPP can also be delivered with infants as young as 3 months in perinatal contexts. The programme has been implemented with birth parents, adoptive parents and foster caregivers, and across community and higher-risk populations. This includes families experiencing socioeconomic disadvantage, parental mental health difficulties or parenting challenges, as well as children at risk of externalising behaviour problems, attachment difficulties or developmental vulnerabilities ⁶
Targeted outcomes	VIPP-SD aims to improve caregiver sensitivity and sensitive discipline, including caregivers' ability to observe and interpret their child's signals, take the child's perspective, respond sensitively, and use calm,

⁶ Varying levels of evidence depending on population.

	consistent and non-coercive limit-setting. In the short term, this is intended to strengthen caregiver confidence, positive caregiver-child interactions and child emotion and behaviour regulation. In the longer term, VIPP-SD aims to support more secure child-parent attachment relationships and reduce or prevent externalising behaviour problems.
How is the intervention delivered to parents?	
Delivery	VIPP-SD is delivered directly to individual caregiver-child dyads, typically over 6–7 sessions of around 1.5 hours. Sessions are usually delivered every two weeks, over approximately 3–4 months. The intervention is usually delivered in the family home but can also be delivered in clinic or virtually where home delivery is not feasible or appropriate. Video feedback is the primary learning method, supported by guided discussion and reflective questioning.
What are the requirements for service providers and practitioners?	
Cost of delivery	Delivering VIPP-SD in UK services has been estimated to cost about £1,450 per family, based on trial evidence, with main expenses tied to practitioner training and supervised delivery. ⁷
Education/experience requirements to become a practitioner	VIPP-SD training is suitable for professionals working with families and caregivers of young children, particularly in early years, infant mental health, health, social care or family support settings. This may include psychologists, health visitors, midwives, nursery nurses, family support workers and other practitioners working with caregiver-child relationships
Training requirements	4 days of basic training in person (or online basic training spread over 7 days)
Training costs	Approximately £2000 (UK)
Supervision	The basic VIPP-SD training is followed by supervised practice with a practice family. Current VIPP-SD International training information describes six online supervision sessions as part of this trajectory.
Is the intervention cost-effective?	
Cost effectiveness	A UK cost-effectiveness analysis was conducted alongside the VIPP-SD trial, but findings were mixed and do not support firm conclusions at the available follow-up point.
What does the evidence show?	
Evaluations conducted in the UK	Yes. A pragmatic RCT was conducted in the UK for children aged 12-36 months at risk of behaviour difficulties. VIPP-SD was delivered largely through NHS health visiting services, with evidence of benefits for child behaviour and a small, sustained effect at six-year follow-up.
Overall evidence	Alongside the UK pragmatic RCT, international evidence includes a meta-analysis of 25 RCTs of VIPP/VIPP-SD-based interventions, with effects on parenting behaviour, parenting attitudes, child attachment and externalising behaviour. In our review, we identified 2 other eligible RCTs of VIPP-SD alongside the UK trial, which were conducted in the Netherlands and Turkey (see Table A3 and A4). The Turkish RCT was rated strong in quality, delivered the program in a universal setting, and showed moderate effects of VIPP-SD on increasing caregiver sensitivity and reducing physical intrusiveness with no other results reported. The Dutch RCT in first-time mothers reported small but sustained effects on one

⁷ O'Farrelly, C., Barker, B., Watt, H., Babalis, D., Bakermans-Kranenburg, M., Byford, S., ... & Ramchandani, P. (2021). A video-feedback parenting intervention to prevent enduring behaviour problems in at-risk children aged 12-36 months: the Healthy Start, Happy Start RCT. *Health Technology Assessment (Winchester, England)*, 25(29), 1.

	measure of caregiver sensitivity and otherwise null effects on caregiver and child outcomes, however the study rating was weak.
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VIDEO INTERACTION GUIDANCE (VIG)	
General information	
Program developer	VIG developed from Dutch video-home training approaches pioneered by Harrie Biemans and colleagues, drawing on Colwyn Trevarthen's work on intersubjectivity and attuned communication. In the UK, VIG delivery is supported through AVIGuk training, supervision and accreditation processes.
Manual information	VIG is not a conventional manualised programme. The key practice text is Kennedy, Landor and Todd's edited volume, <i>Video Interaction Guidance: A relationship-based intervention to promote attunement, empathy and wellbeing</i> (2011).
Official website	https://www.videointeractionguidance.net/
Clearing house information	VIG is not included in the Foundations Guidebook. No major clearinghouse rating was identified for VIG in this review.
Available languages	VIG is used internationally and may be delivered in different languages depending on practitioner and service context. No definitive list of translated programme materials was identified for this review.
Underlying theoretical framework	Attachment-informed and mentalisation-informed relational practice, drawing on intersubjectivity theory.
What does the intervention aim to do, and for whom?	
Theory of change?	VIG has a published theoretical model set out in Kennedy et al (2011). The model places intersubjectivity at the core, alongside attachment and mediated learning, and links these to the Principles of Attuned Interaction and Guidance. VIG uses short video clips of everyday interaction to help caregivers notice, receive and respond to their child's initiatives. Through shared review, the practitioner supports the caregiver to recognise moments of attunement, connection and successful communication, reflect on the child's cues and experience, and build on existing strengths. Over time, this is intended to increase sensitive, attuned interaction in everyday caregiving
What happens during the intervention?	VIG is delivered through repeated cycles of video recording and shared review. The practitioner agrees a focus for the work with the caregiver, then films a short everyday interaction. The practitioner reviews the footage and selects brief clips linked to the caregiver's goals, focusing on moments of attunement, connection and successful communication. In the shared review, the caregiver and practitioner look carefully at these clips together, using the Principles of Attuned Interaction and Guidance to notice the child's initiatives, the caregiver's responses, and what is helping the interaction go well. This process supports caregivers to describe what they see, reflect on their own and their child's thoughts, feelings and needs, and build on existing strengths in future interactions. A VIG intervention usually involves around 3–4 cycles of filming and shared review.
Target Population	VIG can be used across developmental stages and service contexts, but this review focuses on its use with babies, young children and their caregivers. In early years services, VIG may be used where there are concerns about caregiver-child interaction, parental confidence, attachment-related difficulties, child social and emotional wellbeing, trauma or adversity, or where there is social care involvement
Targeted outcomes	VIG aims to improve the quality of caregiver-child interaction by strengthening attunement, sensitivity, and reflective capacity. It supports caregivers to notice and respond to the child's cues and initiatives,

	recognise their own strengths, increase confidence and enjoyment in the relationship, and manage difficult interactions more positively. For babies and young children, intended benefits include more responsive relational experiences and improved social and emotional wellbeing.
How is the intervention delivered to parents?	
Delivery	VIG is delivered to individual caregivers through repeated cycles of filming and shared review. A VIG intervention commonly involves around 3–4 cycles, although the number of cycles may vary according to need and service context. VIG can be delivered face-to-face or online, and may be delivered in the family home, clinic, community, education, social care or early years settings.
What are the requirements for service providers and practitioners?	
Cost of delivery	No standard cost of delivery was identified for VIG.
Education/experience requirements to become a practitioner	AVIGuk reports that there are no formal professional prerequisites for VIG training, and that training may be relevant to staff from a range of backgrounds.
Training requirements	VIG training and supervision are delivered by AVIGuk-accredited supervisors. Initial training enables practitioners to begin as trainee VIG practitioners. To become accredited, practitioners complete supervised practice. AVIGuk states that 15 supervision sessions is the minimum and 18 is recommended, and that the practitioner pathway usually takes 18–24 months.
Training costs	Initial VIG training is estimated at approximately £425–£500, with additional supervision and accreditation costs. Costs vary because training and supervision are provided by licensed AVIGuk supervisors, who may set their own fees.
Supervision	Supervision is central to VIG training and accreditation. It is delivered by AVIGuk-accredited supervisors. AVIGuk recommends 18 supervision sessions, with 15 as the minimum for accreditation.
Is the intervention cost-effective?	
Cost effectiveness	No cost-effectiveness evaluation of VIG was identified for this review
What does the evidence show?	
Evaluations conducted in the UK	Yes, but limited. One UK RCT was identified, although its sample size was below this review's threshold for sufficient evidence. The VIG evidence base was therefore classified as preliminary. The RCT was conducted with caregivers and their preterm babies and reductions were seen in babies' difficult behaviour at the post-test. A large effect size was reported, however may be inflated due to small sample size.
Overall evidence	VIG is widely used in UK practice and has a well-developed UK training, supervision and accreditation infrastructure. VIG met this review's criteria for an emerging evidence base, but not the higher threshold for inclusion in the common elements analysis. Three RCTs were identified, which all targeted preterm babies and their caregivers (see Tables A3 and A4). One UK RCT had a sample below the threshold (discussed above). One Dutch RCT met the review's methodological and sample-size criteria and reported favourable effects on mothers' and fathers' sensitivity, but uneven results on other caregiving measure subscales, and null results on parent mental health. And, one Irish RCT evaluated PIPPA, a multicomponent preterm infant-parent intervention that included VIG. PIPPA did not improve caregiving or child outcomes. VIG should therefore be described as a widely used intervention with a preliminary or mixed trial evidence base.

Appendix C: Common elements supplementary materials

Table C1. Full list of coded practice elements and their prevalence across interventions

Caregiving domain	Caregiving skill	Practice element	Prevalence across interventions
Nurture the relationship	Sensitive responding	Be curious and attend to the child's cues	92%
		Respond in an attuned, timely and individualised way to the child	83%
		Be a secure base for the child	50%
		Acknowledge breaks in and restoring the caregiver-child connection	25%
	Expressing warmth and positive regard	Affirm the child's importance and individuality	75%
		Offer the child appropriate physical touch	50%
	Playful	Create time and opportunities for play in daily life	67%
		Share books and stories	25%
		Be an engaged and responsive play partner	83%
Support child's behaviour	Positive behaviour support	Give the child positive attention for constructive and cooperative behaviour	50%
		Use incentives to reinforce constructive and cooperative behaviour	17%
	Behaviour management	Use direct and positive commands	25%
		Make sure unconstructive and challenging behaviour is not rewarded	33%
		Reassure the child they can come back to something later	8%
		Use distraction and redirection to prevent challenging behaviour	33%
		Use proportionate non-harsh responses to challenging behaviour	50%
	Proactive and caregiving	Establish routines and support transitions	67%
		Carefully set clear and consistent limits	67%
		Monitor what the child's doing	50%
		Protect their child from abuse and neglect	50%
		Build a safe and secure physical and social environment for their child	42%
Support child's skill development	Support child's socioemotional development	Accept and share in all the child's feelings	75%
		Provide co-regulation and emotional support	83%
		Help the child to name and understand their own and others' emotions	58%
		Model prosocial and emotionally regulated interactions	42%
		Coach peer interactions	25%
	Support child's skills for learning	Engage in language-rich stimulating interactions	83%
		Create a stimulating learning environment	8%
		Meet the child at their current skill level and tailor support to their needs	33%
		Model new skills for the child	8%
		Scaffold the child's learning	42%
		Give the child encouragement and celebrate their efforts	33%
	Autonomy support	Encourage independence and competence	33%
		Help the child learn to solve problems	17%
		Offer choices and share decision-making	25%

Caregiver's supporting skills	Emotional and behavioural regulation skills	Monitor the own feelings and actions	67%
		Engage in practices to stay calm and manage stress	42%
	Understanding and empathising with others' perspectives, feelings and behaviour	Infer the child's emotions and needs	83%
		Consider possible reasons behind the child's behaviour	92%
		Recognise the effect of their own emotional states and actions on the child	67%
		Reflect on the caregiving expectations and experiences	67%
		Be open and reflective when receiving advice and feedback	17%
	Effective communication skills	Use a calm and polite tone of voice	25%
		Coordinate goals and efforts with the child's other caregivers	25%
	Problem solving skills	Set and review caregiver and child goals	42%
		Use proactive problem solving	42%
		Be persistent when establishing caregiving practices	17%
		Know when, where, and how to access support	42%
	Self-efficacy	Celebrate their own efforts and successes	25%