Evidence review:

An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

Parenting Research Centre
raising children well

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Disclaimer

This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

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EXECUTIVE SUMMARY

OverviewThis rapid evidence review of parenting interventions was conducted by the Parenting Research Centre for the Families Commission in New Zealand. The review was commissioned to provide background information for the Families Commission review of effective parenting programmes. Elements of this rapid review are included in the Commission's report 'Effective parenting programmes: A review of the effectiveness of parenting programmes for parents of vulnerable children' (Families Commission, 2014). This rapid review report provides an analysis of the evidence for parenting interventions, with a focus on intervention effectiveness for parents of vulnerable children aged up to 6 years, who have been maltreated or who are at risk of maltreatment. Factors to consider when implementing parenting interventions in the New Zealand context are also presented.

Methods

To identify and evaluate the evidence for parenting interventions, a Rapid Evidence Assessment (REA) methodology has been used. We also identified common characteristics and practices within and between effective interventions using a common elements analysis.

Findings

The REA identified 81 parenting interventions for parents of vulnerable children aged up to 6 years, with a particular focus on child maltreatment. Twelve of these interventions can be more confidently considered 'effective' interventions as they have demonstrated effect in at least one randomised controlled trial (RCT) and at least 6 months maintenance of effects have been reported. Only one intervention, Nurse Family Partnership (NFP), was rated as Well Supported. In the current analysis, this is the highest rating possible and is characterised by demonstrating effect in at least two RCTs, with at least 12 months maintenance of effect. In addition, the intervention needed to be included in a systematic review and meta-analysis and found to be effective. The pre and postnatal home-visiting program NFP demonstrated effect on child maltreatment and other relevant outcomes 15 years after the intervention had finished.

A further four of the effective interventions were rated Supported, and seven were rated Emerging. Twenty-two additional interventions had Insufficient Evidence for us to determine their effect and ten Failed to Demonstrate Effect. Thirty-eight interventions were rated Pending as they have yet to demonstrate maintenance of effect. We found no interventions that were rated as Concerning Practice. Only one New Zealand intervention evaluated in an RCT, Early Start, was identified in this REA. Early Start was rated Emerging. The REA located one RCT for Early Start, which showed good results on several key child, parent, and family outcomes, some of which maintained to the 9 year follow-up evaluation.

The majority of the effective interventions were programs delivered by professionals, typically in the home. The outcomes targeted most frequently were child behaviour, parent-child relationships and child development, with few interventions targeting basic child care. There is little evidence for interventions that specifically target specific groups of parents such as those with intellectual disabilities or Indigenous families.

We identified 14 common elements within the 'effective' interventions. These included the use of structured or planned sessions, assessment of the child and family and development of an individualised plan. Content was often conveyed in the form of discussion, with the nature of the

content largely focused on child behaviour and strategies to manage behaviour (in particularly positive, non-punitive approaches), parent-child interactions, emotional regulation, child health, development and safety, as well as issues of family wellbeing and life course.

Conclusions and limitations

This report provides details of effective parenting interventions for parents of young vulnerable children and can be used as a guide to the development and implementation of interventions for this population in the New Zealand context. Further evaluations are needed to determine the effectiveness of many of the reviewed interventions. These evaluations need to be rigorous and demonstrate replication and maintenance of effect in order for the interventions to be considered effective. Future evaluations conducted both in New Zealand and internationally will build on the evidence for interventions, as well as contribute to the map of common elements identified.

Although systematic in its approach, measures were taken to make this a *rapid* review and some evaluations may have been missed. Furthermore, some interventions for children in the target age group had to be excluded because they catered for a broader age-range and it was not possible to determine the impact of the intervention on children under the age of 6 years. Readers are advised to seek updated evidence before selecting and implementing interventions.

1. INTRODUCTION

1.1 Background

Parenting interventions are programs, service models or systems of care that aim to improve child outcomes by influencing parenting behaviour, knowledge or cognition. The person referred to as 'parent' may be anyone acting in the caregiving role, such as a biological or adoptive parent or a guardian.

In response to a White Paper (New Zealand Government, 2012a; 2012b) which highlighted the prevalence of maltreatment in vulnerable children in New Zealand, The Families Commission has sought evidence for parenting interventions targeting parents of vulnerable children aged up to 6 years. Information about the characteristics and practices of these interventions was also sought.

The aim of this report is to provide the Families Commission with information about parenting interventions that have been evaluated internationally and found to be effective. While acknowledging that the scope of the term 'vulnerable' is quite broad, this report focuses on the key area of vulnerability identified in the white paper, defined as child maltreatment or risk of maltreatment. In this report we draw together the common elements of interventions found to be effective in targeting children, parent or family outcomes and discuss factors to consider when implementing these interventions in the New Zealand context. We anticipate that this report will be a useful tool for shaping decisions regarding the development and implementation of parenting interventions for parents of young children exposed to or at risk of maltreatment.

Therefore, this report addresses the following questions:

- What parenting interventions for parents of children aged up to 6 years and exposed to or at risk of maltreatment have been evaluated internationally and found to be effective?
- What are the common elements contained within and between these effective interventions?
- What are the critical factors to consider when implementing a parenting intervention for this population in the New Zealand?

To achieve these objectives, we have structured this report to include definitions of key terminology (in this section), followed by a section outlining the research methodology, then the findings from our review of the evidence and common elements analysis will be presented. The report ends with implementation considerations and concluding remarks.

1.2 Definitions

1.2.1 Vulnerable

All children are vulnerable to some extent, however for the purpose of this analysis, a more specific definition is required. The White Paper on vulnerable children (New Zealand Government, 2012a) focuses on child maltreatment and defines vulnerable children as:

"…children who are at significant risk of harm to their wellbeing now and into the future as a consequence of the environment in which they are being raised and, in some cases, due to their own complex needs. Environmental factors that influence child vulnerability include not having

their basic emotional, physical, social, developmental and/or cultural needs met at home or in their wider community." (p.6).

Based on discussions with key personnel at the Families Commission, we have defined 'vulnerable children' as children who have been maltreated or who are identified as being at risk of maltreatment. Maltreatment includes any form of child abuse (such as physical, sexual, emotional or psychological), child neglect or exposure to family or domestic violence.

1.2.2 Parenting interventions

To conduct this analysis, it was necessary to develop a clear definition of what would and what would not be included in our search for evaluations of parenting interventions. For this purpose, we define parenting interventions as parent or parenting interventions, programs or services in which parents, caregivers or guardians receive direct/targeted education, training or support. The overall objective of the intervention is to improve child outcomes either by increasing the parent's knowledge, skills or capacity as a caregiver, or by improving parent-child interactions, parent outcomes such as parent wellbeing, or family outcomes such as family relationships.

The following *will not* be considered parenting interventions:

- interventions that provide direct education or training to children
- interventions that provide community-wide education where a parent may or may not receive education (i.e. parent is not the target, the community is)
- interventions that provide indirect education to parents via their children (e.g. a notice sent home with the child about the importance of reading)
- tip sheets or information pamphlets handed out to parents in isolation of other forms of intervention.

1.2.3 Parents

For the purpose of this report, we define a parent as a person performing in the role of a primary caregiver to a child. Such a person may be different from the person who is the child's biological parent. This definition therefore may include grandparents, step-parents, foster parents or other carers.

1.2.4 Outcome

An outcome is a measurable change or benefit for someone. For example, a child and family outcome might be a decrease in substantiated reports of child abuse. Outcomes are different from outputs, which focus on *what was done* to try to achieve change in outcomes. An advantage of using outcomes rather than outputs as an indicator of change is that they can help everyone to focus on what is actually intended to change as a result of an intervention.

1.2.5 Effective interventions

The terms 'effective', 'effect' and 'effectiveness' are often associated with evaluations of interventions but can take on different meanings. For the purpose of this report, we use the term 'effective' to refer to interventions in which there is some measureable, statistically significant improvement in an outcome for the child, parent or family. In some studies, interventions are reported to be effective when changes are observed in outcomes from before the intervention to after the intervention (i.e., pre to post). For this analysis, we wanted to identify change that is less likely to be due to chance. Therefore we required interventions to demonstrate statistically significant improvements in comparison to other groups of parents/children that did not receive

the same intervention. That is, in order to be referred to as effective in this report, an intervention needed to be tested against a comparison group and to have found statistically significant improvements in at least one outcome compared to the comparison group. However, even the presence of a control group is insufficient to instil confidence that the intervention is actually 'effective' since there is wide variation in the type and quality of studies. Thus, these positive results should ideally have been tested and replicated using RCTs, the type of study with the greatest internal validity (i.e., the findings were less likely to be due to sampling or experimenter bias) and should also have demonstrated maintenance of effect at follow-up rather than simply at the end of treatment (e.g., 6 or 12 months after the end of the intervention).

2. METHODOLOGY

This section provides an overview of the methods used to conduct the review of parenting interventions for vulnerable children and to determine common characteristics and practices across effective interventions. To achieve this, we used a Rapid Evidence Assessment (REA) methodology and a common elements analysis.

While systematic reviews are essential to a true understanding of the evidence associated with effective interventions, they can be costly in terms of the time and personnel required (at least a year to identify, extract and analyse all relevant studies) (Hemingway & Brereton, 2009). Increasingly being recognised as a less rigorous but more practical form of systematic review, Rapid Evidence Assessments (REAs) are emerging as superior alternatives to traditional literature reviews when there are time and staffing limitations. REAs are reviews that use methods to accelerate or streamline traditional systematic review processes, facilitating the synthesis of evidence in an area within a short time period (Ganann, Ciliska & Thomas, 2010). Examples of methods used to make reviews rapid include placing limitations by language and date of publication, limiting the range of electronic databases searched, limiting searches in terms of geographical context and setting to ensure that evidence can be readily applied to the context of interest. Study designs, populations and intervention types can also be limited depending on the research question. REAs can provide quick summaries of what is already known about a topic or intervention, usually taking between 2 to 6 months. REAs use systematic review methods to search and evaluate the literature, but the comprehensiveness of the search may be limited. REAs are particularly useful when there is uncertainty about the effectiveness of a policy or service, or when a decision regarding evidence-based practice is required within months.

The aim of the REA conducted for this project was to determine what interventions have been found to be effective for parents of young vulnerable children, aged up to 6 years who have been exposed to or who are identified as at risk of maltreatment in the form of abuse, neglect or family violence.

2.1 Search strategy

Evaluations of parenting interventions were identified via a systematic search of the following sources:

- Electronic bibliographic databases
- Selected New Zealand websites
- Key reports identified by the Families Commission
- Citations of related studies identified during data extraction

2.1.1 Electronic bibliographic databases

Search terms were developed that were designed to identify papers reporting relevant evaluations of parenting interventions. We used various terms associated with maltreatment, children and parenting interventions. We also used search terms designed to identify studies that used a comparison or control group. The search terms used appear in Box 1.

Box 1. Search terms used in searches of electronic bibliographic databases in the analysis of effective parenting interventions for parents of vulnerable children aged up to 6 years.

(vulnerab* adj3 (infan* or child* or minor* or toddler* or baby or babies))
OR
child abuse/
OR
((intent* or unintent*) adj3 injur* adj3 (infan* or child* or minor* or toddler* or baby or babies))
OR
(at adj1 risk adj3 (infan* or child* or minor* or toddler* or baby or babies))
OR
((physical* or sexual* or emotion*) adj3 abuse* adj3 (infan* or child* or minor* or toddler* or baby* or babies))
OR
((infan* or child* or minor* or toddler* or baby* or babies) adj3 (maltreat* or neglect*))
OR
((troubled or fragile) adj3 (parent* or famil* or infan* or child* or minor* or toddler* or baby or babies)).
AND
(parent* adj3 (program* or train* or educat* or promot* or intervent* or group* or skill* or support*))
OR
(home* adj1 visit* adj3 (program* or train* or educat* or promot* or intervent* or group* or skill* or support*))
AND
(RCT or randomi* or control* trial* or control* clinical or clinical trial* or random* assign* or random* allocat* or control* group* or comparison group* or treat* group* or wait* list* or wait*-list* or control* condition* or quasi-ex* or quasiex* or (control* adj3 intervention) or (control* adj3 treat*))

Search terms were adapted to meet the individual requirements of each electronic bibliographic database. All years were included in the searches but language was limited to English. The following electronic bibliographic databases were searched: Embase and Embase Classic, PsycInfo, MEDLINE, Social Work Abstracts, CINAHL, ERIC, Applied Social Sciences Index and Abstracts (ASSIA), Sociological Abstracts, BIOSIS Citation Index, Social Sciences Citation Index Web of Science, and The Cochrane Library.

2.1.2 New Zealand websites

Selected New Zealand child welfare and government websites were also searched systematically for published and unpublished papers relating to parenting interventions and child maltreatment, abuse and neglect. All relevant documents located were searched for eligible RCTs of parenting interventions and citations of other potential interventions and RCTs. The purpose of this task was to identify additional interventions and evaluations that might add to our pool of effective interventions. A list of sites searched appears in Box 2.

Box 2. New Zealand child welfare and government websites searched for relevant evaluations of parenting interventions for parents of vulnerable children aged up to 6 years.

The Families Commission - http://www.familiescommission.org.nz/
The New Zealand Government - http://newzealand.govt.nz/
The New Zealand Ministry for Social Development - http://www.msd.govt.nz/
Jigsaw Child Protection Services - http://www.jigsaw.org.nz/
The Practice Centre for Child, Youth and Family - http://www.practicecentre.cyf.govt.nz/
Child Matters – Educating to prevent child abuse - http://www.childmatters.org.nz/
The Office of the Children's Commissioner - http://www.occ.org.nz/
Family Court of New Zealand - http://www.justice.govt.nz/courts/family-court
Save the Children New Zealand - http://www.savethechildren.org.nz/
Ministry of Education - http://www.educationcounts.govt.nz/
Te Puni Kōkiri, the Ministry for Māori Development - http://www.tpk.govt.nz/en/
NZ Research - http://nzresearch.org.nz/
Ministry of Justice - http://www.justice.govt.nz
Ministry of Health- http://www.health.govt.nz/

2.1.3 Reports identified by the Families Commission

Reports identified by the Families Commission were searched for potential studies and interventions to be included in the REA. Reference lists of these documents were also searched. These reports were:

- Hendricks, A. K., & Balakrishnan, R. (2005). *Review of Parenting Programmes: A report by the Families Commission,* Research Report No. 2/05. Wellington, New Zealand*: Families Commission.*
- Mikton, C., & Butchart, A. (2009). Child maltreatment prevention: A systematic review of reviews. *Bull World Health Organisation, 87,* 353-361.
- New Zealand Government. (2012a). The white paper for vulnerable children: Volume I. Retrieved from http://www.msd.govt.nz/documents/about-msd-and-our-work/work-programmes/policy-development/white-paper-vulnerable-children/white-paper-for-vulnerable-children-volume-1.pdf
- New Zealand Government. (2012b). The white paper for vulnerable children: Volume II. Retrieved from http://www.msd.govt.nz/documents/about-msd-and-our-work/work-programmes/policy-development/white-paper-vulnerable-children/whitepaper-volume-ii-web.pdf

2.1.4 Citations of related studies

When extracting data from papers, we checked citations for mention of other studies related to the intervention in question. Eligible studies that were not already in the REA were included.

2.2 Paper selection

2.2.1 Abstract screening

Using our definitions of parent, parenting interventions, vulnerable and outcomes, a four-person team was trained by the Manager of Knowledge Synthesis to select papers reporting relevant evaluations. Raters were trained to a minimum of 90% agreement to screen abstracts and identify papers that met these criteria:

- Is it an **evaluation** of an intervention? (exclude commentaries, opinion pieces, editorials)
- Is the population children exposed to **maltreatment** or at risk of maltreatment (child abuse, neglect, family/domestic violence, at-risk, vulnerable)? (exclude interventions for the general population who are not identified as maltreated or at risk of maltreatment)
- Does the population include children aged **prenatal to 6 years**? (exclude studies that clearly state that the intervention is only for teens/adolescents or, for example, 8-10 year olds)
- Does the evaluation involve a **comparison group**? (exclude studies that clearly state that they have used a design that does not involve a comparison, e.g., one group pre-post, one group exploratory with no intervention)

During this screening phase, papers were sorted into one of four groups by reading the abstracts: **accept** because paper appears to be relevant, paper **maybe** relevant, **reject** because paper is not relevant, paper is **of interest** (for e.g., relevant systematic reviews).

2.2.2 Study eligibility

Full text of papers categorised as accept or maybe were then read separately by one of the four raters to determine if they were eligible for inclusion in the REA. The following eligibility criteria were used:

- Is it an **evaluation**? (exclude commentaries, opinion pieces, editorials, reviews etc.)
- Is the population of children exposed to **maltreatment** or at risk of maltreatment (child abuse, neglect, family/domestic violence)? (exclude interventions for the general population who are not identified as maltreated or at risk of maltreatment, excluded papers reporting only unintentional injury, exclude populations that may present with at-risk characteristics – such as drug abuse - but where there is no mention of maltreatment)
- Does the population include children aged **prenatal to 6 years**? (exclude studies that clearly state that the intervention is only for teens/adolescents or, for example, 8-10 year olds)
- Is it an intervention **targeting parents**? See our definition of parenting intervention. (exclude interventions that target children and see our definition for other exclusions)
- Does it use a randomised, quasi-randomised or non-randomised **contemporaneous control group**? (exclude studies without comparison groups or ones that utilize control groups from different time periods)

- Does it **measure and report effect** of the intervention on child, parent or family **outcomes**? (exclude studies that only report satisfaction, process data etc., exclude papers only reporting cortisol as an outcome)

Papers not reporting evaluations of interventions targeting parenting of vulnerable children aged up to 6 years, papers not measuring the effect of the intervention on child, parent or family outcomes and papers not using contemporaneous comparison groups were excluded. To accelerate the review process, we only included papers written in English, and theses, books and conference papers were excluded. Studies including children of a broader age range than the target of this REA (for example 2 to 10 years), were reviewed to determine if analyses adjusted or controlled for age. Those that did not were excluded as it would not be possible to determine the impact of the intervention on our target age group.

2.3 Data extraction

A four-person team was trained by the Manager of Knowledge Synthesis to extract data from eligible papers. Data extracted included: study design, country in which evaluation was conducted, intervention type (refer to definitions provided below), setting of the intervention, criteria for inclusion in and exclusion from the study, participant demographics, information about participant vulnerability, content of the intervention and the mode of delivery, person delivering the intervention, intervention dose, details of the comparison group, outcome domains targeted by the intervention (refer to outcomes framework below for further details), measures used to assess changes in outcomes and intervention effects. Data were extracted by individual members of the team using a data extraction form (see Appendix 1 for a blank data extraction form). More extensive data were extracted from interventions rated Emerging and higher (i.e., interventions with a minimum of one RCT with 6-months maintenance of effect).

2.3.1 Type of intervention

There is great variability in the nature of parenting interventions. To distinguish between types of interventions, we used a three-category system developed in a previous review (Australian Centre for Posttraumatic Mental Health and Parenting Research Centre, 2013) to classify interventions as a program, service model or system of care. These definitions can be found in Box 3.

Box 3. Definitions of different intervention types: programs, systems of care and service models (Australian Centre for Posttraumatic Mental Health and Parenting Research Centre, 2013).

Program

A program is a well-defined curriculum, set of services or interventions designed for the needs of a specific group or population. Programs are often discrete, manualised curriculums or series of actions/tasks/behaviours designed for a particular population to meet particular outcomes, which are usually measurable. Within a program, children, caregivers, guardians (i.e., group or population) receive direct targeted education, training or support or intervention to increase their knowledge, capacity, skills to improve child and family outcomes.

Service Model

A service model is a suite of approaches, programs or practices delivered to a client group by an agency, organisation or service system. Services may be delivered at home (e.g., a home visiting service) or within another setting, however home visiting programs are not always services; for instance, if they are delivered as a structured curriculum they would be considered a program.

System of Care

A system of care is a coordinated network of community-based services and supports. It is a philosophy that promotes program delivery in ways that prioritise the needs of the children, youth and families to function better in various contexts (i.e., school, home, child protection, peers).

2.3.2 Outcomes framework

In order to identify what interventions exist that target outcomes within a particular area, we have adapted an outcomes framework that we developed for a recent analysis of Australian parenting interventions (Wade, Macvean, Falkiner, Devine, & Mildon, 2012). Given the focus on child maltreatment in the current REA, we have added a domain called systems outcomes. This domain relates to outcomes relevant to child maltreatment service systems (see Box 4).

2.4 Rating of intervention effectiveness

Using the data extracted from each paper, interventions were assessed for effectiveness. We based this assessment on a scheme developed for our analysis of Australian parenting interventions (Wade et al., 2012), with modification to take into account the more rigorous study design criteria and focus on effective interventions in the current REA. There are eight categories within our effectiveness rating scheme: Well Supported, Supported and Promising require RCTs with replication and maintenance of effect. Emerging requires one RCT with maintenance of effect to 6-months. Pending requires one RCT with effect. If there were multiple RCTs for an intervention with mixed findings, for e.g., one with positive findings and one with null findings, we rated the intervention according to the RCT with positive findings. If the weight of the evidence was not favourable, such as more than one RCT with null findings, the intervention would have met the criteria for Failed to Demonstrate Effect. Figure 1 outlines the scheme used for rating intervention effectiveness.

Box 4. Outcomes framework for the analysis of effective parenting interventions for parents of vulnerable children aged up to 6 years.

Child development: normative standards for growth and development; antenatal and infant development (e.g. antenatal and parental smoking and mother's alcohol/drug use, foetal and early childhood exposure to trauma or abuse, birth weight, breastfeeding, immunisation); covers prenatal through to 6 years; overall health; temperament; language and cognitive development (e.g. early childhood brain development, pre-academic skills, approaches to learning, successful in reading, writing, literacy and numeracy, problem-solving and decision-making skills, completion of secondary education, academic achievement, school engagement, attachment and retention, truancy, absenteeism); child adaptive behaviour (e.g. self-care skills, motor skills); parent promotion of child health and development; parent knowledge of child development.

Child behaviour: includes both internalising and externalising behaviour difficulties; problem behaviour; consistent parenting; child behaviour management; positive child behaviour and pro-social behaviour; social and emotional development (e.g. mental health, identity, social competence, self-control, self-esteem, self-efficacy, emotional management and expression, trauma symptoms, coping, emotional intelligence); law-abiding behaviour and underage convictions (particularly for adolescents); risk avoidance and risky behaviour (e.g. youth pregnancy, youth suicide, youth smoking, substance use).

Safety and physical wellbeing: includes optimal physical health and healthy lifestyle (e.g. adequate nutrition, free from preventable disease, sun protection, healthy teeth and gums, healthy weight, free from asthma, adequate exercise and physical activity, healthy adult/parent lifestyle); safety (e.g. safe from injury and harm, free from abuse and neglect); stability, material wellbeing and economic security (e.g. ability to pay for essentials, adequate family housing, family income and family social capital); effects of long-term exposure to persistent poverty.

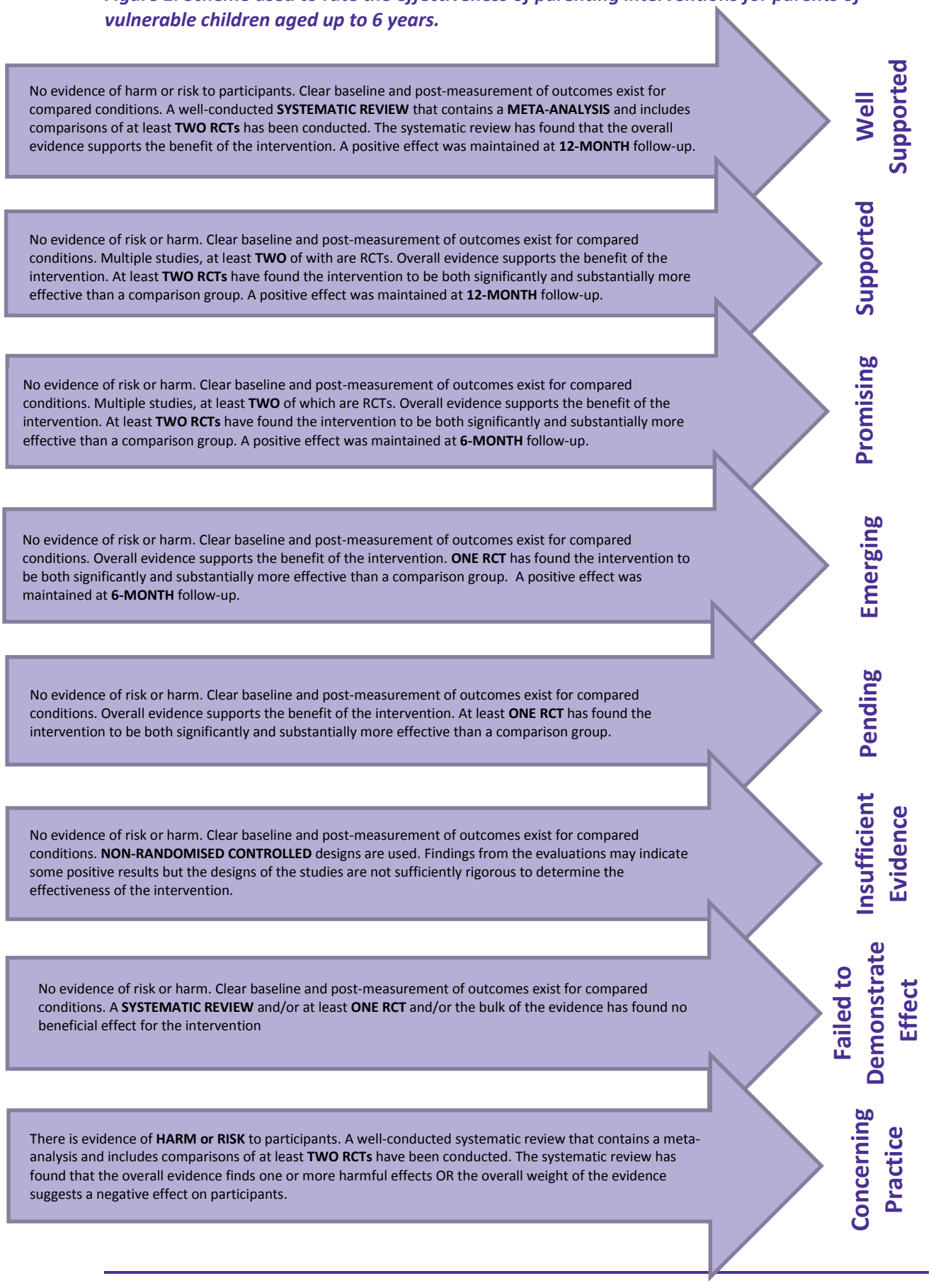
Basic child care: for example, bathing, putting baby to bed, clothing, food and nutrition, child self-care, avoidance of neglect.

Parent-child relationship: includes parent-child interactions (e.g. positive interactions between parents and children, emotional warmth and responsiveness, absence of hostility); consistency and reliability (e.g. children able to rely on supportive adults, providing guidance, providing adequate boundaries); attachment; stimulating learning and development.

Family relationships: includes the parental relationship and relationships between other family members (e.g. child free from exposure to conflict or family violence, positive family functioning, stability in relationships, connection to primary caregiver, connection to family); social relationships and social support (e.g. connection to school and friends, connection to community, connection to culture); family's community participation; community resources; good parental mental health.

Systems outcomes: notification and re-notification to agencies, maltreatment investigations and re-investigation, verified maltreatment investigations and re-investigations, referrals to agencies, presentation to emergency department, help-seeking behaviour, out-of-home care, length of stay, placement stability, maltreatment in care, placement with family, placement in community, placement with siblings, frequency, duration, and quality of parent visitation, level of restrictiveness of care, family reunification/restoration, adoption, re-entry to care, service utilisation, foster parent recruitment and retention, utilisation of kinship care

Figure 1. Scheme used to rate the effectiveness of parenting interventions for parents of vulnerable children aged up to 6 years.



2.4.1 Drawing on the work of existing systematic reviews

Unlike in high quality systematic reviews, the time limitations of this REA prevented an extensive search of the grey literature and it was not possible to contact study authors to obtain further information about their work. To complement the assessment of intervention evaluations identified through electronic bibliographic databases and New Zealand grey literature searches, we located high quality systematic reviews. To identify suitable reviews, we selected reviews that related to parenting interventions, child maltreatment and children aged up to 6 years from our search of bibliographic databases, as described above. We also conducted a targeted search of PsycInfo and MEDLINE using the maltreatment, child and parenting search terms described earlier, but without the filters for comparison or control group. Instead we added (systematic adj1 review*) or (meta-anal*) or (meta adj1 anal*) or (metaanal*) in order to filter for systematic reviews and meta-analyses.

Reviews relating to parenting interventions, maltreatment and children aged up to 6 years were then assessed to determine if they met the following criteria for being high quality systematic reviews:

- They addressed a clearly defined question;
- There was an apriori search strategy and clearly defined inclusion and exclusion criteria;
- They searched a minimum of three databases;
- Grey (unpublished) literature was specifically searched for; and
- There was more than one rater for extraction of study information;

Reviews were also checked to determine if they included meta-analyses. If these criteria were met, the systematic reviews were read to determine if any of the parenting interventions included in the REA were included in the meta-analysis. This enabled us to determine if any of the REA interventions met the criteria for being Well Supported (i.e., there are a minimum of two RCTs, intervention benefit is supported, there is a significant maintenance of effect at 12-month follow-up, and a meta-analysis has found the interventions to be effective).

2.5 Data synthesis

Data extracted from the included studies, along with the effectiveness information was compiled using narrative analysis. Findings were tabulated and described, so that a narrative picture of the interventions and their evaluations are presented (see Results section).

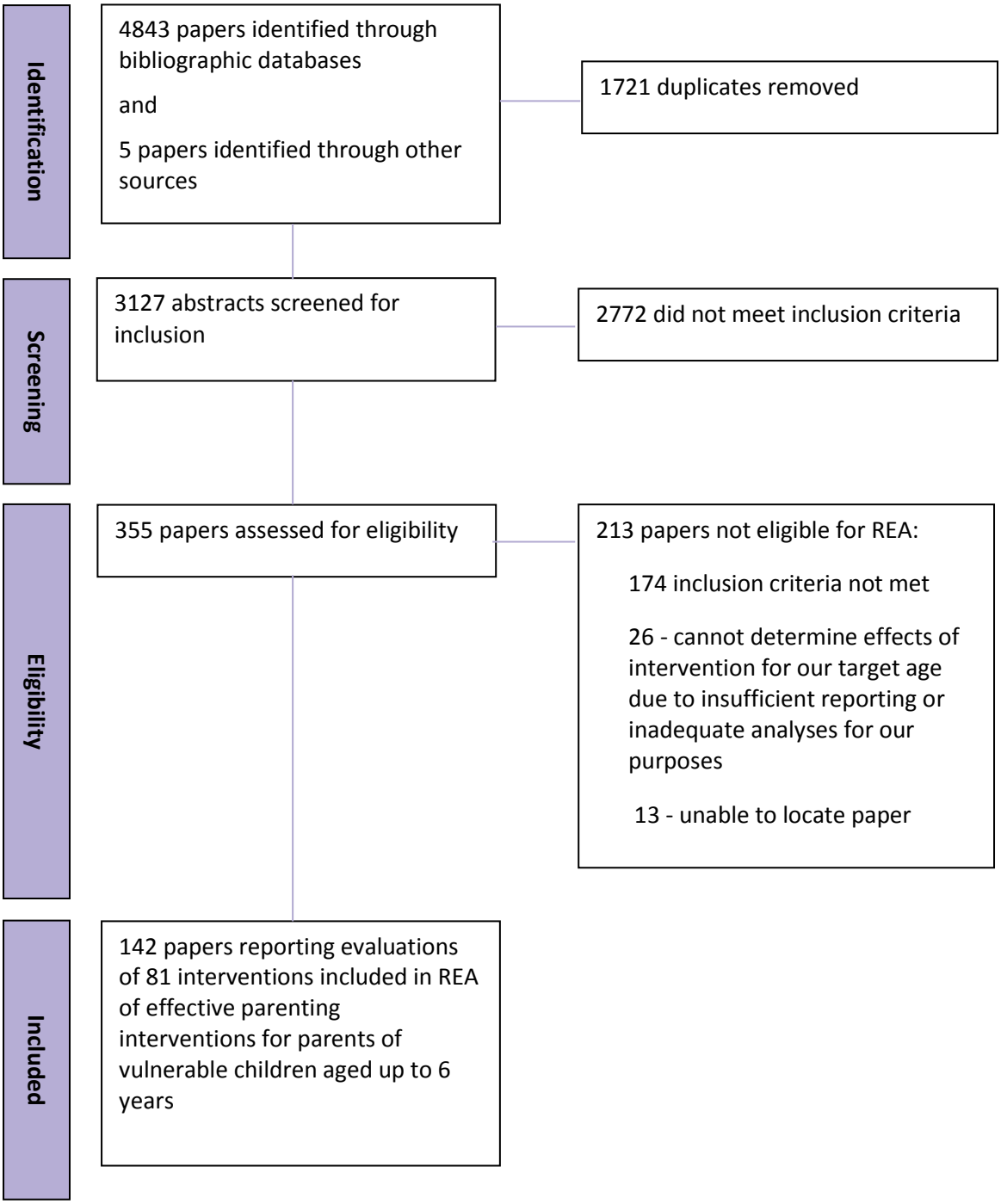
2.6 Common elements analysis

As part of the narrative analysis, we collated individual intervention components for the interventions rated Emerging or higher. These delivery and content components were analysed to determine which elements these effective interventions have in common. The final product is a list of major common elements that are potentially effective for parents and young children exposed to or at risk of maltreatment.

3. RESULTS

Using all sources searched, we identified 142 papers reporting 81 relevant parenting interventions. Figure 2 depicts a flow chart of papers identified in the REA. This section includes intervention effectiveness ratings and descriptions of the parenting interventions, with additional details provided for those rated Emerging and higher (i.e., those with at least one RCT and some maintenance of effect).

Figure 2. Flow of papers through the REA of effective parenting interventions for parents of vulnerable children aged up to 6 years.



3.1.1 Studies excluded from the REA

Twenty-six papers were excluded from the REA (see Table 1), as reliable conclusions concerning the results for children in the target age group could not be drawn. This was due to the inclusion of a broader range in the study and the lack of adequate reporting or analyses precluded any judgements being made about the impact of the intervention on the target group.

Table 1. Papers excluded from the REA because we were unable to determine the outcome on our target age group.

Papers excluded because unable to determine impact on target age
Al-Hassan, S. M., & Lansford, J. E. (2011). Evaluation of the Better Parenting Programme in Jordan. *Early Child Development and Care, 181* (5), 587-598.
Brook, J., McDonald, T. P., & Yan, Y. Q. (2012). An analysis of the impact of the Strengthening Families Program on family reunification in child welfare. *Children and Youth Services Review, 34*, 691-695.
Chaffin, M., Funderburk, B., Bard, D., Valle, L. A., & Gurwitch, R. (2011). A combined motivation and parent-child interaction therapy package reduces child welfare recidivism in a randomized dismantling field trial. *Journal of Consulting and Clinical Psychology, 79*(1), 84-95.
Costas, M., & Landreth, G. (1999). Filial therapy with nonoffending parents of children who have been sexually abused. *International Journal of Play Therapy, 8* (1), 43-66.
DePanfilis, D., & Dubowitz, H. (2005). Family Connections: A Program for Preventing Child Neglect. *Child Maltreatment, 10*(2), 108-123.
Ducharme, J. M., Atkinson, L., & Poulton, L. (2000). Success-based, noncoercive treatment of oppositional behavior in children from violent homes. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(8), 995-1004.
Egan, K. J. (1983). Stress management and child management with abusive parents. *Journal of Clinical Child Psychology, 12*(3), 292-299.
Evans, W., Falconer, M. K., Khan, M., & Ferris, C. (2012). Efficacy of child abuse and neglect prevention messages in the Florida Winds of Change Campaign. *Journal of Health Communication, 17*(4), 413-431.
Fennell, D. C., & Fishel, A. H. (1998). Parent education: an evaluation of STEP on abusive parents' perceptions and abuse potential. *Journal of Child and Adolescent Psychiatric Nursing, 11*(3), 107-120.
Girvin, H., DePanfilis, D., & Daining, C. (2007). Predicting Program Completion among Families Enrolled in a Child Neglect Preventive Intervention. *Research on Social Work Practice, 17* (6), 674-685.
Hakman, M., Chaffin, M., Funderburk, B., & Silovsky, J. F. (2009). Change trajectories for parent-child interaction sequences during parent-child interaction therapy for child physical abuse. [Research Support, N.I.H., Extramural]. *Child Abuse & Neglect, 33*(7), 461-470.

Papers excluded because unable to determine impact on target age
Harder, J. (2005). Prevention of Child Abuse and Neglect: An Evaluation of a Home Visitation Parent Aide Program Using Recidivism Data. *Research on Social Work Practice, 15*(4), 246-256.
Hyde, C., Bentovim, A., & Monck, E. (1995). Some clinical and methodological implications of a treatment outcome study of sexually abused children. *Child Abuse and Neglect, 19*(11), 1387-1397.
Jinich, S., & Litrownik, A. J. (1999). Coping with sexual abuse: development and evaluation of a videotape intervention for nonoffending parents. *Child Abuse & Neglect, 23*(2), 175-190.
Jouriles, E. N., McDonald, R., Rosenfield, D., Stephens, N., Corbitt-Shindler, D., & Miller, P. C. (2009). Reducing conduct problems among children exposed to intimate partner violence: a randomized clinical trial examining effects of Project Support. *Journal of Consulting and Clinical Psychology, 77*(4), 705-717.
Jouriles, E. N., McDonald, R., Rosenfield, D., Norwood, W. D., Spiller, L., Stephens, N., Corbitt-Shindler, D., & Ehrensaft, M. (2010). Improving Parenting in Families Referred for Child Maltreatment: A Randomized Controlled Trial Examining Effects of Project Support. *Journal of Family Psychology, 24*(3), 328-338.
Kelley, M. L., & Fals-Stewart, W. (2002). Couples-versus individual-based therapy for alcohol and drug abuse: Effects on children's psychosocial functioning. *Journal of Consulting and Clinical Psychology, 70*(2), 417-427.
Knox, M. S., Burkhart, K., & Hunter, K. E. (2011). ACT Against Violence Parents Raising Safe Kids Program: Effects on Maltreatment-Related Parenting Behaviors and Beliefs. *Journal of Family Issues, 32*(1), 55-74.
Kolko, D. J. (1996). Clinical monitoring of treatment course in child physical abuse: Psychometric characteristics and treatment comparisons. *Child Abuse and Neglect, 20*(1), 23-43.
Letarte, M.-J., Normandeau, S., & Allard, J. (2010). Effectiveness of a parent training program 'Incredible Years' in a child protection service. *Child Abuse & Neglect, 34*(4), 253-261.
Lovell, M. L., & Richey, C. A. (1997). The impact of social support skill training on daily interactions among parents at risk for child maltreatment. *Children and Youth Services Review, 19*(4), 221-251.
Luthar, S. S., Suchman, N. E., & Altomare, M. (2007). Relational Psychotherapy Mothers' Group: a randomized clinical trial for substance abusing mothers. *Development and Psychopathology, 19*(1), 243-261.
Meezan, W., & O'Keefe, M. (1998a). Evaluating the effectiveness of multifamily group therapy in child abuse and neglect. *Research on Social Work Practice, 8*(3), 330-353.
Meezan, W., & O'Keefe, M. (1998b). Multifamily group therapy: impact on family functioning and child behavior. *Families in Society, 79*(1), 32-44.
Portwood, S. G., Lambert, R. G., Abrams, L. P., & Nelson, E. B. (2011). An Evaluation of the Adults and Children Together (ACT) Against Violence Parents Raising Safe Kids Program. *Journal of Primary Prevention, 32*(3-4), 147-160.

Papers excluded because unable to determine impact on target age
Wolfe, D. A. (1981). A Competency-Based Parent Training Program for Child Abusers. *Journal of Consulting and Clinical Psychology, 49*(5), 633-640.

3.2 Intervention effectiveness

3.2.1 Incorporating the findings of high quality systematic reviews

We located reviews and meta-analyses identified through our search of bibliographic databases and in the targeted systematic review and meta-analysis search of PsycInfo and MEDLINE. Twenty-six reviews were found that related to maltreatment and/or parenting and that included studies relevant to our target age (see Table 2). These were then rated against our criteria for 'systematic' as described in section 3, and checked to see if they involved meta-analyses.

Table 2. Assessment of the quality of reviews related to child maltreatment and parenting.

Review	Systematic criteria met and involved meta-analysis
Allin, H., Wathen, C. N., & MacMillian, H. (2005). Treatment of child neglect: A systematic review. *Canadian Journal of Psychiatry-Revue Canadienne De Psychiatrie 50*(8), 497-504.	NO
Barlow, J., & Coren, E. (2001). Individual and group-based parenting programmes for improving psychosocial outcomes for teenage parents and their children. *Cochrane Database of Systematic Reviews, 3*.	YES
Barlow, J., Johnston, I., Kendrick, D., Polnay, L., & Stewart-Brown, S. (2006). Individual and group-based parenting programmes for the treatment of physical child abuse and neglect. *Cochrane Database of Systematic Reviews, 3.*	NO
Bilukha, O., Hahn, R. A., Crosby, A., Fullilove, M. T., Liberman, A., Moscicki, E., Snyder, S., Tuma, F., Corso, P., Schofield, A., & Briss, P. A. (2005). The Effectiveness of Early Childhood Home Visitation in Preventing Violence: A Systematic Review. *American Journal of Preventive Medicine, 28*(2, Supp1), 11-39.	YES
Carr, A. (2009). The effectiveness of family therapy and systemic interventions for child-focused problems. *Journal of Family Therapy, 31* (1), 3-45.	NO
Cohen, J. A., Mannarino, A. P., Murray, L. K., & Igelman, R. (2006). Psychosocial Interventions for Maltreated and Violence-Exposed Children. *Journal of Social Issues, 62*(4), 737-766.	NO
Corcoran, J., & Pillai, V. (2008). A Meta-Analysis of Parent-Involved Treatment for Child Sexual Abuse. *Research on Social Work Practice, 18*(5), 453-464.	YES

Review	Systematic criteria met and involved meta-analysis
Coren, E., Hutchfield, J., Thomae, M., & Gustafsson, C. (2010). Parent training support for intellectually disabled parents. *Cochrane Database of Systematic Reviews, 6*.	NO
Feldman, M. A. (1994). Parenting education for parents with intellectual disabilities: a review of outcome studies. *Research in Developmental Disabilities, 15*(4), 299-332.	NO
Geeraert, L., Van den Noortgate, W., Grietens, H., & Onghena, P. (2004). The Effects of Early Prevention Programs for Families With Young Children At Risk for Physical Child Abuse and Neglect: A Meta-Analysis. *Child Maltreatment, 9*(3), 277-291.	YES
Johnson, M., Stone, S., Lou, C., Ling, J., Claassen, J., & Austin, M. J. (2008). Assessing parent education programs for families involved with child welfare services: evidence and implications. *Journal of Evidence-Based Social Work, 5*(1-2), 191-236.	NO
Kendrick, D., Elkan, R., Hewitt, M., Dewey, M., Blair, M., Robinson, J., Williams, D., & Brummell, K. (2000). Does home visiting improve parenting and the quality of the home environment? A systematic review and meta analysis. *Archives of Disease in Childhood, 82*(6), 443-451.	YES
Lundahl, B. W., Nimer, J., & Parsons, B. (2006). Preventing Child Abuse: A Meta-Analysis of Parent Training Programs. *Research on Social Work Practice, 16*(3), 251-262.	NO
MacLeod, J., &Nelson, G. (2000). Programs for the promotion of family wellness and the prevention of child maltreatment: A meta-analytic review. *Child Abuse & Neglect, 24*(9), 1127-1149.	YES
MacMillan, H. L., MacMillan, J. H., Offord, D. R., Griffith, L., & MacMillan, A. (1994). Primary prevention of child physical abuse and neglect: A critical review. Part I. *Journal of Child Psychology and Psychiatry, 35*(5), 835-856.	NO
MacMillan, H. L., MacMillan, J. H., Offord, D. R., Griffith, L., & MacMillan, A. (1994). Primary prevention of child sexual abuse: A critical review. Part II. *Journal of Child Psychology and Psychiatry, 35*(5), 857-876.	NO
Niccols, A., Milligan, K., Smith, A., Sword, W., Thabane, L., & Henderson, J. (2012). Integrated programs for mothers with substance abuse issues and their children: A systematic review of studies reporting on child outcomes. *Child Abuse & Neglect, 36*(4), 308-322.	YES
Olds, D. L., & Kitzman, H. (1990). Can home visitation improve the health of women and children at environmental risk? *Pediatrics, 86*(1), 108-116.	NO
Peacock, S., Konrad, S., Watson, E., Nickel, D., & Muhajarine, N. (2013). Effectiveness of home visiting programs on child outcomes: a systematic review. *BMC Public Health, 13*.	NO

Review	Systematic criteria met and involved meta-analysis
Roberts, I., Kramer, M. S., & Suissa, S. (1996). Does home visiting prevent childhood injury? A systematic review of randomised controlled trials. *British Medical Journal*, *312*(7022), 29-33.	YES
Selph, S. S., Bougatsos, C., Blazina, I., & Nelson, H. D. (2013). Behavioral Interventions and Counseling to Prevent Child Abuse and Neglect: A Systematic Review to Update the U.S. Preventive Services Task Force Recommendation. *Annals of Internal Medicine, 158*(3), 179.	NO
Shaw, E., Levitt, C., Wong, S., Kaczorowski, J., & The McMaster University Research Group. (2006). Systematic Review of the Literature on Postpartum Care: Effectiveness of Postpartum Support to Improve Maternal Parenting, Mental Health, Quality of Life, and Physical Health. *Birth: Issues in Perinatal Care, 33*(3), 210-220.	NO
Smith, T. K., Duggan, A., Bair-Merritt, M. H., & Cox, G. (2012). Systematic review of fathers' involvement in programmes for the primary prevention of child maltreatment. *Child Abuse Review, 21*(4), 237-254.	NO
Sweet, M. A., & Appelbaum, M. I. (2004). Is home visiting an effective strategy? A meta-analytic review of home visiting programs for families with young children. *Child Development, 75*(5), 1435-1456.	YES
Turnbull, C., & Osborn, D. A. (2012). Home visits during pregnancy and after birth for women with an alcohol or drug problem. *Cochrane Database of Systematic Reviews, 1*.	YES
Wekerle, C. & Wolfe, D. A. (1993). Prevention of child physical abuse and neglect: Promising new. *Clinical Psychology Review, 13*(6), 501-540.	NO

Of the 26 reviews relating to maltreatment and parenting, 11 met our selection criteria. These 11 systematic reviews including meta-analyses were searched for evaluations of relevant interventions. This information was used to complement the results of our REA, in particular the ratings of intervention effectiveness.

3.2.2 Intervention effectiveness ratings

Data extracted from the papers and evaluations found in the systematic reviews with meta-analyses were compiled to form effectiveness ratings of the parenting interventions. Of the 81 interventions assessed (refer to Table 3), one was rated Well Supported, four were rated Supported, none were rated Promising, 7 were rated Emerging, and 38 were rated Pending. We found ten interventions that Failed to Demonstrate Effect and a further 21 interventions that presented Insufficient Evidence required in order to rate their effectiveness. No interventions were rated as a Concerning Practice. The identified interventions are described below, grouped by effectiveness rating. Where there was no clear intervention name, we have provided a brief description and indicated so. Additional information is provided for the interventions that can be considered more effective (i.e., those with effect and maintenance). For a list of all included interventions, corresponding ratings, and papers reporting these interventions, please refer to Appendix 2.

Table 3. Number of interventions rated in each effectiveness category in the analysis of effective parenting programs for parents of vulnerable children aged up to 6 years.

Effectiveness Rating	Number of Interventions
Well Supported	1
Supported	4
Promising	0
Emerging	7
Pending	38
Insufficient Evidence	21
Failed to Demonstrate Effect	10
Concerning Practice	0

3.3 Effective interventions

In order to be considered potentially 'effective' in this REA, interventions needed to demonstrate effect in at least one RCT and for the effect to maintain for least 6 months after the intervention has ceased. These criteria ensured that the interventions were tested using rigorous designs and that the effects were maintained once the participants were no longer receiving the intervention. Ideally, we would like to see results replicated in at least one more RCT, however the small pool of rigorous evaluations required some flexibility regarding what would be considered 'effective'. Interventions rated Well Supported, Supported, Promising or Emerging are considered potentially 'effective' for the purpose of this REA (*n* = 12). Summaries of the effective interventions appear in Appendix 3. In these summaries you will find: country, intervention type, population and outcomes targeted, delivery and content details and results.

3.3.1 Well Supported intervention

In order to receive a rating of Well Supported, interventions needed to have been included in a systematic review involving a minimum of two RCTs, meta-analysis and 12-month follow-up. They needed to demonstrate a significant effect over the control condition at 12-months after the intervention had ceased. Our analysis of the included systematic reviews identified one intervention that met these criteria: Nurse-Family Partnership (NFP). A tabulated summary of NFP intervention delivery, content and results appears in Appendix 3. Data extracted from NFP papers can be found in Appendix 4.

Nurse-Family Partnership (NFP)

Intervention elements

NFP is a long-running home visitation program from the USA developed by David Olds. Participation commences in the second trimester of pregnancy and is offered to vulnerable parents such as adolescents, single-parents, parents of low socio-economic status or with little education. Individual parents are visited in the home during the antenatal and postnatal period by nurses. The program is delivered in less than 10 prenatal sessions and an average of 20-25 postnatal sessions, each lasting for just over one hour. Participation ceases when the child reaches two years of age. The program targets outcomes across all seven of the outcome domains listed in our framework in Box 3. The aim of NFP is to prevent or reduce negative child outcomes, including maltreatment, by providing education to at-risk mothers during pregnancy and in their first child's early years.

In this intervention, nurses work directly with mothers. The intervention is delivered to parents by linking families to needed services, housing, income and nutritional assistance, as well as to child care and educational vocational training. Parents developed individualised service plans and the nurses help to clarify parent goals. Parents are provided with problem solving skills, praise and encouragement. Structured session guidelines are used and there are plans for each visit. Information covered in the visits includes health-related behaviour during pregnancy and the early childhood years, care parents provide to their children, and maternal personal life course development information such as family planning, education achievements and participation in the workforce.

Evaluation findings

The program has been evaluated extensively since its inception in the 1980s. This REA identified 15 USA papers, including 3 RCTs, in which the program has been compared to treatment as usual, as well as paraprofessional-delivery home visitation. See Appendix 3 for a summary of results. The longest running RCT compared prenatal home visits only (group 3), pre and postnatal home visits (group 4) and a control sample who were provided with some developmental screening and transportation assistance (groups 1 and 2 combined) (Olds, Henderson, Chambelin, & Tatelbaum, 1986; Olds, Henderdson, & Kitzman, 1994; Olds, Henderson, Kitzman, & Cole, 1995; Olds, Eckenrode, Henderson, Kitzman, Powers, Cole, Sidora, Morris, Pettitt, & Luckey, 1997; Olds, Henderson, Cole, Eckenrode, Kitzman, Luckey, Pettitt, Sidora, Morris, & Powers, 1998; Eckenrode, Ganzel, Henderson, Smith, Olds, Powers, Cole, Kitman, & Sidora, 2000; Eckenrode, Zielinkski, Smith, Marcynyszyn, Henderson, Kitzman, Cole, Powers, & Olds, 2001; Zielinkski, Eckenrode, & Olds, 2009). Olds and colleagues (1986) reports that at 22 months of age (i.e., near completion of the intervention for group 4), a subgroup of parents who were poor and unmarried in group 4 showed significantly less restriction and punishment of their children and had a larger number of appropriate play materials than parents in the control group. By 2 years, participants in group 4 had significantly fewer visits to the emergency room than those in the control group (Olds, et al., 1986).

Positive post program effects were also reported by Olds and colleagues (1994; 1995). When children were 46 months old, families in group 4 had significantly fewer hazards in the home and less avoidable punishment than those in the control group. When the children were aged between 25 and 60 months, group 4 had significantly better outcomes than controls for behavioural coping problems, number of visits to the emergency department and number of days in hospital. Although the program demonstrated clear benefits in these early few years, no

significant differences were found between intervention and control groups substantiated reports of maltreatment, abuse or neglect notifications, the presence of maltreatment, combinations of types of maltreatment or the extent to which children were removed from their homes (Olds et al., 1994; 1995).

However, children in this study were reassessed at 15 years and it was found that there were significantly fewer substantiated reports of child abuse and neglect in group 4 when compared to the control group (Olds et al., 1997) and there was a significant reduction in maltreatment reports in group 4 compared to the control group (Eckenrode et al., 2001). In addition, in Olds and colleagues (1997) a subgroup analysis comparing the control group with lower SES, unmarried mothers in group 4, found that the subgroup had significantly less substance use, fewer arrests, fewer convictions, fewer days in jail, fewer subsequent pregnancies and births for the mother, more months between births, and less months receiving Aid to Families with Dependent Children and food stamps.[1]

Also at 15 years (Olds et al., 1998), participants in groups 3 and 4 had significantly fewer incidence of being stopped by the police than the control group, as well as significantly fewer arrests and fewer convictions. Further subgroup analyses with low SES, unmarried mothers found that this subgroup had significantly better outcomes than controls for incidence of running away (both group 3 and 4), incidence of days drinking alcohol, incidence of sex partners (group 4), and incidence of days using drugs (group 3).[2]

Further positive 15-year intervention effects were observed by Eckenrode and colleagues (2000), in which outcomes for group 4 and controls were compared. Group 4 participants had significantly fewer Child Protection Services (CPS) reports: involving mothers as perpetrators; involving the study child; of neglect without abuse; and of abuse without neglect. Also at 15 years, there were significantly fewer reports of maltreatment and neglect for group 4 compared to the control group (Zielinski et al., 2009). These significant differences between groups only started to show up when the children were older. Effects were not observed in the early years of the evaluation.

Two additional RCTs reporting short-term benefits of NFP were included in the REA (Kitzman, Olds, Henderson, Hanks, Cole, Tatelbaum, McConnochie, Sidora, Luckey, Shaver, Engelhardt, James, & Barnard, 1997; Olds, Robinson, O'Brien, Luckey, Pettitt, Henderson, Ng, Sheff, Korfmacher, Hiatt, & Talmi, 2002). Mothers in groups 3 and 4 were found to have significantly fewer yeast infections at 36 weeks of pregnancy and to have less hypertension at labour than those in the control group. Furthermore, at 2 years, those in group 4 compared to group 2 (transportation assistance and developmental screening), had significantly fewer healthcare visits for injuries or ingestions, less days in hospital, more attempts at breastfeeding, fewer subsequent pregnancies and births and greater mastery.

Olds and colleagues (2002) reported the findings of an RCT in which they tested the delivery of NFP with a paraprofessional, against the usual nurse-delivered method, and a control. At 6 months, children in the nurse-delivered group were significantly less likely to be vulnerable

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[1] *Please note: findings from subgroup analyses within RCTs and other studies do not provide the same high level external validity as hypotheses that were specifically tested as part of the evaluation design. This particular finding requires further testing as NFP continues to be evaluated over time and should be treated with cautious optimism.*

[2] *See previous footnote regarding subgroup analyses.*

compared to the control (assessed using fear stimulus). At 21 months, the nurse group were significantly less likely than the controls to have language delays and by 24 months the nurse group were less likely to have delayed mental development. At 2 years, the nurse delivered group had significantly fewer pregnancies and births than the controls. This suggests that the standard nurse-delivered model of NFP is favourable to delivery by a paraprofessional.

3.3.2 Supported interventions

Supported interventions needed to be tested in a minimum of two RCTs. Effects favouring the intervention over the control needed to be observed in both RCTs and effects needed to maintain to 12-months in at least one of these RCTs. In this REA, we rated four interventions Supported: Attachment and Biobehavioral Catch-up (ABC); Parent-Child Interaction Therapy (PCIT); SafeCare; and Triple P Positive Parenting Program – Standard and Enhanced Group Behavioural Family Interventions. A tabulated summary of Supported intervention delivery, content and results appears in Appendix 3. Data extracted from Supported intervention papers can be found in Appendix 5.

Attachment and Biobehavioral Catch-up (ABC)

Intervention elements

ABC is a program for children under the age of 6 years who are at risk of maltreatment or those who have been maltreated. It is delivered to individual parent/carer-child dyads in the home or foster home and targets child development, child behaviour and the parent-child relationship. The program is delivered by a professional in 10 sessions. Refer to Appendices 3 and 5 for intervention details and evaluation results.

In ABC, participants receive written material in the form of a manual. They are videotaped during structured activities with the children and provided with performance feedback based on the videotapes. There is also discussion between the professional and the caregiver. Information conveyed during the interventions includes teaching caregivers how to reinterpret children's alienating behaviour, nurturance in response to child distress, how to manage caregiver negative reactions when the child displays negative behaviours, synchronous parent-child interactions and how to provide a predictable environment for the child.

Evaluation findings

Four RCTs that evaluated the effectiveness of ABC were identified in the current REA. All were conducted in the USA. Sprang (2009) reported immediate post-intervention benefits. Participants in the intervention had significantly less child abuse potential, child internalising and externalising behaviour problems and parental stress, when compared to the waitlist controls. In studies comparing ABC to an alternate treatment of Developmental Education for Families, one-month follow-up results suggest significant gains for the intervention but not comparison group for: child behaviour problems (Dozier, Peloso, Lindhiem, Gordon, Manni, Sepulveda, Ackerman, Bernier, & Levine, 2006); avoidance attachment behaviour (Dozier, Lindhiem, Lewis, Bick, Bernard, & Peloso, 2009); and disorganised attachment and secure attachment (Bernard, Dozier, Bick, Lewis-Morrarty, Lindhiem, & Carlson, 2012).

Longer term program effects (2 year follow-up) were reported by Lewis-Morrarty, Dozier, Bernard, Terracciano, & Moore (2012). Children in ABC had significantly higher scores of cognitive flexibility and theory of mind than the foster-care control group. Also, foster-care

controls, who did not participate in ABC, had significantly lower theory of mind than a comparison group of non-foster care children.

Parent-Child Interaction Therapy (PCIT)

Intervention elements

PCIT is a program that specifically targets the relationship between parents and children. Refer to Appendix 3 for a summary of PCIT and to Appendix 5 for data extracted from PCIT papers. Three RCTs were found in this REA in which PCIT was delivered to families with children aged up to 6 years at risk of maltreatment or with a history of maltreatment. The intervention is delivered by a professional to individual parent-child dyads in a health setting or the home. The outcome domains targeted in PCIT are child behaviour, safety and physical wellbeing and parent-child relationships. In two Australian RCTs (Thomas, & Zimmer-Gembeck, 2011; 2012) involving children at risk, an average of 14-17 sessions were delivered, whereas in an RCT conducted in the USA for children who had experienced maltreatment, parents participated in 22-24 sessions (Chaffin, Silovsky, Funderburk, Valle, Brestan, Balachova, Jackson, Lensgraf, & Bonner, 2004).

PCIT involves didactic presentation to parents, as well as direct coaching of parents while they are interacting with their children. Parents are provided with praise for appropriate responses to child behaviour and there is immediate remediation for inappropriate responses to child behaviour. Treatment continues until parents achieve Mastery criteria in which they successfully and consistently demonstrate strategies learned and express a clear understanding of their own change and their role within the family system. Content delivered in PCIT relates to child behaviour management, such as the use of labelled praise, reflecting or paraphrase the children's appropriate talk, use of behavioural descriptions to describe the child's positive behaviour. Other content includes avoiding the use of commands, questions or criticism, effective instructions and commands, and following through on direct commands via labelled praise or time out.

Evaluation findings

Participants in PCIT had the following significant gains when compared to a control group at 12 weeks: reduced child externalising problems, reduced behaviour intensity, and reduced stress (Thomas & Zimmer-Beck, 2011). These benefits were also reported in Thomas and Zimmer-Beck (2012) in an RCT that compared standard PCIT to a control group as well as time-variable PCIT. At post, the standard PCIT group had significantly better results than the other groups for: child behaviour problems and intensity, child internalising and externalising behaviour, parent stress, parent verbalisations, and parental sensitivity. However, at 12 weeks, Thomas and Zimmer-Beck (2011) found no significant difference between PCIT and controls for child abuse potential.

Long term PCIT outcomes were reported by Chaffin et al. (2004). Chaffin and colleagues (2004) compared standard PCIT, a control condition, and PCIT plus individualised enhanced services and found that parents in the standard group had fewer re-reports of physical abuse than the other two conditions at 2.3 years. Both PCIT groups faired significantly better than the controls for negative parent behaviours.

SafeCare

Intervention elements

SafeCare is a service model delivered in the home by professionals to individual families. See Appendix 3 for a summary of SafeCare and to Appendix 5 for data extracted from SafeCare

papers. SafeCare targets outcomes in all of the domains in our framework, with the exception of child behaviour. The service commences with an assessment of parent skills using observations and checklists. Parenting skill deficits are taught via active skills training, verbal instructions, discussion, modelling, role-play, feedback and praise. Parents are given homework tasks and skills are taught to Mastery criteria in both simulations and in actual interactions. Content delivered in SafeCare includes information on parent-infant interactions, basic caregiving structures, parenting routines, home safety (such as assessing the home for hazards and teaching parents to remove hazards and child-proof the home) and child health care. Planned activities training is also included whereby the parents are taught time management, explaining rules to children, reinforcement, incidental teaching, preparing activities, discussing outcomes and explaining expectations to children.

Evaluation findings

Two SafeCare RCTs conducted in the USA were identified in the REA. One study targeted caregivers of children under 5 years of age presenting with risk factors such as substance abuse, mental health issues or intimate partner violence (Silovsky, Bard, Chaffin, Hecht, Burris, Owora, Beasley, Doughty, & Lutzker, 2011). These authors found significantly fewer reports of domestic violence in the intervention group compared to the control group at completion of the service.

In another US RCT (Chaffin, Hecht, Bard, Silovsky, & Beasley, 2012), SafeCare was delivered in the same mode to families with a history of maltreatment, with children aged less than 12 years. The service lasted for 6 months. Follow-up at 7 years indicated that recidivism rates for the treatment group were significantly lower than for the control group.

Triple P Positive Parenting Program – Standard and Enhanced Group Behavioural Family Interventions

Intervention elements

Triple P is a well-researched Australian-developed program that was originally designed for parents of children with behavioural problems and has since been adapted for other groups of parents. Refer to Appendix 3 for a summary of this intervention and evaluation results and to Appendix 5 for data extracted from Triple P papers. This REA located two Australian-conducted RCTs involving Standard and Enhanced Group Behavioural Family Intervention versions of Triple P. The program is delivered by a professional and targets child development, child behaviour and the parent-child relationship.

In a study by Sanders, Pidgeon, Gravestock, Connors, Brown, and Young (2004), parents with a history of maltreatment were specifically targeted and the intervention was designed to assist with anger control. The mean age of children in this study was 4 years. In this study, Standard Triple P involved four weekly group sessions delivered in the community plus four individual telephone calls. The intervention was delivered by discussion, goal setting, modelling, rehearsal, practice, feedback and developing set goals for behavioural change. Intervention content included child behaviour management with 10 strategies for promoting children's competence and seven strategies for managing misbehaviour (refer to Appendix 3 for a list of strategies). There was also planning ahead for high risk situations in relation to difficult child behaviour, which was referred to as planned activities training. Enhanced Triple P involved all of the above plus four additional group sessions in the community and cognitive re-framing in relation to negative parental attributions about child behaviour. Anger management was also covered using physical, cognitive and planning strategies.

In another study by Sanders, Markie-Dadds, Tully, & Bor (2000) and Sanders, Bor, and Morawska (2007) parent participants had a mental illness and had reported feeling concerned about their child's behaviour. Children in this study were, on average, 3 years of age. Sanders and colleagues (2000) also compared Standard to Enhanced Triple P, along with Self-Directed Triple P and a waitlist sample. Standard Triple P in this study involved an average of 10 weekly individual sessions, half of which were delivered a clinic and half at home. They provided written material in the form of a workbook, as well as verbal instructions about how to use the written material. Discussion, modelling, role-play, feedback and homework tasks were also used. As in Sanders et al. (2004), the intervention content involved 17 child behaviour management strategies and planning for high risk situations. Enhanced Triple P involved an average of 12 weekly individual sessions, half in a clinic and half at home. In addition to the delivery and content in the Standard version, delivery was individualised for each family (e.g., amount of time spent on active skills training varied across families). Partner support for couples was also provided, such as positive listening and speaking, strategies for building a caring relationship. Coping skills information for couples was provided including assistance with personal adjustment difficulties such as depression, anger, anxiety and stress. For single parents, social support was provided via a significant other such as a sister or mother.

Evaluation findings

Results of the study by Sanders et al. (2004) indicate that immediately post intervention, the Triple P Enhanced parents had significantly lower negative parental attribution when compared to Triple P Standard group however this effect did not maintain at 6-month follow-up.

In the study reported by Sanders et al. (2000), the Standard and Enhanced groups compared to the waitlist at post had significantly better outcomes for negative child behaviour, parents' perception of disruptive behaviour in the child, parents' reports of problem child behaviour, parents' reports of dysfunctional discipline style, and mothers' sense of competency. Many of these outcomes for the Enhanced and Standard groups are also significantly better than those in the Self-Directed group, and the Self-Directed group also has some significant gains over the waitlist sample. Unfortunately longer-term comparison to the waitlist sample was not possible as this group commenced participation in the program.

At 12 month follow-up, there were significantly fewer parent reports of negative child behaviour in the Enhanced group, compared to the Self-Directed group (Sanders et al., 2000). This effect was also observed for the Standard group and there was no significant difference between the Standard and Enhanced groups on this measure suggesting no benefit of the Enhanced version over the Standard version. Also at 12-months, observations of mother and child behaviour revealed a significant post to 1-year decrease in intervals of child negative behaviour for the Self-Directed group. The same was not observed for the Enhanced or Standard groups. By 3 years (Sanders et al., 2007), all three treatment groups maintained treatment gains, but there were no significant differences between the groups.

3.3.3 Promising interventions

To be rated Promising, interventions needed have been tested in a minimum of two RCTs and to demonstrate pre-post effect over the comparison condition in both of these. Effect needed to be maintained until at least 6-months post completion of the intervention in one of these RCTs. We identified no interventions in the 'Promising' category in this REA.

3.3.4 Emerging interventions

To receive a rating of Emerging, interventions needed to demonstrate a significant effect over the comparison group in at least one RCT, plus this effect needed to be maintained until at least the 6-month follow-up. Unlike the interventions rated Promising and above, the Emerging interventions demonstrated no replication of effect. While these interventions may be effective in improving child, parent or family outcomes in these single studies, benefits must be reproduced with another sample before the intervention is upgraded to promising or better. Seven Emerging interventions were identified in this REA: Child FIRST; Child-Parent Psychotherapy (CPP); Cognitive Behavioral Therapy for Sexually Abused Preschoolers (CBT-SAP); Early Intervention Foster Care Program (EIFC); Early Start; Parent training prevention model (description not name); and Parents Under Pressure (PUP). Tabulated summaries of the delivery, content and results of Emerging interventions can be found in Appendix 3. Data extracted from Emerging intervention papers can be found in Appendix 6.

Child FIRST

Intervention elements

Child FIRST is a system of care that targets children aged between 6 months and 3 years with emotional and behaviour problems where the parents are at psychosocial risk. See Appendices 3 and 6 for details. Child FIRST targets all of the outcome domains in our framework and is delivered by a professional in 24 weekly home-based sessions to individual parents. The intervention commences with a child and family assessment conducted in partnership between a clinician, a care coordinator and the parents, with other service providers involved as needed. A family plan is developed outlining supports and services for all family members and this is focused on family priorities, strengths, culture and needs. The home visiting component of the service is guided by parental need rather than a set curriculum. Families are also linked in with appropriate services, such as mental health, health and early care, early intervention, education, child protection and social and concrete services.

To meet the families' concrete needs there is observation of the child's emotional, cognitive and physical development, as well as observations of parent-child interactions. Psychoeducation is provided regarding developmental stages, expectations and the meaning of typical behaviours. Information is provided to assist parents to understand the child's feelings and the meaning of the child's unique and challenging behaviours, as well as the mother's history, feelings and experiences of the child. Alternative perspectives of child behaviour and new parental responses are presented. The use of positive reinforcement of parent and child strengths is taught as a means of promoting parental self-esteem.

Evaluation findings

A study from the USA reported effects for the intervention group over the control group at 12 month follow-up (Lowell, Carter, Godoy, Paulicin & Briggs-Gowan, 2011). The intervention group had a significantly smaller percentage of children with language, social and emotional problems and the parents had significantly fewer psychiatric symptoms and less stress.

Child-Parent Psychotherapy (CPP)

Intervention elements

CPP is a program for children aged 3 to 5 years where there is domestic, family or intimate partner violence. Refer to Appendix 3 for a summary of the program and to Appendix 6 for data extracted from CPP papers. CPP targets child development, child behaviour, safety and physical wellbeing, parent-child relationships and family relationships. Professionals deliver the intervention to individual parent-child dyads in an average of 32 sessions over 50 weeks.

Initial sessions focus on assessment, followed by the communication of assessment findings with the mother. Individualised treatment plans are developed and program content is discussed. Content includes information about parent-child relationships, safety in the environment, promoting safe behaviour and setting appropriate limits. Parents also taught about self-regulation such as developing guidance regarding how children regulate affect and emotional reactions, support and label affective experiences, support parent's skills to respond in helpful, soothing ways when the child is upset. Reciprocity in relationships is covered in the program, including, reinforcing the parent and highlight parent's and child's love and understanding of each other, supporting the expression of positive and negative feelings for important people and developing interventions to change maladaptive patterns of interactions.

In this intervention, there is also a focus on traumatic events. Parents are helped to acknowledge what their child has witnessed and remembered, and the parent and child are encouraged to understand each other's perspective on the trauma. Participants are provided with developmental guidance acknowledging response to trauma, to make linkages between past experiences and current thoughts, feelings and behaviours. Parents are also helped to understand the link between their own experiences and current feelings and parenting practices. The difference between past and present circumstances is highlighted. Parents and children are supported in creating a joint narrative. Also, behaviours that help parent and child master the trauma and gain new perspective are reinforced.

CPP content also focuses on continuity of daily living, such as fostering pro-social adaptive behaviour, fostering efforts to engage in appropriate activities, and fostering development of a daily routine.

Evaluation findings

A USA evaluation found that at post, the intervention group had significantly better results for traumatic stress disorder and avoidant behaviour when compared to the control group (Lieberman, Van Horn & Ippen, 2005). At 6-month follow-up (Lieberman, Ghosh Ippen & Van Horn, 2006; Ghosh Ippen, Harris, Van Horn & Lieberman, 2011), child behaviour scores were significantly better for the intervention group than the control group.

Cognitive Behavioral Therapy for Sexually Abused Preschoolers (CBT-SAP)

Intervention elements

CBT-SAP is a program for 3 to 6 year old children with a history of maltreatment. Appendix 3 contains a summary of CBT-SAP and Appendix 6 includes data extracted from CBT-SAP papers. The intervention targets child development, child behaviour, parent-child relationships and family relationships and is delivered in a clinical setting. Twelve sessions are delivered to individual parent-child dyads on a weekly basis by professionals. As the name suggests, this intervention involves the provision of cognitive behavioural therapy to parents and children. Delivery takes the form of cognitive reframing, thought stopping, positive imagery and

contingency reinforcement. Parenting management training is also provided, as well as problem solving, psychoeducation and supportive interventions.

Intervention content for the parents covers ambivalence about belief in the sexual abuse, ambivalence towards the perpetrator, attributions regarding the abuse, feelings that the child is damaged, the provision of appropriate emotional support to the child, management of child fear and anxiety, management of appropriate behaviours, and dealing with the parents' issues in relation to their own abuse. Intervention content for the children covers similar concerns such as attributions regarding the abuse and ambivalent feelings towards the perpetrators, but also child safety and assertiveness training, appropriate versus inappropriate touching, inappropriate behaviour and issues of fear and anxiety.

Evaluation findings

One RCT evaluating CBT-SAP in the USA was found. At post intervention (Cohen & Mannarino, 1996b), children in the intervention group had lower scores for behaviour profile and internalising behaviour problems. At 12-month follow-up (Cohen & Mannarino, 1998), children in CBT-SAP has fewer sexualised behaviours and fewer types of and lower frequency of behaviour problems compared to controls.

Early Intervention on Foster Care Program (EIFC)

Intervention elements

EIFC is a service model for children aged up to 6 years in the foster care system. See Appendix 3 for a summary of EIFC and Appendix 6 for data extracted from EIFC papers. EIFC specifically targets systems outcomes and is delivered directly to children in individual and group sessions each week for 6 to 9 months. Foster parents also receive targeted intervention in group and individual sessions. The intervention is delivered by professionals.

Unlike in most parenting interventions where training occurs when the parents and children are living together, this service model commences prior to the child's placement with the foster parents. After placement, foster parents continue to receive support from the practitioner through daily supervision and telephone contact and weekly foster parents' support groups. There is also 24-hour on-call crisis intervention. Children receive direct service with a behavioural specialist at preschool or daycare and in the home. Children also attend weekly "therapeutic" playgroup sessions.

The content of the foster parent training focuses on child behaviour management. This includes positive parenting strategies to promote child psychosocial development and behaviour regulation, such as a warm, responsive, consistent home environment. Strategies that are taught include the use of positive reinforcement, close supervision and engagement, labelling target behaviour and tracking the occurrence of these, using methods for increasing prosocial behaviour through using behaviour contracting with rewards and start charts, and using time-out and other continent approaches to setting limits.

The individualised child treatment component of EIFC teaches prosocial skills to improve behaviour at daycare/preschool and in the home. Weekly playgroups sessions for children focus on school readiness skills such as early literacy.

Evaluation findings

The EIFC RCT was conducted in the USA (Fisher, Burraston & Pears, 2005). Follow-up occurred at 24 months after the intervention, during which the intervention group was found to have significantly fewer failed permanent placements than the control group.

Early Start

Intervention elements

Early Start is a program for children aged up to 3 months who are at risk of maltreatment. A summary of Early Start appears in Appendix 3 and data extracted from Early Start papers appears in Appendix 6. Family risk factors in Early Start include domestic, family or intimate partner violence and parental substance abuse. The program targets outcomes in all seven outcome domains. This is a professional-delivered home-based intervention. Individual families participant for up to 3 years, with the number of visits varying from a maximum of one per week to a minimum of one per month.

Authors of the Early Start documents located in this REA stated that only essential features of the program are reported as service provision is flexible and it was not possible to account for all of the work undertaken. The essential components are described here. The program commences with an assessment of family needs, issues, challenges, strengths and resources. Individualised service plans are developed. There is a focus on relationship development between the worker and the family, in which there is collaborative problem solving focused on family challenges. Families receive support, teaching, mentoring and advice to assist them to use their strengths and resources.

Content of the intervention includes information about child health and safety, such as timely medical visits, compliance with immunisation and wellbeing checklists and home safety. Parenting skills information is also provided including parental sensitivity, positive parenting and nonpunitive parenting. There is support for parental physical and mental health such as reductions of unplanned pregnancies and early detection and treatment of depression/anxiety/substance abuse. Other content includes information about family economic and material wellbeing (budgeting, employment), positive adult relationships and crisis management.

Evaluation findings

Although three publications (Fergusson, Grant, Horwood & Ridder 2005a; 2006; Fergusson, Boden & Horwood, 2013) and two reports (Fergusson, Horword, Ridder & Grant, 2005b; Fergusson, Boden & Horwood, 2012) were located for this New Zealand evaluation, these all related to the one study. Post intervention results (Fergusson et al., 2005a; 2005b) indicate that the intervention group when compared to the control group had significantly greater duration of early childhood education, greater scores for positive parenting attitudes and non-punitive attitudes and a smaller percentage of parental reports of severe physical assault. At the 9-year follow-up point (Fergusson et al., 2012; 2013), the intervention group had significantly fewer internalising or externalising behaviour problems, a higher parenting score, a smaller percentage of visits to the hospital for accident or injury, a smaller percentage of parent-reported harsh punishment, a lower score for physical punishment, better scores on the strengths and difficulties questionnaire for parents, fewer severe physical assaults by a parent, and a smaller percentage of agency contacts for abuse or neglect. With a follow-up period at 9 years, this

intervention more than met the 6 month follow-up criteria for a rating of Emerging. Had another RCT with effect been located, this program would have been rated Supported.

Parent training prevention model (description)

Intervention elements

This parent training program is for children aged 18 months to 4 years of age who are at risk of maltreatment and have parents who have a low SES status or who are disadvantaged. See Appendix 3 for a summary and Appendix 6 for data extraction forms. Child development, child behaviour, safety and physical wellbeing and parent-child relationships are targeted in this home-based intervention. Professionals deliver the program in 15 weekly sessions to individual parents, plus there are sessions for groups of parents.

The program is delivered in a nondidactic format in which there is continuous interaction between group members and group facilitator. Written materials are provided that outline the group curriculum. Group sessions start with one or more women sharing a positive experience with their child that happened over the week. There is also a review of previous week's curriculum. During sessions, Socratic dialogue is used, as well as role-play, modelling and homework tasks. Barriers to the use of the curriculum are discussed.

The main focus of the program content is on child behaviour management, such as positive parenting techniques including child-let play, distraction, "catching child being good" and effective compliance strategies, as well as the use of time out for managing difficult child behaviour. Problem solving, time management and anger management skills are also included, as well as child health and safety content.

Evaluation findings

Post intervention results in the USA evaluation indicate that the intervention group had significant improvements in problem solving ability and number of tasks during which mothers rewarded children (Peterson, Tremblay, Ewigman & Saldana, 2003). These improvements were not observed for the control group. At 9-month follow-up, the intervention group had significantly greater improvements in child elicited anger and parent self-efficacy (Peterson et al., 2003).

Parents Under Pressure (PUP)

Intervention elements

PUP is a program for parents of children aged 2 to 8 years, where parental substance abuse is an issue. Appendix 3 contains a summary of PUP and Appendix 6 includes data extracted from PUP papers. PUP targets child behaviour, safety and physical wellbeing and family relationships and is delivered to individual parents in the home by professionals in 10 weekly sessions.

PUP includes 10 modules and begins with an assessment and individualised case planning in collaboration with parents. Additional case management can occur outside of the treatment session (e.g., housing, legal advice, school intervention). The program aims to strengthen the parent's view that they are competent in their parenting role and help parents develop skills in coping with negative emotional states through the use of mindfulness skills. There is a focus on positive parenting skills including praise, rewards for good behaviour, and child-centred play skills, as well as non-punitive child management techniques such as time out. Content covers

ways of coping with lapse and relapse (to use of alcohol and drugs). Life skills training is included such as practical advice regarding diet and nutrition, budgeting, health care and exercise. The program aims to extend social networks and build relationships such as effective communication between partners.

Evaluation findings

An Australian evaluation of PUP (Dawe & Harnett, 2007) found significant benefits for the intervention group compared to the control group at 6-month follow-up for parenting stress, child abuse potential, rigid or harsh parenting beliefs and attitudes, parental methadone dose and child behaviour problems.

3.3.5 Narrative synthesis of the Effective interventions

The following section provides a narrative synthesis of the Well Supported, Supported and Emerging interventions. These interventions can more confidently be labelled as 'effective', because they have demonstrated effect in at least one RCT and effect results has been maintained for at least 6 months following the end of the intervention. This information appears in tabulated form in Appendix 3, listed separately for each of the interventions.

Intervention type

Nine of the effective interventions were programs, two were service models (SafeCare and EIFC) and one, a system of care (Child FIRST). Eight of the interventions were evaluated in the USA. One further intervention had evaluations in Australia as well as the USA (PCIT), two were evaluated only in Australia (PUP, Triple P Standard and Enhanced) and one was evaluated in New Zealand (Early Start).

Populations targeted

Only one of the effective interventions targeted both the pre and postnatal period (NFP). Eight of the interventions specifically targeted children within our target range, while PCIT, PUP and SafeCare have been tested in studies targeting only those under 6, as well as a broader age range that includes those under and above 6 years of age.

All of the Supported interventions and one of the Emerging interventions (CBT-SAP) have been tested in at least one RCT with a population identified as at risk of maltreatment or with a history of maltreatment. The remaining interventions were included in the REA because they referred to or targeted maltreatment, even though the populations were not specifically identified as maltreating families. Instead, the parents were involved in the interventions because of factors such as: parental substance abuse (*n* = 3); parents who are teens (*n* = 2); domestic or intimate partner violence (*n* = 2); parental mental illness (*n* = 2); low SES (n = 1); single parenthood (*n* = 1); parents at risk of dysfunction (*n* = 1); parental psychosocial risk (*n* = 1); foster care (*n* = 1); and children at medical risk (*n* = 1).

Outcomes targeted

The outcome domain most frequently targeted by the effective interventions was child behaviour (*n* = 11 each), followed closely by child development and parent-child relationships (*n* = 10 each). Safety and physical wellbeing was targeted by seven interventions, the family relationships domain was targeted by six interventions and systems outcomes were targeted by five. Only two interventions targeted basic child care.

Mode, setting, dose and intervener

All of the effective interventions were delivered by professionals, although NFP standard nurse delivery was compared to paraprofessional delivery and delivery by a paraprofessional was found to be less successful.

Ten of the effective interventions were home-based, with PCIT also delivered in health or clinical settings. One intervention was community based and one was in a health setting. All effective interventions were delivered at the individual level, such as to individual parents, families or parent-child dyads. Four interventions also involved delivery to groups. One intervention involved work with children separate from caregivers. This was in the foster care setting and the intervention was also delivered to foster parents at the individual and group level.

Five interventions were brief, delivered weekly over 8 to 15 weeks. Four interventions were moderate in length, delivered in approximately 6 to 9 months. One intervention was delivered in approximately 32 sessions over 12 months. NFP and Early Start were the longest running interventions, with NFP commencing during the prenatal period and extending until the child is 2 years old, and Early Start running for 3 years. Exact number of sessions for these long-term interventions varied depending on need.

3.3.6 Effectiveness of interventions for targeting maltreatment outcomes

There are a broad range of child, parent and family outcomes that may be targeted as part of an intervention for children exposed to or at risk of maltreatment. Box 3 outlines several of these. Given the key purpose of this analysis is to provide the Families Commission with information about effective interventions that aim to prevent or reduce maltreatment, we summarise here the findings from the interventions that, through rigorous research, have found a significant effect on maltreatment outcomes. Table 4 provides a listing of effective interventions which have shown an effect on these key outcomes, measures used to assess these effects, and when in the course of assessment these effects were observed. Further summaries on intervention findings can be found in Appendix 3.

There were immediate post intervention effects on maltreatment outcomes for ABC and Early Start, with medium term gains for PCIT and PUP. Early Start, SafeCare and NFP demonstrated the longest follow-up effects. Such long-term evaluations of the other interventions have not been reported. The long term effects observed in SafeCare and NFP, along with the physical abuse reports in PCIT (2.3 year maintenance of effect) were based on the most reliable measures. Unlike the other outcomes, these were not assessed by parental self-report or even by interviewer administration, but rather child protection and child welfare substantiated reports, therefore reducing the risk of bias.

Table 4. Effect of the Well Supported and Supported interventions on child maltreatment outcomes.

Construct	Outcome	Measures	Intervention	Study	Effect
Maltreatment	Child maltreatment reports	Child Protection Services records	NFP	Eckenrode et al. (2001) Zielinski et al. (2009)	Significant effect at 15 years
	Agency contacts for abuse or neglect	Questionnaire Interviewer completed but parental report	Early Start	Fergusson et al. (2012)	Significant at 9 years
	Avoidance of punishment	Caldwell and Bradley Home Inventory Interviewer completed but parental report	NFP	Olds et al. (1994)	Significant effect at 46 months
	Non-punitive attitudes	Items from the Child Rearing Practices Report and Adult-Adolescent Parenting Inventory Interviewer completed but parental report	Early Start	Fergusson et al. (2005)	Significant immediately post the end of the intervention period
	Harsh punishment	Medical records Obtained via parental report	Early Start	Fergusson et al. (2012; 2013)	Significant at 9 years

Construct	Outcome	Measures	Intervention	Study	Effect
	Rigid or harsh parenting beliefs or attitudes	Child Abuse Potential Scale Self-Report	PUP	Dawe and Harnett (2007)	Significant at 6 months
	Recidivism	Child Protection Services records	SafeCare	Chaffin et al. (2012)	Significant effect at 7 years
Abuse	Child abuse reports	Child Protection Services records	NFP	Olds et al. (1997) Eckenrode et al. (2000)	Significant effect at 15 years
	Child abuse potential	Child Abuse Potential Inventory Self-report	ABC	Sprang (2009)	Significant immediately post the end of the intervention period
		Child Abuse Potential Scale Self-report	PUP	Dawe and Harnett (2007)	Significant at 6 months
	Physical abuse re-reports	State-wide child welfare administration database	PCIT	Chaffin et al. (2004)	Significant effect at 2.3 years
	Physical punishment	Items from the Child Rearing Practices Report and Adult-Adolescent Parenting Inventory	Early Start	Fergusson et al. (2012; 2013)	Significant at 9 years

Construct	Outcome	Measures	Intervention	Study	Effect
		Interviewer completed but parental report			
	Severe physical assault of child by parent	Parent-Child Conflict Tactics Scale Interviewer completed but parental report	Early Start	Fergusson et al. (2012)	Significant at 9 years
Neglect	Child neglect reports	Child Protection Services records	NFP	Eckenrode et al. (2001) Olds et al. (1997) Zielinski et al. (2009)	Significant effect at 15 years

3.3.7 Common elements of the effective interventions

All of the effective interventions included in this REA were home-based, yet this does not suggest that this was a key characteristic of success. In fact, there were interventions based in the home that rated poorly in this REA.

Components essential to each of the interventions are presented in a matrix in Appendix 7. **Fourteen** common elements among the effective interventions were identified in this REA and these are presented in Box 5. All of the effective interventions identified were delivered by a professional. This may be a key effective practice as in an NFP evaluation, professional delivered intervention was found to be more effective than paraprofessional delivery.

A clear common delivery element of many of the effective interventions was that structured curriculum or planned sessions were used when implementing the intervention. Many of the interventions commenced with an assessment of the family, parents and child, and then an individualised intervention or service plan was developed for/or with the family. Often, the content of the intervention was delivered using discussion.

A central common element in the content provided in the interventions was about child behaviour and strategies to manage child behaviour, with nearly all interventions teaching this to parents. Sometimes this was referred to in general terms, such as child behaviour management techniques, positive parenting techniques for increasing desired behaviour, and non-punitive measures for decreasing undesired behaviour. Specific behaviour management strategies that were common across several interventions included: providing routines and clear rules, explanations, limits and instructions; praise for target behaviours; the use of time-out for reducing unwanted behaviours; and the use of reinforcement, rewards and charts for target behaviours.

Information about and strategies to promote positive parent-child interactions, and for the regulation of parent and child emotions were also common to several interventions.

An additional content element in common across several interventions related to child wellbeing, including child health, development and safety, such as how to care for your child's health, what is typical development and how to ensure your child's safety. Lastly, several effective interventions focused on supporting parental and family wellbeing and life course such as parental mental and physical health, nutrition, budgeting, education and employment.

Box 5. Common elements of the 'effective' interventions identified in the REA.

Delivery

1 The intervention is delivered by a suitably qualified and trained **professional**

2 A **structured curriculum and planned sessions** are followed often with the use of a manual, although there may flexibility for individual circumstances

3 The intervention commences with an **assessment** of the family, parent and child, which may include their current needs, concerns, skills, strengths, functioning, interactions, resources and supports

4 An **individualised plan** is developed for each family, parent and/or child. This is typically based on the outcomes of the assessment and may be developed with input from the family

5 The intervention content is delivered by **discussing** the material with the family, rather than by didactic teaching

Content

6 **Information about child behaviour** is provided to parents, such as what constitutes typical behaviour, reasons for misbehaviour, understanding child behaviour and parental responses to behaviour

7 Parents are taught how to provide an environment where children know what to expect and **know what is expected of them** thereby increasing their opportunity to behave well and reducing the likelihood of misbehaviour. Specific strategies taught to parents included: providing children with **routines**; providing **clear rules** to children; explaining parents' **expectations** of the children; clearly **setting limits**; and providing **clear** instructions for children

8 Parents are taught strategies or techniques for **managing child behaviour**, such as ways to increased desired behaviour and ways to deal with misbehaviour

9 Parents are taught to use '**positive parenting**' strategies for increasing desired behaviour suggesting that behaviour is managed by fostering healthy interactions between parents and children, by focusing and building on strengths in behaviour. Specific strategies mentioned were: **praising** children, which is particularly powerful when praise is **labelled** or accompanied by a descriptor of the behaviour that is being praised (e.g., 'great job putting away your toys', instead of 'great job'); providing **reinforcement or rewards** when children display a desired behaviour. This works well when the parent has clearly described the expectations to the child and also if the child knows what the positive consequences of the good behaviour will be (the reinforcer); and the use of **charts** (such as star charts) for recording and tracking the occurrence of desired behaviours. This is often used in conjunction with praise and reinforcement

10 Parents are taught to use '**non-punitive'** measures for decreasing misbehaviour that involve alternate methods to deal with misbehaviour. These do not involve punishment but do involve clear and reasonable consequences. The most commonly used strategy in the effective interventions was '**time-out**', although other strategies mentioned included planned ignoring and quite time. Time-out would be most effective when used as part of a set plan for managing behaviour in which the child is aware that time-out is the consequence of pre-identified misbehaviour, the child knows what time out entails and the parent follows through with the plan as set

11 Parents are provided with information about **parent-child interactions**. This includes ways to promote positive parent-child interactions, what are positive relationships, and examining current interactions and responses to each other.

12 Parents and children are provided with strategies to help them **regulate their emotions**, such as understanding emotions, anger management training, and preventing, detecting and dealing with depression, anxiety and fear.

13 Parents are provided with information about **child health, development and safety**. This includes developmental milestones, what is typical development and what is not, how to care for the health of children, information about illness, how to provide a safe home and environment, measures to protect your child from harm and abuse.

14 Parents are provided with information about and support for **parental and family wellbeing and life course**. This element of the intervention focuses on what the parents, households and families need in order to be cared for and provided for. It includes looking after the physical and mental health of parents, supporting their access to education and continued employment, as well as considering the nutrition, physical activity and financial/budgetary needs of the family. It involves helping parents access the services and supports they need to meet immediate needs, as well as future planning.

3.4 Interventions with initial effect

The REA identified several interventions that have not met the replication and maintenance requirements for us to say that they are effective, but they have been evaluated in RCTs and show some positive results in favour of the intervention. These have been called Pending interventions.

3.4.1 Pending interventions

Interventions rated as Pending demonstrated significant effect over the comparison condition from pre to post in one RCT but they did not meet the 6-month maintenance requirement. While these interventions appear to show some benefit for participants, further research is needed to determine if these benefits will sustain overtime or diminish in the absence of the intervention.

We identified 38 Pending interventions in the REA, none of which were evaluated in New Zealand: Adolescent prenatal home-visited group (description not name); Child and Youth Program; Child Parent Enrichment Project (CPEP); Comforting and interaction techniques (description not name); Community health nurse prenatal home visits (description not name); COPE intervention; Early home visiting based on Family Partnership Model; Early Intervention Program (EIP) delivered by Public Health Nurses (PHN) (description not name); Enhanced Healthy Start; Family Spirit; Group parent training with individualised home-based training (description not name); Healthy Families; Home-based parent training (description not name); Home visits (description not name); Home intervention for drug-abusing mothers, based on the Infant Health and Development Program (IHDP) (description not name); Home visits for prenatal prevention for out-of-home-placement (description not name); Home visits, play groups and parent groups (description not name); 1) Infant–parent psychotherapy (IPP), 2) Psychoeducational parenting intervention (PPI); In-hospital and after-care services by trained student nurses (description not name); Maltreatment prevention home visits by interdisciplinary team (description not name); Miller Early Childhood Sustained Home Visiting (MECSH); Mother and Toddlers Program; MOtherS Advocates in the Community (MOSAIC); My Baby and Me; Parent and newborn rooming-in postpartum (description not name); Parent-Child Activities Interview; Parent mentoring based on the Touchpoints approach (description not name); Period of PURPLE Crying; Prenatal and paediatric health services program (description not name); 1) Preschooler-parent psychotherapy (PPP), 2) Psychoeducational home visitation (PHV); SOS! Help for Parents; STAR Parenting Program; The Pride in Parenting Program; The Seattle Model of Paraprofessional Advocacy; Triple P - US Triple P System Population Trial; Webster-Stratton Parenting Program (an early iteration of Incredible Years); “What Do I Say Now?”; and Young Parenthood Program (YPP).

Please note that YPP almost qualified for an Emerging rating as a significant subgroup effect (for males only) was observed at 18 months for relationship with partner and nurturing parenting. However, as there was no *whole sample* effect at follow-up, this intervention was downgraded to Pending.

3.5 Interventions with no effect at this stage

3.5.1 Insufficient Evidence

The REA identified 21 interventions that had insufficient evidence. These interventions were not tested in RCTs, only in non-randomised controlled trials and none of the evaluations were conducted in New Zealand. While these interventions showed no harm and may be of some

benefit for participants, the study designs were not rigorous enough to make clear decisions about effect. Further research is needed to determine whether they are effective.

The interventions with insufficient evidence were: Systematic Training for Effective Parenting (STEP) (description not name); Centre-based therapeutic day treatment program and parent services (description not name); Crisis nursery (description not name); Children's Treatment Program (CTP); ChIME (Chinese Immigrant Mothers oral health Education) programme; Community Infant Project (CIP); Cottage Community Care Pilot Project; Family treatment drug courts (FTDCs); Full Love in the Family Protects Your Kids; Group program for sole-parent mothers run by Opportunity for Advancement (description not name); Happy Mothers, Happy Babies (HMHB); Home visiting for African American mothers (description not name); Home Visit Service for Newborns and Home Visit Project for All Infants; Keiner f¨allt durchs Netz (KfdN; "Nobody Slips Through the Net"); Mother-infant clinical home visiting (description not name); Parent-baby (ad)venture (PBA); Substance abuse treatment (description not name); Teen parent education program (description not name); Teen Parents and Babies Program (TPBP); Thrive Program; and Title 1 Child-Parent Centers.

3.5.2 Failed to Demonstrate Effect

Ten interventions were found in the REA that had been tested in at least one RCT and had shown no significant benefit over a comparison condition. None of these evaluations occurred in New Zealand. Although these interventions demonstrated no harm, these interventions show no clear benefit at this stage. It is possible that further research will show some effect for these interventions.

Nine of the interventions that failed to demonstrate effect were: Adolescent parents attending school (description not name); Colorado Assessment Maternity Program (CAMP); Comprehensive Child Development Program (CCDP); Extended postpartum contact and paraprofessional home visits (description not name); Group well-child care (GWCC); Home-based intervention for maternal depression and child behaviour (description not name); Nurse home visits for family in child protection (description not name); Parent-child group education facilitated by a mentor (description not name); and Trauma-Focused CBT with Trauma Narrative.

After some consideration, we rated one further intervention as Failed to Demonstrate Effect (10 interventions in this category in total). This intervention is Healthy Start (refer to Appendix 8 for details). This intervention was tested in two RCTs. One RCT (Duggan, McFarlane, Windham, Rohde, Salkever, Fuddy, Rosenberg, Buchbinder, & Sia, 1999; El-Kamary, Higman, Fuddy, McFarlane, Sia, & Duggan, 2004; Duggan, Fuddy, Burrell, Higman, McFarlane, Windham, & Sia, 2004a; Duggan, Fuddy, McFarlane, Burrell, Windham, & Sia, 2004b; Duggan, McFarlane, Fuddy, Burrell, Higman, Windham, & Sia, 2004c; McFarlane, Burrell, Crowne, Cluxton-Keller, Fuddy, leaf, & Duggan, 2013; Bair-Merrit, Jennings, Chen, Burrell, McFarlane, Fuddy, & Duggan, 2010) demonstrated post effect and effect at 2-year follow up. However, effect was absent by the 7 -9 year mark. An additional RCT (McCurdy, 2001) found effect at post for only one outcome, satisfaction with the support of an adult other than one's partner.

Had these been the only results we found for this intervention, it would have received a rating of Supported, albeit with caution as the effects did not maintain to final follow-up. However, there were two additional RCTs (Bugental, Ellerson, Rainey, Lin, Kokotovic, and O'Hara, 2002; Bugental and Schwartz (2009) testing the effectiveness of Enhanced Healthy Start, with Healthy Start as a comparison group. While no follow-up assessments of Enhanced Healthy Start have been found, these two RCTs found a significant post effect for Enhanced Healthy Start over Healthy Start.

Therefore, the weight of the evidence is not in favour of Healthy Start and we have rated in the Failed to Demonstrate Effect category. Further research is needed to determine whether the short-term gains of the Enhanced version are maintained.

4. DISCUSSION

The purpose of this analysis was to conduct an REA to determine the effectiveness of parenting interventions for parents of vulnerable children aged up to 6 years. Specifically, we examined interventions for children at risk of maltreatment or who have been maltreated and determined the common elements within and between the interventions found to be effective. In this section, we draw the findings of this REA together, outline critical implementation considerations, describe the limitations of this analysis and provide concluding remarks.

4.1 Summary of findings

This REA identified 81 parenting interventions for the target population. Of these, only one was rated Well Supported (NFP), while a further four were rated Supported. These five interventions are ones that we can most confidently call effective because of the rigor of the evaluations, and the replication and maintenance of effect at 12 months after the completion of the intervention. We found no interventions that met the criteria for Promising (replication and maintenance to 6 months), but we found seven interventions that we rated Emerging as they showed effect in one RCT with at least 6 months maintenance. These interventions rated Emerging and above have been grouped together in this report and referred to as 'effective' because of the rigor of their evaluations and because they have demonstrated that effects have not diminished in the absence of the intervention. This is a conservative list of effective interventions which reflects the level of rigor we have utilized when rating these interventions, in particular, the use of information reported in high quality systematic reviews with meta-analyses to rate the Well Supported intervention.

We rated no interventions as a Concerning Practice. There were however 69 interventions that did not meet our criteria to be called effective. These were either not tested using designs that were rigorous enough to determine effect (*n* = 21), had shown no effect using a rigorous design (*n* = 10) or had shown effect but had not demonstrated maintenance of this effect (*n* = 38). Further research may add to the evidence for these interventions.

Nine of the 12 'effective' interventions were programs and eight were US evaluations. Several studies were excluded from review because they included children outside our target age group and we were unable to isolate the effect of the interventions on children aged up to 6 years. There were however three effective interventions found that covered a broad age range and factored age into their analyses. The remaining nine effective interventions included only children in the prenatal period or up to 6 years of age at the commencement of the study.

Five of the effective interventions specifically targeted a sample of maltreated children or those identified as at-risk of maltreatment. The remaining seven interventions did not give this criteria for intervention inclusion but referred to maltreatment as a risk associated with the target population or as an outcome of their intervention. Most often, the effective interventions targeted child behaviour, parent-child relationships and child development. Dose varied from brief interventions, through to ones lasting for several years. The effective interventions were typically delivered on an individual basis, in the home, by professionals. We found little evidence for the use of paraprofessionals in delivery of the interventions, with an NFP evaluation finding favourable results with their standard nurse delivery instead of a paraprofessional.

Fourteen common elements were identified within the effective interventions. These included the use of structured or planned sessions, assessment of the child and family and development of

an individualised plan. Content was often conveyed in the form of discussion, with the nature of content largely focused on child behaviour and strategies to manage behaviour, parent-child interactions, emotional regulation, child health, development and safety, as well as issues of family wellbeing and life course.

All of the effective interventions have demonstrated some benefit for child, parent or family outcomes over a comparison condition, including child maltreatment-specific outcomes. These benefits have been found to be long term for interventions such as NFP, SafeCare, and Early Start. In fact some intervention effects for NFP did not emerge until many years after the conclusion of the intervention. Others have found short or medium term gains that have not been assessed in the longer term.

4.2 Gaps in the evidence

We found few effective interventions that were evaluated outside the USA, with only one RCT of a New Zealand intervention identified in the REA. There are of course many relevant parenting interventions underway in countries other than the USA, including in New Zealand, and several of these will have been subject to evaluation. Despite the rigor of our search, some may have been missed, but others will not have met our criteria of testing against a comparison condition. This finding is in line with results from international evaluations across the health and human services, where there is a strong push for a greater number of comparative effectiveness studies (as opposed to testing interventions against a no treatment condition). In order to determine whether an intervention is better than receiving nothing or receiving the usual services available, evaluation against a comparison condition, preferably with randomisation, is required. Replication in an additional RCT is also ideal, as is long-term follow-up.

Some of the interventions related to maltreatment and our target age that were seen during our New Zealand grey literature search included Parents as First Teachers (PAFT), He Taonga Te Mokopuna programme and Family Start programme. No RCT evaluations were found for these interventions. PAFT was evaluated using a non-equivalent comparison group (census data) which could provide some useful initial indications of impact. However, this intervention was not included in the REA as the lack of rigor in this evaluation would not have added to the information reported here about effective interventions or common elements of same. At best, with the available information, PAFT would have been rated as Insufficient Evidence. He Taonga Te Mokopuna programme and Family Start programme used no comparison groups in the located evaluations. Again, this does not mean that these interventions are not effective. They may well be. Unfortunately, the research required to make that determination has not been conducted. Similarly, some interventions identified in our REA remain at the Pending stage of evaluation because of a lack of follow-up assessment. Findings observed at the conclusion of the intervention period, (e.g., effects in favour of the intervention or effects in favour of the control or the absence of an effect) cannot be assumed to be lasting. The relative absence in the literature of this crucial measure of effectiveness (i.e., maintenance of effect) means that the entire field of human services must pay greater attention to this shortcoming in future studies. In addition, while it is important to make sure that gains are maintained following treatment, some gains might not materialize until for a number of years (for example, some effects in NFP were not observed until long-term assessments were conducted).

This REA identified few effective service models and systems of care. The higher proportion of programs included may be representative of the proportion of programs verses service models and systems of care for this population. Alternatively it may be that there have been fewer

evaluations of these types of interventions or that the evaluations have not met our design inclusion criteria. Perhaps this may even be a reflection of the challenges or inappropriateness of evaluating a service model or system of care using an RCT. Other rigorous designs, particularly econometric designs such as Difference in Differences, Propensity Score Matching, Regression Discontinuity, and Instrumental Variable Analysis hold great promise as alternatives to RCTs.

Although we did not specifically seek interventions targeting particular populations, other than maltreatment, we did record the demographics and descriptors of populations in the interventions rated Emerging and higher. Some clear population gaps exist. Only one effective intervention was identified that included a considerable proportion of Indigenous parents (SafeCare). The paucity of interventions specifically for Indigenous families in the REA may be a reflection of the limited range of evaluations of parenting interventions in general for Indigenous parents, let alone ones that specifically target maltreated children or maltreatment outcomes. In addition, while we did find interventions for teen parents, substance abusing parents and parents with a mental illness, we identified no effective interventions in which participants were identified as parents with an intellectual disability or learning difficulties. In fact, in three interventions (ABC, PCIT, SafeCare), parents with intellectual disabilities were expressly excluded from the studies.

A final identified gap is in the type of outcomes targeted by the interventions. With notable exceptions (e.g., PCIT), not all interventions targeted outcomes in the child safety domain, such as prevention or reduction of abuse or neglect. Other outcomes, such as child behaviour, were the focus of most interventions. In all likelihood, this reflects a less developed understanding of the aetiology and lack of agreed upon, specific definitions of forms of maltreatment that extend beyond serious physical abuse. If interventions are to target specific behaviours, these must be adequately conceptualized and defined.

4.3 Implementation considerations

The report provides an analysis of the evidence for parenting interventions, with a focus on intervention effectiveness for parents of vulnerable children aged up to 6 years, who have been maltreated or who are at risk of maltreatment. Factors to consider when implementing parenting interventions in the New Zealand context are also presented. This section now addresses issues related to the quality implementation of these interventions by describing critical considerations regarding the implementation of interventions.

While the identification of effective interventions can be helpful when practitioners, agencies, and policy makers are searching for interventions in which to invest, the emphasis on identifying and cataloguing effective interventions has not been matched by a corresponding effort to systematically assess the extent to which interventions are implemented and to evaluate the impact of this on intervention outcomes (Aarons, Sommerfield & Walrath-Greene, 2009). This is despite strong evidence that the quality of the implementation of an intervention has an impact on desired outcomes.

By ‘Implementation’ we are referring to a set of planned and intentional activities that aim to put into practice interventions or empirically supported practices (ESPs) within real-world service settings (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Mitchell, 2011). Implementation is a process, not an event, and should be distinguished from adoption, which is defined as the formal decision to use an intervention or set of ESPs (Mitchell, 2011). Effective implementation has more traditionally referred to the full implementation of all components of an intervention or practice, as planned by the original developer(s). More recently, implementation researchers

have systematically started to examine the degree to which core components of a program can be maintained while allowing for local adaptation as a way to accommodate what may be needed at a system, policy or organizational level to facilitate effective implementation and sustainment of the intervention or ESPs (e.g., Aarons, Green, Palinkas, Self-Brown, Whitaker, Lutzker,, Silovsky, Hecht, & Chaffin, 2012)

Implementing effective interventions is complex and challenging, and many previous efforts to implement effective interventions in the family support sector have not reached their full potential due to a variety of issues inherent in both the family support service setting and the implementation process itself (Aarons, Hurlburt & Horwitz, 2011; Mildon & Shlonsky, 2011). Without addressing these organisational and individual challenges as part of a planned, purposeful and integrated implementation strategy, interventions, even effective ones, may not produce the desired effects for parents and children. Therefore, attention to **how** an intervention is implemented is as important to child, parent and family outcomes as **what** is implemented. To ensure that government spending is directed at services and programs known to be associated with positive results, and to ensure that limited dollars are invested in interventions that are more likely to make a difference to families, we must attend to both the evidence that a intervention works, and the way that intervention should be implemented to achieve good results.

Over the last 10 years, implementation researchers have increased their efforts to describe the process of implementation. These can be descriptions of the main steps involved in implementation and/or more refined conceptual frameworks based on research literature and practical experiences such as theoretical frameworks and conceptual models (Meyers, Durlak & Wandersman, 2012).

Frameworks for implementation are structures that describe the implementation process and include key attributes, facilitators, and challenges related to implementation (Flaspohler, Anderson-Butcher, & Wandersman, 2008). They provide an overview of practices that guide the implementation process and, in some instances, can provide guidance to researchers and practitioners by describing specific steps to include in the planning and/or execution of implementation efforts, as well as pitfalls or mistakes that should be avoided (Meyers et al., 2012).

While there is no agreed upon standard in the field, some efforts have been made to synthesize these approaches to implementation. For example, Meyers et al. (2012) conducted a synthesis of 25 implementation frameworks. Frameworks were sought across multiple research and practice areas as opposed to focusing on a specific field (e.g., Damschroeder et al., 2009 who focused on the health care field). Only frameworks that described the specific actions and behaviours (i.e., the “how to”) that can be utilized to promote high quality implementation were included in the synthesis. The authors argued that systematically identifying these action-oriented steps served as practical guidance for planning and/or executing implementation efforts. They found that many frameworks divided the process of implementation into several temporal phases, and within these phases, there was considerable agreement on the critical elements or activities conducted within each. Their synthesis found 14 elements that could be divided into four distinct temporal phases of implementation.

The first phase is named *Initial Considerations Regarding the Host Setting* and contains a number of elements all of which described work that focused primarily on the ecological fit between the intervention and/or practice and the host setting. Activities here commonly include assessment strategies related to organizational needs, innovation-organizational fit, capacity or readiness

assessment, exploring the need for adaptation of the program or practice and how to do it, obtaining buy in from key stakeholders and developing a supportive organizational culture, building organizational capacity, identifying or recruiting staff and conducting some pre-implementation training.

The second phase is named *Creating a Structure for Implementation*. Here the focus of the work can be categorized into two elements: developing a plan for implementation and forming an implementation team which clearly identifies who is responsible for the plan and tasks within it. The third and fourth phases incorporate the actual *doing* of the implementation (whereas, the first two phases focus on *planning* for implementation).

Phase three, *Ongoing Structure Once Implementation Begins,* incorporates three elements: technical assistance (including training, coaching and supervision), monitoring on-going implementation (process evaluation) and creating supportive feedback mechanisms to ensure all relevant players understand how the implementation process is progressing.

Finally, phase four is named *Improving Future Applications.* Here the element is identified as learning from experience, which commonly involves retrospective analysis and self-reflection including feedback from the host setting to identify particular strengths or weaknesses that occur during implementation.

The authors highlighted that many of the frameworks included in the synthesis were based upon what had been learned about implementation from practical experience and through staff feedback. There were few instances where studies empirically tested the implementation framework that had been applied and modified based on their findings. What was more common was making modifications to implementation frameworks based on: feedback received from the setting about ineffective and effective strategies, considering what others were beginning to report in the literature, and/or by critical self-reflection about one's effort.

Box 6 summarises these and other important aspects of implementation identified within implementation science literature that should be considered when selecting an effective intervention to deliver to families and when planning for the implementation of that intervention.

Services face a range of challenges when selecting and implementing effective interventions. One significant challenge is that an effective intervention may not exist for a service provider's identified needs, selected target population, and service and cultural context. Alternatively, or sometimes additionally, the monetary cost of an effective intervention may be too high, which is a difficulty community-based services often face. While the cost of *not* implementing an effective intervention should also be considered in such circumstances, it is nonetheless the case that cost is often a barrier to the quality implementation of effective interventions.

Box 6. Implementation considerations for parenting interventions (Wade et al., 2012).

Appropriateness of intervention aims and outcomes
- Is the intervention based on a clearly defined theory of change?
- Are there clear intervention aims?
- Are there clear intended outcomes of the intervention that match our desired outcomes?

Targeted participants
- Is the target population of the intervention identified and does it match our intended target population?
- What are the participant (child, parent or family) eligibility requirements (ages of caregivers or children, type of person, presenting problem, gender)?

Delivery setting
- What are the intervention delivery options (e.g. group, individual, self-administered, home-based, centre-based)?
- Is there flexibility in delivery modes that suit our service context?

Costs
- What are the costs to purchase the intervention?
- What are the costs to train staff in the intervention?
- What are the ongoing costs associated with purchasing manuals and technical assistance (e.g. coaching and supervision of staff)?
- What are the costs to implement the intervention with families (in terms of staff time, resources to deliver, travel cost to agency, travel cost to families, costs to families in terms of time off work and childcare)?
- Are cost-effectiveness studies available?

Accessibility
- Are the materials, trainers and experts available to provide technical assistance (i.e. training, coaching and supervision) to staff who will deliver the intervention?
- Is the intervention developer accessible for support during implementation of the intervention?
- Does the intervention come with adequate supporting documentation? For instance, are the content and methods of the intervention well documented (e.g. in provider training courses and user manuals); are the content and methods standardised to control quality of service delivery?
- Are the intervention content and materials suited for the professionals and parents we work with, in terms of comprehension of content (e.g. reading level of materials, amount of text to read or write, use of complex terminology)?
- Does the intervention suit our service's access policies (e.g. 'no wrong door' principles; 'soft' entry or access points; community-based access; access in remote communities)?

Technical assistance required
- What are staff training needs (frequency, duration, location, cost)?
- What amount of ongoing technical assistance is required (including top-up training, coaching or supervision)?

Fidelity
- What are the requirements around the fidelity or quality assurance of delivery of the intervention components to families? That is, how well do practitioners need to demonstrate use of the intervention either during training or while they are working with families (e.g. are there tests, checklists or observations that they need to perform during training; are there certain things they need to do to prove/show to the trainers that they are using the intervention correctly, such as video-taped sessions, diaries, checklists about their skills or use of the intervention with families)?
- Are there certain intervention components that MUST be delivered to families? That is, if they don't do X, they are not actually using the intervention as intended.
- What are the intervention dosage or quantity requirements for effective results (i.e. how often and for how long do families need to receive the intervention)? Can our service meet those requirements?

Data and measurement of effectiveness
- How is progress towards goals, milestones and outcomes tracked?
- What are the requirements for data collection (i.e. what measures are recommended, how often are they to be administered, who can administer them)?
- How accessible and relevant are the developer-recommended evaluation tools (ease of access, cost, ease of administration and scoring, relevance to New Zealand context)?

Languages
- What languages is the intervention available in and does that match our client population?
- Is the intervention relevant and accessible to particular cultural and language groups (e.g. Indigenous families)?

Another significant challenge facing services is deciding the extent to which an intervention should be adapted or not to fit the context and, if done, how it should be adapted with quality and to good effect, retaining the essential elements of the intervention that contribute to its effectiveness. In general, when working with effective interventions it is best to work towards strong adherence to the intervention as is, to ensure intervention fidelity and to avoid possible dilution of the benefits of the intervention. For example, one of the main findings of the NFP studies is that it may be inadvisable to have this intervention delivered by paraprofessionals as this form of delivery was found to be less effective than the nurse-delivered program. It is unclear whether professionals from other disciplines, adequately trained, could successfully deliver the program. Adaptation of this program to include delivery by other professionals, perhaps due to the unavailability of suitability trained and qualified staff, may not result in favourable outcomes.

Nevertheless, adaptation and local innovation are sometimes necessary in order to meet emerging needs and suit specific populations. In such cases it is important to evaluate adapted or innovative interventions to ensure that intended child and family outcomes are being met, and that harm is not being caused. Ideally, where an evaluation reveals that an adapted or innovative intervention demonstrates promise (that is, has been reasonably well evaluated and was shown to have some positive outcomes), ongoing evaluation should be performed to establish higher levels of evidence.

4.4 Limitations

Although systematic reviews remain the ideal method of assessing the effectiveness of interventions, REAs are increasingly being used in circumstances where time and/or budgetary constraints do not permit a systematic review. While REAs use methods considerably more rigorous than a standard literature review, they are not without limitations. In order to accelerate the review process (i.e., to fulfil the 'rapid' in REA), we imposed some restrictions: we only included English language papers; we only searched the *New Zealand* grey literature; we did not contact authors for further studies or to clarify information reported in publications; we did not include books, theses and conferences papers; and we did not undertake an extensive search of reference lists of included studies. As a result of these necessary limits, there may have been some interventions, studies or data that were missed in this REA. This additional information may have provided us with further information about the effectiveness of an intervention, lack of effect, or even potential harm. Our search of electronic bibliographic databases was, however, exhaustive and we imposed no limits on year of publication. We are confident that this process was rigorous enough to identify the vast majority of relevant publications within our search parameters.

Another limitation of the REA process was that we were unable to extract extensive data from all studies. This means that some information of relevance to the reader may not be reported here but could be further explored if needed. Moreover, we were not as rigorous in our evaluation of the quality of the research as would be required in a high quality systematic review. For example, we do not report effect sizes or assess for bias. In addition, the data were synthesized in a narrative fashion rather than through meta-analysis. Nonetheless, the rating scheme used did require considerable design rigor, replication and maintenance in order for the interventions to be rated highly, and the inclusion of systematic review evidence to complement our rating scheme helped us to single out the most effective intervention for the Well Supported level. The use of this additional criteria, which is not imposed on interventions rated by web-based

clearinghouses such as the California Evidence-Based Clearinghouse (http://www.cebc4cw.org/), somewhat compensated for our inability to evaluate interventions using more rigorous, and time-consuming, methods.

An additional necessary restriction imposed on this REA was to limit the interventions to those targeting children up to the age of 6 years. Given that this was the population of interest in the review, all studies needed to involve children of this age. While we were able to identify 142 papers that clearly included this population, there were 26 that we rejected because reporting in the paper or analyses used did not allow us to reasonably determine the possible effect of the intervention for the target age group. It is possible that some of these papers reported interventions that may in fact be of benefit to the target age group, but it was just not possible to determine this from the information available.

Further interventions of interest may have been missed due to the maltreatment-specific search terms and inclusion criteria used in this REA. These terms and criteria were necessary in order to identify the most relevant interventions for the target population and to make the search and selection process manageable. There were some studies that were excluded because, although they involved populations such as substance abusing parents (in fact these probably came up in our search because of the word 'abuse'), they did not refer to child maltreatment. Furthermore, we did not specifically search for studies involving known populations at risk of maltreatment. To include the handful of interventions found that targeted populations such as substance abusing parents in the absence of the mention of maltreatment would provide an incomplete picture of these interventions since there was no specific search for further studies involving these populations. Examples of New Zealand evaluated interventions sighted during our grey literature search that may be of interest but did not specifically mention maltreatment include HIPPY New Zealand, Well Child/Tamariki Ora and New Zealand Te Aroha Noa programme. It should be noted that such interventions may in fact be useful for the prevention of child maltreatment but their analysis and inclusion was beyond the scope of the current REA.

A final limitation of this REA, and in fact of all reviews, is that the information reported here is time limited. High quality systematic reviews undergo regular updates to check for new studies. This analysis was completed in May 2013 and readers are advised that new evidence will emerge after publication of this report. We recommend that any new evidence is taken into consideration when selecting and implementing parenting interventions.

4.5 Conclusion

The relative scarcity of interventions that may be effective for vulnerable children under the age of six should be considered in context. First, the field of child welfare in high income countries has tended to focus on systems level interventions for children experiencing extreme forms of maltreatment (i.e., physical abuse with injuries; sexual abuse; severe neglect). Prevention efforts aimed at the less frequently occurring forms of maltreatment may miss the vast majority of vulnerable children exposed to less extreme but still debilitating and long-lasting forms of maltreatment. Second, this review identified thousands of studies representing hundreds of interventions, but almost all of them failed to meet objective standards of evidence needed to label them 'effective'. This finding is not uncommon in many areas of social services. A tradition of rigorous evaluation has only recently begun to emerge. Over time, more interventions will be identified that have been rigorously evaluated. Third, the lack of comparative effectiveness research, a gap found across the social services, limits our ability to ascertain whether administered programs have an effect in the presence of other reasonably effective

interventions. Thus, while we can say that many of the interventions appear to be effective when compared to nothing, we do not know how they perform in head to head comparisons with other services that can be reasonably offered. Finally, knowledge about the substantial limitations of the studies conducted in this area is, in and of itself, informative. Too often, interventions are assumed to be effective and later found to be ineffective or even harmful. The state of knowledge in this area is relatively weak and should prompt caution with respect to investment on the part of government. As decisions are made in terms of outcomes and interventions, a wise approach would be to rigorously test these choices and, in the process, build the knowledge base in this area.

Despite some limitations that are inherent in rapid reviews such as this, the current REA has been conducted with rigor and we have expected high standards of interventions in order to consider them 'effective'. The report has identified parenting interventions for parents of young children who have been maltreated or who are at risk of maltreatment, and has provided ratings of intervention effectiveness. Information about interventions, including key outcomes with effect, has been presented; effective interventions have been analysed to determine what practices and characteristics they have in common; and key factors to consider when implementing parenting interventions have been described that take the New Zealand context into account.

The information presented in this report can be used to assist in the development and testing of parenting interventions in New Zealand. A useful first step in this process might be to map the findings within the effective interventions to New Zealand epidemiological data, in terms of target populations. Next, consider what outcomes are desired or what you want to achieve for these populations, and which interventions best fit your population and outcomes. We would then recommend implementing and rigorously testing the chosen interventions. In general, most of the interventions presented here have not been subject to rigorous testing, and particularly not in New Zealand. Even for those that have been well tested, such as NFP, there remain unanswered questions such as the applicability of the program to families with a history of maltreatment and to families that are not pregnant with their first child, and whether or not the intervention can be effective if delivered by professionals that are not nurses or with paraprofessionals. Rigorous evaluation of the implementation and effectiveness of future interventions in New Zealand will add to the existing literature and can be used to further refine the work that is currently underway with vulnerable families in New Zealand. Furthermore, the common elements identified here can be used as a precursor to a more in-depth look at how these elements, and others identified in future New Zealand evaluations, can be fit together to form relevant interventions that have a good chance of working with locally or regionally identified populations.

5. References

(Includes only references cited in this report. Refer to Appendix 1 and 2 for a reference list of all papers included in the REA)

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6. List of appendices in accompanying documents

Appendix 1: Data extraction form for interventions rated Well Supported, Supported, Promising and Emerging

Appendix 2: Effectiveness ratings of parenting interventions included in the REA

Appendix 3: Summary of Well Supported, Supported and Emerging interventions: Intervention delivery, content and evaluation results

Appendix 4: Data extracted regarding the Well Supported intervention

Appendix 5: Data extracted regarding the Supported interventions

Appendix 6: Data extracted regarding the Emerging interventions

Appendix 7: Intervention component matrix for the Well Supported, Supported and Emerging interventions

Appendix 8: Information collected regarding Healthy Start

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Appendices 1 and 2

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

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Appendix 1: Data extraction form for interventions rated Well Supported, Supported, Promising and Emerging

Appendix 2: Effectiveness ratings of parenting interventions included in the REA

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Disclaimer
This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

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Contents

Appendix 1: Data extraction form for interventions rated Well Supported, Supported, Promising and Emerging

Study ID (first surname + year)	**Initials of person extracting data** **Date**
Full citation	
Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA	
Was a cluster design used? If so, clustered by schools, communities, families etc?	
Country in which study was conducted	
Inclusion criteria Children: Parents:	
Exclusion criteria Children: Parents:	

Participant demographics at baseline

		Intervention	Comparison
Number assigned to groups	Children		
	Parents		
Number in final analysis	Children		
	Parents		
Age (mean, SD, range)	Children		
	Parents		
Sex	Children		
	Parents		
Education	Parents		
Ethnicity/indigenous	Parents		
	Children		
Notes			

Vulnerability or maltreatment issues (reason this child/parent/family is in this intervention. Select as many as applicable)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		

Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Intervention delivery and dose (Select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	

	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	
	Duration of sessions	
	Total duration of program	
Person delivering	Was it a professional? (person with qualifications, e.g., social worker, psychologist, nurse, teacher, youth worker)	
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Intervention	Control	Alternate	

Intervention delivery	Intervention content

Appendix 2: Effectiveness ratings of parenting interventions included in the REA

Intervention name (description - where name not available)	Studies
Well Supported	
Nurse Family Partnership (NFP)	Eckenrode et al. 2000; 2001 Kitman et al. 1997 Olds et al. 1986; 1994; 1995; 1997; 1998; 1999; 2002 Olds 2002; 2006; 2007; 2008 Zielinski et al. 2009
Supported	
Attachment and Biobehavioral Catch-up (ABC)	Bernard et al. 2012 Dozier et al. 2006; 2009 Lewis-Morrarty et al. 2012 Sprang 2009
Parent-child interaction therapy (PCIT)	Chaffin et al. 2004 Thomas & Zimmer-Gembeck, 2011 Thomas & Zimmer-Gembeck, 2012
Triple P Positive Parenting Program – Standard and Enhanced Group Behavioural Family Intervention	Sanders et al. 2000; 2004; 2007
SafeCare	Chaffin et al. 2012 Silovsky et al. 2011

Intervention name (description - where name not available)	Studies
Promising	
NONE IDENTIFIED	
Emerging	
Child FIRST	Lowell et al. 2011
Child-Parent Psychotherapy (CPP)	Ippen et al. 2011 Liberman et al. 2005; 2006
Cognitive Behavioral Therapy for Sexually Abused Preschoolers (CBT-SAP)	Cohen & Mannarino 1996a; 1996b; 1998
Early Intervention Foster Care Program (EIFC)	Fisher et al. 2000; Fisher et al. 2005
Early Start	Fergusson et al. 2005a; 2005b; 2006; 2012; 2013
Parent training prevention model-description	Peterson et al. 2003
Parents Under Pressure (PUP)	Dawe & Harnett, 2007
Pending	
Adolescent prenatal home-visited group - description	Barnet et al. 2007
Child and Youth Program	Hardy & Street 1989
Child Parent Enrichment Project (CPEP)	Barth 1991 Barth et al. 1988
Comforting and interaction techniques - description	French et al. 1998

Intervention name (description - where name not available)	Studies
Pending	
Community health nurse prenatal home visits - description	Starn 1992
COPE intervention	Fantuzzo et al. 2007
Early home visiting based on Family Partnership Model	Barlow et al. 2007 McIntosh et al. 2009
Early Intervention Program (EIP) delivered by Public Health Nurses (PHN) - description	Koniak-Griffin et al. 2003
Enhanced Healthy Start	Bugental et al. 2002; 2009
Family Spirit	Barlow et al. 2013 Mullany et al. 2012
Group parent training with individualised home-based training - description	Wolfe et al. 1988
Healthy Families	Duggan et al. 2009 DuMont et al. 2008 Falconer et al. 2011 Gessner 2008 LeCroy & Krysik 2011 Lee et al. 2009 Rodriguez et al. 2010

Intervention name (description - where name not available)	Studies
Pending	
Home-based parent training - description	Feldman et al. 1992
Home intervention for drug-abusing mothers, based on the Infant Health and Development Program (IHDP) - description	Nair et al. 2003 Schuler et al. 2000; 2002; 2003
Home visits - description	Moss et al. 2011
Home visits for prenatal prevention of out-of-home-placement - description	Marcenko et al. 1996 Marcenko & Spence 1994
Home visits, play groups and parent groups – description	El-Mohandes et al. 2003
1) Infant–parent psychotherapy (IPP) 2) Psychoeducational parenting intervention (PPI)	Cicchetti et al. 2006
In-hospital and after-care services by trained student nurses - description	Taylor & Beauchamp 1988
Maltreatment prevention home visits by interdisciplinary team - description	Armstrong et al. 1999; 2000 Fraser et al. 2000
Miller Early Childhood Sustained Home Visiting (MECSH)	Kemp et al. 2011
Mother and Toddlers Program	Suchman et al. 2010; 2011
MOtherS Advocates in the Community (MOSAIC)	Taft et al. 2011
My Baby and Me	Akai et al. 2008

Intervention name (description - where name not available)	Studies
Pending	
Parent and newborn rooming-in postpartum – description	O'Connor et al. 1978
Parent-Child Activities Interview	Lefever et al. 2008
Parent mentoring based on the Touchpoints approach - description	Zajicek-Farber 2012
Period of PURPLE Crying	Fujiwara et al. 2012b
Prenatal and paediatric health services program - description	Brayden et al. 1993
1) Preschooler-parent psychotherapy (PPP) 2) Psychoeducational home visitation (PHV)	Toth et al. 2002
SOS! Help for Parents	Oveisi et al. 2010
STAR Parenting Program	Nicholson et al. 2002
The Pride in Parenting Program	Katz et al. 2011
The Seattle Model of Paraprofessional Advocacy	Ernst et al. 1999
Triple P - US Triple P System Population Trial	Prinz et al. 2009
Webster-Stratton Parenting Program (an early iteration of Incredible Years)	Hughes & Gottlieb 2004
"What Do I Say Now?"	Burgess & Wurtele 1998
Young Parenthood Program (YPP)	Florsheim et al. 2012

Intervention name (description - where name not available)	Studies
Insufficient Evidence	
Based on Systematic Training for Effective Parenting (STEP) – description	Huebner 2002
Centre-based therapeutic day treatment program and parent services - description	Culp et al. 1991
Crisis nursery – description	Cole & Hernandez 2011
Children's Treatment Program (CTP)	Duffany & Panos 2009
ChIME (Chinese Immigrant Mothers oral health Education) program	Yuan & Freeman 2011
Community Infant Project (CIP)	Huxley & Warner 1993
Cottage Community Care Pilot Project	Kelleher & Johnson 2004
Family treatment drug courts (FTDCs)	Green et al. 2007; Bruns et al. 2012
Full Love in the Family Protects Your Kids	Sawasdipanich et al. 2010
Group program for sole-parent mothers run by Opportunity for Advancement - description	Resnick 1985
Happy Mothers, Happy Babies (HMHB)	Hesselink 2012
Home visiting for African American mothers – description	Muslow & Murry 1996
Home Visit Service for Newborns and Home Visit Project for All Infants	Fujiwara et al. 2012a
Keiner f¨allt durchs Netz (KfdN; "Nobody Slips Through the Net")	Sidor et al. 2013

Intervention name (description - where name not available)	Studies
Insufficient Evidence	
Mother-infant clinical home visiting – description	Lyons-Ruth & Melnick 2004
Parent-baby (ad)venture (PBA)	Vines & Williams-Burgess 1994
Substance abuse treatment - description	Barth et al. 1983
Teen parent education program - description	Britner & Reppucci 1997
Teen Parents and Babies Program (TPBP)	Honig & Morin 2001
Thrive Program	McKelvey et al. 2012
Title 1 Child-Parent Centers	Reynolds et al. 2002 Reynolds & Robertson 2003
Failed to Demonstrate Effect	
Adolescent parents attending school - description	Stritzinger et al. 2002
Colorado Assessment Maternity Program (CAMP)	Stevens-Simon et al. 2001
Comprehensive Child Development Program (CCDP)	Goodson et al. 2000
Healthy Start	Bair-Merritt et al. 2010 Duggan et al. 1999 Duggan et al. 2004a; 2004b; 2004c El-Kamary et al. 2004 McCurdy 2001 McFarlane et al. 2013

Intervention name (description - where name not available)	Studies
Failed to Demonstrate Effect	
Extended postpartum contact and paraprofessional home visits - description	Siegel et al. 1980
Group well-child care (GWCC)	Taylor et al. 1997 Taylor & Kemper 1998
Home-based intervention for maternal depression and child behaviour - description	Cheng et al. 2007
Nurse home visits for family in child protection - description	MacMillan et al. 2005
Parent-child group education facilitated by a mentor - description	Constantino et al. 2001
Trauma-Focused CBT with Trauma Narrative	Deblinger et al. 2011
Concerning Practice	
NONE IDENTIFIED	

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(Includes references for all papers in the REA)

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Appendix 3

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

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Appendix 3: Summary of Well Supported, Supported and Emerging interventions: Intervention delivery, content and evaluation results

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Disclaimer

This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

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Contents

Appendix 3: Summary of Well Supported, Supported and Emerging interventions: Intervention delivery, content and evaluation results

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
Well Supported								
Nurse-Family Partnership (NFP)	USA	Program	Pre and postnatal Teen parents Low SES/disadvantaged Single parents	Child development Child behaviour Safety and physical wellbeing Basic child care Parent-child relationships Family relationships Systems outcomes	Variable number of home-based sessions for individual families delivered by professionals starting during pregnancy and finishing when the child is 2 years old	Link families to needed services, housing, income and nutritional assistance, child care and educational and vocational training Individualised service plans Nurses "worked directly with mothers" Clarify parent goals Praise and encouragement Structured	Health-related behaviour during pregnancy and early years Care parents provide to their child Maternal personal life-course development (family planning, educational achievement, participation in the workforce) Problem solving skills	Fewer yeast infections – 36 weeks pregnancy Less hypertension - labour Subgroup of poor unmarried mothers. Less restriction and punishment and more appropriate play material than controls – just before post Fewer healthcare visits for injuries/ingestions, less days in hospital, more breastfeeding attempts, fewer subsequent

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
						session guidelines and plans for visits		pregnancies/births, greater mastery – 2 year follow-up Fewer visits to emergency – 2 year follow-up Less hazards in the home and avoidable punishment – 22 month follow-up Improved behavioural coping and fewer days in hospital – between 1 month and 3 years follow-up Less substantiated reports of child abuse and neglect, maltreatment reports, less being stopped by police, fewer arrests and convictions – 15 years Subgroup of lower

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
								SES unmarried mothers. Less substance use, fewer arrests, fewer convictions, fewer days in jail, fewer subsequent pregnancies and births, better birth spacing, less months receiving aid, less running away, fewer days drinking alcohol, fewer sex partners, fewer days using – 15 years Fewer CPS reports: involving mothers as perpetrators, involving the study child, of neglect, abuse – 15 years
Supported								
Attachment and Biobehavioral	USA	Program	Under 6 years Children at risk of maltreatment or who	Child development Child	10 sessions over 10 weeks	Written material in the form of a manual	Teach caregiver to reinterpret children's alienating behaviours	Improved child behaviours, avoidance

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
Catch-up (ABC)			have been maltreated	behaviour Parent-child relationships	delivered by a professional in the home/foster home to individual parent/carer-child dyads	Discussion Videotape during structure activities with performance feedback	Nurturance in response to child distress Teach caregiver to manage negative reactions when child displays negative behaviours Synchronous parent-child interactions Providing a predictable environment for child	attachment behaviour, disorganised attachment, secure attachment – 1 month follow-up Higher cognitive flexibility, theory of mind – 2 year follow-up
Parent-Child Interaction Therapy (PCIT)	Australia and USA	Program	Child mean age of 5 years At risk of maltreatment	Child development Child behaviour Safety and physical wellbeing Parent-child relationships	Average of 14 to 16 weekly sessions for individual parent-child dyads delivered in the home or clinic, medical or health setting by professionals	Didactic presentation to parents Direct coaching of parents while they are interacting with the children Praise for appropriate responses to child behaviour Immediate remediation for inappropriate response to	Child behaviour management Labelled praise Reflect or paraphrase the children's appropriate talk Use behavioural descriptions to describe the child's positive behaviour Avoid using commands, questions or criticism Effective instructions and commands Following through on direct commands via labelled praise or time out	Less child externalising problems, less behaviour intensity, reduced stress – 12 weeks Less child behaviour problems and intensity, improved child internalising and externalising behaviour, improved parent stress, improved parent verbalisations and parent sensitivity-

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
						child behaviour Treatment continues to Mastery criteria – parent successfully and consistently demonstrates strategies learned and expresses a clear understanding of their own change and role in the family		post
			Child aged 4 to 12 years History of maltreatment	Child behaviour Safety and physical wellbeing Parent-child relationships	Home-based sessions for individual parent-child dyads and clinic-based sessions for groups of parents. 22 to 24 weekly sessions delivered by professionals			Fewer re-reports of physical abuse – 2.3 year follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
SafeCare	USA	Service model	Under 5 years Caregivers with risk factors such as substance abuse, mental health issues or intimate partner violence	Child development Safety and physical wellbeing Basic child care Parent-child relationships Systems outcomes	Home-based sessions delivered by professionals	Assess parent skills using observations and checklists Teach skill deficits via active skills training Verbal instructions Discussion Modelling Role-play Feedback Praise Homework tasks Teach to mastery criteria in simulation and in actual interactions	Parent-child or parent-infant interactions Basic caregiving structure Parenting routines Home safety (assess home hazards and teach parents to remove hazards and child proof doors and cabinets, provide safety equipment such as door and cabinet latches) Problem solving Child health care Planned activities training (teach parent time management, explain rules to child, reinforcement/rewards, incidental teaching, activity preparation, outcome discussions with child, explain expectations to child)	Fewer reports of domestic violence – post
			Children under 12 years History of maltreatment	Child development Safety and physical wellbeing Basic child care Parent-child relationships Systems outcomes	Home-based sessions delivered weekly by professionals over 6 months to individual families			Less maltreatment recidivism – 7 years

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
Triple P Positive Parenting Program – Standard and Enhanced Group Behavioural Family Intervention	Australia	Program	Mean age 4 years History of maltreatment	Child development Child behaviour Parent-child relationships	Standard 4 weekly group sessions in the community and 4 individual telephone calls. All delivered by a professional Enhanced As above plus 4 additional group sessions delivered in the community by a professional	Standard Discussion Written material in the form of a workbook Set goals for behaviour change Modelling Rehearsal Practice Goal setting Enhanced As above	Standard Child behaviour management 10 strategies for promoting children's competence (i.e., quality time; talking with children; physical affection; praise; attention; engaging activities; setting a good example; Ask, Say, Do; incidental teaching; and behaviour charts) Seven strategies for managing misbehaviour (i.e., setting rules; directed discussion; planned ignoring; clear, direct instructions; logical consequences; quiet time; and time-out). Planning ahead for high risk situations in relation to difficult child behaviour. Planned activities training Enhanced As above plus Cognitive re-framing in relation to negative parental	Lower negative parental attribution – post

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
							attributions about child behaviour Anger management using physical, cognitive and planning strategies	
			Mean age of 3 years Parents with a mental illness and concerns about child behaviour	Child development Child behaviour Parent-child relationships	<u>Standard</u> Average of 10 weekly individual sessions delivered by a professional. Half delivered in a clinic and half at home. <u>Enhanced</u> Average of 12 weekly individual sessions delivered by a professional. Half	<u>Standard</u> Written material in the form of a workbook Verbal instruction on how to use written material Discussion Modelling Role-play Feedback Homework tasks <u>Enhanced</u> As above, plus Delivery method was individualised	<u>Standard</u> Child behaviour management – 10 strategies for promoting children's competence and seven strategies for managing misbehaviour Planning ahead for high risk situations in relation to difficult child behaviour. Planned activities training <u>Enhanced</u> As above plus Partner support for couples (positive listening and speaking, strategies for building a caring relationship) Coping skills for couples (assist with personal adjustment difficulties such as depression, anger, anxiety,	Improve negative child behaviour, parents' perceptions of disruptive behaviour, parents' reports of problem child behaviour, parents' reports of dysfunctional discipline style, mothers' sense of competency – post Fewer reports of negative child behaviour – 12 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
					delivered in a clinic and half at home	for each family (e.g., amount of time spent on active skills training varied across families)	stress) Social support via a significant other for single parents	
Promising								
NONE IDENTIFIED								
Emerging								
Child FIRST	USA	System of care	Children aged 6 to 36 months with emotional/behavioural problems Parents at psychosocial risk	Child development Child behaviour Safety and physical wellbeing Parent-child relationship Family relationship Systems outcomes	Mean of 24 home-based sessions delivered over 22 weeks to individual families by a professional	Assessment of child and family Individualised plan Linkage to other services, such as mental health, health and early care, early interventions, education, child protection and social and concrete	Home visiting components are guided by parental need rather than a fixed curriculum Observations of child's emotional, cognitive and physical development Observation of parent-child interactions Psychoeducation including developmental stages, expectations and means of typical behaviours Reflective functioning to understand the child's	Smaller percentage of children language problems, problems with toddler social and emotional development, parental global psychiatric symptoms, parental stress – 12 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
						services Based on family priorities, strengths, culture and needs Collaboration with families	feelings and the meaning of the child's unique and challenging behaviours Psychodynamic understanding of the mothers history, feelings and experience of the child Alterative perspectives of child behaviour and new parental responses Positive reinforcement of both parents' and child's strengths to promote parents self-esteem	
Child-Parent Psychotherapy (CPP)	USA	Program	3 -5 years Domestic, family or intimate partner violence	Child development Child behaviour Safety and physical wellbeing Parent-child relationship Family	Mean of 32 sessions delivered over 50 weeks to individual parent-child dyads by a professional	Initial sessions focus on assessment Communication of assessment finding with mother Individualised treatment plan Discussion	Parent-child relationships Safety in the environment Promote safe behaviour Support appropriate limit setting Self-regulation (development guidance regarding how children regulate affect and emotional reactions, support and label affective experiences, support parent's	Improved traumatic stress disorder and avoidant behaviour scores - post Improved child behaviour total score – 6 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
				relationship			skills to respond in helpful, soothing ways when child is upset) Reciprocity in relationships (reinforces parent and highlight parent's and child's love and understanding of each other, support expression of positive negative feelings for important people, develop interventions to change maladaptive patterns of interactions) Focus on traumatic events (help parents acknowledge what child has witnessed and remembered, help parents and child understand each other's perspective to the trauma. Provide developmental guidance acknowledging response to trauma, make linkage between past experiences and current thoughts, feelings and behaviours, help parents understand link between her	

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
							own experiences and current feelings and parenting practices, highlight the difference between past and present circumstances, support parent and child in creating a joint narrative, reinforces behaviours that help parent and child master the trauma and gain new perspective) Continuity of daily living (foster prosocial adaptive behaviour, foster efforts to engage in appropriate activities, foster development of a daily routine)	
Cognitive Behavioral Therapy for Sexually Abused Preschoolers (CBT-SAP)	USA	Program	3 – 6 year old History of maltreatment	Child development Child behaviour Parent-child relationships Family relationships	12 sessions delivered weekly by professionals to individual parent-child dyads in a clinic, medical or health	Cognitive behavioural therapy Cognitive reframing Thought stopping, Positive imagery Contingency	For parents: Ambivalence about belief in the sexual abuse Ambivalence towards the perpetrator Attributions regarding the abuse Feelings that the child is	Lower score for behaviour profile and internalising problems - post Less sexualised behaviour, fewer types of problematic behaviours, lower frequency of

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
					setting	reinforcement. Parenting management training Problem solving Psychoeducation Supportive interventions	damaged Management of child fear and anxiety Provision of appropriate emotional support to the child Management of appropriate behaviours Dealing with the parents issues in relation to their own abuse For the child: Attributions regarding the abuse Ambivalent feeling towards the perpetrators Child safety and assertiveness training Appropriate versus inappropriate touching Inappropriate behaviour Issues of fear and anxiety	problematic behaviours – 12 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
Early Intervention Foster Care Program (EIFC)	USA	Service model	Children aged 3 to 6 years old in the foster care system	Systems outcomes	6 to 9 months of weekly group sessions for children and individual and group sessions for foster parents. Professional delivered.	Training of foster care parents is completed before they receive foster care (unlike most other parenting interventions that are for families with children living with them) After placement, foster parents work with practitioner via "support and supervision through daily telephone contacts, weekly foster parents support group meetings and a 24-hour on-call crisis	Child behaviour management Foster parents training focuses on positive parenting strategies to promote child psychosocial development and behavioural regulation (warm, responsive, consistent home environment) Positive reinforcement Close supervisions and engagement Labelling target behaviours and tracking their occurrence Using behaviour contracting with rewards an star charts to increase prosocial behaviour Using timeout and other contingent approaches to setting limits Individualised child treatment teaches prosocial skills to improve behaviour Weekly playgroup focuses on skills for school readiness such as early literacy	Fewer failed permanent placements – 24 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
						intervention" Children receive direct service with behavioural specialist at preschool/day care and home Children attend weekly "therapeutic" playgroup sessions		
Early Start	New Zealand	Program	Up to 3 months old At risk of maltreatment. Domestic, family or intimate family violence, parental substance abuse	Child development Child behaviour Safety and physical wellbeing Parent-child relationships Family relationships Systems	Professional delivered program to individual families in the home over 3 years. Number of sessions varied from a maximum of one per week to minimum of	Essential features only as authors report service provision is flexible and it is difficult to provide account of the work undertaken Individualised service planning Assessment of family needs, issues,	Essential features only as authors report service provision is flexible and it is difficult to provide account of the work undertaken Child health (timely medical visits, compliance with immunisation and wellbeing checklists, home safety and home environment) Parenting skills (parental sensitivity, positive parenting and non-punitive parenting) Supporting parental physical	Greater duration of early childhood education – post Greater score for positive parenting attitude and non-punitive attitudes– post Smaller percentage of parental reports of severe physical assault - post Fewer internalising or externalising

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
				outcomes	1 per month	challenges strengths and resources Focus on relationship development between worker and family Collaborative problem solving focused on family challenges Supporting, teaching, mentoring and advice to assist client families to use their strengths and resources	and mental health (reductions of unplanned pregnancies, early detection and treatment of depression/anxiety/substance abuse) Family economic and material wellbeing (budgeting, employment) Positive adult relationships Crisis management	behaviour problems – 9 year follow-up Higher parenting score – 9 year follow-up Smaller percentage attended hospital for accident/injury – 9 year follow-up Smaller percentage of parent reported harsh punishment – 9 year follow-up Lower score for physical punishment – 9 year follow-up Lower score for strengths and difficulties – 9 year follow-up Fewer severe physical assaults by any parent – 9 year follow-up Smaller percentage of agency contact

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
								for abuse/neglect – 9 year follow-up
Parent training prevention model (description)	USA	Program	Children aged 18 months to 4 years At risk of maltreatment and low SES/disadvantaged	Child development Child behaviour Safety and physical wellbeing Parent-child relationships	15 weekly home-based sessions for individual parents, plus sessions for groups of parents. Delivered by a professional.	Nondidactic, continuous interaction between group members and group facilitator Written materials outlining group curriculum Group start with one or more women sharing a positive experience with child that happened over the week Review of previous week's curriculum Role-playing Socratic	Main focus is on child behaviour management Problem solving Time management Positive parenting techniques such as child-led play, distraction, "catching child being good" and effective compliance strategies Anger management Time out for difficult child behaviour Child health and safety issues (e.g., losing control or leaving child with someone who might lose control)	Improved problems solving ability and number of tasks during which mothers rewarded children – post Improved child elicited anger and parent self-efficacy – 9 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
						dialogue Modelling Discussion of barriers to the curriculum use Homework tasks		
Parents Under Pressure (PUP)	Australia	Program	Children aged 2 – 8 years Parental substance abuse	Child behaviour Safety and physical wellbeing Family relationships	10 home-based sessions over 10 – 12 weeks delivered by a professional to individual parents	Begins with assessment and individualised case planning in collaboration with parents Additional case management can occur outside treatment session (e.g., housing, legal advice, school intervention)	10 modules Strengthen the parent's view that they are competent in the parenting role Help parents develop skills in coping with negative emotional states through use of mindfulness skills Positive parenting skills including praise, rewards for good behaviour, and child-centred play skills Non-punitive child management techniques such as time-out Coping with lapse and relapse (to use of alcohol and drugs)	Lower parenting stress, lower child abuse potential, less rigid or harsh parenting beliefs and attitudes, lower parental methadone dose, child behaviour problem – 6 month follow-up

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
							Extending social networks Life skills: practical advice on diet and nutrition, budgeting, health care and exercise Relationships (effective communication between partners)	

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Appendix 4

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

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Appendix 4: Data extracted regarding the Well Supported intervention

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Disclaimer

This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

June 2013

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Contents

Appendix 4: Data extracted regarding the Well Supported intervention

1. Nurse-Family Partnership (NFP)

Study ID (first surname + year) Olds 1986; Olds 1994; Olds 1995; Olds 1997; Olds 1998; Eckenrode 2001; Eckenrode 2000; Zielinski 2009	**Initials of person extracting data** MT **Date** 9/5/13

Full citation

Olds, D. L., Henderson, C. R. J., Chambelin, R., & Tatelbaum, R. (1986). Preventing child abuse and neglect a randomised trial of nurse home visitation. *Pediatrics*, 78(1), 65-78.

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Eckenrode, J., Zielinski, D., Smith, E., Marcynyszyn, L. A., Henderson, C. R., Jr., Kitzman, H., Cole, R., Powers, J., & Olds, D. L. (2001). Child maltreatment and the early onset of problem behaviors: Can a program of nurse home visitation break the link? *Development & Psychopathology*, 13(4), 873-890.

Eckenrode, J., Ganzel, B., Henderson, C. R., Smith, E., Olds, D. L., Powers, J., Cole, R., Kitman, H., & Sidora, K. (2000). Preventing child abuse and neglect with a program of nurse home visitation: The limiting effects of domestic violence. *Journal of the American Medical Association*, 284(11), 385-91.

Zielinski, D. S., Eckenrode, J., & Olds, D. L. (2009). Nurse home visitation and the prevention of child maltreatment: Impact on the timing of official reports. *Development and Psychopathology*, 21(2), 441-453.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Parents:

No previous live births; less than 26 weeks gestation; at least one of the following factors (young age <19 years; single-parent status; low socio-economic status). However, any woman who asked to participate and was pregnant with her first child was enrolled.

Note. Across papers reporting the same RCT (Elmira NY, 1978-1980) the inclusion criteria for gestation varies from 25th week to 30th week. Also the terms 'single-parent status' and 'unmarried' are used interchangeably.

Exclusion criteria

Children:

Parents:

Participant demographics at baseline

		Group 1	Group 2	Group 3	Group 4
Number assigned to groups	Children				
	Parents	90	94	100	116
Number in final analysis	Children				
	Parents	Refer to Sample size for analysis table below			
Age (mean, SD, range)	Children				
	Parents	*Mean = 19.3 years; SD = 2.9 years		Mean = 19.5 years; SD = 3.1 years	Mean = 19.4 years; SD = 3.7 years
Sex	Children	*55% male		44%	55%

			male	male
	Parents	*100% female	All female	All female
Education	Parents	*Mean = 11.2 years; SD = 1.5 years	Mean = 11.6 years; SD = 1.5 years	Mean = 11.1 years; SD = 1.6 years
Ethnicity/indigenous	Parents	*90% white	91% white	86% white
	Children			

*Aggregate demographic data reported for Group 1 and 2 combined.

Notes

High risk sub-group (low SES, unmarried sample) demographic characteristics.

		Group 1 + 2	**Group 3**	**Group 4**
Number assigned	Parents	62	30	38
Age (mean, SD, range)	Parents	Mean 18.6 ± 2.5 years	Mean 19.0 ± 2.8 years	Mean 18.2 ± 3.3 years
Sex	Children	44% male	53% male	49% male
	Parents	All female	All female	All female
Education	Parents	Mean = 10.7 years; SD = 1.4 years	Mean = 10.9 years; SD = 1.4 years	Mean = 10.3 years; SD = 1.5 years
Ethnicity/indigenous	Parents	87% white	87% white	77% white

Sample size for final analysis

Paper	**Follow-up period**	**Group 1 + 2**	**Group 3**	**Group 4**
Olds 1994	20 to 50 months	160	85	93
Olds 1995	20 to 50 months	29	14	13
Olds 1997	15 years	Cannot tell	Cannot tell	Cannot tell
Olds 1998	15 years	148	79	97
Eckenrode 2001	15 years	Cannot tell	Cannot tell	Cannot tell
Eckenrode 2000	15 years	Cannot tell	Cannot tell	Cannot tell
Zielinski 2009	15 years	Cannot tell	Cannot tell	Cannot tell

* Represent the number of parents analysed in each study. Demographic characteristics

were also reported for the sub-sample, but not reported here.

Vulnerability or maltreatment issues (reason this child/parent/family is in this intervention. Select as many as applicable)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but not mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent	Yes	Yes
Low SES/disadvantaged	Yes	Yes
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Single-parent status	Single-parent status
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	

Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Group 1 (Comparison) - When children were aged 1 and 2 an infant specialist hired by the research project screened them for sensory and developmental problems and referred those with suspected problems to other specialists for further evaluation and treatment.

Group 2 (Comparison) - Families were provided free transportation for regular prenatal and well-child care at local clinics and physicians' offices through a contact with a local taxicab company, as well as the sensory and developmental screening outlined in Group 1.

Group 3 (Treatment) - Families were provided a nurse home visitor during pregnancy, in addition to the screening and transportation services. The nurses visited families approximately once every 2 weeks and made an average of nine visits during pregnancy. The average visit lasted 1 hour and 15 minutes.

Group 4 (Treatment) - Families received the same services as those in Group 3, but in addition the nurse continued to visit until the children were 2 years of age. For 6 weeks after delivery the nurses visited the families every week; from 6 weeks to 4 months, they visited every 2 weeks; from 4 to 14 months, every 3 weeks; from 14 to 20 months, every 4 weeks; and from 20 to 24 months, every 6 weeks.

Intervention delivery and dose (Select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes

	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	Yes
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	Yes
Dose	Number of sessions	Group 3: Average 9 visits (Range = 0-16). Group 4: Average 23 visits (Range = 0-59).
	Duration of sessions	1 hour 15 minutes
	Total duration of program	Pregnancy to 2 years of age
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes (nurse)
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc)	
	Cannot tell	

Results

Olds et al 1986. *Pediatrics*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
Avoidance of restriction and punishment	In home observation	Group 1 and Group 2 were combined. Together they represented the control group.			+ (punished and restricted their children less frequently) compare to control. Only in poor and unmarried teenagers.	At 22 months of children's lives
Provision of appropriate play materials	In home observation	Group 1 and Group 2 were combined. Together they represented the control group.			+ (larger number of appropriate play materials) compared to control. Only in poor and unmarried teenagers.	At 22 months of children's lives

Emergency room visits		Group 1 and Group 2 were combined. Together they represented the control group.		+ (Less visits) compared to control	2nd year of life
Emergency room visits for accidents and poisoning		Group 1 and Group 2 were combined. Together they represented the control group.		+ (Less visits compared to control)	2nd year of life

Olds et al 1994. *Pediatrics*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
Hazardous exposure observed in home	In home observation by interviewer	Group 1 and Group 2 were combined. Together they represented the control group.			+ compared to control (fewer hazards)	46 months
No. of behavioural coping problems	Children's paediatric records	Group 1 and Group 2 were combined. Together they represented the control group.			+ compared to control (fewer problems)	25 to 60 months
No. Of emergency department visits for injuries/ingestions	Children's hospital records	Group 1 and Group 2 were combined. Together they represented the control group.			+ compared to control (fewer injuries)	25 to 60 months
No. of days hospitalised	Children's hospital records	Group 1 and Group 2 were combined. Together they represented the control group.			- compared to control (more days in hospital)	25 to 60 months

				NOTE: This is explained in terms of one outlier	
Avoidance of punishment	Caldwell and Bradley Home Inventory	Group 1 and Group 2 were combined. Together they represented the control group.		- compared to control (more punishment)	46 months
Substantiated reports of maltreatment	CPS Records	Not different from control			Between child birth and children's 4th year of life

Olds et al 1995. *Pediatrics*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
Hazardous exposure observed in home	In home observation by interviewer	Group 1 and Group 2 were combined. Together they represented the control group			+ compared to control (fewer hazards)	46 months
No. injuries/ingestions	Children's paediatric records	Group 1 and Group 2 were combined. Together they represented the control group.			+ compared to control (fewer injuries)	25 to 50 months
No. Of	Children's	Group 1 and Group 2			+	25 to 50

emergency department visits	hospital records	were combined. Together they represented the control group.		compared to control (fewer visits)	months
Abuse or neglect notations, the presence of different types of maltreatment, combinations of types of maltreatment, or the extent to which children were removed from the home.	CPS Records	Not different from control			Between child birth and children's 4th year of life

Olds et al 1997. *JAMA*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
Substantiated reports of child abuse and neglect	CPS Records	Group 1 and Group 2 were combined. Together they represented the control group			+ (less perpetration of child abuse and neglect compare to control). For both whole	15 years after birth of first child

				group and lower SES unmarried mothers	
Substance use	Self report at interview – questions adapted from National Comorbidity Survey	Group 1 and Group 2 were combined. Together they represented the control group		+ (less use compared to control). For lower SES unmarried mothers only	15 years after birth of first child
Arrests	Self report at interview	Group 1 and Group 2 were combined. Together they represented the control group		+ (fewer arrests compared to control). For lower SES unmarried mothers only.	15 years after birth of first child
Convictions	Self report at interview	Group 1 and Group 2 were combined. Together they represented the control group		+ (fewer convictions compared to control). For lower SES unmarried mothers only	15 years after birth of first child
Days in jail NYS arrests	Records from NYS Division of Criminal Justice Services	Group 1 and Group 2 were combined. Together they represented the control group		+ (less days in jail compared to control). For lower SES unmarried mothers only	15 years after birth of first child
NYS	Records from NYS	Group 1 and Group 2 were combined.		+ (less conviction	15 years after birth

convictions	Division of Criminal Justice Services	Together they represented the control group		s compared to control). For lower SES unmarried mothers only.	of first child
Subsequent pregnancies	Life history calendar completed at interview	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less pregnancies compared to control). For lower SES unmarried mothers only.	15 years after birth of first child
Subsequent births	Life history calendar completed at interview	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less births compared to control). For lower SES unmarried mothers only.	15 years after birth of first child
Months between birth of first and second child	Life history calendar completed at interview	Group 1 and Group 2 were combined. Together they represented the control group.		+ (more months compared to control). For lower SES unmarried mothers only.	15 years after birth of first child
Months receiving Aid to Families with Dependent Children (AFDC)	Self report at interview	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less months compared to control). For lower SES	15 years after birth of first child

				unmarried mothers only.	
Months receiving food stamps	Self report at interview	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less months compared to control). For lower SES unmarried mothers only.	15 years after birth of first child

Olds et al 1998. *JAMA*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
Incidence of times ran away	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less times compared to control). In Low-SES unmarried sample only	+ (less times compared to control). In Low-SES unmarried sample only	Birth to 15 years
Incidence of times stopped by police	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.			+ (less times compared to control). In whole sample only.	Birth to 15 years
Incidence of	Interviews	Group 1 and Group 2		+ (less	+ (less	Birth to 15

arrests	with children	were combined. Together they represented the control group.	times compared to control). In both whole and Low-SES sample.	times compared to control). In both whole and Low-SES sample.	years
Incidence of convictions and probation violations	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.	+ (less times compared to control). In both whole and Low-SES sample.	+ (less times compared to control). In both whole and Low-SES sample	Birth to 15 years
Incidence of arrests	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less times compared to control). In Low-SES unmarried sample only.	Birth to 15 years
Incidence of days drank alcohol	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less days compared to control). In Low-SES unmarried sample only.	Birth to 15 years
Incidence of days used drugs	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.	- (more days compared to control). In Low-SES unmarrie		Birth to 15 years

			d sample only.		
Incidence of sex partners	Interviews with children	Group 1 and Group 2 were combined. Together they represented the control group.		+ (less compared to control). In Low-SES unmarried sample only	Birth to 15 years

Eckenrode et al 2000. *JAMA*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
No of reports involving mothers as perpetrators	CPS records	Group 1 and Group 2 were combined. Together they represented the control group.			+ (fewer reports compared to control)	15 year
No. of reports involving study child	CPS records	Group 1 and Group 2 were combined. Together they represented the control group.			+ (fewer reports compared to control)	15 year
Mother as perpetrator	CPS records	Group 1 and Group 2 were combined. Together they represented the control group.			+ (fewer reports compared to control)	15 year
Child as victim	CPS records	Group 1 and Group 2 were combined. Together they represented the control group.			+ (fewer reports compared to control)	15 year

Neglect without abuse	CPS records	Group 1 and Group 2 were combined. Together they represented the control group.		+ (fewer reports compared to control)	15 year
Abuse without neglect	CPS records	Group 1 and Group 2 were combined. Together they represented the control group.		+ (fewer reports compared to control)	15 year

Eckenrode et al 2001. ***Development & Psychopathology***

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 4 (Note. Group 3 was not include in analysis)	
Number of early onset behaviours	Self-report of engagement in several potentially problematic health-related behaviours	No association			15 years
Number of maltreatment reports	Child Protection Services Records	Group 1 and Group 2 were combined. Together they represented the control group.		+ (reduction in maltreatment reports compared to control)	15 years

Zielinski et al 2009. *Development & Psychopathology*

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
All maltreatment	CPS reports	Group 1 and Group 2 were combined. Together they represented the control group.			+ fewer reports compared to control	Over 15 years
Neglect	CPS reports	Group 1 and Group 2 were combined. Together they represented the control group.			+ fewer reports compared to control	Over 15 years

Study ID (first surname + year) Kitzman 1997	**Initials of person extracting data** MT **Date** 10/5/2013

Full citation

Kitzman, H., Olds, D. L., Henderson, C. R., Hanks, C., Cole, R., Tatelbaum, R., McConnochie, K. M., Sidora, K., Luckey, D. W., Shaver, D., Engelhardt, K., James, D., & Barnard, K. (1997). Of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing trial: A randomized controlled trial. *Journal of the American Medical Association*, 278(8), 644-652.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Parents:

No previous live births; less than 29 weeks of gestation; at least two of the following sociodemographic risk factors (unmarried; <12 years of education; unemployed).

Exclusion criteria

Children:

Parents:

Specific chronic illnesses thought to contribute to fetal growth retardation or preterm delivery (Eg. Chronic hypertensive disorders requiring medical treatment, severe cardiac disease, large uterine fibroids).

Participant demographics at baseline

		Group 1	**Group 2**	**Group 3**	**Group 4**
Number assigned to groups	Children				
	Parents	166	515	230	228
Number in final analysis	Children				
	Parents	Cannot tell	Cannot tell	Cannot tell	Cannot tell
Age (mean, SD, range)	Children				
	Parents	Mean = 18.0 years; SD = 3.3 years	Mean = 18.1 years; SD = 3.2 years	Mean = 17.9 years; SD = 2.8 years	Mean = 18.1 years; SD = 3.3 years
Sex	Children				

	Parents	All female	All female	All female	All female
Education	Parents	Mean = 10.1 years; SD = 2.0 years	Mean = 10.3 years; SD = 1.9 years	Mean = 10.3 years; SD = 2.0 years	Mean = 10.1 years; SD = 2.0 years
Ethnicity/indigenous	Parents	4% White	8% White	7% White	11% White
	Children				

Notes

Prenatal treatment phase evaluation – Group 1 and 2 were combined to represent a comparison group.

Postnatal treatment phase evaluation – Group 2 was compared to Group 4.

Vulnerability or maltreatment issues (reason this child/parent/family is in this intervention. Select as many as applicable)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but not mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged	Yes (unemployed)	Yes (unemployed)
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Unmarried; <12 years of education	Unmarried; <12 years of education
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Group 1 (Comparison) – Women were provided free round-trip taxicab transportation for scheduled prenatal care appointments; they did not receive any postpartum services or assessments.

Group 2 (Comparision) – Women were provided the free transportation for scheduled prenatal care plus developmental screening and referral services for the child at 6,12, and 24 months of age.

Group 3 (Treatment) – Women were provided the free transportation and screening offered in Group 2 plus intensive nurse home-visitation services during pregnancy, 1 postpartum visit in the hospital before discharge, and 1 postpartum visit in the home.

Group 4 (Treatment) - were provided the same services as those in Group 3; in addition, they continued to be visited by nurses through the child's second birthday.

Intervention delivery and dose (Select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	

	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	Yes
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	
Dose	Number of sessions	Group 3: Average 7 visits (Range = 0-18). Group 4: Average 26 visits (Range = 0-71).
	Duration of sessions	Not indicated
	Total duration of program	Pregnancy to child's 2nd birthday.
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes (nurse)
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family	

	support/education or child welfare etc)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Group 1	Group 2	Group 3	Group 4	
No of yeast infections	Prenatal medical record			+ (fewer infections for 3 and 4 together compared to 1 and 2 together)		36 weeks pregnancy
Used other community services	Phone interview with mothers			+ (more services. 3 and 4 versus 1 and 2)		36 weeks pregnancy
Pregnancy induced hypertension	Intrapartum and postpartum records			+ (less hypertension. T3 and T4 versus T1 and T2)		At labour
Total number of healthcare encounters for injuries/ingestions	Children's medical and hospital records				+ (less visits) compared to T2	2 years
Number of outpatients visits for injuries/ingestions	Children's medical and hospital records				+ (less visits) compared to T2	2 years
Number of days of hospitalization	Children's medical and hospital records				+ (Less days compared to T2)	2 years
Breastfeeding	Interview				+ (more	2 years

(attempted)	with mother				attempts compared to T2)	
Beliefs associated with child abuse	Bavolek total score				+ (improve compared to T2)	2 years
Emotional/cognitive stimulation,	HOME total score				+ (greater score compared to T2)	2 years
Subsequent pregnancy	Interview with mother				+ (fewer pregnancies compared to T2)	2 years
Subsequent live births	Interview with mother				+ (fewer births compared to T2)	2 years
Mastery	Mastery/self-efficacy measure developed for this study specifically				+ (greater mastery compared to T2)	2 years

Study ID (first surname + year) Olds 2002	**Initials of person extracting data** MT **Date** 10/5/2013

Full citation

Olds, D. L., Robinson, J., O'Brien, R., Luckey, D. W., Pettitt, L. M., Henderson, C. R., Ng, R. K., Sheff, K. L., Korfmacher, J., Hiatt, S., & Talmi, A. (2002). Home visiting by paraprofessionals and by nurses: A randomized, controlled trial. *Pediatrics*, 110(3), 486-496.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Parents:

No previous live births; qualified for Medicaid or had no private health insurance. Enrolled any time before delivery.

Exclusion criteria

Children:

Parents:

Participant demographics at baseline

		Paraprofessional	**Nurse**	**Comparision**
Number assigned to groups	Children			
	Parents	245	235	255
Number in final analysis	Children			
	Parents	24-month interviews n=213; 24-month child assessments	24-month interviews n=194; 24-month child assessments	24-month interviews n=223; 24-month child assessments

		n=188.	n=168.	n=204.
Age (mean, SD, range)	Children			
	Parents	Mean = 19.44 years; SD = 3.69 years	Mean = 20.24 years; SD = 4.17 years	Mean = 19.70 years; SD = 4.13 years
Sex	Children			
	Parents	100% Female	100% Female	100% Female
Education	Parents	Mean = 11.00 years; SD = 1.83 years	Mean = 11.24 years; SD = 2.04 years	Mean = 11.22 years; SD = 1.88 years
Ethnicity/indigenous	Parents	17% African American; 35% Caucasians (non-Hispanics); 45% Hispanic (nearly all Mexican American; 4% Monolingual Spanish	16% African American; 37% Caucasians (non-Hispanics); 44% Hispanic (nearly all Mexican American; 3% Monolingual Spanish	16% African American; 35% Caucasians (non-Hispanics); 46% Hispanic (nearly all Mexican American; 4% Monolingual Spanish
	Children			

Notes

Demographic data presented for a sub-group used in analysis - low psychological resources sample.

		Paraprofessional	**Nurse**	**Comparison**
Number assigned	Parents	115	97	82
Age (mean, SD, range)	Parents	Mean 19.04 ± 3.90 years	Mean 19.74 ± 4.27 years	Mean 19.71 ± 4.43 years
Sex	Children			
	Parents	All female	All female	All female
Education	Parents	Mean 10.54 ± 1.82 years	Mean 10.62 ± 2.10 years	Mean 10.70 ± 1.73 years
Ethnicity/indigenous	Parents	20% African American; 29% Caucasians (non-Hispanics); 47% Hispanic (nearly all Mexican American; 2% Monolingual	22% African American; 28% Caucasians (non-Hispanics); 47% Hispanic (nearly all	16% African American; 27% Caucasians (non-Hispanics); 56% Hispanic (nearly all

		Spanish	Mexican American; 2% Monolingual Spanish	Mexican American; 4% Monolingual Spanish

Vulnerability or maltreatment issues (reason this child/parent/family is in this intervention. Select as many as applicable)

	Intervention **Yes/no**	**Comparison** **Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but not mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged	Yes (unemployed)	Yes (unemployed)
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Unmarried; <12 years of education	Unmarried; <12 years of education
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Paraprofessional (Treatment) – Women were provided the screening and referral services plus paraprofessional home visitation during pregnancy and infancy (first 2 years of child's life)

Nurse (Treatment) – Women were provided screening and referral plus nurse home visitation during pregnancy and infancy.

Comparision - Women were provided developmental screening and referral services for their children at 6, 12, 15, 21, and 24 months old.

Intervention delivery and dose (Select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	

	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	Yes
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	
Dose	Number of sessions	Paraprofessional group: Average 6.3 visits (Range 0-21) (during pregnancy); Average 16 visits (Range 0-78) (during infancy). Nurse group: Average 6.5 visits (range 0-17) (during pregnancy); Average 21 visits (Range 0-71) (during infancy).
	Duration of sessions	Not indicated
	Total duration of program	Pregnancy to the child's 2nd birthday.
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes (nurse)
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc)	Yes (paraprofessional)
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured (name of measure, self-report etc). List all formal measures or systems level outcomes.	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Paraprofessional	Nurse	Comparision	
Subsequent pregnancy	Interviews with mothers		+ (fewer pregnancies) compared to control		2 years
Subsequent live births	Interviews with mothers		+ (fewer births) compared to control		2 years
Vulnerable: fear stimulus	Laboratory based monitoring of infants' emotional reactivity		+ (less likely to be vulnerable compared to control). Whole sample only.		6 months
Low vitality: joy stimuli	Laboratory based monitoring of infants' emotional reactivity		+ (less likely to show low vitality compared to control). Low resource only.		6 months
Low vitality: anger stimuli	Laboratory based monitoring of infants' emotional reactivity		+ (less likely to show low vitality compared to control). Low resource only.		6 months
Language delay	In home testing of children		+ (less likely to exhibit language delays compared to		21 months

			control). Both whole and low resource sample.		
Mental development	Mental Development Index in lab		+ (less likely to have slow development compared to control). Low resource only.		24 months

Intervention delivery	Intervention content
Link families to needed services, housing, income and nutritional assistance, child care and educational and vocational training Individualised service plans Nurses “worked directly with mothers” Clarify parent goals Praise and encouragement Structured session guidelines and plans for visits	Health-related behaviour during pregnancy and early years Care parents provide to their child Maternal personal life-course development (family planning, educational achievement, participation in the workforce) Problem solving skills

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Appendix 5

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

Parenting Research Centre
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Appendix 5: Data extracted regarding the Supported interventions

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Disclaimer

This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

June 2013

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Contents

Appendix 5: Data extracted regarding the Supported interventions

1. Attachment and Biobehavioral Catch-up (ABC)

Study ID (first surname + year) Bernard et al. (2012)	**Initials of person extracting data** JF **Date** 13/5/13

Full citation

Bernard, K., Dozier, M., Bick, J., Lewis-Morrarty, E., Lindhiem, O., & Carlson, E. (2012). Enhancing attachment organization among maltreated children: Results of randomized clinical trial. *Child Development*, 83(2), 623-636.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

United States

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children: Children at risk of maltreatment

Parents:

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children	60	60
	Parents		

Number in final analysis	Children	60	60
	Parents		
Age (mean, SD, range)	Children	M = 19.2 (SD = 5.2)	M = 19.2 (SD = 5.8)
	Parents	M = 29.0 (SD = 7.3)	M = 29.0 (SD = 8.7)
Sex	Children	Male (62%)	Male (53%)
	Parents	Male (2%)	Male (2%)
Education	Parents	The majority of parents had not completed high school (68%)	The majority of parents had not completed high school (68%)
Ethnicity/indigenous	Parents	Sixty-nine of the parents were African American (61%), 10 were Biracial (9%), 17 were White/Hispanic (15%), and 17 were White/non-Hispanic (15%)	Sixty-nine of the parents were African American (61%), 10 were Biracial (9%), 17 were White/Hispanic (15%), and 17 were White/non-Hispanic (15%)
	Children	Seventy-three of the children were African American (61%), 25 were Biracial (20%), 13 were White/Hispanic (11%), and 9 were White/non-Hispanic (8%).	Seventy-three of the children were African American (61%), 25 were Biracial (20%), 13 were White/Hispanic (11%), and 9 were White/non-Hispanic (8%).
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		

Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Developmental Education for Families (DEF): The Developmental Education for Families sessions was of the same duration (10 hour-long sessions) and frequency (weekly) as the Attachment and Biobehavioral Catch-up intervention

Intervention delivery and dose (Select as many as applicable)		
		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	10 sessions
	Duration of sessions	Not indicated
	Total duration of program	10 weeks

Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control Developmental Education for Families: DEF	Treatment 1 ABC		
Disorganised attachment	Attachment classification - Strange Situations assessment		+ (Lower level of disorganised attachment compared to control)		One month following completion of 10 ABC sessions
Secure attachment	Attachment classification - Strange Situations assessment		+ (Higher rates of secure attachment than control)		One month following completion of 10 ABC sessions

Study ID (first surname + year)	**Initials of person extracting data**
Dozier et al. (2006); Dozier et al. (2009)	JF **Date** 13/5/13

Full citation

Dozier, M., Peloso, E., Lindhiem, O., Gordon, M. K., Manni, M., Sepulveda, S., Ackerman, J., Bernier, A., & Levine, S. (2006). Developing evidence-based interventions for foster children: An example of a randomized clinical trial with infants and toddlers. *Journal of Social Issues*, 62(4), 767-785.

Dozier, M., Lindhiem, O., Lewis, E., Bick, J., Bernard, K., & Peloso, E. (2009). Effects of a foster parent training program on young children's attachment behaviors: Preliminary evidence from a randomised clinical trial. *Child Adolesc Soc Work J*, 26(4), 321-332.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

United States

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children in the foster care system. In order for children to participate, both foster parent and birth parent (or proxy) consent were required.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

Dozier et al. (2006)		**Intervention**	**Comparison**
Number assigned	Children	Whole sample size: 60	Whole sample size: 60
	Parents		
Number in final analysis	Children		

	Parents		
Age (mean, SD, range)	Children	M=19.01 months (SD= 9.64)	M=16.30 months (SD=7.42)
	Parents		
Sex	Children	50% boys	50% boys
	Parents		
Education	Parents		
Ethnicity/indigenous	Parents		
	Children	Most (63%) of the children were African American, with 32% White, and 5% biracial	Most (63%) of the children were African American, with 32% White, and 5% biracial
Notes			
Dozier et al. (2009)		**Intervention**	**Comparison**
Number assigned	Children		
	Parents	N= 46 (whole sample size)	N= 46 (whole sample size)
Number in final analysis	Children		
	Parents	N= 46 (whole sample size)	N= 46 (whole sample size)
Age (mean, SD, range)	Children	M = 18.9 months, range = 3.6 to 39.4 months N= 46 (figure for whole sample)	M = 18.9 months, range = 3.6 to 39.4 months (figure for whole sample)
	Parents		
Sex	Children	F= 50%	F=50%
	Parents	F n =42 M n =4 (figure for whole sample)	F n =42 M n =4 (figure for whole sample)
Education	Parents	Mean = 11.6 years (figure for whole sample)	Mean = 11.6 years (figure for whole sample)
Ethnicity/indigenous	Parents		
	Children	African-American = 63%	

		Non Hispanic White = 26% Hispanic= 3% biracial = 7%	
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At risk of maltreatment (no description of reason)	Yes	Yes
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Control intervention*: Developmental Education for Families (DEF).* The Developmental Education for Families Intervention is of the same duration (10 hour long sessions) and frequency (weekly) as the Attachment and Biobehavioral Catch-up intervention.

Intervention delivery and dose (select as many as applicable)

Dozier et al. (2006)		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	

Setting of delivery	Home	
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	10 sessions
	Duration of sessions	One hour
	Total duration of program	10 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Dozier et al.(2009)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	

	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	10
	Duration of sessions	Not indicated
	Total duration of program	10 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes (professional social workers or psychologists with at least 5 years clinical experience)
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Dozier et al. (2006)

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control Developmental Education for Families: DEF	Treatment 1 ABC	Alternative Never in foster care children	
Cortisol level	Cortisol laboratory assay using saliva samples.	- (Higher levels compared to alternative)	+ (Lower levels of cortisol compared to control)		One month following completion of 10 ABC sessions
Problem behaviours	Parent-completed infant-toddler or the preschool version of the Parent's Daily Report		+ (reported fewer behavioral problems for toddlers than infants, which was not the case for parents in the Developmental Education for Families intervention.		One month following completion of 10 ABC sessions

Dozier et al. (2009)

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.	Follow-up Longest point of follow up (i.e., 6 months; 1 year)

		Control Developmental Education for Families: DEF	Treatment 1 ABC	
Avoidant attachment behaviour	Parent completed attachment diaries.		+ (Less avoidance) compared to control	Post-intervention (1 month after completion)

Study ID (first surname + year) Lewis-Morrarty et al. (2012)	**Initials of person extracting data** JF **Date** 13/5/13

Full citation

Lewis-Morrarty, E., Dozier, M., Bernard, K., Terracciano, S. M., & Moore, S. V. (2012). Cognitive Flexibility and Theory of Mind Outcomes Among Foster Children: Preschool Follow-Up Results of a Randomized Clinical Trial. *Journal of Adolescent Health*, 51(2), S17-S22.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children: Children in foster care

Parents:

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	Comparison
Number assigned	Children	17	20
	Parents		
Number in final analysis	Children		
	Parents		
Age (mean, SD, range)	Children	4 and 6 years (mean [M]= 60.3 months; SD= 8.6 months	4 and 6 years (mean [M] = 60.3 months; SD =8.6 months
	Parents		
Sex	Children	50.8% male	50.8% male
	Parents	100% female	100% female
Education	Parents		
Ethnicity/indigenous	Parents	57.4% of parents were European American, 39.3% were African American, and 3.3% were Asian American.	57.4% of parents were European American, 39.3% were African American, and 3.3% were Asian American.
	Children	42.6% African American; 36.1% European American; 21.3% Hispanic, Asian American, or biracial	42.6% African American; 36.1% European American; 21.3% Hispanic, Asian American, or biracial

Notes

Demographics are for foster care children in intervention and control conditions (whole sample demographics reported for these conditions)

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes

Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	Yes
Treatment as usual/usual care	
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Two comparison groups: one with a history of foster care placement and the other who had not been in foster care

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/No
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	Yes
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	10 sessions
	Duration of sessions	
	Total duration of program	10 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth	Yes

	worker)	
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control Children in foster care	Treatment 1 ABC	Alternative Non-foster care children	
Cognitive flexibility	Dimensional Change Card Sort (DCCS)		+ (Higher scores compared to control)		Approx 2 years post intervention
Theory of mind	Penny-hiding game	- (Lower than non-foster care children. p	+ (Better performance compared to control)		Approx 2 years post intervention

Study ID (first surname + year) Sprang (2009)	**Initials of person extracting data** JF **Date** 13/5/13

Full citation

Sprang, G. (2009). The Efficacy of a Relational Treatment for Maltreated Children and their Families. *Child and Adolescent Mental Health*, 14(2), 81-88.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

The adult caregivers were foster parents caring for children who had experienced severe maltreatment (resulting in termination of parental rights) and who had disruptions in their primary attachment relationships during their early years (0–5 years of age). All of these children had been diagnosed with attachment-related problems that threatened to disrupt their foster care placements. Caregiver-child dyads were eligible for participation in the study if the identified child was younger than six years of age, and if the neither the child or caregiver had begun taking prescribed psychotropic drugs within three months preceding pretest data collection.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Exclusion criteria included the presence of active, severe mental illness as defined by active psychosis, mania, or if either party was imminently suicidal/homicidal, and/or suffering from mental retardation and could not provide informed consent.

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children	29	29
	Parents	29	29
Number in final analysis	Children	26	27
	Parents	26	27
Age (mean, SD, range)	Children	42.5 months (approximately 3.5 years) (SD = 18.6 months)	42.5 months (approximately 3.5 years) (SD = 18.6 months)
	Parents	39.7 years (SD = 6.45)	39.7 years (SD = 6.45)
Sex	Children		
	Parents	45 female; 8 male	45 female; 8 male
Education	Parents		
Ethnicity/indigenous	Parents	The majority of study participants	The majority of study participants

		Caregivers were white (47), and six were African American	Caregivers were white (47), and six were African American
	Children		
Notes Demographics are for entire sample			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention **Yes/no**	**Comparison** **Yes/no**
History of maltreatment (either parents as abusers or children were abused)	Yes	Yes
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	

System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	Yes
Alternate treatment	

Brief description of each condition being compared

The control group waited 10 weeks until the cessation of the treatment intervention to begin the intervention. During that time, the wait-list control participants received ongoing, biweekly support services (as did the treatment group).

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/No
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	

	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	Yes
	Parent-child relationship	
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	10
	Duration of sessions	
	Total duration of program	10 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control Waitlist for ABC and bi-weekly support group	Treatment 1 ABC	
Child abuse potential	Child abuse potential inventory		+ (Lower compared to control)	At completion of intervention
Internalising problems	Child Behaviour		+ (Lower compared to control p = 0.01 to	At completion of intervention

	Checklist		p = 0.05)	
Externalising problems	Child Behaviour Checklist		+ (Lower compared to control)	At completion of intervention
Parental Stress	Parenting Stress Index – Short form		+ (Less stress compared to control p = 0.05)	At completion of intervention

Intervention delivery	Intervention content
Written material in the form of a manual Discussion Videotape during structure activities with performance feedback	Teach caregiver to reinterpret children's alienating behaviours Nurturance in response to child distress Teach caregiver to manage negative reactions when child displays negative behaviours Synchronous parent-child interactions Providing a predictable environment for child

2. Parent-child interaction therapy (PCIT)

Study ID (first surname + year) Chaffin et al. 2004	**Initials of person extracting data** JF **Date** 9/5/13

Full citation

Chaffin, M., Silovsky, J. F., Funderburk, B., Valle, L. A., Brestan, E. V., Balachova, T., Jackson, S., Lensgraf, J., & Bonner, B. L. (2004). Parent-child interaction therapy with physically abusive parents: Efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology*, 72(3), 500-510.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Referrals were eligible for the study if: (a) both the abusive parent (including stepparents or others in a parental role) and at least one abused child were available to participate together in treatment, and no legal termination of parental rights or abdication of parenting role had been initiated; (b) the abusive parent had a minimum measured IQ score of 70; (c) the child was between 4 and 12 years old; (d) the identified abusive parent did not have a child welfare report as a sexual abuse perpetrator; and (e) the parent provided voluntary informed consent to participate.

Additionally, parents were required to "pass" the motivational enhancement group requirements by meeting checklist criteria as scored by the therapist for their personal statement and for participation in the group before starting PCIT.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	Comparison
Number assigned	Children	110	110
	Parents	110	110
Number in final analysis	Children	110	110
	Parents	110	110
Age (mean, SD, range)	Children	4-12 years	4-12 years
	Parents	M=32 years; SD=8.8	M=32 years; SD=8.8
Sex	Children	Not indicated	Not indicated
	Parents	65%=female	65%=female
Education	Parents	Seven percent of the identified abusive parents had less than a 9th-grade education, 19% had a 9th- to 11th-grade education, 48% had a high school or equivalent education, 22% had some college, and 5% were college graduates	Seven percent of the identified abusive parents had less than a 9th-grade education, 19% had a 9th- to 11th-grade education, 48% had a high school or equivalent education, 22% had some college, and 5% were college graduates
Ethnicity/indigenous	Parents	Fifty-two percent were White, non-Hispanic, 40% were African American, 4% were Hispanic/Latino, 1% were Native American, 1% were Asian, and 2% were classified as other	Fifty-two percent were White, non-Hispanic, 40% were African American, 4% were Hispanic/Latino, 1% were Native American, 1% were Asian, and 2% were classified as other
	Children		

Notes

Demographics are for entire sample

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)	Yes	Yes
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

PCIT- PCIT as usual

Enhanced PCIT-Participants in the EPCIT condition received the identical motivational enhancement and PCIT interventions as did participants in the PCIT condition, and these were provided by the same staff. Individualized enhanced services were added, with particular attention to services targeting parental depression, current substance abuse, and family, marital, or domestic violence problems.

Standard community intervention-The community group intervention was implemented at a single community-based nonprofit agency, which had operated this group parent training program for many years and serves over 750 physical abuse cases annually. The parenting program is based on a group psychoeducational (i.e., didactic) model developed in-house by the agency and contains three modules.

Intervention delivery and dose (select as many as applicable)

		Intervention (PCIT) **Yes/No**	**Intervention (Enhanced PCIT)** **Yes/No**
At what level was it delivered?	Individual parents		
	Individual parent-child dyads	Yes	Yes
	Individual children		
	Individual families		Yes
	Groups of parents	Yes	Yes
	Groups of parent-child dyads		
	Groups of children		
	Groups of families		
	Household		
	School		
	Community/region		
	Cannot tell		
Setting of delivery	Home		Yes
	School		
	Clinic, medical or health	Yes	Yes
	Community		
	Other		
	Cannot tell		
Outcome	Child development		

domains targeted			
	Child behaviour	Yes	Yes
	Safety and physical wellbeing	Yes	Yes
	Basic child care		
	Parent-child relationship	Yes	Yes
	Family relationship		
	Systems outcomes		
Dose	Number of sessions	Average 22-24 total parenting sessions	Average 22-24 total parenting sessions
	Duration of sessions	Not indicated	Not indicated
	Total duration of program	Approx. 6 months	Approx. 6 months
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)		
	Cannot tell		

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control Standard Community-Based Parenting group	PCIT	PCIT + Individualised Enhanced Services	

Re-report of physical abuse	Follow-up for detected child maltreatment outcomes was obtained from the statewide child welfare administrative database, with matches based on unique identifiers for the family and individual unique identifiers for the abusive parent		+ (Fewer reports than control)		Median follow up of 850 days (2.3 years)
DPICS-II negative parent behaviorsa	Parent behaviors were coded from videotaped structured interaction sessions by trained observers with the DPICS-II		+ (Less negative behaviours than control)	+ (Less negative behaviours than control)	

Study ID (first surname + year)	**Initials of person extracting data**
Thomas & Zimmer-Gembeck 2011	JF **Date** 9/5/13

Full citation

Thomas, R., & Zimmer-Gembeck, M. J. (2011). Accumulating evidence for parent-child interaction therapy in the prevention of child maltreatment.*Child Development*,82(1), 177-192.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

Australia

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents: Participants were referred from child protection authorities, identified as suspects of maltreatment by other professionals, or self-identified because of significant child behaviour problems and stress. All participants were confirmed to be at high risk of child maltreatment using a semistructured clinical interview

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children	99	51
	Parents	99	51
Number in final analysis	Children	42	36
	Parents	42	36
Age (mean, SD, range)	Children	M age = 5, SD = 1.6	M age = 5, SD = 1.6
	Parents	M age = 33.5, SD = 8.9	M age = 33.5, SD = 8.9
Sex	Children	71% boys and 29% girls	71% boys and 29% girls
	Parents	F=100%	F=100%
Education	Parents		
Ethnicity/indigenous	Parents		
	Children		
Notes - Demographics are for entire sample			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	Yes
Alternate treatment	

Brief description of each condition being compared

Attention Only wait-list group. For those allocated to the 12-week Attention Only group, parents were contacted weekly for brief conversations regarding family and other concerns. At the end of 12 weeks, families commenced PCIT, but these families were not included in the PCIT treatment group of the current study.

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	
	School	
	Clinic, medical or health	Yes
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	

	Systems outcomes	
Dose	Number of sessions	Average= 16.95 sessions
	Duration of sessions	24.3 weeks of contact with program
	Total duration of program	
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of followup (i.e., 6 months; 1 year)
		PCIT	Control (Attention only waitlist)	
Parent child abuse potential	The Child Abuse Potential Inventory	*No different from control*		12 weeks
Child externalising problems	Child behaviour checklist, Parent report	+ (greater decline compared to control)		12 weeks
ECBI intensity	Eyberg Child Behavior Inventory, Parent report	+ (greater reduction in intensity compared to control)		12 weeks
ECBI Problem	Eyberg Child Behavior	+ (greater reduction in		12 weeks

	Inventory, Parent report	problem compared to control)		
Stress due to child	The Parenting Stress Inventory	+ (greater decline in stress compared to control)		12 weeks
Stress due to parent	The Parenting Stress Inventory	+ (greater decline in stress compared to control)		12 weeks
Praise	Dyadic Parent– Child Interaction Coding System III (Observer completed)	+ (greater improvement in verbalisation of praise compared to control)		12 weeks
Description & Reflection	Dyadic Parent–Child Interaction Coding System III (Observer completed)	+ (greater improvement compared to control)		12 weeks
Questions	Dyadic Parent–Child Interaction Coding System III (Observer completed)	+ (greater decrease in questioning compared to control)		12 weeks
Child externalising problem	Child behaviour checklist, Parent report		n/a (at completion there was no comparison group just pre versus post program)	
ECBI Intensity	Eyberg Child Behavior Inventory, Parent report		n/a (at completion there was no comparison group just pre versus post program)	
ECBI Problem	Eyberg Child Behavior Inventory, Parent report		n/a (at completion there was no comparison group just pre versus post program)	

Child internalising problems	Child behaviour checklist, Parent report		n/a (at completion there was no comparison group just pre versus post program)	
Parent stress due to the child	The Parenting Stress Inventory		n/a (at completion there was no comparison group. Just pre versus post program	
Parent stress due to the parent	The Parenting Stress Inventory		n/a (at completion there was no comparison group just pre versus post program)	
Child abuse potential	The Child Abuse Potential Inventory		n/a (at completion there was no comparison group just pre versus post program)	
Praise	Dyadic Parent–Child Interaction Coding System III (Observer completed)		n/a (at completion there was no comparison group. Just pre versus post program	
Desc & Reflection	Dyadic Parent–Child Interaction Coding System III (Observer completed)		n/a (at completion there was no comparison group just pre versus post program)	
Questions	Dyadic Parent–Child Interaction Coding System III (Observer completed)		n/a (at completion there was no comparison group just pre versus post program)	
Commands	Dyadic Parent–Child Interaction Coding System III (Observer completed)		n/a (at completion there was no comparison group just pre versus post program)	
Observed intensity	Dyadic Parent–Child Interaction Coding System III (Observer completed)		n/a (at completion there was no comparison group just pre versus post program)	

Child protection notification	Official records regarding children's notification to child welfare protection	+ (participants who completed the program were less likely to be notified than those than dropped out of treatment.	n/a (at completion there was no comparison group just pre versus post program)	

Study ID (first surname + year)	**Initials of person extracting data**
Thomas & Zimmer-Gembeck (2012)	JF **Date** 9/5/13

Full citation

Thomas, R., & Zimmer-Gembeck, M. J. (2012). Parent-Child Interaction Therapy: An evidence-based treatment for child maltreatment. *Child Maltreatment*, 17(3), 253-266.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

Australia

Inclusion criteria (what are the criteria for participant inclusion in the study

Families at high risk of, or engaged in, child maltreatment.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Children were excluded if there was any suspected sexual abuse history based on information revealed during the initial interview with parents or from child protection authorities

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	Comparison
Number assigned	Children	61	91
	Parents	61	91
Number in final analysis	Children	61	91
	Parents	61	91
Age (mean, SD, range)	Children	M=4.57 years; SD=1.3	M=4.57 years; SD=1.3
	Parents	M=33.9 years; SD=7.31	M=33.9 years; SD=7.31
Sex	Children	Boys= 70.4%	Boys= 70.4%
	Parents	Female=100%	Female=100%
Education	Parents	Most mothers had completed some high school (81%) and 16.5% had some tertiary education.	Most mothers had completed some high school (81%) and 16.5% had some tertiary education.
Ethnicity/indigenous	Parents	The majority of parents were born in Australia (74%) with 1.4% being of Aboriginal or Torres Strait Islander descent	The majority of parents were born in Australia (74%) with 1.4% being of Aboriginal or Torres Strait Islander descent
	Children	N/A	N/A

Notes

Demographics are for entire sample

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes

Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	Yes
Alternate treatment	

Brief description of each condition being compared

Participants allocated to the waitlist were contacted weekly by phone by an allocated PCIT psychologist for brief conversations regarding family and other concerns. Parents in the waitlist group were asked to refrain from family therapy and therapeutic assistance with child behavior management for the duration of 12 weeks. At the end of 12 weeks, families were offered S/PCIT. Families who commenced S/PCIT after the waitlist were not included in the S/PCIT treatment group data of the current study.

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	M=14 (SD=0.84; range= 12-16)
	Duration of sessions	Not indicated
	Total duration of program	Not indicated

Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes- Master and doctoral level psychologists trained in PCIT
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of followup (i.e., 6 months; 1 year)
		Control (Attention only waitlist)	Standard PCIT	Time-Variable PCIT	
Child behaviour problems- Externalising behaviours	The Eyberg Child Behavior Inventory (ECBI, parent-report)		+ (Improvement compared to control and to TV/PCIT)		12 weeks
Child behaviour problems- ECBI Intensity	The Eyberg Child Behavior Inventory (ECBI, parent-report		+ (Improvement compared to control)		12 weeks
Child behaviour problems-EBCI Problem	The Eyberg Child Behavior Inventory (ECBI, parent-		+ (Improvement compared to control and to TV/PCIT)		12 weeks

	report				
Child behaviour problems- Internalising symptoms	The Eyberg Child Behavior Inventory (ECBI, parent-report		+ (Improvement compared to control)		12 weeks
Parent stress- due to the child	The Parenting Stress Inventory (PSI)		+ (Improvement compared to control)		12 weeks
Parent verbalisations-praise	The Dyadic Parent–Child Interaction Coding System III (DPICS)		+ (Improvement compared to control and to TV/PCIT)		12 weeks
Parent verbalisations-descriptions/reflections	The Dyadic Parent–Child Interaction Coding System III (DPICS)		+ (Improvement compared to control and to TV/PCIT)		12 weeks
Parent verbalisations-questions	The Dyadic Parent–Child Interaction Coding System III (DPICS)		+ (Improvement compared to control and to TV/PCIT)		12 weeks
Parent verbalisations-commands	The Dyadic Parent–Child Interaction Coding System III (DPICS)		+ (Improvement compared to control and to TV/PCIT)		12 weeks
Parent verbalisations-negative talk	The Dyadic Parent–Child Interaction Coding System III (DPICS)		+ (Improvement compared to control)		12 weeks
Parental sensitivity	The full 10-minute videotaped		+ (Improvement compared to		12 weeks

	interactions were coded for sensitivity. The measure of parent sensitivity was developed by modifying one subscale of the Emotional Availability scales (Biringen, Robinson, & Emde, 2000). Parents were rated from 1 (highly insensitive) to 9 (highly sensitive). Coding included consideration of the parent's affect, ability to respond to the child's signals, flexibility, and accessibility to the child.		control and to TV/PCIT)		

Intervention delivery	Intervention content
Didactic presentation to parents Direct coaching of parents while they are interacting with the children Praise for appropriate responses to child behaviour Immediate remediation for inappropriate	Child behaviour management Labelled praise Reflect or paraphrase the children's appropriate talk Use behavioural descriptions to describe the child's positive behaviour

Intervention delivery	Intervention content
response to child behaviour Treatment continues to Mastery criteria – parent successfully and consistently demonstrates strategies learned and expresses a clear understanding of their own change and role in the family	Avoid using commands, questions or criticism Effective instructions and commands Following through on direct commands via labelled praise or time out

3. SafeCare

Study ID (first surname + year)	**Initials of person extracting data**
Chaffin et al. 2012	MT **Date** 10/05/2013

Full citation

Chaffin, M., Hecht, D., Bard, D., Silovsky, J. F., & Beasley, W. H. (2012). A statewide trial of the SafeCare home-based services model with parents in Child Protective Services. *Pediatrics*, 129(3), 509-515. doi: 10.1542/peds.2011-1840.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc?

Yes. At the agency/region level.

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Families with children up to age 12.

Parents:

Nonsexual abusers referred to the programs by Child Protective Services. One maltreating parent per household was enrolled, prioritizing the primary caregiver.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Untreated substance use disorder.

Participant demographics (provide family/household/school etc. details if child/parent details not given)

		Treatment (SafeCare)	**Treatment (Comparison -Usual care)**	**Coached**	**Uncoached**
Number assigned	Children				
	Parents	Cannot tell	Cannot tell	Cannot tell	Cannot tell

Age (mean, SD, range)	Children	79% preschool aged	72% preschool aged	76% preschool aged	75% preschool aged
	Parents	29 years	30 years	29 years	29.7 years
Sex	Children				
	Parents	92% female	90% female	91% female	91% female
Education	Parents	7% less than 9th; 33% less than 12th; 33% high school or equivalent; 22% some beyond high school; 5% college graduate	8% less than 9th; 32% less than 12th; 35% high school or equivalent; 21% some beyond high school; 4% college graduate	9% less than 9th; 32% less than 12th; 34% high school or equivalent; 21% some beyond high school; 4% college graduate	6% less than 9th; 34% less than 12th; 34% high school or equivalent; 22% some beyond high school; 5% college graduate
Ethnicity/indigenous	Parents	11% African American; 19% American Indian; 4% Hispanic; 64% White (non-Hispanic)	8% African American; 14% American Indian; 5% Hispanic; 70% White (non-Hispanic)	9% African American; 16% American Indian; 5% Hispanic; 67% White (non-Hispanic)	10% African American; 17% American Indian; 4% Hispanic; 67% White (non-Hispanic)
	Children				
Notes Cluster randomisation of region to treatment (SC vs SAU) and participant level to coaching (coached vs uncoached).					

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention **Yes/no**	**Comparison** **Yes/no**
History of maltreatment (either parents as abusers or children were abused)	Yes	Yes
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		

Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	
Service model	Yes
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Treatment – SafeCare

Comparison – Home-based services as usual (SAU)

Scaled-up implementation – Coached quality control strategy

Scaled-up implementation – Uncoached quality control strategy

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	
	Safety and physical wellbeing	Yes
	Basic child care	Yes
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	weekly
	Duration of sessions	Cannot tell
	Total duration of program	6 months
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes

	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '-'			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Safe Care	Coaching (this is tested in combination with both Safe Care and SAU)	SAU	
Recidivism	Past and future CPS reports were extracted from a statewide CPS database	+ (compared to control) For whole sample – consistent across models			7 years
Recidivism	Past and future CPS reports were extracted from a statewide CPS database		+ (compared to control and to SC). Only in subsets of the sample (e.g. non customary inclusion criteria)		7 years

Study ID (first surname + year)	**Initials of person extracting data**
Silovsky et al. 2011	MT **Date** 10/05/2013

Full citation

Silovsky, J. F., Bard, D., Chaffin, M. Hecht, D., Burris, L. Owara, A., … Lutzker, J. (2011). Prevention of child maltreatment in high-risk rural families: A randomized clinical trial with child welfare outcomes. *Children and Youth Services Review*, *33*(8), 1435-1444.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents:

Caregiver at least 16 years of age; at least one child aged 5 years or younger; at least one of the following risk factors (parental substance abuse, mental health issues, or intimate partner violence).

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

A current child welfare case or service involvement due to a recent child welfare case or a history of more than two prior child welfare referrals (regardless of substantiation status); the primary caretaker has a substantiated report of perpetrating child sexual abuse; any conditions that would prevent the primary caregiver from providing valid self-report data (e.g., severe psychosis, severe mental retardation, etc.)

Participant demographics (provide family/household/school etc. details if child/parent details not given)

		Intervention	Comparison
Number assigned	Children		
	Parents	48	57
Age (mean, SD, range)	Children		
	Parents	Mean 25.9 ± 6.8 years	Mean 27.7 ± 8.7 years
Sex	Children		
	Parents	Female 100%	Female 98%
Education	Parents	0% Less than 9th grade; 25% 9-12th grade; 35% High school diploma or GED; 23% Some college; 8% Vocational school; 2% Associate's Degree; 6% Bachelor's or Graduate Degree.	4% Less than 9th grade; 18% 9-12th grade; 33% High school diploma or GED; 19% Some college; 14% Vocational school; 2% Associate's Degree; 10% Bachelor's or Graduate Degree.
Ethnicity/indigenous	Parents	68% White; 15% Black or African American; 2% Hispanic or Latino; 15% American Indian or Alaska Native; 0% Asian	74% White; 14% Black or African American; 4% Hispanic or Latino; 7% American Indian or Alaska Native; 1% Asian
	Children		
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence	Yes	Yes
Teen parent		

Low SES/disadvantaged		
Parental substance abuse	Yes	Yes
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness	Yes	Yes
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	
Service model	Yes
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Treatment-SafeCare augmented (SafeCare+). SafeCare with the addition of Motivational Interviewing (Miller & Rollnick, 2004)

Comparison – standard Home-based mental health services (SAU)

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	

	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	
	Safety and physical wellbeing	Yes
	Basic child care	Yes
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	Yes
Dose	Number of sessions	Cannot tell
	Duration of sessions	Cannot tell
	Total duration of program	Cannot tell
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment (SC+)	Control	
Service intake completion (enrolling)		+ (greater completion number compared to control)		At enrolment
Retainment into service		+ (greater compared to control)		At exit from treatment
Reports due to domestic violence	CPS records (not overly clear though)	+ (less reports compared to control)		No sooner than 6 months post the end of service, in January 2010 (not very clear)

Intervention delivery	Intervention content
Assess parent skills using observations and checklists Teach skill deficits via active skills training Verbal instructions Discussion Modelling Role-play Feedback Praise Homework tasks Teach to mastery criteria in simulation and in actual interactions	Parent-child or parent-infant interactions Basic caregiving structure Parenting routines Home safety (assess home hazards and teach parents to remove hazards and child proof doors and cabinets, provide safety equipment such as door and cabinet latches) Problem solving Child health care Planned activities training (teach parent time management, explain rules to child, reinforcement/rewards, incidental teaching, activity preparation, outcome discussions with child, explain expectations to child)

4. Triple P Positive Parenting Program – Standard and Enhanced Group Behavioural Family Intervention

Study ID (first surname + year) Sanders et al. (2000); Sanders et al. (2007)	**Initials of person extracting data** JF **Date** 13/5/13

Full citation

Sanders, M. R., Markie-Dadds, C., Tully, L. A., & Bor, W. (2000). The triple p-positive parenting program: A comparison of enhanced, standard, and self-directed behavioral family intervention for parents of children with early onset conduct problems. *Journal of Consulting and Clinical Psychology*, 68(4), 624-640.

Sanders, M. R., Bor, W., & Morawska, A. (2007). Maintenance of treatment gains: A comparison of enhanced, standard, and self-directed Triple P-Positive Parenting Program. *Journal of Abnormal Child Psychology*, 35(6), 983-998.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

Australia

Inclusion criteria (what are the criteria for participant inclusion in the study)?

A standardized telephone interview was used to ensure families met the following criteria: (a) child aged between 36 and 48 months; (b) mothers reported they were concerned about their child's behaviour; (c) the child showed no evidence of developmental disorder or significant health impairment; (d) the child was not currently having regular contact with another professional or agency or taking medication for behavioural problems; and (e) the parents were not currently receiving therapy for psychological problems, were not intellectually disabled and reported they were able to read the newspaper without assistance

For inclusion in the study, mothers had to rate their child's behaviour as being in the elevated range on the Eyberg Child Behaviour Inventory. They were also required to have at least one of the following family adversity factors: (a) maternal depression as measured by a score of 20 or more on the Beck Depression Inventory (b) relationship conflict as measured by a score of 5 or more on the Parent Problem Checklist (c) single parent household; (d) low gross family income (less than AUD$345 per week) or low occupational prestige as indicted by a rating of 5.0 or higher for the major income earner on the Power, Privilege and Prestige Scale.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		EBFI	SBFI	SDBFI	Waitlist
Number assigned	Children				
	Parents	76	77	75	77
Number in final analysis *	Children	48	50	41	na
	Parents				
Age (mean, SD, range)	Children	M=40.57 months (SD=3.66)	M=40.29 months (SD=3.47)	M=40.93 months (SD=3.66)	M=41.7 months (SD=3.6)
	Parents (mother)	M=30.68 months (SD=5.61)	M=31.88 months (SD=4.88)	M=31.39 months (SD=5.26)	M=30.4 months (SD=5.8)
Sex	Children				
	Parents				
Education	Parents				
Ethnicity/indigenous	Parents				
	Children				

Notes

Overall demographic data for child gender (68% male) are reported in Sanders etal. (2000).

* Sanders et al. 2007 – 3 year follow up. Sample size varied from the earlier Sanders et al. 2000 paper (EBFI n=48; SBFI n=50; SDBFI n=41). Gender, Education and Ethnicity data are reported in Sanders etal. 2007.

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		

At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged	Yes	Yes
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness	Yes	Yes
Child has a disability or additional needs		
Other (please list)	Child behaviour problems (Yes) and family conflict (Yes) single parent families (Yes)	Child behaviour problems (Yes) and family conflict (Yes) single parent families (Yes)
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	Yes

Alternate treatment	

Brief description of each condition being compared

Self-directed Behavioural Family Intervention (SDBFI)- Families in the SDBFI (see Connell et al. 1997) condition received a ten session self-directed program comprising Every Parent (Sanders 1992) and Every Parent's Workbook (Sanders et al. 1994). This program involved parents learning 17 core child management strategies.

Standard Behavioural Family Intervention (SBFI): Like parents in the SDBFI condition, parents in the SBFI were taught the 17 child management strategies listed above and planned activities training. Each family also received Every Parent (Sanders 1992) and a workbook, Every Parent's Family Workbook (Markie-Dadds et al. 1999), and active skills training and support from a trained practitioner (see Sanders and Dadds 1993).

Enhanced Behavioural Family Intervention (EBFI): Parents in the EBFI condition received the intensive behavioural parent training component as described above for the SBFI condition. Each family also received a workbook, Every Parent's Supplementary Workbook (Markie-Dadds et al. 1998).

Waitlist (WL): Families allocated to the WL condition received no treatment and had no contact with the research team for 15 weeks.

Intervention delivery and dose (select as many as applicable)

		SDBFI	**SBFI**	**EBFI**
At what level was it delivered?	Individual parents	Yes	Yes	Yes
	Individual parent-child dyads			
	Individual children			
	Individual families			
	Groups of parents			
	Groups of parent-child dyads			
	Groups of children			
	Groups of families			
	Household			
	School			
	Community/region			
	Cannot tell			
Setting of delivery	Home	Yes		
	School			
	Clinic, medical or health			

	Community		Yes	Yes
	Other			
	Cannot tell			
Outcome domains targeted	Child development	Yes	Yes	Yes
	Child behaviour	Yes	Yes	Yes
	Safety and physical wellbeing			
	Basic child care			
	Parent-child relationship	Yes	Yes	Yes
	Family relationship			
	Systems outcomes			
Dose	Number of sessions	10	10	12
	Duration of sessions		60-90 mins	60-90 mins
	Total duration of program			
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	N/A	Yes	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	N/A		
	Cannot tell			

Results

Sanders et al. 2000

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or'–'.				Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Waitlist	Standard	Enhanced	Self-directed	

Observed negative child behaviour	30-min videorecorded home observation		+ (Less frequent) Compared to waitlist	+ (Less frequent) Compared to waitlist and compared to self-directed		Post-intervention
Mother's perception of disruptive behaviour in child	ECBI		+ (Less disruptive behaviour) Compared to waitlist	+ (Less frequent) Compared to waitlist	+ (Less frequent) Compared to waitlist	Post-intervention
Father's perception of disruptive behaviour in child	ECBI		+ (Less disruptive behaviour) Compared to waitlist	+ (Less frequent) Compared to waitlist		Post-intervention
Mother report of problem child behaviour	Parental daily report		+ (Less problems reported) Compared to waitlist and compared to self-directed	+ (Less frequent) Compared to waitlist and compared to self-directed	+ (Less frequent) Compared to waitlist	Post-intervention
Father report of problem child behaviour	Parental daily report		+ (Less problems reported) Compared to waitlist and compared to self-directed	+ (Less frequent) Compared to waitlist		Post-intervention
Mother's dysfunctional discipline style	Parenting Scale		+ (Less dysfunctional) Compared to waitlist and to self-directed	+ (Less dysfunctional) Compared to waitlist and to self-directed		

Father's dysfunctional discipline style	Parenting Scale		+ (Less dysfunctional) Compared to waitlist	+ (Less dysfunctional) Compared to waitlist and to self-directed		
Mother's sense of competency	PSOC Scale		+ (Higher sense of competency) Compared to waitlist and compared to self-directed	+ (Less frequent) Compared to waitlist and compared to self-directed	+ (Less frequent) Compared to waitlist	Post-intervention
Percentage of intervals of child negative behaviour	Observations of mother and child behaviour				+ (decrease). This is the only condition that reported a significant difference between post-intervention and 1 year.	1 Year
Parent observed negative child behaviour	Parent Daily Report Checklist		+ (reliable improvement in behaviour) compared with self-directed	+ (reliable improvement in behaviour) compared with self-directed		1 Year

Sanders et al. 2007

Outcomes	Measures	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.	Follow-up
Outcome reported in results	How measured		Longest point of follow up (i.e., 6 months; 1

					year)
		Standard	Enhanced	Self-directed	
There were no differences in outcomes between the three variants of Triple P					3 Years

Study ID (first surname + year)	**Initials of person extracting data**
Sanders et al. (2004)	JF **Date** 13/5/13

Full citation

Sanders, M. R., Pidgeon, A. M., Gravestock, F., Connors, M. D., Brown, S., & Young, R. W. (2004). Does parental attributional retraining and anger management enhance the effects of the Triple P- Positive Parenting Program with parents at risk of child maltreatment. *Behavior Therapy*, 35(3), 513-535.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

Australia

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents: Parents had to meet the following selection criteria: (a) parent had received at least one notification to the FYCCQ for potential abuse or neglect of their children (the case need not be substantiated); and/or (b) parent expressed concerns regarding difficulty in controlling their anger in relation to their child's behavior, and scored within an elevated range on three selected subscales of the State-Trait Anger Expression Inventory (STAXI); Anger Expression (indication of the frequency of expressed anger); Trait Anger (the tendency to express anger without provocation); and Anger-Out (the frequency of anger expressed toward others or objects in the environment

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Families that were, at time of screening, receiving intensive ongoing family therapy or psychotherapeutic intervention targeting parenting or child behavior were excluded from participation, as were families who had a child or parent with a significant intellectual impairment. No families had to be excluded on these grounds. Families who did not meet eligibility criteria were referred when appropriate to other services in the community.

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children	50	48
	Parents		
Number in final analysis	Children		
	Parents		
Age (mean, SD, range)	Children	M= 52.84 months (SD=17.58)	M=53.71 months (SD=19.32)
	Parents	M=34.18 years (SD=6.34)	M=33.33 years (SD=5.37)
Sex	Children	Female=52%	Female=48%
	Parents	Female=94%	Female=92%
Education	Parents	Approx. 50% had completed their secondary education	Approx. 50% had completed their secondary education
Ethnicity/indigenous	Parents		
	Children		
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes

Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Families assigned to the SBFI (standard behavioural family intervention) intervention received four group sessions of parent training (2 hours' duration each). Upon completion of the group sessions, parents participated in four individual telephone consultations (15 to 30 minutes' duration each). Parents also received a copy of the *Every Parent's Group Workbook*

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	Yes
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes (telephone calls)
	School	
	Clinic, medical or health	
	Community	Yes (group sessions)
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	8 group sessions and 4 individual telephone

		calls
	Duration of sessions	2 hours
	Total duration of program	
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control standard behavioral family intervention program	Treatment 1 Enhanced Behavioural Family Intervention (Triple P incorporating attributional retraining and anger management)	
Negative parental attribution (for intentional situations)	Parent's Attributions for Child's Behavior			6 months (Note: there was an immediate post intervention effect but this did not maintain at 6 month follow-up)

Study	Standard or Enhanced	Intervention delivery	Intervention content
Sanders et al. (2004)	Standard	Discussion Written material in the form of a workbook Set goals for behaviour change Modelling Rehearsal Practice Goal setting	Child behaviour management 10 strategies for promoting children's competence (i.e., quality time; talking with children; physical affection; praise; attention; engaging activities; setting a good example; Ask, Say, Do; incidental teaching; and behaviour charts) Seven strategies for managing misbehaviour (i.e., setting rules; directed discussion; planned ignoring; clear, direct instructions; logical consequences; quiet time; and time-out) Planning ahead for high risk situations in relation to difficult child behaviour Planned activities training
	Enhanced	As above	As above plus Cognitive re-framing in relation to negative parental attributions about child behaviour Anger management using physical, cognitive and planning strategies
Sanders et al. (2000;	Standard	Written material in	Child behaviour

Study	Standard or Enhanced	Intervention delivery	Intervention content
2007)		the form of a workbook Verbal instruction on how to use written material Discussion Modelling Role-play Feedback Homework tasks	management – 10 strategies for promoting children's competence and seven strategies for managing misbehaviour Planning ahead for high risk situations in relation to difficult child behaviour. Planned activities training
	Enhanced	As above, plus Delivery method was individualised for each family (e.g., amount of time spent on active skills training varied across families)	As above plus Partner support for couples (positive listening and speaking, strategies for building a caring relationship) Coping skills for couples (assist with personal adjustment difficulties such as depression, anger, anxiety, stress) Social support via a significant other for single parents

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Appendix 6

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

Parenting Research Centre
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Appendix 6: Data extracted regarding the Emerging interventions

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Disclaimer

This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

June 2013

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Contents

Appendix 6: Data extracted regarding the Emerging interventions

1. Child FIRST

Study ID (first surname + year)	**Initials of person extracting data**
Lowell et al. 2011	MT **Date** 16/5/2013

Full citation

Lowell, D. I., Carter, A. S., Godoy, L., Paulicin, B., & Briggs-Gowan, M. J. (2011). A Randomized Controlled Trial of Child FIRST: A Comprehensive Home-Based Intervention Translating Research Into Early Childhood Practice. *Child Development*, 82(1), 193-208. doi: 10.1111/j.1467-8624.2010.01550.x.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Child aged 6–36 months, screened positive for social-emotional ⁄ behavioural problems on the Brief Infant-Toddler Social and Emotional Assessment, (BITSEA; Briggs-Gowan & Carter, 2006) and ⁄or the parent screened high for psychosocial risk on a risk screen developed for this study (Parent Risk Questionnaire [PRQ]); lived in the city of Bridgeport, Connecticut; and was in a permanent caregiving environment

Parents:

Exclusion criteria

Children:

Children referred directly from community providers and families with prior involvement with Child FIRST were not eligible for the study.

Parents:

Participant demographics at baseline

		Intervention	Comparison
Number assigned to groups	Children	78	79
	Parents		
Number in final analysis	Children	58	59
	Parents		
Age (mean, SD, range)	Children	Mean = 19.0; SD = 9.2 months	Mean = 18.0; SD =8.8 months
	Parents	Mean = 27.7; SD = 7.0 years	Mean = 26.9; SD = 6.9 years
Sex	Children	42.3% male	45.6% male
	Parents	100% female	100% female
Education	Parents	27.0% < 9^{th} grade; 34.6% 9^{th}-12^{th} grade (no degree); 22.2% High school degree/GED; 6.4% some college (no degree); 5.0% 2-year degree; 1.6% Bachelor's degree/other	16.7% < 9^{th} grade; 27.9% 9^{th}-12^{th} grade (no degree); 26.9% High school degree/GED; 19.2% some college (no degree); 6.5% 2-year degree; 2.6% Bachelor's degree/other
Ethnicity/indigenous	Parents	60.3% Latino/Hispanic; 26.9% African American; 6.4% Caucasian; 6.4% other	57.0% Latino/Hispanic; 32.9% African American; 8.9% Caucasian; 1.3% other
	Children		
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention. Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no		

mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Infant socio-emotional problems; parent psycho-social risk	Infant socio-emotional problems; parent psycho-social risk
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	
Service model	
System of care	Yes

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Treatment – Child FIRST Intervention

Control – Usual care

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	Yes
Dose	Number of sessions	Mean = 24.0 contacts/sessions; SD = 14.3
	Duration of sessions	45-90 minutes
	Total duration of program	Mean = 22.1 weeks; SD = 14.5 weeks; Median =

		18.7 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Child FIRST	Usual Care	
% with child language problems	Infant-Toddler Developmental Assessment (IDA)	+ (smaller percentage) compared to control		12 months
% with problems in any ITSEA domain	Infant-Toddler Social and Emotional Assessment	+ (smaller percentage) compared to control		12 months
% with ITSEA externalizing problems	Infant-Toddler Social and Emotional Assessment	+ (smaller percentage) compared to control		12 months
% of parents with problematic global psychiatric symptoms	Brief Symptom Inventory	+ (smaller percentage) compared to control		12 months
% with any parental stress problems	Parental Stress Inventory scale	+ (smaller percentage) compared to		12 months

(Parent Distress, Difficult Child, and Parent–Child Dysfunctional Interaction)		control		

Intervention delivery	Intervention content
Assessment of child and family Individualised plan Linkage to other services, such as mental health, health and early care, early interventions, education, child protection and social and concrete services Based on family priorities, strengths, culture and needs Collaboration with families	Home visiting components are guided by parental need rather than a fixed curriculum Observations of child's emotional, cognitive and physical development Observation of parent-child interactions Psychoeducation including developmental stages, expectations and means of typical behaviours Reflective functioning to understand the child's feelings and the meaning of the child's unique and challenging behaviours Psychodynamic understanding of the mothers history, feelings and experience of the child Alterative perspectives of child behaviour and new parental responses Positive reinforcement of both parents' and child's strengths to promote parents self-esteem

2. Child-Parent Psychotherapy (CPP)

Study ID (first surname + year)	**Initials of person extracting data**
Lieberman 2005; 2006; Ghosh Ippen 2011	MT **Date** 16/5/2013

Full citation

Lieberman, A. F., Van Horn, P. & Ippen, C. G. (2005) Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(12), 1241-1248

Ghosh Ippen, C., Harris, W. W., Van Horn, P., & Lieberman, A. F. (2011). Traumatic and stressful events in early childhood: Can treatment help those at highest risk? *Child Abuse & Neglect*, 35(7), 504-513. doi:10.1016/j.chiabu.2011.03.009

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Lieberman, A. F., Ghosh Ippen, C., & Van Horn, P. (2006). Child-Parent Psychotherapy: 6-month follow-up of a randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(8), 913–918.

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Child was 3 to 5 years old, had been exposed to marital violence as confirmed by mother's report on the Conflict Tactics Scale 2 (Straus et al., 1996), and the perpetrator was not living in the home.

Mother–child dyads were referred because there were clinical concerns about the child's behavior or mother's parenting after the child witnessed or overheard marital violence.

Parents:

Exclusion criteria

Children:

Mental retardation or autistic spectrum disorder.

Parents:

Documented abuse of the target child, current substance abuse and homelessness, mental retardation, and psychosis.

Participant demographics at baseline

		Intervention	Comparison
Number assigned to groups	Children	36	29
	Parents		
Number in final analysis	Children	27	25
	Parents		
Age (mean, SD, range)	Children	*Mean = 4.06 years; SD = 0.82 years	
	Parents	* Mean =31.48 years; SD = 6.23 years	
Sex	Children	*n = 39 female	
	Parents	100% female	100% female
Education	Parents	* Mean = 12.51 years; SD = 3.96	
Ethnicity/indigenous	Parents	* 37.3% Latina; 24% white; 14.7% African American; 10.7% Asian; and the rest of mixed or other ethnicities	
	Children	* 38.7% mixed ethnicity (predominantly Latino/white); 28% Latino; 14.7% African American; 9.3% white; 6.7% Asian; and 2.6% of another ethnicity	
Notes * Only aggregate demographic data presented for the entire sample at baseline. N=75			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention. Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence	Yes	Yes
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		

Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Treatment – Child-Parent Psychotherapy

Control – Case mangagement plus individual treatment (usual care)

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	

	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	Yes
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	
	Family relationship	Yes
	Systems outcomes	
Dose	Number of sessions	Mean = 32.09 sessions; SD = 15.20 sessions
	Duration of sessions	60 minutes
	Total duration of program	50 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Liberman et al. 2005

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	
Traumatic Stress Disorder	Semi-structured Interview for Diagnostic Classification DC: 0-3 for Clinicians	+ Improvement compared to control		Post-treatment
Child behaviour (total score)	Child Behaviour Checklist	+ Improvement compared to control		Post-treatment
Avoidance behaviour	Clinician-Administered PTSD Scale	+ Improvement compared to control		Post-treatment

Liberman et al. 2006

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	
Child behaviour (total score)	Child Behaviour Checklist	+ Improvement compared to control		6 month follow up

Ghosh Ippen et al. 2011

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	
Child behaviour (total score)	Child Behaviour Checklist	+ Improvement compared to control		6 month follow up

Intervention delivery	Intervention content
Initial sessions focus on assessment Communication of assessment finding with mother Individualised treatment plan Discussion	Parent-child relationships Safety in the environment Promote safe behaviour Support appropriate limit setting Self-regulation (development guidance regarding how children regulate affect and emotional reactions, support and label affective experiences, support parent's skills to respond in helpful, soothing ways when child is upset) Reciprocity in relationships (reinforces parent and highlight parent's and child's love and understanding of each other, support expression of positive negative feelings for important people, develop interventions to change maladaptive patterns of interactions) Focus on traumatic events (help parents acknowledge what child has witnessed and remembered, help parents and child understand each other's perspective to the trauma. Provide developmental guidance acknowledging response to trauma, make linkage between past experiences and current thoughts, feelings and behaviours, help

Intervention delivery	Intervention content
	parents understand link between her own experiences and current feelings and parenting practices, highlight the difference between past and present circumstances, support parent and child in creating a joint narrative, reinforces behaviours that help parent and child master the trauma and gain new perspective) Continuity of daily living (foster prosocial adaptive behaviour, foster efforts to engage in appropriate activities, foster development of a daily routine)

3. Cognitive Behavioral Therapy for Sexually Abused Preschoolers (CBT-SAP)

Study ID (first surname + year)	**Initials of person extracting data**
Cohen & Mannarino 1996a; 1996b; Cohen & Mannarino 1998	MT **Date** 16/5/2013

Full citation

Cohen, J. A., & Mannarino, A. P. (1996a). Factors that mediate treatment outcome of sexually abused preschool children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35(10), 1402-1410. doi:10.1097/00004583-199610000-00028

Cohen, J. A., & Mannarino, A. P. (1996b). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35(1), 42-50.

Cohen, J. A., & Mannarino, A. P. (1998). Factors that mediate treatment outcome of sexually abused preschool children: Six- and 12-month follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37(1), 44-51.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Children aged 3 through 6 years (2 years, 11 months to 7 years, 1 month: Age criteria specified in Cohen & Mannarino 1998). The child had to have experienced some form of sexual abuse (sexual exploitation involving physical contact between a child and another person. Physical contact included anal, genital, oral, and/or breast contact), with the most recent episode of sexual abuse having occurred no more than 6 months prior to referral to the study. Where applicable, the sexual abuse had to have been reported to Child Protective Services prior to the child's acceptance into the study. In all cases, a child was included only if the child also had either a Child Protective Services-indicated report, if there had been independent confirmation of abuse by the agency in Pittsburgh with recognized expertise in conducting investigative evaluations, or if there was physical evidence of sexual abuse.

Parents:

Exclusion criteria

Children:

Parents:

Mental retardation or pervasive developmental disorder, psychotic symptoms, a serious medical illness, psychotic disorder or active substance abuse in the parent participating in treatment, or the lack of a long-term caretaker to participate in the study (i.e., if a child was expected to remain with the present caretaker for less than 12 months, the child was not included).

Participant demographics at baseline

		Intervention	**Comparison**
Number assigned to groups	Children	39	28
	Parents		
Number in final analysis	Children	Only total cohort of final sample reported. N = 43	
	Parents		
Age (mean, SD, range)	Children	*Mean = 4.68 years; Range = 2.11 to 7.1 years.	
	Parents		
Sex	Children	*42% male	
	Parents		
Education	Parents		
Ethnicity/indigenous	Parents		
	Children	*54% Caucasian; 42% African-American; and 4% other	

Notes

* Only aggregate demographic data reported for the sample N = 67.

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention. Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)	Yes	Yes
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		

Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Treatment – Cognitive-Behavioral Therapy for Sexually Abused Preschool children (CBT-SAP)

Comparison – Non-directive Supportive Therapy (NST)

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	Yes

	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	
	School	
	Clinic, medical or health	Yes
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	
Dose	Number of sessions	12
	Duration of sessions	90 minutes (50 mins with parent and 30-40 mins with child)
	Total duration of program	12 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family	

	support/education or child welfare etc.	
	Cannot tell	

Results

Cohen & Mannarino 1996b

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Non-directive supportive therapy (NST)	Cognitive-behavioral therapy adapted for sexually abused preschool children (CBT-SAP)	
Behaviour Profile total	Child Behaviour Checklist (CBCL)		+ (Lower score) compared to control	Post-treatment
Internalizing problems	Child Behaviour Checklist (CBCL)		+ (Lower score) compared to control	Post-treatment
Sexualised behaviour	Child Sexual Behaviour Inventory (CSBI)		+ (Lower score) compared to control	Post-treatment
Frequency of problematic behaviours	Weekly Behaviour Record (WBR)		+ (Lower score) compared to control	Post-treatment

Cohen & Mannarino 1998

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.	Follow-up Longest point of follow up (i.e., 6 months; 1 year)

		Non-directive supportive therapy (NST)	Cognitive-behavioral therapy adapted for sexually abused preschool children (CBT-SAP)	
Sexualised behaviour	Child Sexual Behaviour Inventory (CSBI)		+ (Lower score) compared to control	12 Month follow up
Type of problematic behaviour	Weekly Behaviour Record (WBR)		+ (Fewer types) compared to control	12 Month follow up
Frequency of problematic behaviours	Weekly Behaviour Record (WBR)		+ (Lower score) compared to control	12 Month follow up

Intervention delivery	Intervention content
Cognitive behavioural therapy Cognitive reframing Thought stopping, Positive imagery Contingency reinforcement. Parenting management training Problem solving Psychoeducation Supportive interventions	For parents: Ambivalence about belief in the sexual abuse Ambivalence towards the perpetrator Attributions regarding the abuse Feelings that the child is damaged Management of child fear and anxiety Provision of appropriate emotional support to the child Management of appropriate behaviours Dealing with the parents issues in relation to their own abuse For the child: Attributions regarding the abuse Ambivalent feeling towards the perpetrators Child safety and assertiveness training Appropriate versus inappropriate touching

Intervention delivery	Intervention content
	Inappropriate behaviour Issues of fear and anxiety

4. Early Intervention Foster Care Program (EIFC)

Study ID (first surname + year) Fisher et al. 2005	**Initials of person extracting data** MT **Date** 17/5/2013

Full citation

Fisher, P. A., Burraston, B., & Pears, K. (2005). The Early Intervention Foster Care Program: Permanent Placement Outcomes From a Randomized Trial. *Child Maltreatment*, 10(1), 61-71.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

3- to 6-year-old foster children new to the foster care system, reentering foster care, and moving between placements (expected to remain in care for more than 3 months).

Parents:

Exclusion criteria

Children:

Parents:

Participant demographics at baseline

		Intervention	**Comparison**
Number assigned to groups	Children	47	43
	Parents		
Number in final analysis	Children	47	43
	Parents		

Age (mean, SD, range)	Children	Mean = 4.50 years; SD = 0.86 years	Mean = 4.22 years; SD = 0.74 years
	Parents		
Sex	Children	66% Male	60% Male
	Parents		
Education	Parents		
Ethnicity/indigenous	Parents		
	Children	79% White; 3% Native American; 18% Hispanic or Latino	92% White; 4% Native American; 4% Hispanic or Latino
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention. Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Foster care	Foster care
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	
Service model	Yes
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Treatment – The Early Intervention Foster Care Program

Comparison – Regular foster care

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	Yes
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	Yes
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes

	School	
	Clinic, medical or health	
	Community	
	Other	Playgroup
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	
	Family relationship	
	Systems outcomes	Yes
Dose	Number of sessions	Foster parents: daily telephone contacts, weekly foster parent support group meetings, and 24-hour on-call crisis intervention. Children: attend weekly therapeutic playgroup sessions.
	Duration of sessions	Cannot tell
	Total duration of program	Children: 6-9 months
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family	

	support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'. If there is no significant effect, leave blank.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		EIFC	Regular foster care	
Failure of a permanent placement	Children's placement records obtained from the Oregon DHS Child Welfare Division of Lane County	+ (Fewer failed permanent placements) compared to regular foster care		24 months

Intervention delivery	Intervention content
Training of foster care parents is completed before they receive foster care (unlike most other parenting interventions that are for families with children living with them) After placement, foster parents work with practitioner via "support and supervision through daily telephone contacts, weekly foster parents support group meetings and a 24-hour on-call crisis intervention" Children receive direct service with behavioural specialist at preschool/day care and home Children attend weekly "therapeutic" playgroup sessions	Child behaviour management Foster parents training focuses on positive parenting strategies to promote child psychosocial development and behavioural regulation (warm, responsive, consistent home environment) Positive reinforcement Close supervisions and engagement Labelling target behaviours and tracking their occurrence Using behaviour contracting with rewards an star charts to increase prosocial behaviour Using time-out and other contingent approaches to setting limits Individualised child treatment teaches

Intervention delivery	Intervention content
	prosocial skills to improve behaviour Weekly playgroup focuses on skills for school readiness such as early literacy

5. Early Start

Study ID (first surname + year)	**Initials of person extracting data**
Fergusson 2005a; Fergusson 2005b (Evaluation report); Fergusson 2006; Fergusson 2012 (Evaluation report); Fergusson 2013	MT **Date:** 16/5/2013

Full citation

Fergusson, D. M., Grant, H., Horwood, L. J., & Ridder, E. M. (2005a). Randomized trial of the early start program of home visitation. *Pediatrics*, 116(6), E803-E809.

Fergusson, D., Horword, J., Ridder, E., & Grant, H. (2005b). *Early start evaluation report*. Early Start Project Ltd. Retrieved from http://www.otago.ac.nz/christchurch/otago014859.pdf

Fergusson, D. M., Grant, H., Horwood, L. J., & Ridder, E. M. (2006). Randomized trial of the Early Start program of home visitation: Parent and family outcomes. *Pediatrics*, 117(3), 781-786.

Fergusson, D., Boden, J., & Horwood, J. (2012). *Early start evaluation report: Nine year follow-up. Ministry of Social Development*. Retrieved from http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/evaluation/early-start-evaluation-report-nine-year-follow-up.pdf

Fergusson, D. M., Boden, J. M., & Horwood, L. J. (2013). Nine-Year Follow-up of a home-visitation program: A randomized trial. *Pediatrics*, 131(2), 297-303. doi: 10.1542/peds.2012-1612.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

New Zealand

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents:

Plunket nurses were asked to refer any family in which 2 or more risk factors were present based on a 11-point screening measure based on the measure used in the Hawaii Healthy Start Program (contained items relating to maternal age, extent of family support, wantedness of pregnancy, substance use, family violence and child abuse risk.). In addition, Plunket nurses were asked to refer any family in which there were serious concerns about the family's

capacity to care for the child. Referral was made within 3 months of birth.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children	206	221
	Parents		
Number in final analysis	Children	184	207
	Parents		
Age (mean, SD, range)	Children		
	Parents	Mean = 24.6 years (mother)	Mean = 24.4 years (mother)
Sex	Children		
	Parents		
Education	Parents	70.6% lacked educational qualifications (mother)	69.9% lacked educational qualifications (mother)
Ethnicity/indigenous	Parents	24.8% Maori (mother)	26.7% Maori (mother)
	Children		
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes
Vulnerable, troubled or fragile (use these phrases but no		

mention of maltreatment)		
Domestic, family or intimate partner violence	Yes	Yes
Teen parent		
Low SES/disadvantaged		
Parental substance abuse	Yes	Yes
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being

Treatment – Healthy Start programme

Comparison – families provided existing child health and related services.

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	Yes
Dose	Number of sessions	There were 4 levels of service delivery which were based on family needs.

		1. High need: One–two hours home visitation per week. 2. Moderate need: Up to one-hour home visitation per fortnight. 3. Low need: Up to one-hourhome visitation per month. 4. Graduate: Up to one-hourcontact (phone/home visitation) per three months.
	Duration of sessions	Cannot tell
	Total duration of program	36 months (Median = 24 months)
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Fergusson et al. 2005a

Outcomes Outcome reported in results	Measures How	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.	Follow-up Longest point of follow up (i.e., 6 months; 1 year) They have to

				[MB1]
		Control	Early Start	
Mean number of GP visits	Medical records		+ (More visits) compared to control	0-36 months
% Up to date with well-child checks	Medical records		+ (Greater percentage) compared to control	0-36 months
% Attended hospital for accident/injury or accidental poisoning	Medical records		+ (Smaller percentage) compared to control	0-36 months
% Enrolled with dental nurse/dentist at 36 months	Medical records		+ (Greater percentage) compared to control	At 36 months
Mean duration of early childhood education	To assess the extent to which families used nonmedical community services, 2 measures of service utilization were developed: (1) the duration of the child's attendance at preschool education services by 36 months and (2) the number of community service agency contacts that the family had made up to 36 months.		+ (Greater duration) compared to control	0-36 months
Mean number of community service contacts			+ (Greater number) compared to control	0-36 months
Mean positive	49-item parenting		+ (Greater score)	At 36 months

parenting attitudes	questionnaire that contained items derived from the Child Rearing Practices Report and the Adult-Adolescent Parenting Inventory		compared to control	
Mean non-punitive attitudes			+ (Greater score) compared to control	At 36 months
Mean parenting score			+ (Greater score) compared to control	At 36 months
% Parental report of severe physical assault	Parental report of severe punishment of the child by either parent, based on the severe/very severe assault subscales of the Parent-Child Conflict Tactics Scale		+ (Smaller percentage) compared to control	0-36 months
Mean internalizing problems score	Infant Toddler Social and Emotional Assessment scale		+ (Lower score) compared to control	At 36 months
Mean total behaviour problems score			+ (Lower score) compared to control	At 36 months

Fergusson et al. 2005b

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control	Early Start	
Mean number of GP visits	Medical records		+ (More visits) compared to control	0-36 months
% Up to date with well-child checks	Medical records		+ (Greater percentage) compared to control	0-36 months

% Attended hospital for accident/injury or accidental poisoning	Medical records		+ (Smaller percentage) compared to control	0-36 months
% Enrolled with dental nurse/dentist at 36 mo	Medical records		+ (Greater percentage) compared to control	At 36 months
Mean duration of early childhood education	To assess the extent to which families used nonmedical community services, 2 measures of service utilization were developed: (1) the duration of the child's attendance at preschool education services by 36 months and (2) the number of community service agency contacts that the family had made up to 36 months.		+ (Greater duration) compared to control	0-36 months
Mean positive parenting attitudes	49-item parenting questionnaire that contained items derived from the Child Rearing Practices Report and the Adult-Adolescent Parenting Inventory		+ (Greater score) compared to control	At 36 months
Mean non-punitive attitudes			+ (Greater score) compared to control	At 36 months
Mean parenting score			+ (Greater score) compared to control	At 36 months
% Parental report of severe physical assault	Parental report of severe punishment of the child by either parent, based on the		+ (Smaller percentage) compared to control	0-36 months

	severe/very severe assault subscales of the Parent-Child Conflict Tactics Scale			
Mean internalizing problems score	Infant Toddler Social and Emotional Assessment scale		+ (Lower score) compared to control	At 36 months
Mean total behaviour problems score			+ (Lower score) compared to control	At 36 months

Fergusson et al. 2006

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control	Early Start	
There were no significant differences between the Early Start and control series in any comparisons				

Fergusson et al. 2012

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control	Early Start	
% Attending hospital for unintentional injury	Medical records		+ (Smaller percentage) compared to control	0-9 years
% Severe/very severe physical assault by any parent	Parent-Child Conflict Tactics Scale		+ (Smaller percentage) compared to controls	0-9 years
% Parent-reported	Medical records		+ (Smaller	0-9 years

harsh punishment			percentage) compared to control	
% agency contact for child abuse/neglect	Questionnaire items in which families were asked about contact with a range of services because of physical child abuse		+ (Smaller percentage) compared to control	0-9 years
Mean physical punishment score	49-item parenting questionnaire that contained items derived from the Child Rearing Practices Report and the Adult-Adolescent Parenting Inventory		+ (Lower score) compared to control	0-9 years
Mean parenting competence score			+ (Higher score) compared to control	5, 6, 9 years
Mean externalising problems score	Strengths and difficulties questionnaire		+ (Lower score) compared to control	5, 6, 9 years
Mean internalising problems score	Strengths and difficulties questionnaire		+ (Lower score) compared to control	5, 6, 9 years
Mean total parent-reported SDQ score	Strengths and difficulties questionnaire		+ (Lower score) compared to control	5, 6, 9 years

Fergusson et al. 2013

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Control	Early Start	
% Attending hospital for unintentional	Medical records		+ (Smaller percentage) compared to	0-9 years

injury			control	
% Parent-reported harsh punishment	Medical records		+ (Smaller percentage) compared to control	0-9 years
Mean physical punishment score	49-item parenting questionnaire that contained items derived from the Child Rearing Practices Report and the Adult-Adolescent Parenting Inventory		+ (Lower score) compared to control	0-9 years
Mean parenting competence score			+ (Higher score) compared to control	5, 6, 9 years
Mean total parent-reported SDQ score	Strengths and difficulties questionnaire		+ (Lower score) compared to control	5, 6, 9 years

Intervention delivery	Intervention content
<u>Essential features only as authors report service provision is flexible and it is difficult to provide account of the work undertaken</u> Individualised service planning Assessment of family needs, issues, challenges strengths and resources Focus on relationship development between worker and family Collaborative problem solving focused on family challenges Supporting, teaching, mentoring and advice to assist client families to use their strengths and resources	<u>Essential features only as authors report service provision is flexible and it is difficult to provide account of the work undertaken</u> Child health (timely medical visits, compliance with immunisation and wellbeing checklists, Home safety and home environment Parenting skills (parental sensitivity, positive parenting and non-punitive parenting) Supporting parental physical and mental health (reductions of unplanned pregnancies, early detection and treatment of depression/anxiety/substance abuse) Family economic and material wellbeing (budgeting, employment) Positive adult relationships Crisis management

6. Parent training prevention model – description

Study ID (first surname + year)	**Initials of person extracting data**
Peterson etal 2003	MT **Date** 17/5/2013

Full citation

Peterson, L., Tremblay, G., Ewigman, B., & Saldana, L. (2003). Multilevel selected primary prevention of child maltreatment. *Journal of Consulting and Clinical Psychology*, 71(3), 601-612. doi:10.1037/0022-006X.71.3.601

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria

Children:

Children who were 18 months through to 4 years of age

Parents:

Women: Medicaid eligible (as an index of low-income status) and to have less than 2 years of college (to rule out graduate students with children, whose eligibility for Medicaid was likely to be brief).

Exclusion criteria

Children:

Parents:

If there was a specific reason that the mother would not be able to profit from the intensive training we offered because of lack of communication ability or high levels of interfering psychological distress. Specifically, if mothers did not speak fluent English or showed diagnosable levels of serious depression or delusional symptoms (assessed in the first of the pretest questions with the Diagnostic Interview Schedule [3rd ed., rev.; DIS–III–R]; Robins, Helzer, Cottler, & Goldring, 1989; DIS–IV criteria were not available at the time the study began).

Participant demographics at baseline

		Intervention	Comparison (Diary-only group)	Comparison (No-diary group)
Number assigned to groups	Children			
	Parents	42	32	25
Number in final analysis	Children			
	Parents	69% completed 1yr followup	52% completed 1yr followup	49% completed 1yr followup
Age (mean, SD, range)	Children			
	Parents	Mean = 27.81 years; SD = 5.48 years.	Mean = 29.03 years; SD = 6.51 years	Mean = 27.56 years; SD = 6.03 years
Sex	Children			
	Parents	100% Female	100% Female	100% Female
Education	Parents	Mean = 11.90 years; SD = 1.45 years	Mean = 12.22 years; SD = 1.07 years	Mean = 12.04 years; SD = 1.14 years
Ethnicity/indigenous	Parents	16% African American; 76% Caucasian; 7% Other minority	28% African American; 59% Caucasian; 13% Other minority	24% African American; 72% Caucasian; 4% Other minority
	Children			
Notes				

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention. Select as many as applicable.)

	Intervention Yes/no	Comparison Yes/no
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no		

mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged	Yes	Yes
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Population at risk of child maltreatment	Population at risk of child maltreatment
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	Yes
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Treatment – Parent training intervention (Multi-component program using role-playing, Socratic dialogue, modeling, and discussion of barriers to the curriculum . It involves group therapy, home-visiting, practice work done at home)

Comparison – Diary-only group

Comparision – No diary group

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	Yes
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	Yes
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	15 sessions (the 16th session had no content).
	Duration of sessions	Group: not indicated. Home visit: 90 minutes.

	Total duration of program	16 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Intervention (training)	With diary	No diary	
Child elicited anger	Novaco Anger Scale	+ (improvement) Compared to control)	Combined to form control		1 year follow up
Parent self-efficacy	Parent Efficacy Scale	+ (improvement) Compared to control)	Combined to form control		1 year follow up
Problem solving ability	Parent Problem-Solving Scale	+ (improvement) Compared to control)	Combined to form control		Post-intervention
The number of tasks during which the mothers rewarded children	Coded observation of the Child Instruction Task	+ (improvement) Compared to control)	Combined to form control		Post-intervention

Intervention delivery	Intervention content
Nondidactic, continuous interaction between group members and group facilitator Written materials outlining group curriculum Group start with one or more women sharing a positive experience with child that happened over the week Review of previous week's curriculum Role-playing Socratic dialogue Modelling Discussion of barriers to the curriculum use Homework tasks	Main focus is on child behaviour management Problem solving Time management Positive parenting techniques such as child-led play, distraction, "catching child being good" and effective compliance strategies Anger management Time out for difficult child behaviour Child health and safety issues (e.g., losing control or leaving child with someone who might lose control)

7. Parents Under Pressure (PUP)

Study ID (first surname + year)	**Initials of person extracting data**
Dawe & Harnett 2007	MT **Date:** 17/5/2013

Full citation

Dawe, S., & Harnett, P. (2007). Reducing potential for child abuse among methadone-maintained parents: Results from a randomized controlled trial. *Journal of Substance Abuse Treatment*, 32 (4), 381-390. doi:10.1016/j.jsat.2006.10.003

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

Australia

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents:

The primary carer needed to be receiving methadone, have at least one child aged between 2 and 8 years in their full-time care, and be able to understand and read English.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics at baseline (provide family/household/school etc. details if child/parent details not given)

		Intervention (PUP)	**Comparison (Brief intervention)**	**Comparison (Usual care)**
Number assigned	Children			
	Parents	22	23	19
Number in final analysis	Children			

	Parents	20	20	13
Age (mean, SD, range)	Children	*Mean = 45.9 months; SD = 17.2 months		
	Parents	*Mean = 30.33 years; SD = 6.34 years		
Sex	Children	* 60.9% Male		
	Parents	* 84.4% Female		
Education	Parents			
Ethnicity/indigenous	Parents			
	Children			
Notes * Aggregate demographic data reported for the entire sample N=64.				

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse	Yes	Yes
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Treatment – Parents Under Pressure (PUP) program

Comparison – Brief Clinic Intervention

Comparison – Standard Care

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	

Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	Yes
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	
	Family relationship	Yes
	Systems outcomes	
Dose	Number of sessions	Mean = 10.5 face-to-face sessions; SD = 2.9 sessions. Range = 8 to 14 sessions (PUP group)
	Duration of sessions	1-2 hours
	Total duration of program	10-12 weeks
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Yes
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.	Follow-up Longest point of follow up (i.e., 6

					months; 1 year)
		Standard Care	wo-session parenting education intervention	T Parents Under Pressure	
Perceived stress in the parenting role	Parenting Stress Index	No change	No change	+ (Lower score). Change significantly different from zero	6 months
Child abuse potential	Child Abuse Potential Scale	- (Higher score). Change significantly different from zero	+ (Lower score). Change significantly different from zero (p<0.05)	+ (Lower score). Change significantly different from zero (p<0.001)	6 months
Rigid or harsh parenting beliefs and attitudes	Child Abuse Potential Scale			+ (Lower score). Change significantly different from zero	6 months
Parental methadone dose	Case records			+ (Lower score). Change significantly different from zero	6 months
Child behaviour problem score	Strengths and Difficulties Questionnaire			+ (Lower score). Change significantly different from zero	6 months

Intervention delivery	Intervention content
Begins with assessment and individualised case planning in collaboration with parents Additional case management can occur outside treatment session (e.g., housing, legal advice, school intervention)	10 modules Strengthen the parent's view that they are competent in parenting role Help parents develop skills in coping with negative emotional states through use of mindfulness skills Positive parenting skills including praise, rewards for good behaviour, and child-centred play skills Non-punitive child management techniques such as time out Coping with lapse and relapse (to use of alcohol and drugs) Extending social networks Life skills: practical advice re diet and nutrition, budgeting, health care and exercise Relationships (effective communication between partners)

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Appendix 7

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

Commissioned by the Families Commission, New Zealand

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Appendix 7: Intervention component matrix for the Well Supported, Supported and Emerging interventions

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Disclaimer

This analysis of parenting interventions was commissioned by the Families Commission of New Zealand. It was conducted between March and May 2013. Readers are advised to consider new evidence arising post the publication of this review when selecting and implementing parenting interventions.

June 2013

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Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Population													
Maltreated		✓	✓	✓	✓	✓			✓				
No history of maltreatment	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Person delivering													
Professional	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Non-professional													
Setting													
Home	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
Clinic			✓						✓				
Community					✓	✓							
Delivery Level													
Individual	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Group					✓	✓				✓			

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Dose													
Brief (less than 22 weeks)		✓	✓		✓	✓	✓		✓			✓	✓
Medium (6 – 12 months)				✓				✓		✓			
Long (2 + years)	✓										✓		
Delivery													
Service linkage	✓						✓						
Assessment				✓			✓	✓			✓		✓
Individual plan	✓						✓	✓			✓		✓
Family goals	✓				✓	✓							
Praise for parents	✓		✓	✓									
Structured sessions	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓
Written material		✓			✓	✓						✓	
Discussion		✓		✓	✓	✓		✓				✓	
Feedback		✓		✓	✓	✓							
Modelling				✓	✓	✓						✓	
Role-play				✓	✓	✓						✓	

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Didactic teaching				✓									
Coaching while parents interact with child/ active skills training			✓	✓									
Remediation of inappropriate response to child			✓										
Mastery skills attainment			✓	✓									
Verbal instructions				✓									
Homework tasks				✓	✓	✓							
Rehearsal					✓	✓							
Ongoing supervision and support										✓			
Behavioural specialist support for children and therapeutic playgroup										✓			
Collaborative relationship with family											✓		
Sharing stories of positive interactions with child												✓	
Review the course curriculum												✓	
Socratic dialogue												✓	

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Collaboration with family							✓						
Based on family strengths, needs, resources							✓				✓		
Cognitive re-framing						✓			✓				
Thought stopping									✓				
Positive imagery									✓				
Parent management training									✓				
Psychoeducation									✓				
Supportive interventions									✓				
Content													
Individualised home visiting component rather than fixed curriculum							✓						
Parent mental and physical health	✓										✓		
Child care skills/care-giving	✓			✓									
Problem solving skills	✓								✓			✓	
Child behaviour and behaviour management		✓	✓		✓	✓	✓		✓	✓		✓	

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Nurturance in response to child distress		✓											
Parent-child interactions		✓		✓			✓	✓					
Predictable environment for child, explain rules/expectations/use of routines/ setting limits		✓	✓	✓	✓	✓		✓		✓			
Child health and development				✓			✓				✓	✓	
Reinforcement of parents strengths							✓						
Descriptive for child behaviour/descriptive/labelled praise for child			✓							✓			✓
Praise for desired child behaviour			✓	✓	✓	✓							✓
Avoid commands, questions, criticism			✓										
Follow through on commands			✓										
Time out			✓		✓	✓				✓		✓	
Home, environment and child safety				✓				✓	✓			✓	
Planned activities training				✓	✓	✓							

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Parent time management				✓								✓	
Use of reinforcement/rewards for child/ behaviour charts				✓	✓	✓		✓		✓			✓
Planning ahead for high risk situations/crisis management					✓	✓					✓		✓
Partner support						✓							
Coping skills for couples						✓							
Social support						✓							
Emotional regulation						✓		✓	✓			✓	✓
Reciprocity in relationships								✓					
Trauma focused								✓					
Positive parenting										✓	✓	✓	✓
Nonpunitive parenting											✓		✓
Life skills, continuity of life course: family economics, nutrition, education, employment, relationships	✓							✓			✓		✓
Positive adult relationships											✓		✓

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
Mindfulness													✓
Teaching child prosocial behaviours and school readiness										✓			
Quality time					✓	✓							
Talking to children					✓	✓							
Physical affection					✓	✓							
Attention for child					✓	✓							
Setting a good example for children					✓	✓							
Incidental teaching					✓	✓							
Quite time					✓	✓							
Logical consequences					✓	✓							
Directed discussion					✓	✓							
Planned ignoring					✓	✓							
Ambivalence in belief of abuse, ambivalence toward perpetrators, feeling the child is damaged, emotional support for child, parental issues regarding their									✓				

Element	NFP	ABC	PCIT	SafeCARE	Triple P		Child FIRST	CPP	CBT-SAP	EIFC	Early Start	Parent training prevention model	PUP
					S	E							
own abuse													
Chid assertiveness training, appropriate vs inappropriate touching									✓				

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Appendix 8

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

June 2013

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Appendix 8: Information collected regarding Healthy Start

Evidence review: An analysis of the evidence for parenting interventions for parents of vulnerable children aged up to six years

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Appendix 8: Information collected regarding Healthy Start

The information contained in this appendix was gathered from evaluations involving Healthy Start, including evaluations where Healthy Start was used as a comparison condition in studies testing the effectiveness of Enhance Healthy Start. We initially rated Healthy Start Supported but upon further consideration of the favourable results for Enhanced Healthy Start, we have rated Healthy Start 'Failed to Demonstrate Effect'. In the absence of follow-up data, Enhanced Healthy Start has been rated 'Pending'.

Healthy Start

Intervention components

Healthy Start is a home visiting program delivered to individual parents by paraprofessionals. Healthy Start involves population-based screening for early identification of families with newborns at risk for child abuse and neglect. The intervention is delivered via discussion with parents, active, empathic listening, modelling, role-modelling and individual service plans. Children are linked with continual paediatric primary care and families are linked into needed services, housing, income and nutritional assistance, child care, and educational and vocational training. Content conveyed during the intervention includes problem solving skills and child health and development. They also promote family use of prevention and early intervention service by offering referrals and assist with the resolution of any immediate crises.

Evaluation findings

The REA identified two RCTs that have evaluated this program in the USA. Program details varied slightly across each of these evaluations. In one RCT (Duggan, McFarlane, Windham, Rohde, Salkever, Fuddy, Rosenberg, Buchbinder, & Sia, 1999; El-Kamary, Higman, Fuddy, McFarlane, Sia, & Duggan, 2004; Duggan, Fuddy, Burrell, Higman, McFarlane, Windham, & Sia, 2004a; Duggan, Fuddy, McFarlane, Burrell, Windham, & Sia, 2004b; Duggan, McFarlane, Fuddy, Burrell, Higman, Windham, & Sia, 2004c; McFarlane, Burrell, Crowne, Cluxton-Keller, Fuddy, leaf, & Duggan, 2013; Bair-Merrit, Jennings, Chen, Burrell, McFarlane, Fuddy, & Duggan, 2010), the intervention targeted families of newborns at high risk of child abuse and it aimed to target parent-child relationships, family relationships and systems outcomes. There was an average of 13 visits over the course of 3-5 years, however there were four levels of intensity, ranging from weekly visits to quarterly. Early results for this RCT showed some promise, with some post intervention and early follow-up effects observed. The intervention group had significantly less corporal or verbal punishment and neglectful parenting than the control group (Duggan et al., 2004c). At 2-year follow-up, intervention participants had significantly fewer reports of physical assault, less partner violence resulting in injury, more use of non-violent discipline and greater efficacy, when compared to the control group (Duggan et al., 1999).

By the time the children were 7-9 years old, there were no significant impacts on any of the assessed parenting outcomes (McFarlane et al., 2013) and there were no significant differences between intervention and controls on the incidence of interpersonal violence (Bair-Merritt et al.,2010). The last measure of parental risk factors for child abuse was assessed at 3 years and no significant effects were found (Duggan et al., 2004a).

A separate RCT assessed the effectiveness of Healthy Start for families at risk of dysfunction (McCurdy, 2001). Families received a mean of 28 individual home visits for 1 year, delivered by paraprofessionals. The program specifically targeted family relationships and outcomes were

compared to treatment as usual. The only observed effect in this RCT was at 12 months where the Healthy Start group reported significantly better social support scores than the control group.

Healthy Start compared to Enhanced Healthy Start

In an RCT reported by Bugental, Ellerson, Rainey, Lin, Kokotovic, and O'Hara (2002) new parents at risk of child abuse received a mean of 17 individual home visits from a paraprofessional. The intervention targeted child behaviour and parent-child relationships. The effectiveness of standard Healthy Start was compared to Enhanced Healthy Start (standard plus a cognitive appraisal component) and also compared to treatment as usual. Home visits lasted for 1 year and the final reported assessment was taken at this point. Results favoured the Enhanced version, with significantly less harsh parenting in this group compared to both the other conditions.

Bugental and Schwartz (2009) reported the results of an RCT for children under the age of 6 who were at medical risk. Healthy Start home visits were delivered to individual families for 17 sessions over the course of 1 year and targeted safety and physical wellbeing and parent-child relationships. At post intervention, participants in the Enhanced version faired significantly better than those in both treatment as usual and standard Healthy Start, on corporal punishment and home safety.

Intervention name (description where name not available)	Country	Intervention type	Population targeted	Outcomes targeted	Mode, setting, dose and intervener	Delivery	Content	Results Outcome with significant effect favouring intervention at post or number of months/years after post
Healthy Start	USA	Program	Newborns at high risk of child abuse Predominantly Native Hawaiian or Latin American	Parent-child relationships Family relationships System outcomes	Average of 13 home-based sessions delivered to individual parents by paraprofessionals	Population based screening for early identification of families with newborns at risk for child abuse and neglect Active, empathic listening Discussion Modelling Role-modelling Individual service plans Linked child with continual paediatric primary care Link families into needed services, housing, income, nutritional assistance, child care, and educational and vocational training	Resolving any immediate crises Problem solving skills Child health and development Promoting family use of prevention and early intervention services (referrals)	Less corporal or verbal punishment and neglectful parenting– post Fewer reports of physical assault, less partner violence, more use of non-violent discipline, greater efficacy – 2 year follow-up
			Families at risk of dysfunction	Family relationships	Average of 28 home-based sessions for individual parents delivered by a paraprofessional			Better social support – post

1.1 Healthy Start

Study ID (first surname + year)	**Initials of person extracting data**
Bair-Merrit 2010; McFarlane 2013; Duggan 2004a; Duggan 2004b; Duggan 2004c; El-Kamary 2004; Duggan 1999	BD **Date** 10/05/2013

Full citation

Bair-Merritt, M. H., Jennings, J. M., Chen, R., Burrell, L., McFarlane, E., Fuddy, L., & Duggan, A. K. (2010). Reducing Maternal Intimate Partner Violence After the Birth of a Child: A Randomized Controlled Trial of the Hawaii Healthy Start Home Visitation Program. *Archives of Pediatrics & Adolescent Medicine*, 164(1), 16-23.

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El-Kamary, S. S., Higman, S. M., Fuddy, L., McFarlane, E., Sia, C., & Duggan, A. K. (2004). Hawaii's healthy start home visiting program: Determinants and impact of rapid repeat birth. *Pediatrics*, 114(3), e317-326.

Duggan, A, K., McFarlane, E, C., Windham, A, M., Rohde, C. A., Salkever, D. S., Fuddy, L., Rosenberg, L. A., Buchbinder, S. B., Sia, C. C. J. (1999). *Evaluation of Hawaii's Healthy Start Program. Future of Children*, 9(1), 66-90.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents:

Families of newborns identified as at risk of child abuse and:

(1) gave birth between November 1994 and December 1995 on Oahu; (2) had an English-speaking mother; (3) were not involved with Child Protective Services; and (4) had an infant who was at high risk for maltreatment - ≥ 25 on Family Stress Checklist

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children: Not indicated

Parents: Not indicated

Participant demographics (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children		
	Parents	N=373	N=270
Number – final analysis	Children		
	Parents	81% completed 3rd year interview	81% completed 3rd year interview
Age (mean, SD, range)	Children	Not indicated	Not indicated
	Parents	≤18 years n = 78 19-25 years n = 178 ≥26 years = 116 Mean = 24 years	≤18 years n = 65 19-25 years n = 121 ≥26 years = 84 Mean = 24 years
Sex	Children	Not indicated	Not indicated
	Parents	F = 100%	F = 100%
Education	Parents	High school graduate = 257	High school graduate = 174
Ethnicity/indigenous	Parents	Native Hawaiian or Pacific Islander n = 127 Asian or Filipino n = 103 White n = 39 No primary ethnicity or other n = 104	Native Hawaiian or Pacific Islander n = 88 Asian or Filipino n = 75 White n = 36 No primary ethnicity or other n = 71

	Children	Not indicated	Not indicated
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)	Yes	Yes
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	**Yes/no**
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	

Alternate treatment	Yes

Brief description of each condition being compared

Alternate treatment – other community resources

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	Yes
	Systems outcomes	Yes
Dose	Number of sessions	Mean = 13

		home visits 12 or more visits = 45% Level 1 = weekly sessions Level 2 = bi-weekly sessions Level 3 = monthly Level 4 = quarterly Dose delivered - n = 84 had a high dose of service in their first year of enrolment, n = 55 in their second year, and n = 42 in their third year. There were 53 families with a high dose over all 3 years combined. Dose definitions – A family was classified as receiving a high dose of service for a given year if the family met three criteria: (1) active in the program at

		the end of the year; (2) had ≥ 75% of expected visits; and (3) on Level X for ≤ 3 months. A family was considered to have a high dose of service for the full 3 years if they met similar criteria: (1) active in or graduated from the program at the end of the third year; (2) had ≥ 75% of expected visits over the full period of enrolment; and (3) on Level X for ≤ 3 months total.
	Duration of sessions	Not indicated
	Total duration of program	3-5 years
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	No
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	Yes
	Cannot tell	

Results

Blair-Merrit et al. 2010

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
Av Incidence Rate of IPV Events per person/year Maternal victimisation	Conflict Tactics Scale (CTS)	*No difference*			7-9 years
Av Incidence Rate of IPV Events per person/year Maternal perpetration	Conflict Tactics Scale (CTS)	*No difference*			7-9 years

McFarlane et al. 2013

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
Home visited and control mothers had nearly identical distributions across relationship classifications as assessed by the Attachment Style Questionnaire For both the early childhood and grade school samples, HSP and control groups were comparable at baseline on most demographic variables There were no significant overall impacts on any of the parenting outcomes when children were 7 to 9 years old					

Duggan et al. 2004a

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '-'			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
This paper reported no effect significant effects for the intervention on any of the malleable parental risk factors for child abuse assessed (AT 3 YEARS)					

Duggan et al. 2004b

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
Mother's satisfaction with father's role	Mother's rating of satisfaction	+ MORE likely to be satisfied with accessibility and engagement in child care		In non-violent fathers only	3 years
Mother's satisfaction with father's role	Mother's rating of satisfaction	- LESS likely to be satisfied with accessibility		In violent fathers only	3 years
For families overall, there was no apparent program impact on fathers' accessibility, engagement, or sharing of responsibility as measured by maternal report					

Duggan et al. 2004c

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
Common corporal/verbal punishment		+ (less compared to control)			1-3 years (longitudinal)
Neglectful parenting behaviour in past year	Conflict Tactics Scale (Revised neglect category)	+ (less compared to control)			1-3 years (longitudinal)

El-Kamary et al. 2004

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
Rapid repeat birth (Main outcome in paper)	Maternal self-report	*There was no program impact on RRB for mothers overall, after adjustment for the significant baseline differences in demographic variables*			3 years

Duggan et al. 1999

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.		Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	
Has a primary carer	Rates	+ (more mothers		Year 2 follow up

who knows family's concerns about child	provider's level of knowledge as indicated by mothers during interview	agreed with this) compared to control		
Any incidence of physical assault	Conflict Tactics Scales	+ (fewer report) compared to control IN ONE AGENCY ONLY		Year 2 follow up
Partner violence resulting in injury	Conflict Tactics Scales	+ (fewer reports of violence) compared to control		Year 2 follow up
Frequent use of non-violent discipline	Conflict Tactics Scale	+ (more common) compared to control		Year 2 follow up
Parenting efficacy	Parenting Sense of Competence Scale	+ (greater) compared to control		Year 2 follow up

Study ID (first surname + year)

McCurdy 2001

Initials of person extracting data

BD

Date 10/05/2013

Full citation

McCurdy, K. (2001). Can home visitation enhance maternal social support? *American Journal of Community Psychology*, 29, 97-112.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents: Families at risk of parental dysfunction based on a review of hospital records. Families

with a mother or father with a score ≥ 25 on the family stress index

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children		
	Parents	N=108	N=104
Age (mean, SD, range)	Children		
	Parents	Mean f = 23.2 years Mean m = 27.2 years	Mean f = 23.8 years Mean m = 26.8 years
Sex	Children		
	Parents	Not indicated	Not indicated
Education	Parents	No High school diploma = 35 High school diploma = 49 More than high school = 15 Unknown =1	No High school diploma = 21 High school diploma = 55 More than high school = 24 Unknown = 0
Ethnicity/indigenous	Parents	Caucasian = 15 Filipina = 24 Hawaiian = 26 Japanese =6 Puerto Rican/Hispanic = 6 Samoan= 9 Other = 15	Caucasian = 12 Filipina = 29 Hawaiian = 31 Japanese =7 Puerto Rican/Hispanic = 4 Samoan = 4 Other = 14
	Children		
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged	Yes	Yes
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)		
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	**Yes/no**
No treatment (no further detail required)	
Treatment as usual/usual care	Yes
Waitlist	
Alternate treatment	

Brief description of each condition being compared

Comparison group – Usual care. Referral services were provided as necessary.

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	
	Family relationship	Yes
	Systems outcomes	
Dose	Number of sessions	Mean delivered = 28, range = 1-55
	Duration of sessions	Not indicated

	Total duration of program	1 year
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	paraprofessionals
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment	Control	Alternative	
Satisfaction with an adult other than a partner	Maternal social support Index	+ (Greater satisfaction)			12 months

Although they looked at all kind of supports, the satisfaction with an adult other than the partner was the only one that was significantly different. Overall the hypothesis that home visiting would significantly enhance social support was not supported with these data.

This study didn't report on effects of the intervention on neglect.

1.2 Enhanced Healthy Start

Study ID (first surname + year)	**Initials of person extracting data**
Bugental et al. 2002	BD **Date** 03/05/2013

Full citation

Bugental, D. B., Ellerson, P. C., Rainey, B., Lin, E. K., Kokotovic, A., & O'Hara, N. (2002). A cognitive approach to child abuse prevention. *Journal of Family Psychology*, 16(3), 243-258

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children:

Parents: All families expecting the birth of a child (or having recently given birth to a child) who were identified as at moderate risk to become abusive were eligible to participate.

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics (provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison 1**	**Control**
Number assigned	Children			
	Parents	96 Families (across all three conditions)	96 Families	96 Families
Age (mean, SD, range)	Children			
	Parents	26.49 years	25.02 years	23.74 years

		(mothers)	(mothers)	(mothers)
Sex	Children	F = 41%	F = 47%	F = 66%
	Parents	F = 100% (father present = 50%)	F = 100% % (father present = 61%)	F = 100% % (father present = 44%)
Education	Parents	Mean = 8 years	Mean = 7.5 years	Mean = 7.5 years
Ethnicity/indigenous	Parents	97% Latino	97% Latino	97% Latino
	Children			
Note - 96 families were recruited and divided into the three groups (specific group numbers not given). Program was completed by 73 families (76%). Although fathers were involved statistics only included mothers.				

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child	Yes (50% of intervention sample had been abused)	
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Identified as at risk by a moderate score on the Family	

	Stress Checklist. (This includes many items including past abuse, unemployment, crises, substance abuse.)	
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	Yes (Comparison group 2)
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes (Comparison group 1)

Brief description of each condition being compared

Comparison group 1 - Parents in the unenhanced home visitation condition received home visitation consistent with the Healthy Start program, supplemented with information regarding existing services available in the community

Comparison group 2- Parents in the control condition received no direct services but were provided information regarding existing services available in the community

(Note – intervention received home visitation plus an extra cognitive based appraisal component)

Intervention delivery and dose (select as many as applicable)		
		Intervention Yes/no
At what level was it delivered?	Individual parents	
	Individual parent-child dyads	
	Individual children	
	Individual families	Yes
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	
	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	Yes
	Safety and physical wellbeing	
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	20 , mean delivered = 17
	Duration of sessions	Not indicated
	Total duration of program	1 year
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher,	No

	youth worker)	
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	Paraprofessional
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment 1 (Healthy Start)	Treatment 2 (Enhanced Health Start)	Control	
Frequency of Harsh Parenting	Conflict Tactics Scale		+ (Less harsh parenting than Treatment 1 and Control)		1 YEAR
Prevalence of Harsh Parenting	Conflict Tactics Scale		+ (Less harsh parenting than Treatment 1 and Control)		1 YEAR

Study ID (first surname + year)	Initials of person extracting data
Bugental et al. 2009	BD **Date** 3/05/2013

Full citation

Bugental, D. B., & Schwartz, A. (2009). A Cognitive Approach to Child Mistreatment Prevention Among Medically At-Risk Infants. *Developmental Psychology*, 45(1), 284-288.

Papers cited/referenced in this paper that relate to this intervention but are not already included in the REA

Was a cluster design used? If so, clustered by schools, communities, families etc.?

No

Country in which study was conducted

USA

Inclusion criteria (what are the criteria for participant inclusion in the study)?

Children: Child referral (by obstetricians and paediatricians) was based on the presence of a medical risk factor; 48 were referred primarily on the basis of preterm status (less than 36 weeks gestational age), 59 referred primarily on the basis of a medical problem (e.g., respiratory problems, cardiac problems), and 40 referred primarily for other reasons (e.g., cesarean delivery). Parental risk (e.g., poverty or history of abuse) was not considered in the referral. Families were eligible for inclusion for children up to 6 months of age.

Parents:

Exclusion criteria (what are the criteria for participant exclusion from the study)?

Children:

Parents:

Participant demographics (Provide family/household/school etc. details if child/parent details not given)

		Intervention	**Comparison**
Number assigned	Children		
	Parents	N = 51 (45 completed program	N = 59 (57 completed
Age (mean, SD, range)	Children		
	Parents	Mean = 27.1 years	Mean = 27.3 years
Sex	Children	F=43%	F=41%

	Parents	F=100%	F=100%
Education	Parents	F = 10.2 years	F = 9.5 years
Ethnicity/indigenous	Parents	83% Latino	91% Latino
	Children		
Notes			

Vulnerability or maltreatment issues (Reason this child/parent/family is in this intervention? Select as many as applicable.)

	Intervention Yes/no	**Comparison Yes/no**
History of maltreatment (either parents as abusers or children were abused)		
At-risk of maltreatment (no description of reason)		
Vulnerable, troubled or fragile (use these phrases but no mention of maltreatment)		
Domestic, family or intimate partner violence		
Teen parent		
Low SES/disadvantaged		
Parental substance abuse		
Parent was maltreated as a child		
Parent has a physical disability		
Parent has learning disability/difficultly or intellectual disability		
Parent has a mental illness		
Child has a disability or additional needs		
Other (please list)	Preterm babies (<36 weeks), babies with medical problems eg respiratory/cardiac, other reason (eg caeserian).	
Cannot tell		

Intervention and comparison conditions

What type of approach was the intervention? (refer to definitions)

Approach type	Yes/no
Program	Yes
Service model	
System of care	

What type of comparison condition was used?

Comparison condition	Yes/no
No treatment (no further detail required)	
Treatment as usual/usual care	
Waitlist	
Alternate treatment	Yes

Brief description of each condition being compared

Control group received Health Start home visitation. (Note – intervention received this plus a cognitively based extension.)

Intervention delivery and dose (select as many as applicable)

		Intervention Yes/no
At what level was it delivered?	Individual parents	Yes
	Individual parent-child dyads	
	Individual children	
	Individual families	
	Groups of parents	
	Groups of parent-child dyads	
	Groups of children	
	Groups of families	
	Household	
	School	
	Community/region	
	Cannot tell	
Setting of delivery	Home	Yes
	School	

	Clinic, medical or health	
	Community	
	Other	
	Cannot tell	
Outcome domains targeted	Child development	
	Child behaviour	
	Safety and physical wellbeing	Yes
	Basic child care	
	Parent-child relationship	Yes
	Family relationship	
	Systems outcomes	
Dose	Number of sessions	17
	Duration of sessions	Not indicated
	Total duration of program	1 year
Person delivering	Was it a professional? (person with qualifications, for e.g., social worker, psychologist, nurse, teacher, youth worker)	Not indicated
	Was it a non-professional? (e.g., peer, paraprofessional, person that may be trained but does not have a qualification relevant to family support/education or child welfare etc.)	
	Cannot tell	

Results

Outcomes Outcome reported in results	Measures How measured	Effect: Post intervention results. Indicate if significant and the direction by using '+' or '–'.			Follow-up Longest point of follow up (i.e., 6 months; 1 year)
		Treatment 1 (Healthy Start)	Treatment 2 (Enhanced Health Start)	Control	
Corporal punishment	Conflict Tactics Scale		+ Lower use of punishment (ANOVA)		1 YEAR

Safety maintenance in the home	Framingham Safety Survey		+ Greater safety (ANOVA)		1 YEAR
	Child Injury Survey		+ Fewer injuries (ANOVA)		

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