The effect of parenting interventions on intimate partner violence: A systematic review and meta-analysis

Evidence-Based Social Intervention and Policy Evaluation
Department of Social Policy and Intervention
University of Oxford

21 August 2020

Word count (excluding abstract, table of contents, tables, figures, and appendices): 9,999
Word count (abstract): 500
Word count (with appendices): 13,963

Abstract

Background
Intimate partner violence (IPV) and child maltreatment (CM) are widespread issues with severe consequences. There is growing recognition of the overlap between these two forms of violence and on the need for prevention efforts addressing both issues. Preliminary evidence suggests that parenting interventions, which often target CM and harsh parenting, may also have an impact on IPV in the family. Thus, improvements in parents' emotion regulation and communication skills, may improve not only parent-child interactions, but also couple interactions. However, it is also possible that parenting interventions may increase IPV, due to changes in couple power dynamics and conflict.

Objectives
To assess the effect of parenting interventions on IPV perpetration and victimisation in male and female parents/caregivers.

Search methods
Six databases were searched, plus supplementary searches on Google, NHS Evidence, and ProQuest Dissertations databases. Reference lists of included studies were searched, and experts contacted.

Selection criteria
Included studies (1) were randomised controlled trials (RCTs) or cluster-RCTs, (2) examined a parenting intervention (or multicomponent intervention with at least 50% parenting content), (3) included parents/caregivers with a child under 12 years, (4) included a control group with no treatment, treatment-as-usual, waitlist control, or active control, (6) measured quantitative IPV-related outcomes, (5) were available in English.

Data collection and analysis
Data extraction used Cochrane's extraction form and studies were assessed for risk of bias using the RoB2 tool for randomised trials. Intervention effects were converted into standardised mean differences (SMDs) and random-effects meta-analyses conducted. Quality of the evidence was assessed using the GRADE framework. Subgroup analyses were conducted based on intervention content and sensitivity analyses performed based on study quality.

Results
The review included nineteen studies, with eighteen studies quantitatively synthesised. Victimisation: Meta-analysis findings revealed a statistically significant intervention effect on reduction in female IPV victimisation for both overall IPV (Hedge's g=-0.14; 95% CI=-0.25, -0.03; p=0.013) and physical IPV (Hedge's g=-0.20; 95% CI=-0.32, -0.07; p=0.002) at post-intervention. None of these reductions were significant at follow-up. No significant differences were found in psychological IPV female victimisation. No study reported on male IPV victimisation.

Perpetration: A significant reduction was found at post-intervention in physical male IPV perpetration in the intervention (Hedge's g=-0.23; 95% CI=-0.43, -0.03; p=0.026). No significant differences were found in overall or psychological IPV male perpetration. A significant reduction was found at post-intervention in female IPV perpetration for overall (Hedge's g=-0.29; 95% CI=-0.43, -0.14; p=0.0002) and physical IPV (Hedge's g=-0.24; 95% CI=-0.40, -0.08; p=0.0034) in the intervention. No female IPV perpetration outcomes were significant at follow-up. Notably, a small, significant increase was found for overall male IPV perpetration at follow-up (Hedge's g=0.26; 95% CI=0.06, 0.46; p=0.011), suggesting the reduced IPV levels noted at post-intervention may have increased. Interpretation of these findings, however, warrant caution due to the small effect sizes and considerable heterogeneity in many of the analyses.

Conclusions
This study is the first systematic review to synthesise evidence surrounding the effect of parenting interventions on IPV. The review offers encouraging, albeit tentative, evidence that parenting interventions may also reduce IPV.

Table of Contents

1 Background

1.1 Description of the condition

Intimate partner violence (IPV) and violence against children

Intimate partner violence (IPV) and violence against children are pervasive issues that are both a serious public health concern and a violation of human rights (UNICEF, 2017; WHO, 2013). Indeed, IPV accounts for most of women's experiences of violence (UNSD, 2015). IPV is defined by the World Health Organisation (WHO, 2013, p.vii) as 'behaviour by an intimate partner that causes physical, sexual or psychological harm, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviours'. While IPV can occur regardless of gender, most reported instances of IPV are perpetrated by men towards women (Anderson & van Ee, 2018). Even though estimates vary across the world, figures suggest that almost 30% of women who have been in a relationship have experienced IPV (WHO, 2013).

Child maltreatment (CM) is one of the most common forms of violence against children and is defined by the WHO (2006, p.9) as 'all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power'. Studies have indicated that worldwide, six in ten children aged 2-14 regularly experience physical punishment (UNICEF, 2014).

The fields of IPV and CM have in the past often been considered relatively distinct from each other (Bacchus et al., 2017). Increasingly, however, in light of evidence highlighting the intersections that exist between the two issues, there has been a rise in calls for combined strategies that address both types of violence (Guedes & Mikton, 2013). The rationale for this systematic review therefore derives from this evidence and the growing recognition of the overlap that exists between CM and IPV. Three notable intersections that have been identified between CM and IPV include: (i) their shared risk factors; (ii) the common co-occurrence of the two types of violence in the same household; (iii) and their shared consequences (Guedes, Bott, Garcia-Moreno, & Colombini, 2016). These intersections are described below.

Intersections between IPV and child maltreatment

One of the main intersections between CM and IPV are their shared, underlying risk factors (Guedes et al., 2016). These include both society- and family-level risk factors such as poverty, acceptability of family violence, and marital conflict, as well as perpetrator-related risk factors, such as parental history of physical abuse, substance abuse, and poor mental health (Alhusen et al., 2014; Gracia, Rodriguez, Martín-Fernández, & Lila, 2017). Social and gender norms that condone violence have also been highlighted as a critical risk factor for both CM and IPV (Guedes et al., 2016).

Co-occurrence is another important intersection between CM and IPV, and refers to the occurrence of both forms of violence in the same household over the same period of time (Guedes & Mikton, 2013). Evidence from both high-income countries and low- and middle-income countries (LMICs) suggests that children in families impacted by IPV are also more likely to experience harsh parenting and child maltreatment (Guedes et al., 2016; Jouriles, Mcdonald, Slep, Heyman, & Garrido, 2008). Within the family systems literature, it has also been proposed that negative (and positive) interactions in one dyad in the family (e.g. couple dyad) may spill over to another dyad (e.g. parent-child dyad) (Marshall, Feinberg, & Daly, 2019).

Another notable intersection between CM and IPV are their shared consequences (Guedes & Mikton, 2013). Indeed, the effects of both forms of violence are often serious and long-standing in nature. Research suggests that both CM and IPV are associated with various adverse health effects, including mental health problems, such as depression and anxiety, and physical health issues, such as physical injuries and chronic pain (Chisholm, Bullock, & Ferguson, 2017; Li, D'Arcy, & Meng, 2016).

1.2 Description of the intervention

Parenting interventions

One type of intervention that seeks to address the issue of harsh parenting and CM are parenting programmes. Parenting programmes are interventions that 'aim to help parents improve the quality of parenting that their child receives, and, in turn, the child's development and behaviour' (Gardner & Leijten, 2017, p.99). The delivery and format in which parenting interventions are provided can vary. For instance, parenting programmes can involve a range of different delivery techniques, including interactive methods like discussions, modelling, role-playing, and watching video-vignettes (Barlow, Bergman, Kornør, Wei, & Bennett, 2016). The theoretical frameworks that underpin parenting programmes can also vary and can include approaches such as cognitive-behavioural, attachment, family systems, and mindfulness theories (Barlow, 2014). In addition to teaching parenting and child management skills, parenting interventions may also include content on couple relations and on interparental communication skills which seek to help couples parent better together.

The timing of delivery also differs across programmes. Some programmes focus on educating and supporting parents during the perinatal and postnatal period, while others focus on supporting parents during, for example, the child's adolescent years (Yap et al., 2016). Parenting interventions also vary in terms of the parent and caregiver involved. While they can be open to one or both parents, the participants in the majority of parenting interventions are, to date, often predominately female (Bacchus et al., 2017), which is something that has raised concerns about potentially reinforcing harmful gender norms (Daly et al., 2015).

Another aspect of parenting interventions which can vary is the modality of delivery (Hillis, Mercy, Amobi, & Kress, 2016). Some parenting programmes are held in small groups delivered in settings such as community spaces and clinics, while other parenting interventions are delivered on a one-to-one basis to parents in their own home (Barlow et al., 2016; Sweet & Appelbaum, 2004). Interventions delivered to parents in their own home are sometimes referred to as home visitation or home visiting programmes (Sweet & Appelbaum, 2004). The definition of the term 'home visitation' and 'home visiting programme', however, can vary within the literature and is sometimes defined differently by different researchers. Some researchers define 'home visitation' and 'home visiting' as an intervention that offers 'broad based support which is provided on a frequent basis over an extended period of time' and consider it to be a distinct and different type of intervention from parenting programmes (Barlow et al., 2011, p.4). Other scholars, however, posit that 'home visiting is an umbrella term that implies a *strategy* [emphasis added] for delivering a service, rather than a *type* [emphasis added] of intervention, per se' (Sweet & Appelbaum, 2004, p.1435-1436). In this review, the latter definition of the term will be used, and accordingly, interventions referred to as home visiting programmes will also be considered, provided that the majority of the programme comprises of parenting content, as discussed further in the methods section.

1.3 How the intervention might work

How parenting interventions may affect IPV

In terms of violence against children, parenting programmes have been suggested to reduce and prevent CM in a number of ways (J.M. Lachman et al., 2017). For instance, evidence indicates that parenting programmes that train parents in behaviour change techniques, such as positive instruction-giving and realistic rule-setting, can help increase positive parenting behaviours and reduce the use of violent discipline techniques (Kaminski, Valle, Filene, & Boyle, 2008; J.M. Lachman et al., 2017). Research also suggests that parenting programmes may help improve parental mental health and reduce stress, which may have a positive impact on parenting practices and outcomes (Barlow et al., 2016; J.M. Lachman et al., 2017).

Notably, recent evidence suggests that parenting interventions may also have an effect on IPV (Bair-Merritt et al., 2010). One way that parenting interventions may influence IPV is through programme content that focuses on couple relations and interparental interactions. Indeed, numerous parenting programmes include not only material focused on *parent-child* relations, but also content on *couple* (i.e. parent-to-parent) interactions and interparental relations, focusing on how partners can support each other and parent better together (Feinberg, 2003). As such, it is therefore plausible that this type of couple-focused content may not only have an impact on CM, but also have a direct effect on partner conflict and IPV. Since differences in intervention content might impact IPV differently, this review will distinguish between parenting interventions that focus *only* on parent-child relations, versus those that focus on *both* parent-child *and*

couple relations. Accordingly, for the purpose of this review, the term *parent-child interventions* will refer to parenting interventions that comprise solely of content concerning parent-child relations, whilst the term *child-and-couple interventions* will refer to those that include content on *both* parent-child relations *and* couple relations.

Another, more indirect way that parenting interventions may influence IPV is through addressing family violence more widely. For instance, parenting programmes may have an impact on parents' emotion regulation and communication skills, two skills that are of relevance to both CM and IPV (Karam & Blow, 2020). Indeed, deficits in communication skills and poor emotion regulation have been identified as risk factors for perpetration of both CM and IPV (Baldwin et al., 2018; Karam & Blow, 2020). Hence, addressing these shared risk factors in parenting interventions may therefore have an impact on not only CM but IPV as well. Various studies have also found improvements in parental mental health and reductions in parental stress following participation in a parenting intervention (Bennett, Barlow, Huband, Smailagic, & Roloff, 2013). Considering that parenting stress has been identified as a risk factor for both CM and IPV, it is possible this is another way that parenting interventions may impact IPV (Probst et al., 2008). Furthermore, since one of the direct effects of parenting interventions is that children behave better, this outcome may also contribute to a reduction in not only conflict and blame in the family, but potentially also IPV.

It is important, however, to also consider any potential harmful effects that parenting interventions may have on IPV. It is possible, for instance, that whilst seeking to reduce CM, parenting interventions may unintentionally increase partner conflict and IPV. Indeed, research studies have, for example, found that changes in power dynamics between women and men in intimate relationships may lead to an increase in couple conflict and IPV (Liles et al., 2012). Studies have also found that women participating in interventions which challenge existing gender norms and power dynamics, may also experience an increased risk of IPV (Gibbs, Corboz, & Jewkes, 2018). Accordingly, since parenting interventions may impact both caregiver roles and couple power dynamics, it is possible they might potentially also increase partner conflict and IPV. Hence, examining the effect of parenting interventions on IPV is therefore crucial to ensure they are not causing harm.

1.4 Why it is important to do this review

Rationale and importance of this review

Considering the various intersections that exist between CM and IPV as well as the calls for greater collaboration between the two fields (Guedes et al., 2016), efforts that seek to address both forms of violence concurrently are becoming increasingly important. In recent years there has also been a rapid growth in the dissemination of parenting programmes that aim to reduce child maltreatment (Gardner et al., 2017). However, while there exists extensive evidence that IPV can have a detrimental effect on parenting outcomes (Lapierre, 2008), what remains unclear is what effect parenting

interventions may have on IPV. Indeed, despite the increased emphasis on maximising prevention efforts, particularly in LMICs where the prevalence of IPV and CM are high and resources often are scarce (Bacchus et al., 2017), there is a paucity of research on the impact of parenting interventions on IPV. Given the overlap between these two forms of violence, conducting this review and investigating the effect of parenting interventions on IPV is therefore important for two main reasons. First, if evidence suggests that parenting interventions may also contribute to reductions in IPV, then such findings may help researchers, practitioners, and policymakers more effectively use resources when seeking to address both forms of violence simultaneously. Second, it is equally important to also investigate the effect of parenting interventions on IPV in order to ensure that they are not causing harm.

State of the evidence

There is currently a lack of systematic reviews examining the effect of parenting interventions on IPV. Despite this paucity in systematic evidence, there are a few relevant reviews worth mentioning. A systematic review by Austin, Shanahan, Barrios, and Macy (2019), for example, examined interventions aimed at women parenting in the context of IPV. In their review, however, Austin et al. (2019) only included parenting programmes designed specifically for women experiencing IPV and as such excluded male caregivers from their review. Additionally, more general parenting interventions not specifically designed for women experiencing IPV, were also not considered in their review. A review conducted by Anderson & van Ee (2018) also investigated interventions for mothers and children affected by IPV. Notably, however, victims of child abuse were excluded from their review as the authors sought to focus solely on the relational trauma of IPV and not child maltreatment. A scoping review by Bacchus et al. (2017), which examined opportunities for coordinated responses to IPV and CM in LMICs, also provides insights on interventions that focus on parenting and the intersection between IPV and CM. However, as well as not being systematic, their review provides no information on interventions conducted in high-income countries.

Accordingly, since, there appears to be no systematic review on the effect of parenting interventions on IPV, this thesis therefore seeks to overcome this gap in the literature. Moreover, given that many parenting interventions in the field also include content on couple interactions and interparental relations, these interventions will also be included, provided they meet the specific eligibility criteria (i.e. at least 50% of the intervention is comprised of parenting content). Subgroup analyses will then be conducted to examine whether these two types, i.e. *parent-child* parenting interventions (i.e. those with content *only* on parent-child relations) versus *child-and-couple* parenting interventions (i.e. interventions with content on *both* parent-child relations *and* couple relations content) have different effects on IPV.

2 Research question and objectives

2.1 Research question

The research question of this thesis was developed using the PICO (population, intervention, comparator, outcome) framework (Petticrew & Roberts, 2006), as explained in *Table 1*, and is the following:

What is the effect of parenting interventions on intimate partner violence in parents and caregivers with children aged 0-12 years old?

PICO framework	Explanation
Population (P)	The *population* for this systematic review is parents and caregivers with children aged 0-12 years old
Intervention (I)	The *intervention* is parenting interventions, with home visiting programmes, transition-to-parenthood interventions, and multicomponent interventions also included as long as at least a majority of the programme (i.e. at least 50% of the programme content) consisted of parenting components. Interventions thus may or may not include additional components focusing on couple interactions and relations
Comparator (C)	The *comparator* considered in this review, which is not described in the research question itself, but is important to still specify, were control groups, including: control groups with no treatment, treatment-as-usual, waitlist controls, or active control groups
Outcome (O)	The *outcome* of interest was quantitative measures of IPV measured at post-intervention, including frequency of male and female IPV victimisation and perpetration

Table 1

2.2 Objectives

The primary objective of this review is to address an important gap in the literature by conducting, to the author's knowledge, the first systematic review on the effect of parenting interventions on IPV in parents and caregivers. The secondary objective is to investigate whether parenting intervention content is associated with its effect on IPV by conducting subgroup analyses (specified a priori) comparing intervention effects in *child-parent focused* interventions (i.e. parenting interventions focusing *only* on parent-child relations) versus *child-and-couple focused* interventions (i.e. parenting interventions that focus on *both* parent-child relations *and* couple relations).

3 Method

3.1 Eligibility criteria

Inclusion and exclusion criteria were developed based on the PICO framework (*Table 3*) (Petticrew & Roberts, 2006). There were no geographical location restrictions, however, only studies written in English were included.

Types of participants
Parents or caregivers of any age and gender with a child aged 0-12, or parents or caregivers expecting a child to be born during the intervention period. Studies with children aged over 12 years were included if the mean age of the sample was not over 12 years. This age range was chosen to reduce heterogeneity of the study populations and because some parenting programmes designed for parents of adolescents vary in content and focus on adolescent problem behaviours such as substance abuse and pregnancy (Haggerty, Mcglynn-Wright, & Klima, 2013). Excluded were studies aimed at children with specific disabling conditions (e.g. autism, ADHD, cerebral palsy) or health conditions (e.g. cancer, obesity). This served to reduce heterogeneity of the populations, and because some of the listed conditions often involve additional treatments and services (Peacock-Chambers, Ivy, & Bair-Merritt, 2017).

Types of interventions
Parenting interventions, that is interventions that focus on training parents and caregivers in parenting skills that promote healthy development, positive child behaviours, and nurturing parent-child relationships (Haggerty et al., 2013). This includes teaching parents and caregivers how to reinforce positive behaviour, set clear limits, manage misbehaviour, and interact with their children in ways that are developmentally appropriate (Leijten et al., 2015; Morris et al., 2017). Programmes such as home visiting programmes, transition-to-parenthood interventions, and multicomponent interventions were also included provided that at least a majority of the intervention (i.e. at least 50% of the programme content) consisted of parenting components. Parenting programmes that included couple-focused components were therefore also included if at least 50% of the programme comprised of parenting content. Since parenting interventions vary greatly in length (Yap et al., 2016), there were no limitations on the length or dose of the interventions.

Types of outcomes
The outcome of interest was the effect of parenting interventions on IPV. Eligible studies therefore needed to measure and report quantitative IPV-related outcomes, that is, frequency of either overall, physical, psychological, or sexual IPV victimisation and/or perpetration. Studies that only measured IPV-related outcomes at baseline were excluded. While outcomes are ideally not used as a criterion for including studies in a review, restricting eligibility to certain outcomes is appropriate for some reviews, such as when a review seeks to address a specific effect of an intervention that may be used for multiple conditions (Higgins & Green, 2011). However, to avoid bias from selective non-reporting, it is important that when studies are excluded on the basis of outcomes,

precautions are taken to ensure the outcomes are unavailable because they were not measured, rather than simply by not being reported (Higgins & Green, 2011).

Types of comparisons

Control groups considered included control groups with no treatment, treatment-as-usual, waitlist controls, or an active control group. Studies that incorporate a control group are valuable since they facilitate the assessment of change following the intervention due to passage of time, as well as can serve as a control for regression to the mean (Hart, Fann, & Novack, 2008; Tang & Fielding, 2014).

Types of study designs

Studies were included if they use a randomised controlled trial (RCT) or a cluster-RCT design. Randomised trials are considered to provide the highest level of evidence for examining the effect of an intervention and as such the studies included in this review were limited to this design (Peat, Mellis, Williams, & Xuan, 2002). Further, given the large number of randomised trials that exist in the parenting intervention field (Gardner et al., 2019), it was deemed appropriate to only include this design. Study designs other than RCTs and clustered-RCTs (e.g. non-randomised designs, pre- and post-test designs with control groups, qualitative studies, or case studies) were excluded.

Components	Inclusion Criteria	Exclusion Criteria
Population (P)	Parents or caregivers of any age and gender with a child under the age of 12 years, or parents or caregivers expecting a child where the child was born during the intervention Studies with children aged over 12 years were included if the mean age of the sample was not over 12 years.	Studies that do not include parents or caregivers Parents or caregivers with children over the age of 12 years old (where the mean age of the sample was over 12 years) Studies aimed at children with specific disabling conditions (such as autism, Attention-Deficit/Hyperactivity Disorder, cerebral palsy, and other physical disabilities) or specific health conditions (e.g. cancer and obesity)
Intervention (I)	Parenting interventions, that is interventions that focus on training parents and caregivers in parenting skills that promote healthy development, positive child behaviours, and nurturing parent-child relationships (Haggerty et al., 2013)	Multi-component interventions, transition-to-parenthood programmes, or home visiting interventions where less than 50% of the programme content consisted of parenting components

	Programmes such as home visiting programmes, transition-to-parenthood interventions, and multicomponent interventions were also included provided that that at least a majority of the intervention (i.e. at least 50% of the programme content) consisted of parenting components. Accordingly, parenting programmes that included couple-focused content were therefore also included if at least 50% of the programme comprised of parenting content No limitations were placed on the length or dose of the interventions	
Comparison (C)	Control groups considered include control groups with no treatment, treatment-as-usual, waitlist controls, or an active control group	Studies with no control group
Outcome (O)	The outcome of interest is the effect of parenting interventions on IPV. Eligible studies therefore needed to measure and report quantitative IPV-related outcomes, that is, frequency of either overall, physical, psychological, or sexual IPV victimisation and/or perpetration	Studies that did not measure IPV-related outcomes Studies that only measured IPV-related outcomes at baseline
Study design	Randomised controlled trials (RCTs) or cluster-RCTs	Study designs other than RCTs and clustered-RCTs (e.g. non-randomised designs, pre- and post-test designs with control groups, qualitative studies, or case studies)

Table 3

3.2 Search methods

Electronic databases
All searches were conducted on May 18, 2020 with no date restrictions. Selection of databases was guided by related systematic reviews (Gardner, 2017; McCoy, Melendez-Torres, & Gardner, 2020), the Cochrane Handbook (Higgins & Green, 2011), and librarian consultation. Given the interdisciplinary nature of the topic, a combination of electronic databases covering different fields were used, as listed in *Table 4*.

Electronic databases	
1.	EMBASE (Ovid)
2.	MEDLINE (Ovid)
3.	Cochrane Central Register of Controlled Trials (CENTRAL)
4.	PsycINFO (Ovid)
5.	ERIC (ProQuest)
6.	CINAHL Plus (EBSCO)

Table 4

Other sources and grey literature
To retrieved unpublished studies, Google searches were conducted using the strategy in *Table 6*, and the first 20 pages retrieved were reviewed. Searches were also performed on the NHS Evidence database and the ProQuest Dissertations and Theses database, between May 18-21, 2020. Reference lists of included studies were also searched for eligible articles. In addition, experts in the field were contacted to ask for additional articles to include (Appendix A).

Search strategy
The development of the search strategy was an iterative process. This involved developing a set of keywords related to the different elements of the research question and conducting preliminary searches on multiple databases. Truncations and asterisks were used to allow for variations of the words to be identified. While a search strategy is typically informed by the main elements of a research question, in some cases it may be unnecessary and even disadvantageous to include every element of the research question (Higgins & Green, 2011). For instance, even if a research question might focus on specific outcomes, these concepts might not be included in the title or the abstract of an article (Higgins & Green, 2011). For this reason, the outcome 'intimate partner violence' was not included in the final search string, since preliminary searches which included this concept led to known key relevant articles being excluded.

The final search strategy therefore favoured sensitivity over specificity to minimise relevant articles being missed (Petticrew & Roberts, 2006). A combination of free-text terms and controlled vocabulary words were adopted based on the functionality of each database. The search string used for MEDLINE is presented in *Table 5*. See Appendix B for search strings used in other databases. Since Google Scholar does not have the same functionality as electronic databases, the search string was adapted accordingly (*Table 6*).

MEDLINE (Ovid) search strategy	*[Applied filters: English language]*
1.	((parent* adj3 (program* or intervent* or train*)) OR (mother* adj3 (program* or intervent* or train*)) OR (father* adj3 (program* or intervent* or train*)) OR (caregiv* adj3 (program* or intervent* or train*)) OR (family adj3 (program* or intervent* or train*))).tw.
2.	(exp Parenting/) AND (program* or intervent* or train*))).tw.
3.	(home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies).tw.
4.	#1 OR #2 OR #3
5.	(exp Infant/) OR (Child, Preschool/) OR (baby or babies or child$ or toddler$ or infant$ or preschool$ or pre-school$).tw.
6.	#4 AND #5
7.	(randomised controlled trial or randomized controlled trial or randomised trial or randomized trial or random allocation or control group).mp.
8.	#6 AND #7

Table 5

Google Scholar search terms
("parenting") AND ("programme" OR "program" OR "intervention" OR “training”) AND ("randomised controlled trial" OR "randomized controlled trial" OR "randomised trial" OR "randomized trial" “random allocation” OR "control group")

Table 6

3.3 Data collection

Selection of studies

The retrieved studies were first screened by title and abstract, then the full texts of the studies were retrieved and assessed based on the eligibility criteria. When multiple publications of the same trial existed, these reports were linked and presented as one.

Data extraction and management

Data from each included study were extracted using an adapted version of the Cochrane Collaboration data collection form for intervention reviews (EPOC, 2013) (Appendix C).

Assessment of risk of bias in included studies

Risk of bias of included studies was assessed using version 2 of the Cochrane risk-of-bias tool for randomised trials (RoB2) (Sterne et al., 2019). The domains of bias in RoB2 are presented in *Figure 2*. The additional RoB2 domain *timing of participant identification and recruitment* was also included since this is used when assessing cluster-RCTs. Each study was assessed across the RoB2 domains and rated as having either 'high', 'low', or 'some concerns' of risk of bias.

Measures of treatment effect

Since some of the studies used different measurement scales, treatment effects were converted into standardised mean differences (SMDs) (Borenstein, Hedges, Higgins, & Rothstein, 2011). The SMDs were computed using the Campbell Collaboration Effect Size Calculator (Wilson, 2017) first as Cohen's d effect size estimate, and then, to correct for potential bias due to small sample sizes, transformed into Hedge's g (Hedges, 1981) using the 'esc' package in RStudio (Lüdecke, 2019; RStudio Team, 2020). Effect sizes were categorised as small (0.2), moderate (0.5), or large (0.8 and above) (Cohen, 1988). When extracting data from studies that reported outcomes at multiple time points, the data from the first and last follow-up assessment time points were used. For consistency, in the few instances where multiple long-term follow-up assessments took place (e.g. 5-year follow-up assessments), an *a priori* decision was made to extract the follow-up data for the assessment time point closest to two years since this was the most common time point for follow-up assessments.

3.4 Data analysis

Unit of analysis issues

For cluster-RCTs that did not account for clustering, the design effects and effective sample sizes were calculated using study data and reported intra-class correlation coefficients (ICCs) in order to adjust the sample sizes to account for clustering (Higgins et al., 2019).

Dealing with missing data

When data were missing or incomplete, authors of the corresponding studies were contacted in an attempt to request the missing data.

Assessment of heterogeneity

Statistical heterogeneity across the trials was assessed by calculating the I^2 statistic (Higgins, Thompson, Deeks, & Altman, 2003). The following Cochrane heterogeneity guidelines were used to interpret the I^2 values: might not be important (0%-40%), moderate (30%-60%), substantial (50-90%), and considerable (75%-100%) (Higgins et al., 2019).

Assessment of reporting bias

A contour-enhanced funnel plot (i.e. a graph where intervention effects of each study are plotted against the standard error) was used to assess publication bias when sufficient studies (i.e. at least 10 studies) were available for an outcome. If asymmetry was observed, then publication bias was suspected since this would suggest that studies may not have been not published and hence not included (Higgins et al., 2019).

Data synthesis

Studies were combined in a meta-analysis in RStudio using the 'metafor' package (Viechtbauer, 2010) if they were deemed sufficiently homogenous, i.e. reported on the same outcome (e.g. type of IPV), for individuals of the same sex (e.g. male vs. female perpetrator), and at the same time point (post-intervention vs. follow-up), and when outcomes were available for at least two studies (Higgins et al., 2019). Considering the heterogeneity across the interventions, a random-effects model was selected, rather than a fixed-effects model, since a random-effects model assumes there exist differences in treatment effects between studies (Borenstein et al., 2011). When it was not possible to quantitively synthesise outcomes, they were summarised narratively.

Subgroup analyses and investigations of heterogeneity

Where possible, subgroup analyses were conducted to investigate heterogeneity and to examine whether the content of the parenting interventions was associated with its effect on IPV. More specifically, these subgroup analyses, planned *a priori*, sought to examine whether intervention effects on IPV female victimisation differed between *parent-child* parenting interventions (i.e. those with content *only* on parent-child relations) versus *child-and-couple* parenting interventions (i.e. interventions with content on *both* parent-child *and* couple relations) the latter of which might potentially contribute more directly to a reduction in partner conflict and IPV.

Sensitivity analysis

To examine whether studies classified as having high risk of bias affected overall meta-analyses results, sensitivity analyses were performed when at least two studies remained after studies at high risk of bias were removed.

Summary of findings table and GRADE

Using the GRADE framework (Schünemann, Brożek, Guyatt, & Oxman, 2013), a summary of findings table was created to summarise the results of the meta-analyses and the quality of the evidence for each outcome. Drawing upon the GRADE approach, the quality of the evidence for each outcome was first rated based on study design (randomised trials are rated as high quality), and then subsequently downgraded if there were issues with risk of bias, inconsistency, indirectness, imprecision, or publication bias, or upgraded in cases of a large effect, a dose-response gradient, or if all plausible confounding would reduce the observed effect (Balshem et al., 2011; Guyatt et al., 2011).

Ethical approval
Ethical approval was received (Appendix D) from the Departmental Research Ethics Committee, Department of Social Policy and Intervention, University of Oxford.

4 Results

4.1 Description of studies

Results of the search
The search yielded a total of 27,830 studies, with 27,758 studies identified through electronic databases and 72 studies retrieved from other sources. It should be noted, given the relatively high number of studies retrieved, that the search was intentionally designed to favour sensitivity over specificity. This approach was taken because, despite the considerably large size of the parenting intervention field, the number of studies that measure IPV-related outcomes are relatively few. A sensitive search strategy was therefore adopted in order to minimise missing any of the relevant studies measuring IPV. A sensitive search was also deemed appropriate given the high variability of terminology used in the parenting intervention literature. After duplicates were removed, 14,170 studies remained, out of which 13,999 were removed during title and abstract screening. An additional 152 studies were removed at full-text screening (see Appendix E for excluded studies and reasons for exclusion). In total, 19 studies were eligible for inclusion. *Figure 1* shows the PRISMA flowchart of the screening process.

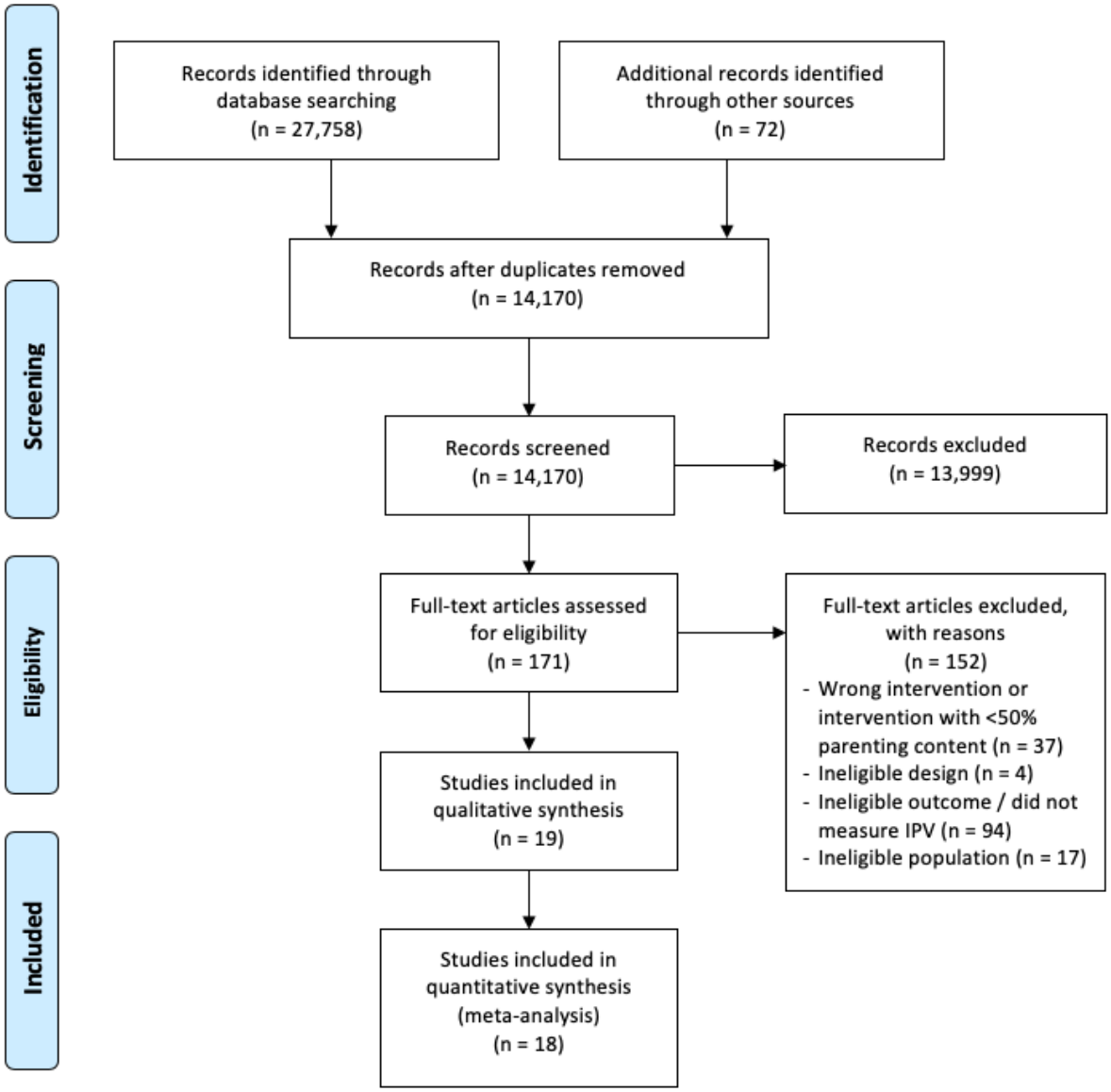

Figure 1

Included studies. A total of 19 studies were included; *Table 7* shows their characteristics.

Sample sizes. Sample size varied considerably, with included studies comprising of both pilot studies (e.g. Stover (2015)) with smaller sample sizes (n=18) and other studies (e.g. Jacobs et al. (2016)) with larger sample sizes (n=704).

Study design. All studies were RCTs including one cluster-RCT.

Participants and location. Most studies (n=17) involved only one caregiver in the intervention, with two studies (Heyman et al., 2019; Skar, Sherr, Macedo, Tetzchner, & Fostervold, 2017) involving multiple caregivers. Of note, the majority of the studies were either aimed at women, or while not specifically aimed at women still consisted

primarily of female caregivers (with the exception of a few father-centred interventions, e.g. Kohli, Jayasekara, & McLean (2020); Stover (2015); Stover, McMahon, & Moore (2019)). The mean age of caregivers ranged from 18.62 to 42.06 years. Most studies were carried out in the United States (n=10), and others in South Africa (n=2), Colombia (n=1), the Netherlands (n=1), New Zealand (n=1), Philippines (n=1), Rwanda (n=1), Uganda (n=1), and Thailand (n=1). Studies examined interventions that were primarily aimed at: low-income families and families at-risk for CM (n=7), families at-risk for both CM and IPV (n=6), women recruited from domestic violence shelters (n=4), and men with histories of IPV and substance abuse (n=2).

Interventions and comparisons. Descriptions of the parenting interventions are provided in detail in *Table 7*. In summary, however, ten of the interventions were delivered as group-based programmes predominantly held in community settings, seven were delivered through home visitation, and two as one-to-one interventions delivered in residential substance abuse facilities. The duration of the interventions ranged from 10-sessions, to interventions offered weekly for up to 5 years (Jacobs et al., 2016). The control groups included no-treatment controls (n=6), waitlist controls (n=3), treatment-as-usual controls (n=6), information-only controls (n=1), and active controls (n=3).

Outcomes. *Table 7* presents all IPV outcomes measured. All studies used self-report data and most studies (n=17) measured IPV using a version of the Conflict Tactics Scale (CTS) (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), one of the most widely used tools for measuring family conflict. Two studies (Betancourt et al., 2020; Skar et al., 2017) used other measurement tools: the Hurt, Insult, Threaten, and Scream (HITS) questionnaire (Sherin, Sinacore, Li, Zitter, & Shakil, 1998) and the DHS Domestic Violence Module Questionnaire (NISR, 2006). The time period at which the first post-intervention assessment was measured varied between studies, and accordingly, some reflect longer-term effects of the intervention than others. The majority of studies provided outcomes of overall IPV female victimisation, with some studies reporting outcomes that specified the type of IPV (e.g. physical or psychological IPV), and some reporting IPV perpetration outcomes.

Table 7 Characteristics of Included Studies

First Author (Year)	Country	Study sample and respondents	Intervention and findings	Study design (control)	IPV outcomes, assessment time points, and data source	Measurement tool
Group-based parenting interventions						
Gardner et al. (2020)	Thailand	Low-income parents and caregivers (N = 93) in Udon Thani, Thailand with children aged 2-9 years old. Adult respondents predominantly (97%) female. Parent age: M = 44 years Respondents: caregivers/parents (predominantly female)	**Intervention:** Parenting for Lifelong Health (PLH) for Young Children Thailand **Description:** A group-based parent training programme that is delivered by community facilitators and is aimed at parents and primary caregivers of children aged 2-9 years. Programme content includes components such as developing positive care-giver child interaction and communication, non-violent discipline strategies, limit setting, and Mindfulness Based Stress Reduction techniques. **Duration:** 12 weekly sessions each lasting approximately 2-3 hours.	RCT (treatment-as-usual control)	**Outcomes:** - Overall IPV victimisation **Assessment time point:** Immediate post-intervention; 3-month follow-up	CTS2S
Kohli et al. (2020)	Uganda	Young fathers (N = 1200) aged 16-25 years in Northern Uganda, with a child aged 1-3 years old, and living with an intimate partner. Fathers' age: M = 23 years Respondents: fathers	**Intervention:** Responsible, Engaged and Loving (REAL) Fathers Initiative **Description:** A community-based, father-centred mentoring programme combined with a community poster campaign that corresponds to the programme, which seeks to enhance awareness and skills in positive parenting, couple communication, and reflection on gender roles in parenting. Programme content includes components such as using positive parenting practices, developing nurturing parent-child relationships, understanding gender norms in childcare, conflict resolution, and effective communication in the family. **Duration:** 12 sessions that take place over the course of 7 months	RCT (no-treatment control)	**Outcomes:** - Overall IPV perpetration **Assessment time point:** 3-month post-intervention; 12-month follow-up	Adapted CTS2
Jouriles et al. (2001)	USA	Mothers (N = 36) who had previously resided in urban or suburban women's shelters due to domestic violence, with at least one child 4-9 years old exhibiting clinical levels of conduct problems. Mothers' age: M=28.7 years (SD=4.9) Respondents: mothers	**Intervention:** Project SUPPORT **Description:** A multi-component intervention focused on teaching mothers child management and parenting skills and providing the mothers with instrumental and social support as well as problem-solving skills. Programme content includes components such as developing effective communication skills, cultivating positive child management strategies, developing nurturing caregiver-child relations, and techniques to help reduce their children's conduct problems. **Duration:** 1-1.5-hour weekly sessions for 8 months	RCT (treatment-as-usual control)	**Outcomes:** - Physical IPV victimisation **Assessment time points:** 4 months post-intervention; 8 months follow-up; 12 months follow-up; 16 months follow-up; 24 months follow-up	CTS2

Jouriles et al. (2018)	USA	Mothers (N = 26) with a child aged 4-9 years old exhibiting clinical levels of conduct problems, departing from an urban or suburban domestic violence shelter. Mothers' age: M = 29.8 years (SD = 6.2) Respondents: mothers	**Intervention:** Project SUPPORT **Description:** A multi-component intervention focused on teaching mothers child management and parenting skills and providing the mothers with instrumental and social support as well as problem-solving skills. Programme content includes components such as developing effective communication skills, cultivating positive child management strategies, developing nurturing caregiver-child interactions, and techniques to help reduce their children's conduct problems. **Duration:** 1-1.5-hour weekly sessions for 8 months	RCT (treatment-as-usual control)	**Outcomes:** - Overall IPV victimisation **Assessment time points:** 4 months post-intervention; 8 months follow-up; 12 months follow-up; 16 months follow-up; 20 months follow-up	CTS
Lachman et al. (2017)	South Africa	Low-income parents and caregivers (N = 68) residing in Khayelitsha, a suburb in Cape Town, with children aged 3-8 years of age. Participating parents predominantly female (98.5%) (N = 67 female). Parents' age: M = 42.06 years (SD = 13.16) Respondents: caregivers/parents (predominantly female)	**Intervention:** Sinovuyo Caring Families Program for Young Children (part of Parenting for Lifelong Health (PLH)) **Description:** A group-based parent training programme that is delivered by community facilitators and is aimed at parents and primary caregivers of children aged 2-9 years. Programme content includes components such as developing positive caregiver child interaction and communication, non-violent discipline strategies, limit setting, and Mindfulness Based Stress Reduction techniques. **Duration:** 12 weekly sessions each lasting approximately 2-3 hours.	RCT (waitlist control)	**Outcomes:** - Overall IPV victimisation **Assessment time point:** 12 weeks post-intervention	CTS-SF
Lachman et al. (2020)	Philippines	Low-income Filipino parents and caregivers (N = 120) with children aged 2-6 years old, in Metro Manila. Participating parents all female (100%) (N = 120 female). Parents' age: M = 36 years Respondents: caregivers/ parents (all female)	**Intervention:** MaPa Kids (Masayang Pamilya) parenting program (part of Parenting for Lifelong Health (PLH) Philippines) **Description:** A group-based parent training programme that is delivered by community facilitators and is aimed at parents and primary caregivers of children aged 2-6 years. Programme content includes components such as developing positive care-giver child interaction and communication, non-violent discipline strategies, limit setting, and Mindfulness Based Stress Reduction techniques. **Duration:** 12 weekly sessions each lasting approximately 2-3 hours.	RCT (treatment-as-usual control)	**Outcomes:** - Overall IPV victimisation **Assessment time point:** 1-month post-intervention	CTS-SF

Miller et al. (2014)	USA	Mothers (N = 120), residing in upper Midwestern USA, who had experienced IPV in the last 2 years, and with a child 4-6 years of age. Approximately 50% of the sample was either currently residing in, or had previously resided in, a shelter for abused women during recruitment. Mothers' age: M = 31.8 years (SD = 7.2) Respondents: mothers	**Intervention:** Moms' Empowerment Program (MEP) **Description:** A group-based intervention focused on improving parenting skills and knowledge, strengthening social and instrumental support, and enhancing coping skills. Programme content includes components such as how to create a supportive parenting environment, different types of appropriate discipline strategies, how to communicate effectively with one's child, and strategies for coping with stress. **Duration:** 10 sessions each lasting approximately 1 hour. Sessions delivered twice per week for 5 weeks in total	RCT (no-treatment control)	**Outcomes:** - Physical IPV victimisation **Assessment time point:** 6-8-month post-intervention	CTS2
Skar et al. (2017)	Colombia	Low-income parents and caregivers (N = 176) of children 3-4 years old recruited from a social service child centre in Chocó, Colombia. Participating caregivers predominantly (78.5%) female (N = 134 female). Parents' age: M = 31.89 (SD = 8.45) Respondents: caregivers/parents (predominantly female)	**Intervention:** International Child Development Programme (ICDP) **Description:** A group-based child-development and parenting programme aimed to improve caregivers' attitudes and parenting abilities. Programme content includes components such as developing positive caregiver-child interactions, responding sensitively to their child's needs, and cultivating positive child-rearing practices. **Duration:** 12 sessions in total	RCT (active control: organized community activities)	**Outcomes:** - Overall IPV victimisation - Overall IPV perpetration **Assessment time point:** 6-month post-intervention	HITS
Stein et al. (2018)	USA	Spanish speaking mothers (N = 72) residing in the USA, who identified as Latina, had experienced IPV in the last 2 years, and had a child 5-7 years of age. Mothers' age: M = 35.44 years (SD = 7.38). Respondents: mothers	**Intervention:** Latina Moms' Empowerment Program (LMEP) **Description:** A culturally adapted version of the Moms' Empowerment Program (MEP) for Latina immigrants. The MEP is a group-based intervention focused on improving parenting skills and knowledge, strengthening social and instrumental support, and enhancing coping skills. Programme content includes components such as how to create a supportive parenting environment, different types of appropriate discipline strategies, how to communicate effectively with one's child, and strategies for coping with stress. **Duration:** 10 weekly sessions each lasting approximately 1 hour.	RCT (waitlist control)	**Outcomes:** - Overall IPV victimisation **Assessment time point:** 10 weeks post-intervention	CTS2

Ward et al. (2020)	South Africa	Low-income parents and caregivers (N = 296) residing in peri-urban settlements in Cape Town, with children aged 2-9 years old showing clinical levels of conduct problems. Participating parents predominantly female (99.3%) (N = 295 female). Parents' age: M = 42 years Respondents: caregivers/parents (predominantly female)	**Intervention:** Parenting for Lifelong Health (PLH) for Young Children South Africa **Description:** A group-based parent training programme that is delivered by community facilitators and is aimed at parents and primary caregivers of children aged 2-9 years. Programme content includes components such as developing positive care-giver child interaction and communication, non-violent discipline strategies, limit setting, and Mindfulness Based Stress Reduction techniques. **Duration:** 12 weekly sessions each lasting approximately 2-3 hours.	RCT (no-treatment control)	**Outcomes:** - Overall IPV victimisation **Assessment time point:** 1-month post-intervention	CTS
Home visiting based parenting interventions						
Betancourt et al. (2020)	Rwanda	Low-income parents and caregivers (N = 541) living in extreme poverty, residing in the Nyanza, Ngoma, or Rubavu district in Rwanda, with at least one child aged 6–36 months. Caregiver age: M = 34.5 years (SD = 9.7) Respondents: both caregivers/parents	**Intervention:** Sugira Muryango (Strengthen the Family) **Description:** A father-engaged parenting and violence-prevention home-visiting programme delivered by paraprofessionals. Programme content includes components such as using responsive parenting techniques, the importance of early stimulation and play, developing effective communication skills and using non-violent interactions in the family, and managing the stresses of parenting. **Duration:** 12 sessions in total with each lasting approximately 1.5 hours and with typically one session per week	cRCT: village level (treatment-as-usual control)	**Outcomes:** - Overall IPV victimisation - Overall IPV perpetration **Assessment time point:** Immediate post-intervention	DHS
Duggan et al. (2004)	USA	Parents (N = 643) residing in Hawaii, USA, identified as having an infant at high risk for child maltreatment. Mothers' age: M = 23.4 years (SD = 5.7). Respondent: mothers	**Intervention:** Hawaii Healthy Start Program (HSP) **Description:** A paraprofessional home visiting-based programme for families at risk for child abuse and neglect. The HSP programme seeks to improve parenting behaviour and family functioning, with the overall goal of promoting child development and health. The HSP also became a model for the Healthy Families America (HFA) initiative, which seeks to help communities in the USA develop home visiting programmes. The HSP programme content includes components such as developing healthy parent-child interactions, using positive parenting practices, and learning effective problem-solving skills. **Duration:** Weekly home-visits over the course of 3 years	RCT (no-treatment control)	**Outcomes:** - Overall IPV victimisation - Physical IPV victimisation - Psychological IPV victimisation **Assessment time point:** 12-month post-intervention; 24-month follow-up; 36-month follow-up	CTS2

Duggan et al. (2007)	USA	Parents (N = 643) residing in Alaska, USA, with an infant identified as at high risk for child maltreatment. Mothers' age: M = 23.7 (SD = 5.8). Respondent: mothers	**Intervention:** Healthy Families Alaska (HFAK) **Description:** A paraprofessional home visiting-based programme for families at risk for child abuse and neglect. The programme seeks to improve parenting behaviour and family functioning, with the overall goal of promoting child development and health. HFAK was designed using development guidelines from the Healthy Families America (HFA), which is an initiative that seeks to help communities in the USA develop home visiting programmes. Programme content includes components such as developing positive parenting skills, promoting healthy child development, and cultivating nurturing parent-child interactions through role modelling and positive behaviours. **Duration:** 42 visits over the course of 2 years	RCT (no-treatment control)	**Outcomes:** - Overall IPV victimisation - Physical IPV victimisation - Psychological IPV victimisation **Assessment time point:** 12-month post-intervention; 24-month follow-up; 36-month follow-up	CTS
Fergusson et al. (2005)	New Zealand	Parents and caregivers (N = 427) with infants residing in Christchurch, New Zealand, and experiencing severe social, emotional, or economic challenges. Fathers' age: M = 27.3 years; Mothers' age: M = 24.6 years Respondents: mothers	**Intervention:** Early Start **Description:** A home visiting programme aimed at families that have infants and who are experiencing major social, emotional, and economic difficulties. The programme seeks to improve child development and health, parenting practices and skills, family functioning, and parental life quality. Programme content includes components such as developing nurturing parenting skills and parental sensitivity, developing non-punitive parenting techniques, and cultivating collaborative parenting strategies and encouraging positive partner relationships. **Duration:** Intervention delivery frequency depends on family needs and varies from weekly home visits (Level 1) to 3-monthly visits (Level 4), with support lasting up to 5 years after the birth of a child	RCT (no-treatment control)	**Outcomes:** - Overall IPV victimisation - Overall IPV perpetration - Physical IPV victimisation **Assessment time point:** 12-month post-intervention; 24-month follow up; 36-month follow-up	CTS2
Heyman et al. (2019)	USA	Parents (N = 368) residing in New York City with a new-born infant that had recently become first-time parents and that had been identified as at heightened risk for IPV. Fathers' age: M = 29.31, (SD = 5.23); Mothers' age: M = 26.76 (SD = 3.78) Respondents: both parents	**Intervention:** Couple CARE for Parents of Newborns Program (CCP) **Description:** A parenting programme focused on assisting new parents with improving their parenting skills, developing collaborative parenting strategies, and strengthening their couple relationship. Programme content includes components such as developing collaborative parenting practices, dealing with parenting challenges and managing stress, and learning how to communicate effectively. **Duration:** 8 sessions in total. Session 1 and Session 4 consisted of 1-hour home-visits, while the other sessions consisted of video-content provided through pre-distributed DVD material, which was accompanied by 30 to 60-minute telephone calls.	RCT (waitlist control)	**Outcomes:** - Overall IPV victimisation - Physical IPV victimisation - Psychological IPV victimisation - Overall IPV perpetration - Physical IPV perpetration - Psychological IPV perpetration **Assessment time point:** 8-month post-intervention; 15 months follow-up; 24 months follow-up;	CTS2

Jacobs et al. (2016)	USA	Adolescent, first-time mothers (N = 704) aged 16-21 years living in Massachusetts, USA. Mothers' age: M = 18.62 years (SD = 1.29) Respondents: mothers	**Intervention:** Healthy Families Massachusetts (HFM) **Description:** A paraprofessional home visiting-based programme for teenage parents. The programme seeks to improve parenting behaviour and family functioning, with the overall goal of preventing child abuse, encouraging positive parenting, and promoting child development and health. HFM was designed using development guidelines from the Healthy Families America (HFA), which is an initiative that seeks to help communities in the US develop home visiting programmes. Programme content includes components such as developing positive parenting skills, promoting healthy child development, and cultivating nurturing parent-child interactions through role modelling and positive behaviours. **Duration:** Weekly home-visits over the course of 3 years for up to 5 years	RCT (referral and information only control)	**Outcomes:** - Overall IPV victimisation - Overall IPV perpetration **Assessment time point:** 12-months after enrolment; 24-months after enrolment	CTS2S
Mejdoubi et al. (2013)	Netherlands	Socio-economically disadvantaged expectant mothers (N = 260) (maximum 28 weeks of gestation at time of recruitment), over 26 years old, with no prior live births, living in the Netherlands. Mothers' age: M = 19.5 years (SD = 2.8) Respondents: mothers	**Intervention:** VoorZorg Dutch Nurse-Family Partnership (NFP) **Description:** A nurse home visitation programme that seeks to improve the health of pregnant mothers' and their child, by teaching parents how to provide better care for their child and improve parental health during and after pregnancy. Programme content includes components such as attachment and parenting, effective communication skills, development of the child, and building a nurturing caregiver-child relationship. **Duration:** 10 visits during pregnancy, 20 visits during the first year of the child's life and 20 visits during the second year	RCT (treatment-as-usual control)	**Outcomes:** - Overall IPV victimisation - Physical IPV victimisation - Psychological IPV victimisation - Overall IPV perpetration - Physical IPV perpetration - Psychological IPV perpetration **Assessment time point:** 32-weeks post-enrolment; 24-month follow-up	Dutch version of CTS2S
Individually based parenting interventions						
Stover et al. (2015)	USA	Fathers (N = 18) with co-occurring substance abuse and IPV, and with at least one child under 10 years old, with whom they lived with or who visited them more than once per month. Fathers' age: M = 30.19 years (SD = 6.90) Respondents: fathers	**Intervention:** Fathers for Change (F4C) **Description:** An integrated intervention with one-to-one sessions focusing on parenting, child maltreatment, IPV, and substance abuse, delivered in an outpatient setting. Programme content includes components such as changing maladaptive behaviours, how to decrease negative parenting behaviours, using collaborative parenting strategies, developing effective emotion-regulation strategies and communication skills around parenting. **Duration:** 16 weekly sessions each lasting approximately 1 hour	RCT (active control)	**Outcomes:** - Physical IPV victimisation - Physical IPV perpetration **Assessment time point:** Immediate post-intervention; 3-month follow-up	CTS2

Stover et al. (2019)	USA	Fathers (N = 62) in a 6-month residential substance abuse treatment facility with a biological child under 16 years old, and who reported either psychological or physical aggression toward his partner during the last 12 months. Fathers age: M = 35.85 years (SD = 7.89) Respondents: fathers	**Intervention:** Fathers for Change (F4C) **Description:** An integrated intervention with one-to-one sessions focusing on parenting, child maltreatment, IPV, and substance abuse, delivered in a residential facility. Programme content includes components such as changing maladaptive behaviours, how to decrease negative parenting behaviours, using collaborative parenting strategies, developing effective emotion-regulation strategies and communication skills around parenting. **Duration:** 16 weekly sessions each lasting approximately 1 hour	RCT (active control)	**Outcomes:** - Overall IPV perpetration **Assessment time point:** 6-month post-intervention	CTS2

Abbreviations: IPV: intimate partner violence; CTS: Conflict Tactics Scale; CTS2: Revised Conflict Tactics Scale; CTS-SF: Conflict Tactics Scale-Short Form; CTS-2S: Revised Conflict Tactics Scale-Short Form; HITS: Hurt, Insult, Threaten, and Scream; DHS: the Demographic and Healthy Survey Domestic Violence Module Questionnaire (NISR, 2006). RCT: randomised controlled trial; cRCT: cluster randomised controlled trial

Excluded studies

Two main reasons studies were excluded at the full-text stage was because studies either did not measure IPV outcomes or the intervention did not consist of at least 50% parenting content. In terms of the latter, it is noteworthy that cultural variations of programmes meant that, sometimes, interventions based on similar programmes or models, consisted of considerably different quantities of parenting content. For instance, studies on the US Nurse-Family Partnership (NFP) programme (e.g. Olds et al., 2010)) were excluded (Appendix E) because it does not consist of at least 50% parenting content (i.e. only two out of the six content domains consist of parenting components) (Nurse-Family Partnership, 2017). However, a recent, culturally-adapted Dutch version of the NFP, VoorZorg, was included because in this version, six out of the nine domains of the programme comprised of parenting content (Mejdoubi et al., 2013). Limitations surrounding judgements made regarding the eligibility of interventions is elaborated in the discussion.

4.2 Risk of bias in included studies

Risk of bias of included studies is summarised in *Figure 2* and *Figure 3*. (See Appendix F for details of the assessment process.)

Figure 2

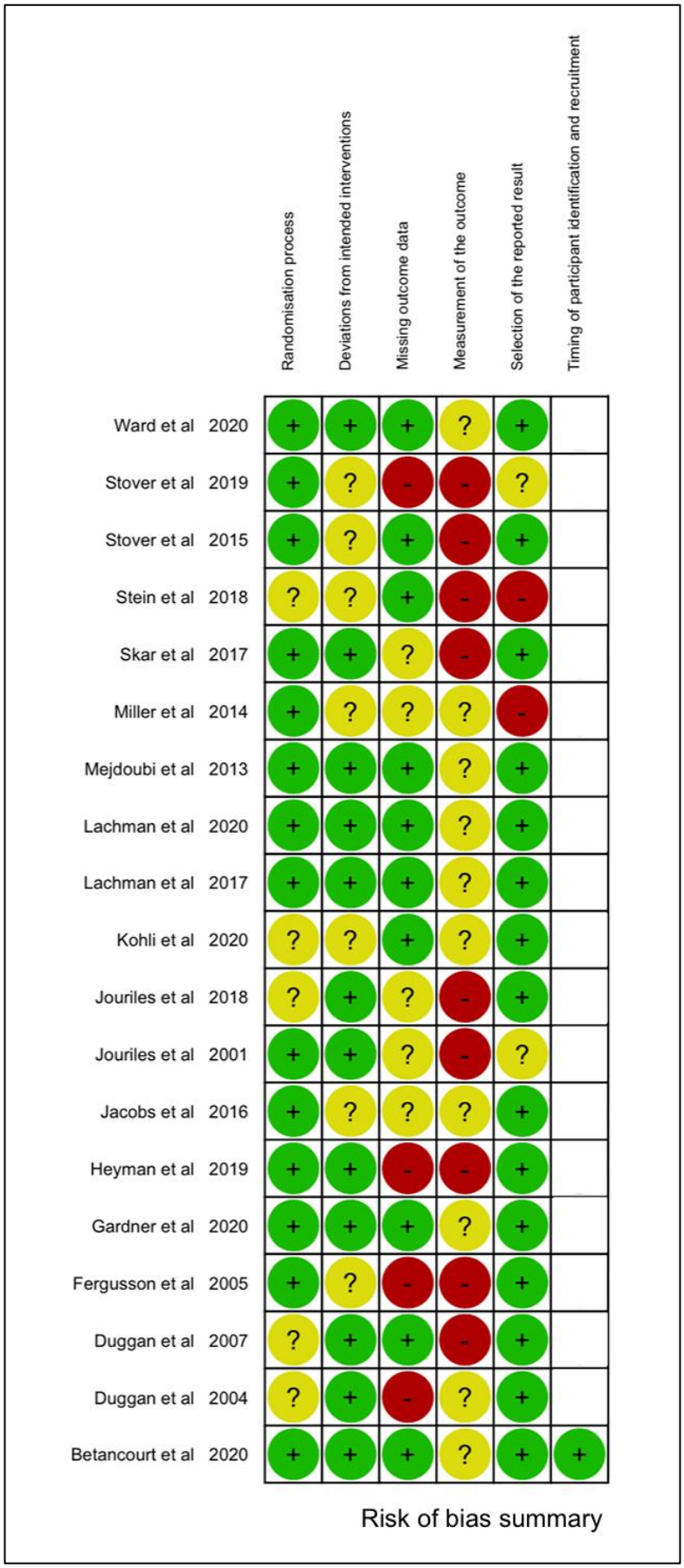
Randomisation process
Deviations from intended interventions
Missing outcome data
Measurement of the outcome
Selection of the reported result
Timing of participant identification and recruitment
Ward et al 2020
Stover et al 2019
Stover et al 2015
Stein et al 2018
Skar et al 2017
Miller et al 2014
Mejdoubi et al 2013
Lachman et al 2020
Lachman et al 2017
Kohli et al 2020
Jouriles et al 2018
Jouriles et al 2001
Jacobs et al 2016
Heyman et al 2019
Gardner et al 2020
Fergusson et al 2005
Duggan et al 2007
Duggan et al 2004
Betancourt et al 2020
Risk of bias summary

Figure 3

Randomisation process
Fourteen studies explained the random allocation method used and reported that the allocation sequence was adequately concealed. These studies were therefore classified as low risk of bias. The majority of these used methods such as computer-generated random numbers (e.g. Lachman et al., 2017) or a table of random numbers (e.g. Duggan et al., 2004). Five studies were rated to have some concerns, either because they did not explain what randomisation method they used or because they had baseline differences between the intervention and control groups indicating potential problems with the randomisation process.

Cluster-RCTs: Timing of participant identification and recruitment
In cluster-RCTs, if recruitment or identification of participants occurs after randomisation of the clusters, and individuals recruiting participants are aware of the cluster allocations, they may introduce bias by consciously or subconsciously influencing the type of people recruited to a particular cluster (Sterne et al., 2019). The included cluster-RCT (Betancourt et al. (2020)), however, was classified as low risk of bias because all participants were identified before randomisation of the clusters.

Deviations from intended interventions
Twelve studies were classified as low risk of bias for this domain. This rating was assigned because there were no deviations that arose that were inconsistent with the planned intervention (Sterne et al., 2019). Seven studies, however, were classified to have some concerns as they reported deviations from the intended interventions which may potentially have affected the outcomes.

Missing outcome data
Missing outcome data can result in bias if the mechanism through which the outcome is missing is related to the true value of the outcome (Sterne et al., 2019). Ten studies were rated as low risk of bias because outcome data were available for all, or almost all, randomised participants. Five studies were rated to have some concerns because even though there were outcome data missing, there was no evidence that the results were biased by these missing data. Four studies were classified as high risk of bias because they had considerable outcome data missing and it is likely their missingness was dependent on their true values. For example, in Skar et al. (2020) violence exposure was associated with not attending follow-up assessment, and accordingly, the exclusion of these participants and their outcome data means the result may have been biased by underestimating the actual presence of IPV, and thereby underestimating the reduction in IPV following the intervention (Sterne et al., 2019).

Measurement of the outcome
Bias in the estimates of intervention effects can arise when there are systematic differences in measurement errors between the intervention and control group (Sterne et al., 2019). This type of bias is less likely when outcome assessors are blinded to the intervention allocation. Blinding of outcome assessors, however, is not always possible, and is especially challenging when using participant-reported outcomes (Higgins et al., 2019). When outcome assessors are aware of intervention assignment, it is therefore

important to consider whether participants' reporting of the outcome is likely to be impacted by their awareness of the intervention received (Higgins et al., 2019). In the present studies, participants' awareness of participating in a parenting intervention (some of which included content on couple communication and interparental relations), may have influenced their reporting of IPV. For example, social desirability bias may have led participants perpetrating IPV to provide lower reports of IPV perpetration (Fisher & Katz, 2000). Moreover, it is worth noting that participating in the intervention may also have led to an increased *awareness* of IPV among participants (especially when the intervention included explicit IPV content, such as in e.g. Stover (2015)), and this heightened awareness may consequently have increased participants' *reporting* of IPV even though the *occurrence* of IPV may not necessarily have increased or changed.

In light of these concerns, nine studies were rated to have a high risk of bias as there were particularly strong indications in these studies that participants' awareness of the received intervention may have influenced their self-reported outcomes. In the other ten studies there were less evident concerns regarding the effect of participants' awareness of the received intervention, and as such these studies were rated to have some concerns.

Selection of the reported result

Bias can also arise if the reported result is selected (e.g. because of its magnitude, direction, or statistical significance) from a number of effect estimates that have been calculated (Sterne et al., 2019). Fifteen studies were rated as low risk of bias for this domain, as they reported all of the outcomes that had been specified in their methods or protocols. Two studies were classified to have some concerns because although the results were unlikely to have been chosen based on their results, there was no pre-specified analysis plan provided, and only some of the analyses of the data were provided. Two studies were classified as high risk of bias because they only provided some of the results from the analyses they had described in their methods.

4.3 Effects of interventions

The following section summarises the review outcomes and presents the meta-analyses findings (see *Table 8* for an overview).

Outcome	No of participants	No of studies	Effect Size (Hedge's g) (95% CI)	P-value	Heterogeneity I^2	Quality of Evidence (GRADE)
Post-intervention						
Female Victimisation - Post-intervention						
Overall IPV	2089	10	-0.14 (-0.25, -0.03)	0.013	24.27%	⊕⊕⊕◯ MODERATE
Physical IPV	1589	6	-0.20 (-0.32, -0.07)	0.002	0%	⊕⊕◯◯ LOW
Psychological IPV	1079	3	-0.07 (-0.20, 0.07)	0.340	0%	⊕◯◯◯ VERY LOW
Male Victimisation - Post-intervention						
No study reported male victimisation	–	–	–	–	–	–
Male Perpetration - Post-intervention						
Overall IPV	1191	3	-0.25 (-0.60, 0.11)	0.171	88.84%	⊕⊕◯◯ LOW
Physical IPV	386	2	-0.23 (-0.43, -0.03)	0.026	0%	⊕◯◯◯ VERY LOW
Female Perpetration - Post-intervention						
Overall IPV	830	2	-0.29 (-0.43, -0.14)	0.0002	0%	⊕⊕⊕◯ MODERATE
Physical IPV	652	3	-0.24 (-0.40, -0.08)	0.003	0%	⊕⊕◯◯ LOW
Psychological IPV	634	2	-0.13 (-0.30, 0.04)	0.131	0%	⊕◯◯◯ VERY LOW
Follow-up						
Female Victimisation - Follow-up						
Overall IPV	1140	3	-0.73 (-1.90, 0.45)	0.225	98.46%	⊕◯◯◯ VERY LOW
Physical IPV	1166	4	-0.16 (-0.35, 0.03)	0.107	40.65%	⊕⊕◯◯ LOW
Psychological IPV	1017	2	-0.0005 (-0.14, 0.14)	0.994	0%	⊕◯◯◯ VERY LOW
Male Victimisation - Follow-up						
No study reported male victimisation	–	–	–	–	–	–
Male Perpetration - Follow-up						
Physical IPV	398	2	0.26 (0.06, 0.46)	0.011	0%	⊕◯◯◯ VERY LOW
Female Perpetration - Follow-up						
Overall IPV	1054	2	-1.48 (-4.48, 1.52)	0.333	99.71%	⊕◯◯◯ VERY LOW
Physical IPV	846	3	-0.17 (-0.47, 0.14)	0.281	65.11%	⊕◯◯◯ VERY LOW
Psychological IPV	828	2	-0.11 (-0.26, 0.03)	0.124	0%	⊕◯◯◯ VERY LOW

Table 8 Summary of Effects

Post-intervention results

4.3.1 Female victimisation of IPV – post-intervention

Female victimisation – overall IPV (post-intervention)

Ten studies reported overall female IPV victimisation at post-intervention. A simple random-effects meta-analysis (*Figure 4*) was conducted to combine these findings. Results found a small, statistically significant effect (Hedge's g=-0.14; 95% CI=-0.25, -0.03; p=0.013) indicating a greater reduction in overall IPV female victimisation in the intervention condition compared to the control. Heterogeneity was low and non-significant (I^2=24.27%, Q(df=9)=10.399, p=0.319).

A sensitivity analysis was conducted to determine if studies with high risk of bias influenced the findings of the meta-analysis. The studies removed were: Jouriles et al. (2018), Skar et al. (2020), and Stein et al. (2018). The sensitivity analysis revealed that the small, statistically significant effect size remained, with a greater reduction in overall IPV female victimisation in the intervention group compared to the control (Hedge's g=-0.14; 95% CI=-0.27, -0.01; p=0.033). Heterogeneity remained low and non-significant (I^2=38.81%, Q(df=6)=9.916, p=0.128). See Appendix G for the sensitivity analysis forest plot. It was not possible to conduct sensitivity analyses for the subsequent meta-analyses due to insufficient studies remaining after removing studies with high risk of bias.

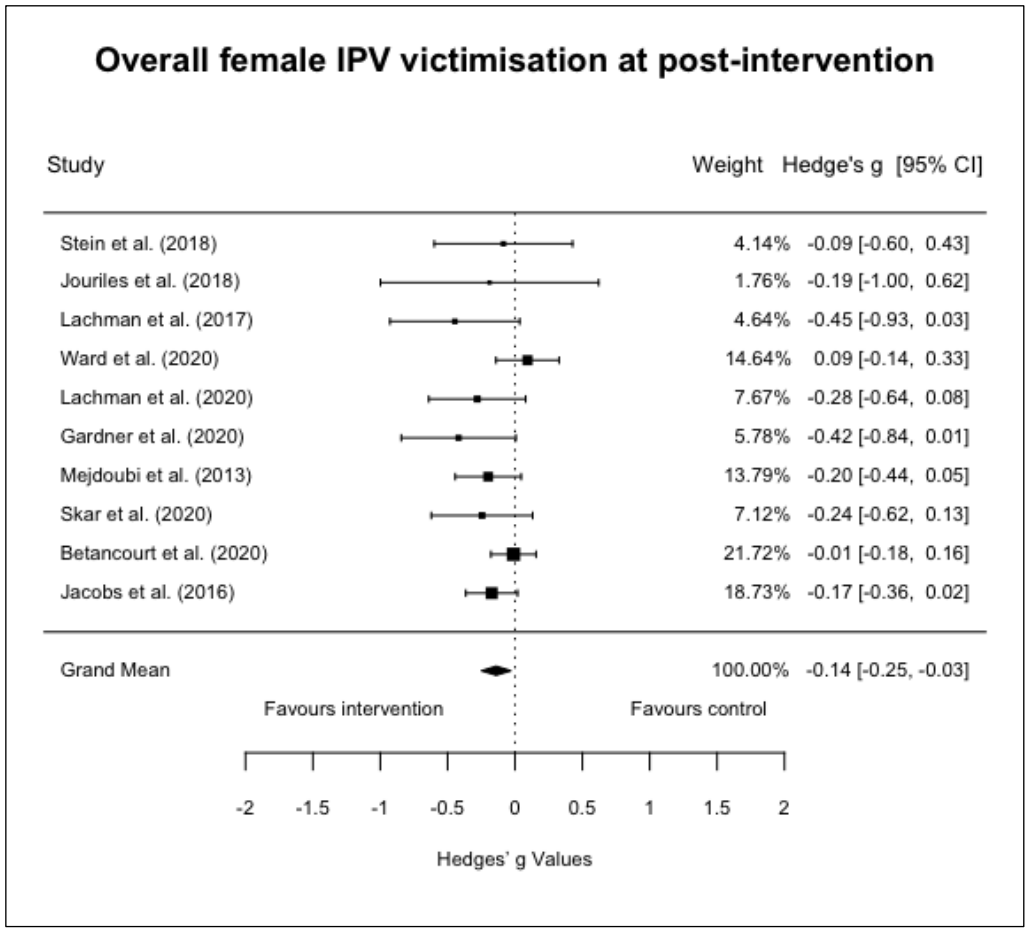

Figure 4

Female victimisation – physical IPV (post-intervention)

Six studies reported physical female IPV victimisation at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 5*), finding a small, significant effect (Hedge's g=-0.20; 95% CI=-0.32, -0.07; p=0.002), with a greater reduction in physical female IPV victimisation in the interventions compared to the controls. No heterogeneity was detected.

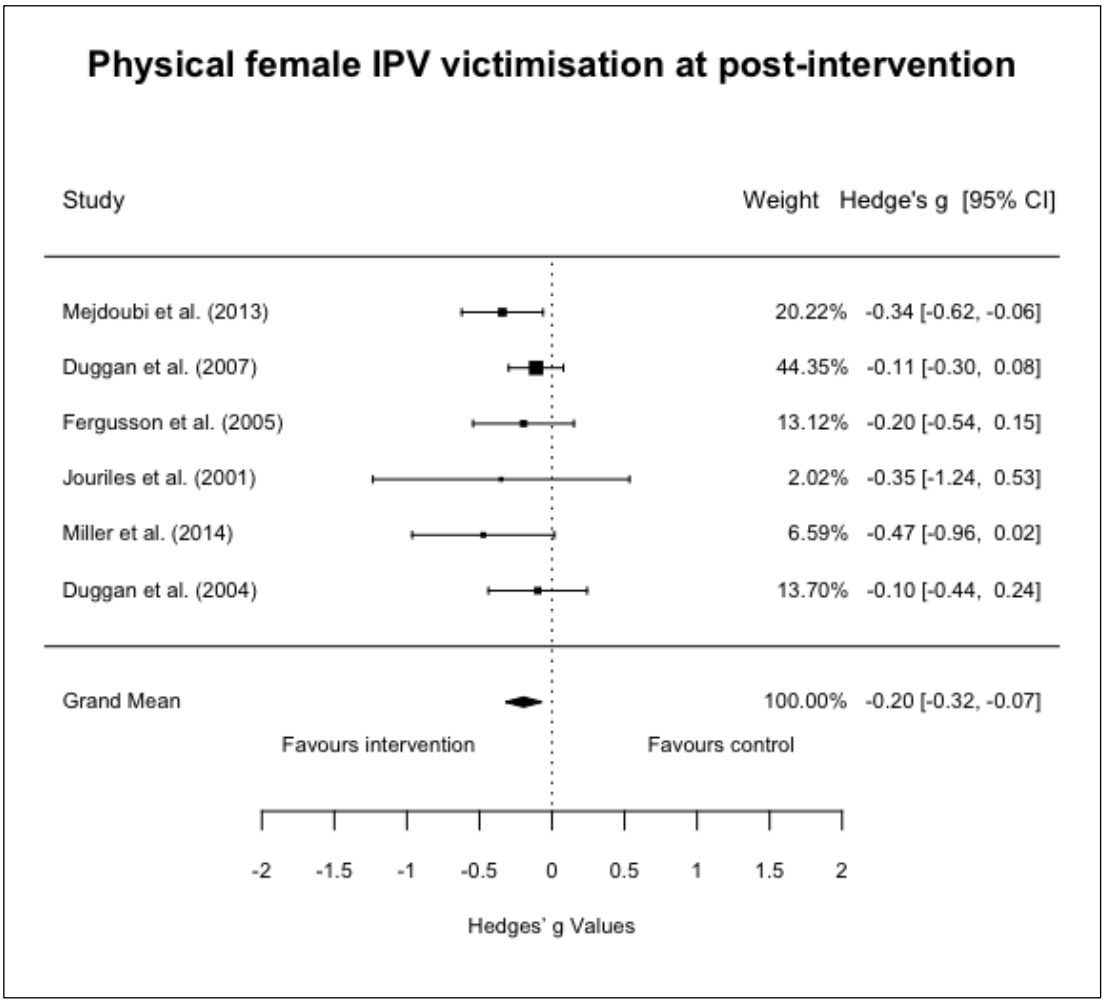

Figure 5

Female victimisation – psychological IPV (post-intervention)

Three studies reported psychological female IPV victimisation at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 6*), finding a negligible, non-significant effect (Hedge's g=-0.07; 95% CI=-0.20, 0.07; p=0.340) on the reduction of psychological female IPV victimisation. No heterogeneity was detected.

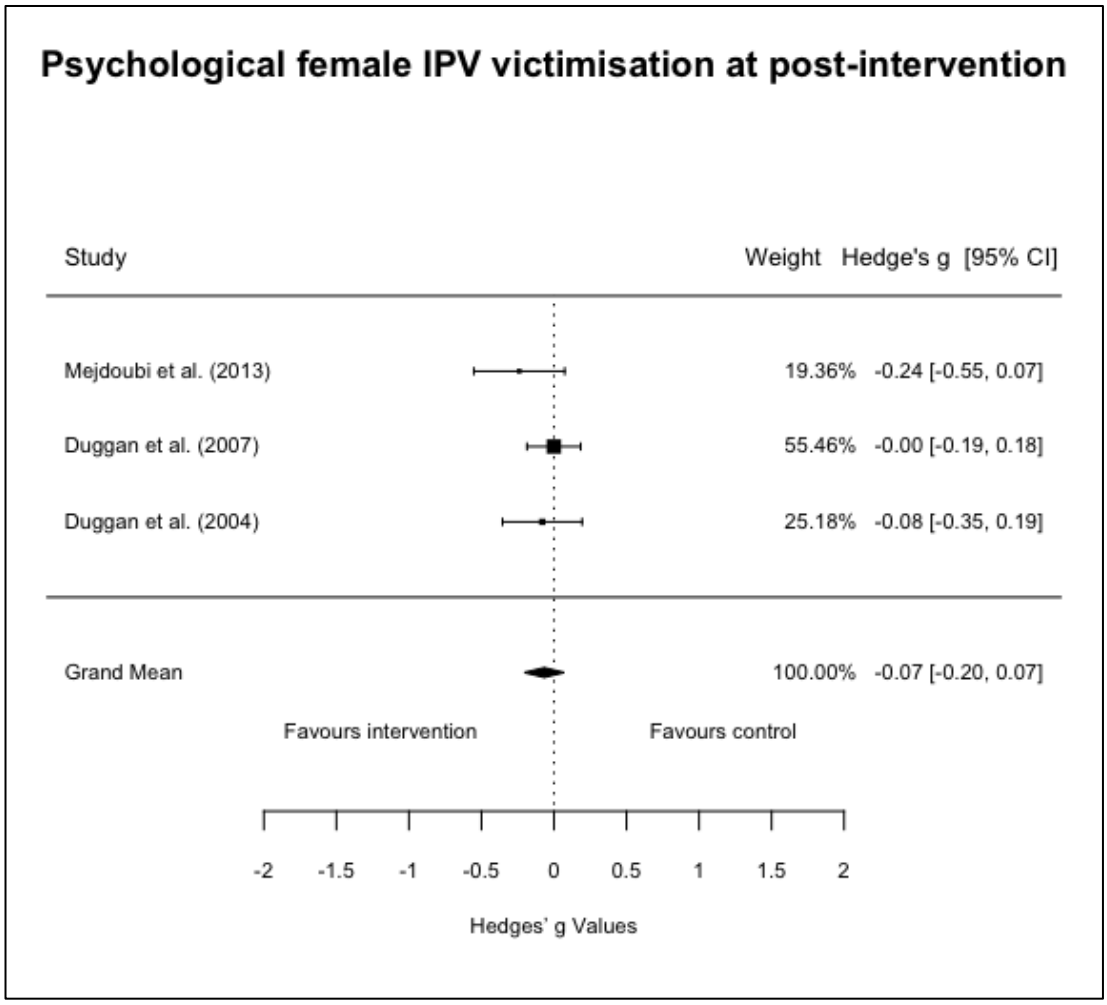

Figure 6

Female victimisation – sexual IPV (post-intervention)

Only Mejdoubi et al. (2013) reported on the effect of the intervention on sexual female IPV victimisation at post-intervention, finding a small, non-significant effect (Hedge's g=-0.26; 95% CI=-0.72, 0.19).

4.3.2 Male victimisation of IPV – post-intervention

No study reported on this outcome.

4.3.3 Male perpetration of IPV – post-intervention

Male perpetration – overall IPV (post-intervention)

Three studies reported overall male IPV perpetration at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 7*), revealing a small, non-significant effect on the reduction of overall male IPV perpetration (Hedge's g=-0.25; 95% CI-0.60, 0.11; p=0.171). Heterogeneity was substantial and significant (I^2=88.84%, Q(df=2)=17.353, p=0.0002), hence these findings should be interpreted with caution.

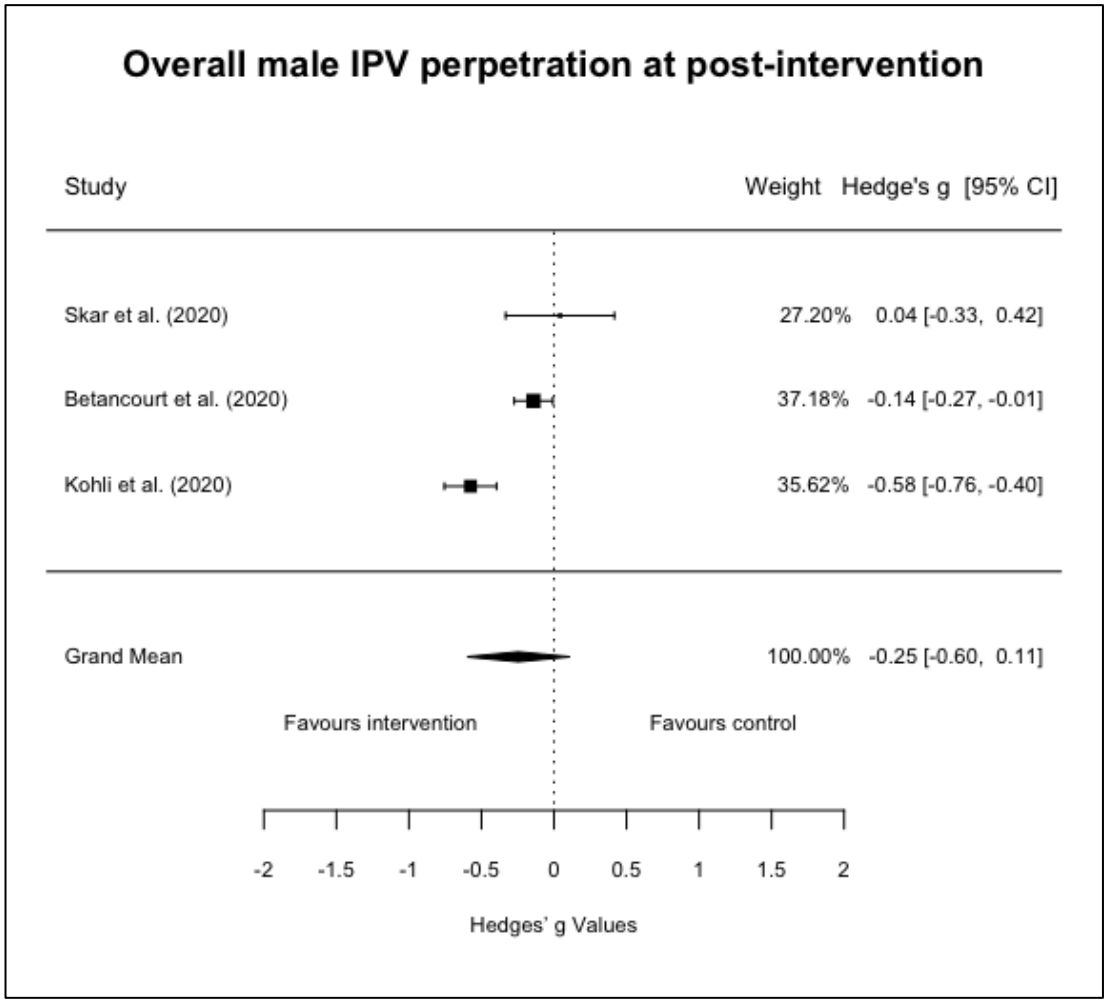

Figure 7

Male perpetration – physical IPV (post-intervention)

Two studies reported physical male IPV perpetration at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 8*), revealing a small, significant effect size (Hedge's g=-0.23; 95% CI=-0.43, -0.03; p=0.026) of interventions on the reduction of physical male IPV perpetration compared to controls. No heterogeneity was detected.

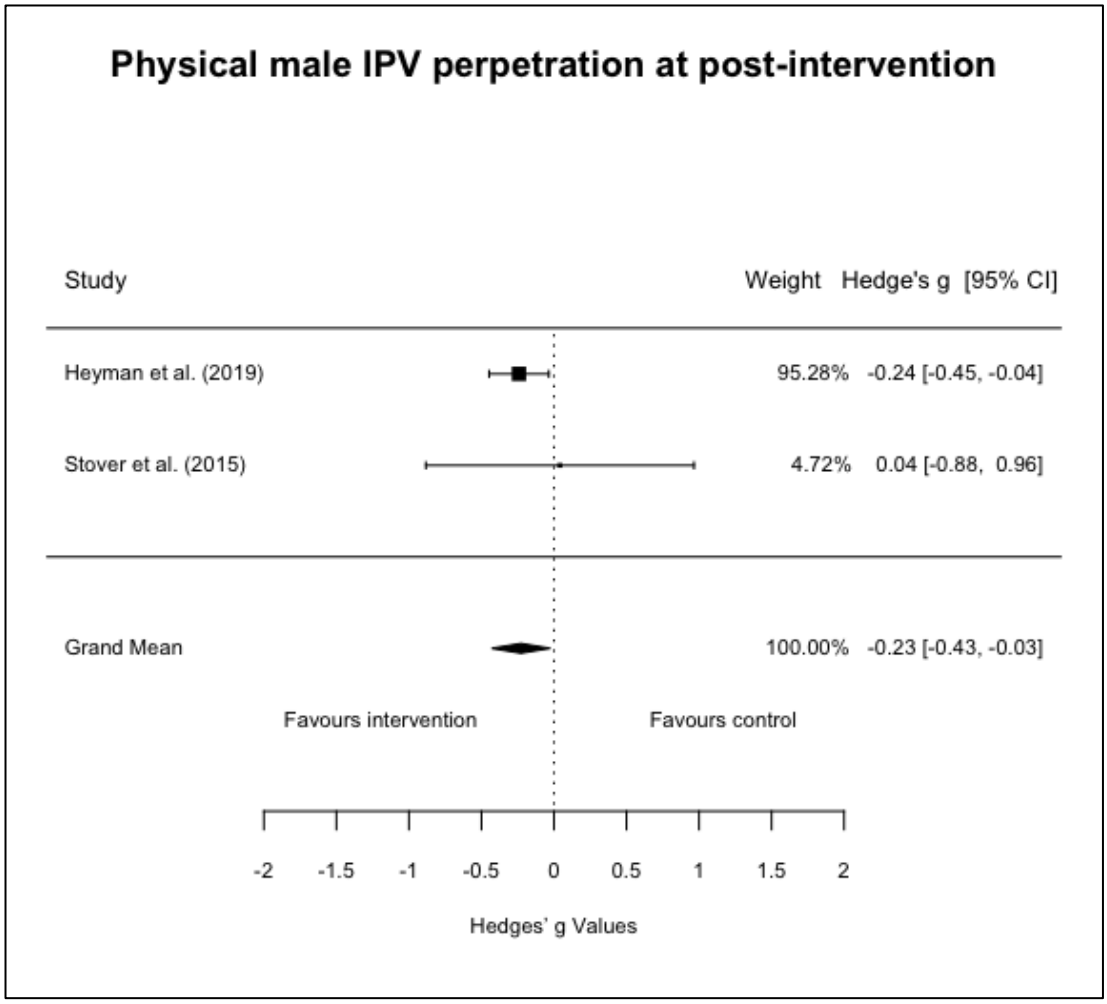

Figure 8

Male perpetration – psychological IPV (post-intervention)

Only Heyman et al. (2019) reported on the effect of the intervention on psychological male IPV perpetration at post-intervention, finding a small, non-significant effect (Hedge's g=-0.18; 95% CI=-0.36, 0.16).

Male perpetration – sexual IPV (post-intervention)

No study reported on this outcome.

4.3.4 Female perpetration of IPV – post-intervention

Female perpetration – overall IPV (post-intervention)

Two studies reported overall female IPV perpetration at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 9*), revealing a small, significant effect (Hedge's g=-0.29; 95% CI=-0.43, -0.14; p=0.0002) of interventions on the reduction of overall female IPV perpetration compared with controls. No heterogeneity was detected.

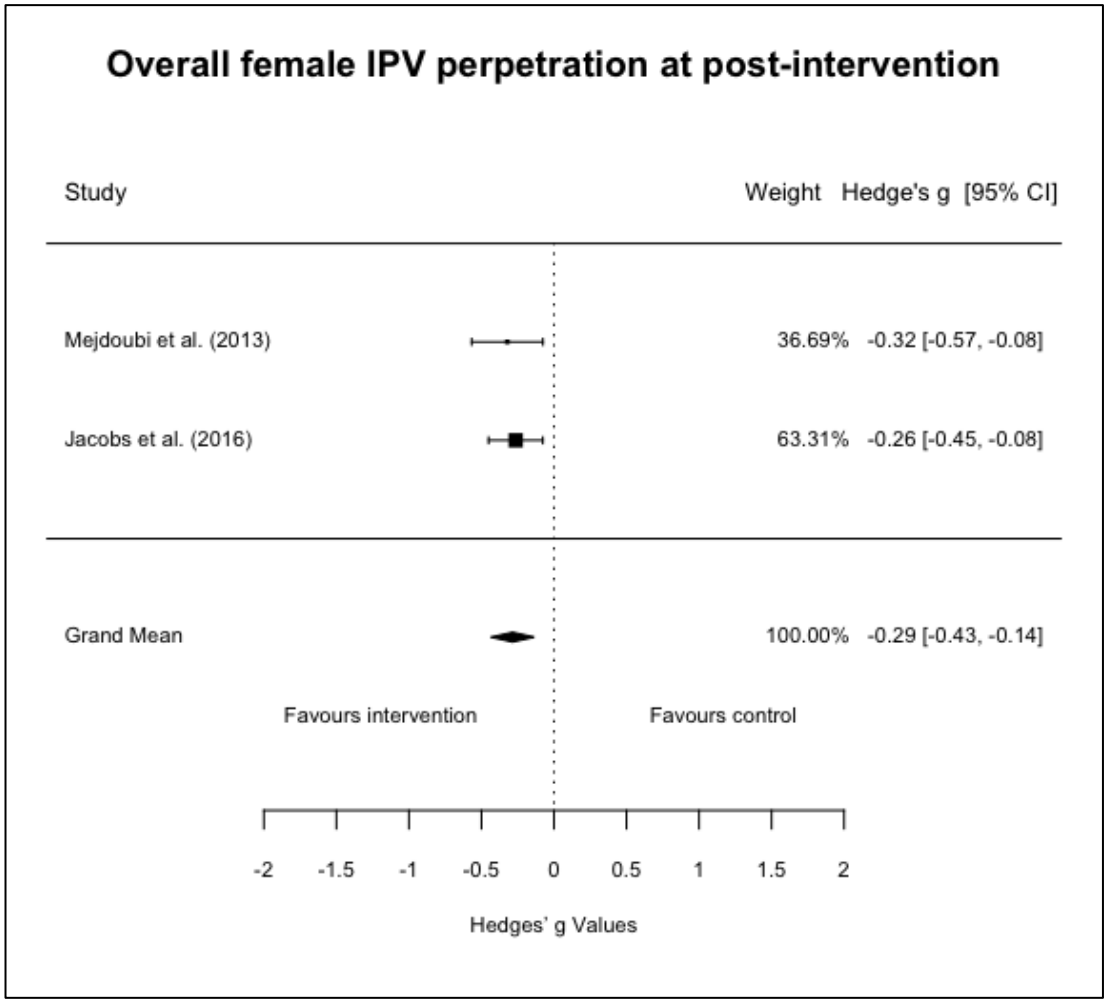

Figure 9

Female perpetration – physical IPV (post-intervention)

Three studies reported physical female IPV perpetration at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 10*), finding a small, significant effect (Hedge's g=-0.24; 95% CI=-0.40, -0.08; p=0.003) indicating a greater reduction in physical female IPV perpetration in the interventions compared to the controls. No heterogeneity was detected.

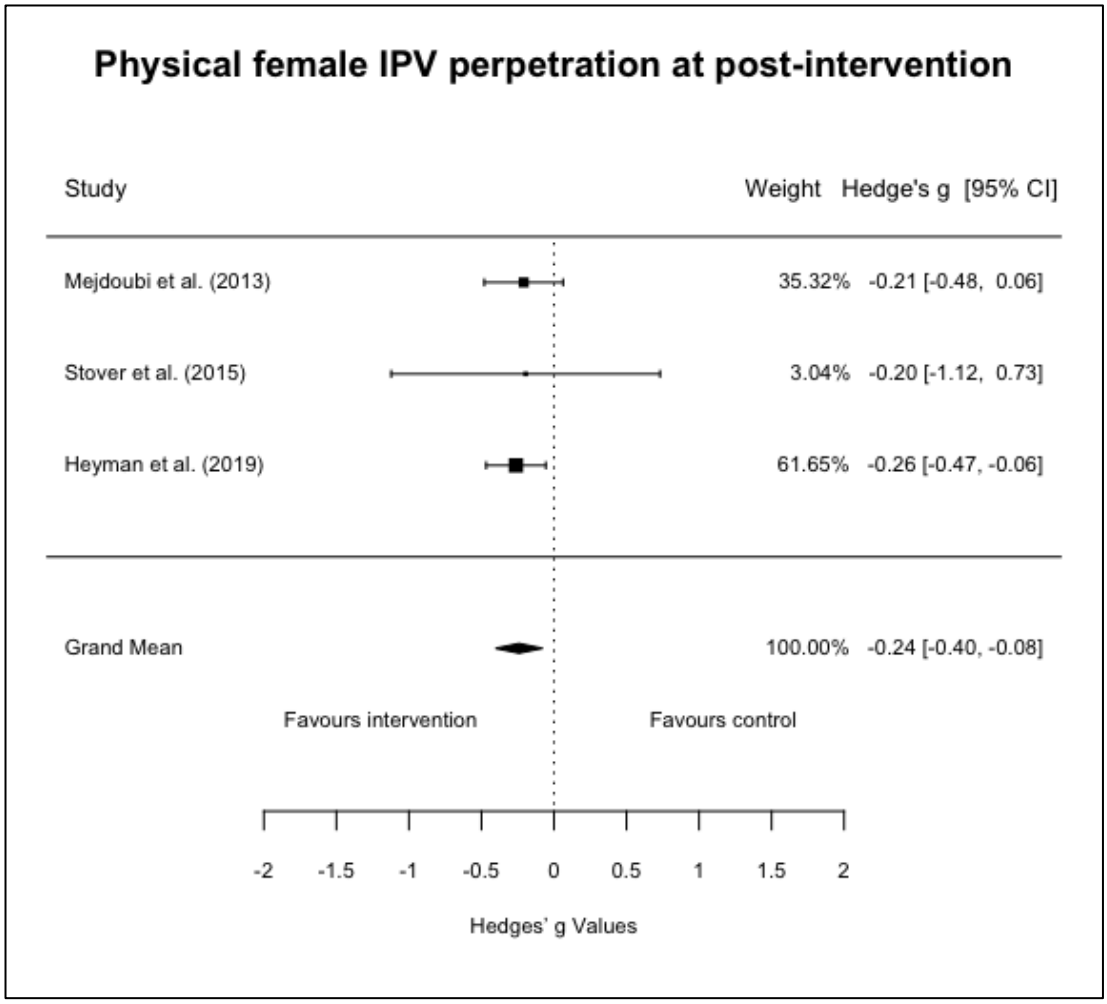

Figure 10

Female perpetration – psychological IPV (post-intervention)

Two studies reported psychological female IPV perpetration at post-intervention. A simple random-effects meta-analysis was conducted (*Figure 11*), revealing a small, non-significant effect (Hedge's g=-0.13; 95% CI=-0.30, 0.04 p=0.131) of interventions on the reduction psychological female IPV perpetration. No heterogeneity was detected.

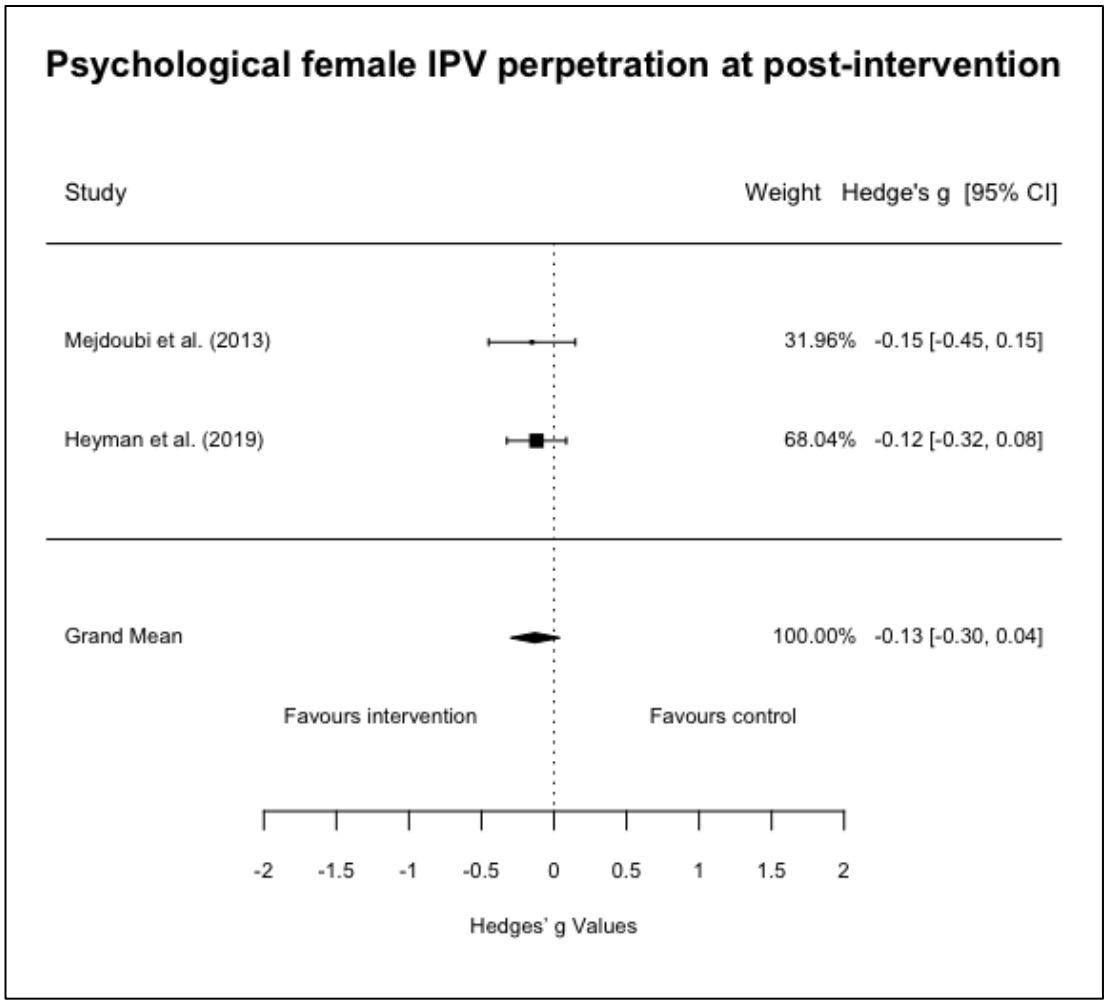

Figure 11

Female perpetration – sexual IPV (post-intervention)

Only Mejdoubi et al. (2013) reported on the effect of the intervention on sexual female IPV perpetration at post-intervention, finding a negligible, non-significant effect (Hedge's g=-0.007; 95% CI=-0.66, 0.64).

Follow-up results

4.3.5 Female victimisation of IPV – follow-up

Female victimisation – overall IPV (follow-up)

Three studies reported overall female IPV victimisation at follow-up. A simple random-effects meta-analysis was conducted to combine these (*Figure 12*), revealing a large, although non-significant effect (Hedge's g=-0.73; 95% CI= -1.90, 0.45; p=0.225) of interventions on the reduction of overall IPV female victimisation. Heterogeneity was substantial and significant (I^2=98.46%, Q(df=2)=174.485, p< .0001). The high heterogeneity revealed in this meta-analysis, and in many of the other meta-analyses, warrant caution however, in terms of the conclusions that can be drawn, especially given that in many of these analyses, data were only available for two or three studies.

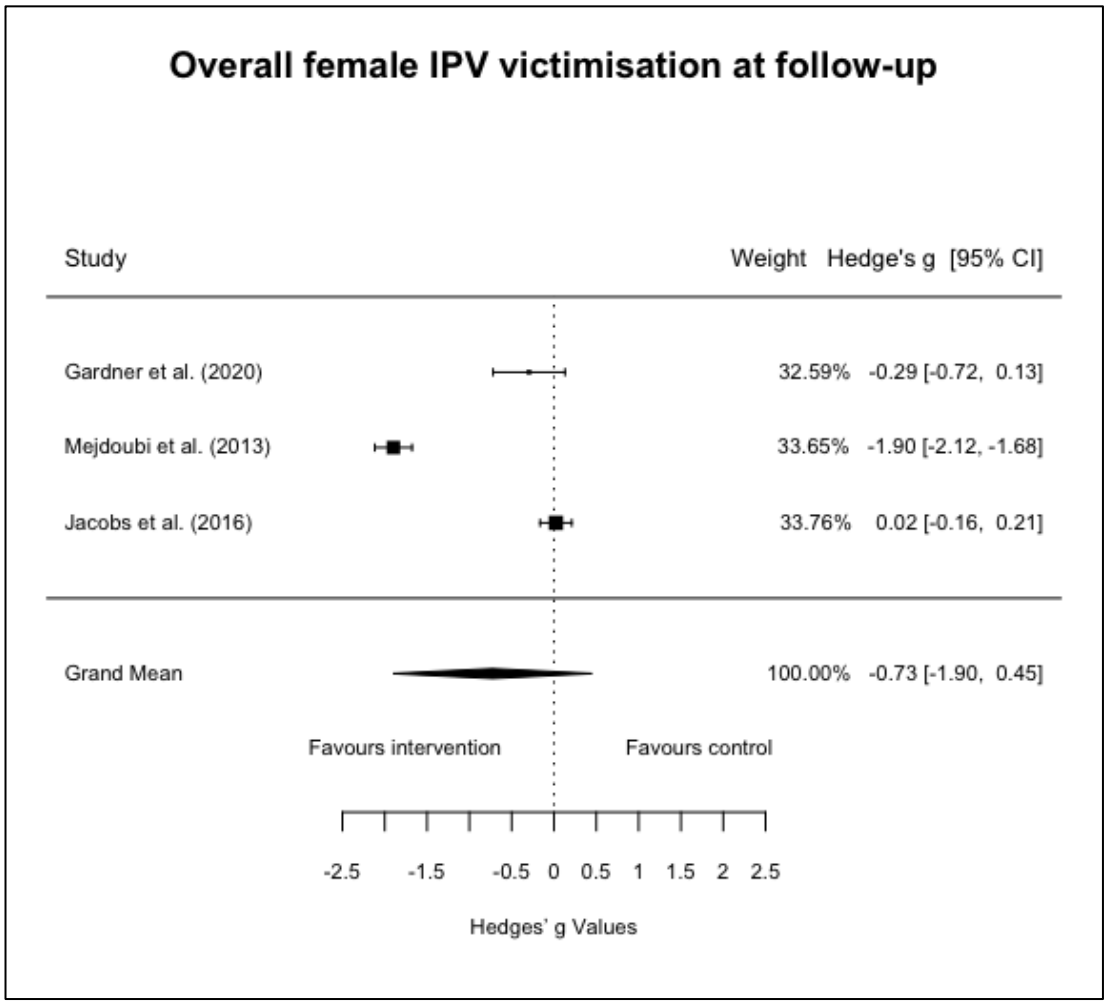

Figure 12

Female victimisation – physical IPV (follow-up)

Four studies reported physical female IPV victimisation at follow-up. A simple random-effects meta-analysis was conducted (*Figure 13*), finding a small, non-significant effect (Hedge's g=-0.16; 95% CI=-0.35, 0.03; p=0.1071) of interventions on the reduction of physical female IPV victimisation. Heterogeneity was low to moderate and non-significant (I^2= 40.65%, Q(df=3)=4.808, p=0.186).

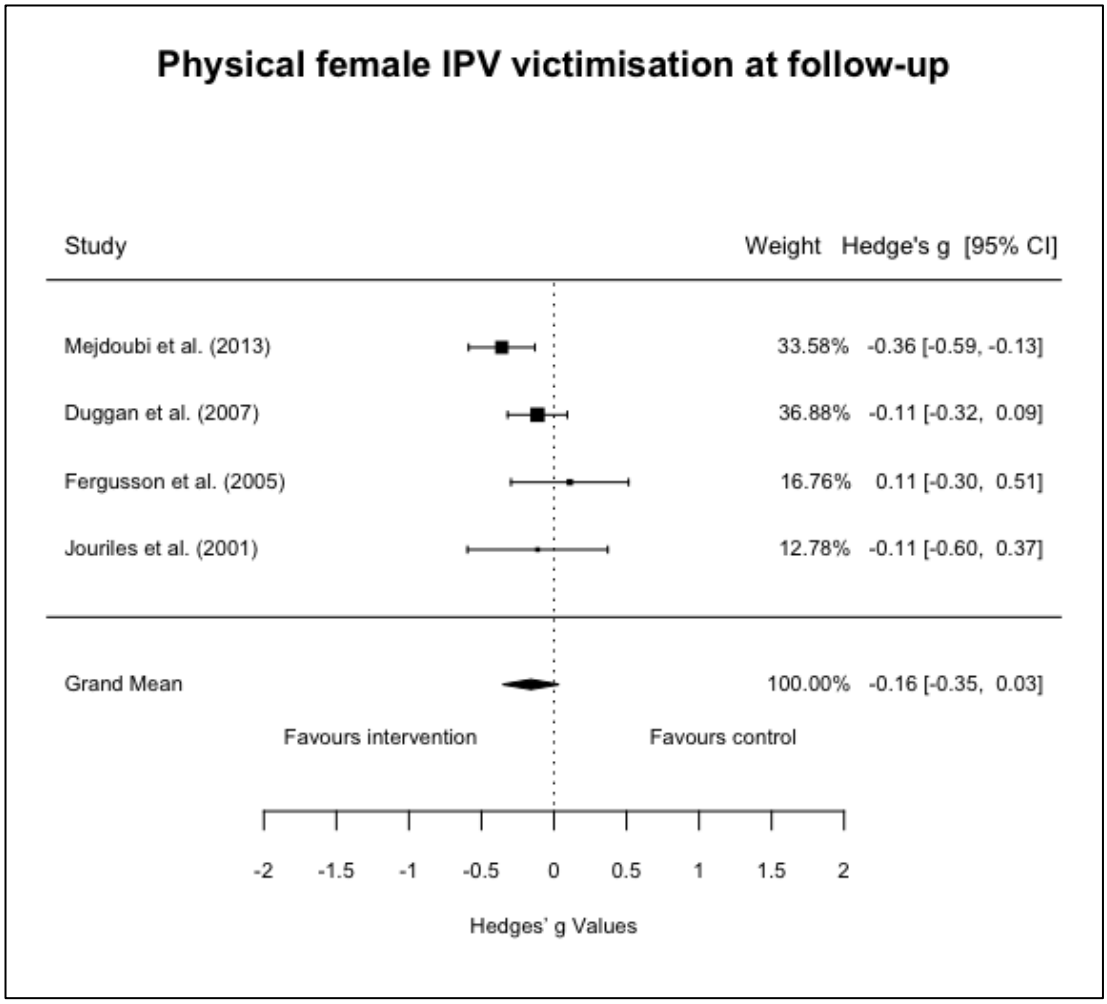

Figure 13

Female victimisation – psychological IPV (follow-up)

Two studies reported psychological female IPV victimisation at follow-up. A simple random-effects meta-analysis was conducted (*Figure 14*), finding a negligible, non-significant effect (Hedge's g=-0.0005; 95% CI=-0.14, 0.14; p=0.994) on psychological female IPV victimisation. No heterogeneity was detected.

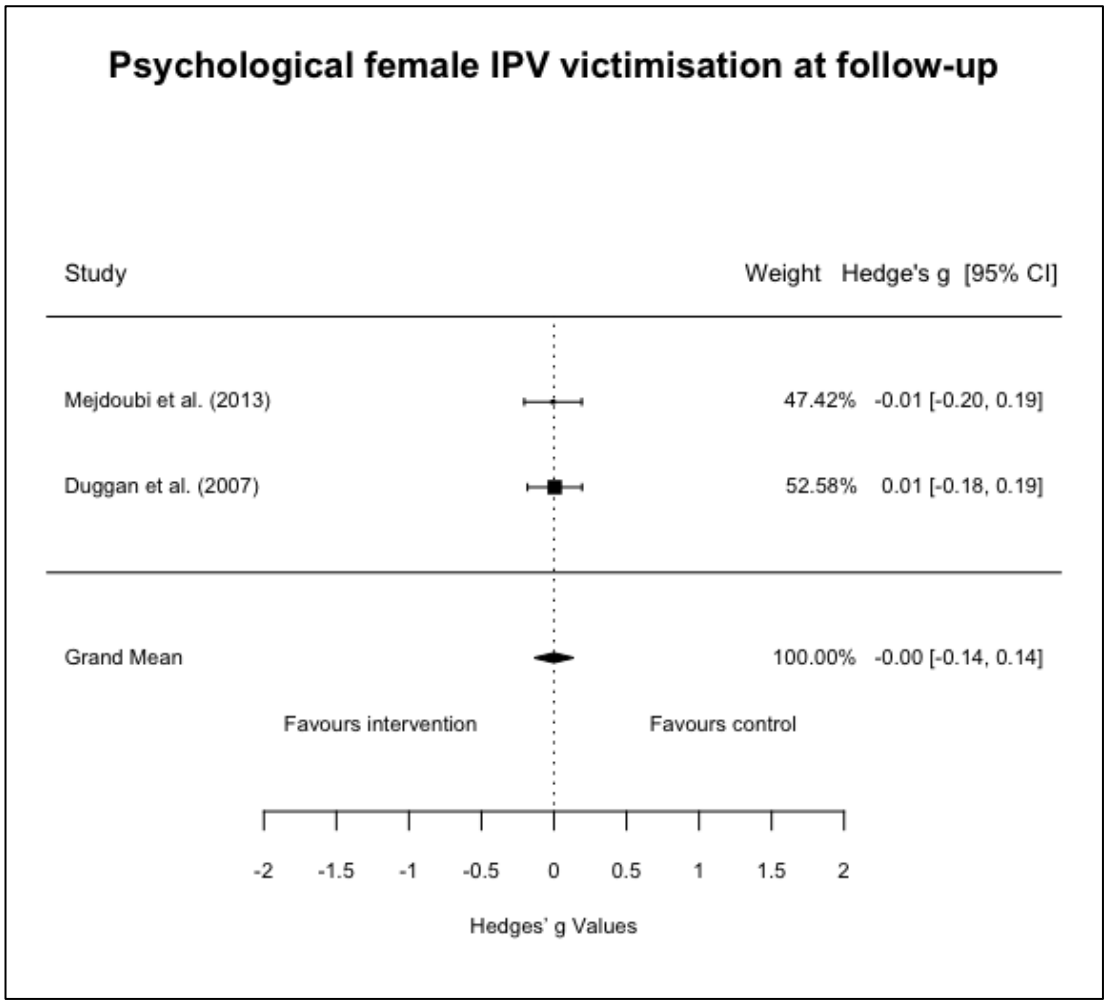

Figure 14

Female victimisation – sexual IPV (follow-up)

Only Mejdoubi et al. (2013) reported on the effect of the intervention on sexual female IPV victimisation at follow-up, finding a small, non-significant effect (Hedge's g=-0.13; 95% CI= -0.48, 0.23).

4.3.6 Male victimisation of IPV – follow-up

No study reported on this outcome.

4.3.7 Male perpetration of IPV – follow-up

Male perpetration – overall IPV (follow-up)

Only Kohli et al. (2020) reported on the effect of the intervention on overall male IPV perpetration at follow-up, finding a negligible, significant effect (Hedge's g=-0.45; 95% CI=-0.63, -0.28).

Male perpetration – physical IPV (follow-up)

Two studies reported physical male IPV perpetration at follow-up. A simple random-effects meta-analysis was conducted to combine these findings (*Figure 15*). Notably, results showed a small, significant increase in physical male IPV perpetration in the intervention compared to controls at follow-up (Hedge's g=0.26; 95% CI=0.06, 0.46; p=0.011), suggesting that the reduction in male IPV perpetration found at post-intervention may not be sustained in the long-term, and there may even be an iatrogenic effect. While no heterogeneity was detected, this needs to be interpreted with caution considering that I^2 can be substantially underestimated when the number of studies in a meta-analysis is small (Von Hippel, 2015).

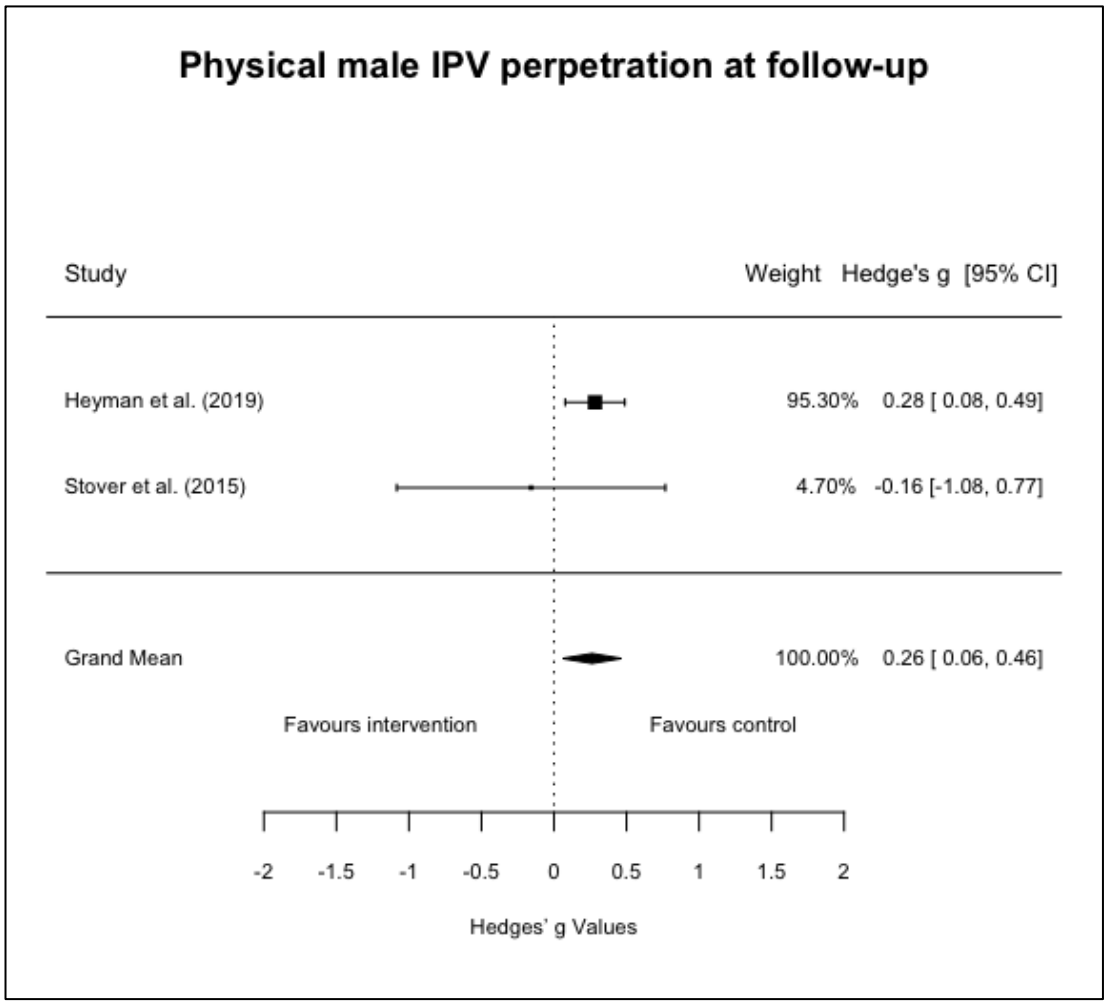

Figure 15

Male perpetration – psychological IPV (follow-up)

Only Heyman et al. (2019) reported on the effect of the intervention on psychological male IPV perpetration at follow-up, finding a negligible, non-significant effect (Hedge's g=0.02; 95% CI=-0.25, 0.27).

Male perpetration – sexual IPV (follow-up)

No study reported on this outcome.

4.3.8 Female perpetration of IPV – follow-up

Female perpetration – overall IPV (follow-up)

Two studies reported overall female IPV perpetration at follow-up. A simple random-effects meta-analysis was conducted (*Figure 16*), indicating a large, non-significant effect (Hedge's g=-1.48; 95% CI=-4.48, 1.52; p=0.333) of interventions on the reduction of female IPV perpetration. Heterogeneity was high and significant (I^2 = 99.71%, Q(df=1)=340.762, p< .0001). This large, non-significant effect, however, needs to be interpreted with caution, given both the high heterogeneity detected and limitations of the studies in the meta-analysis. Indeed, both Mejdoubi et al. (2013) and Jacobs et al. (2016) had, for example, high attrition rates (60% and 70% attrition rates, respectively), which the authors of both studies emphasise, may have compromised the integrity of the study results.

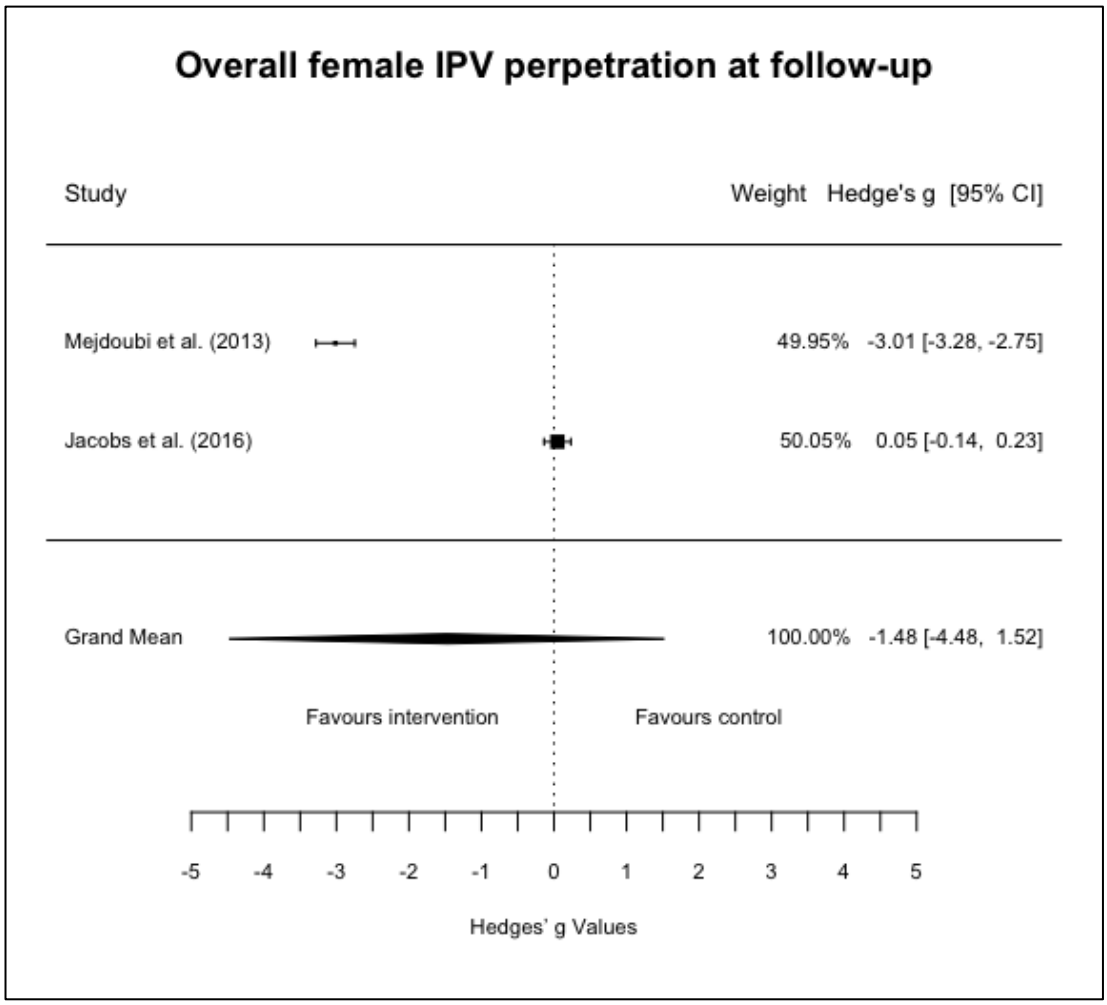

Figure 16

Female perpetration – physical IPV (follow-up)

Three studies reported physical female IPV perpetration at follow-up. A simple random-effects meta-analysis was conducted (*Figure 17*), revealing a small, non-significant effect (Hedge's g=-0.17; 95% CI=-0.47, 0.14; p=0.281) of interventions on the reduction of physical female IPV perpetration at follow-up. Heterogeneity was substantial and, although approaching significance, was not significant (I^2=65.11%, Q(df=2)=5.686, p=0.058).

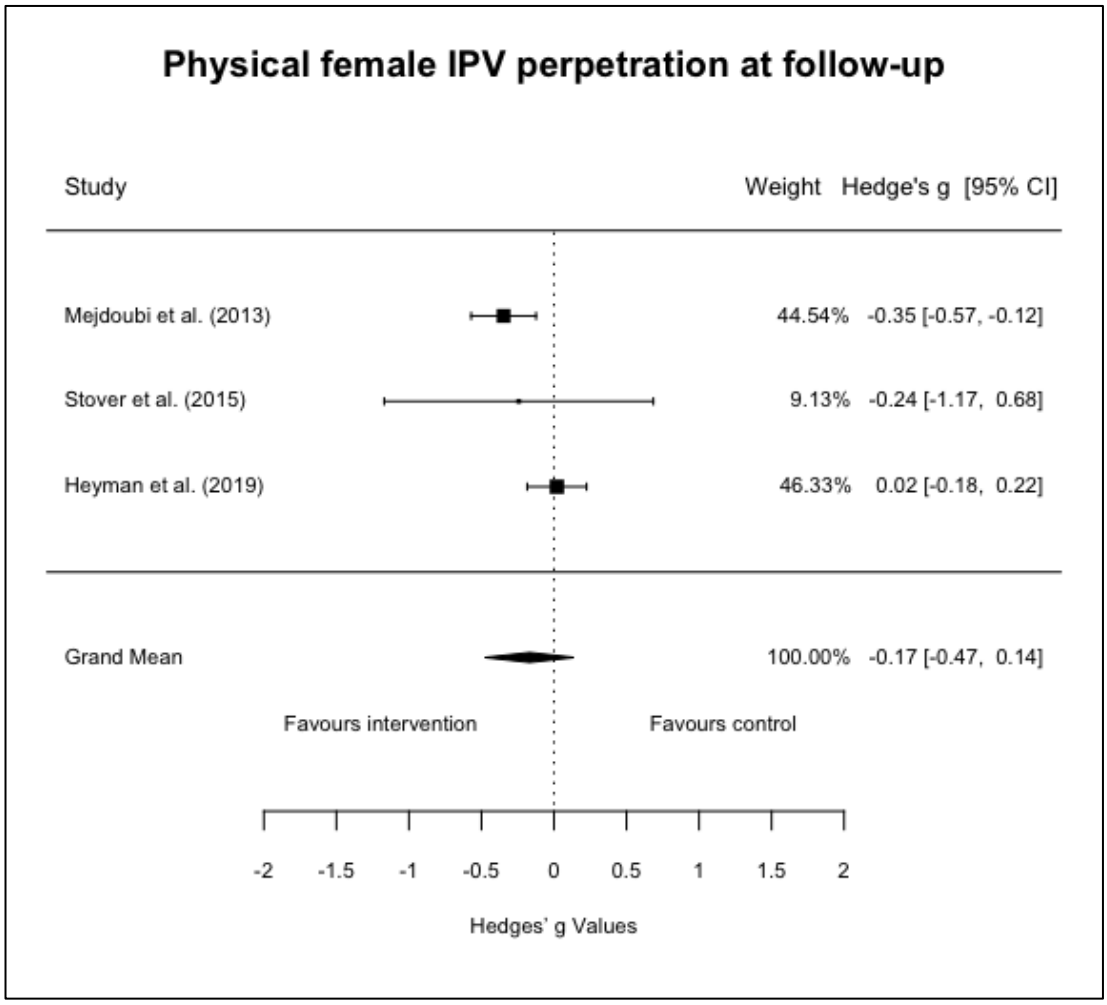

Figure 17

Female perpetration – psychological IPV (follow-up)

Two studies reported psychological female IPV perpetration at follow-up. A simple random-effects meta-analysis was conducted (*Figure 18*), finding a small, non-significant effect (Hedge's g=-0.11; 95% CI=-0.26, 0.03; p=0.124) of interventions on the reduction of psychological female IPV perpetration at follow-up. No heterogeneity was detected.

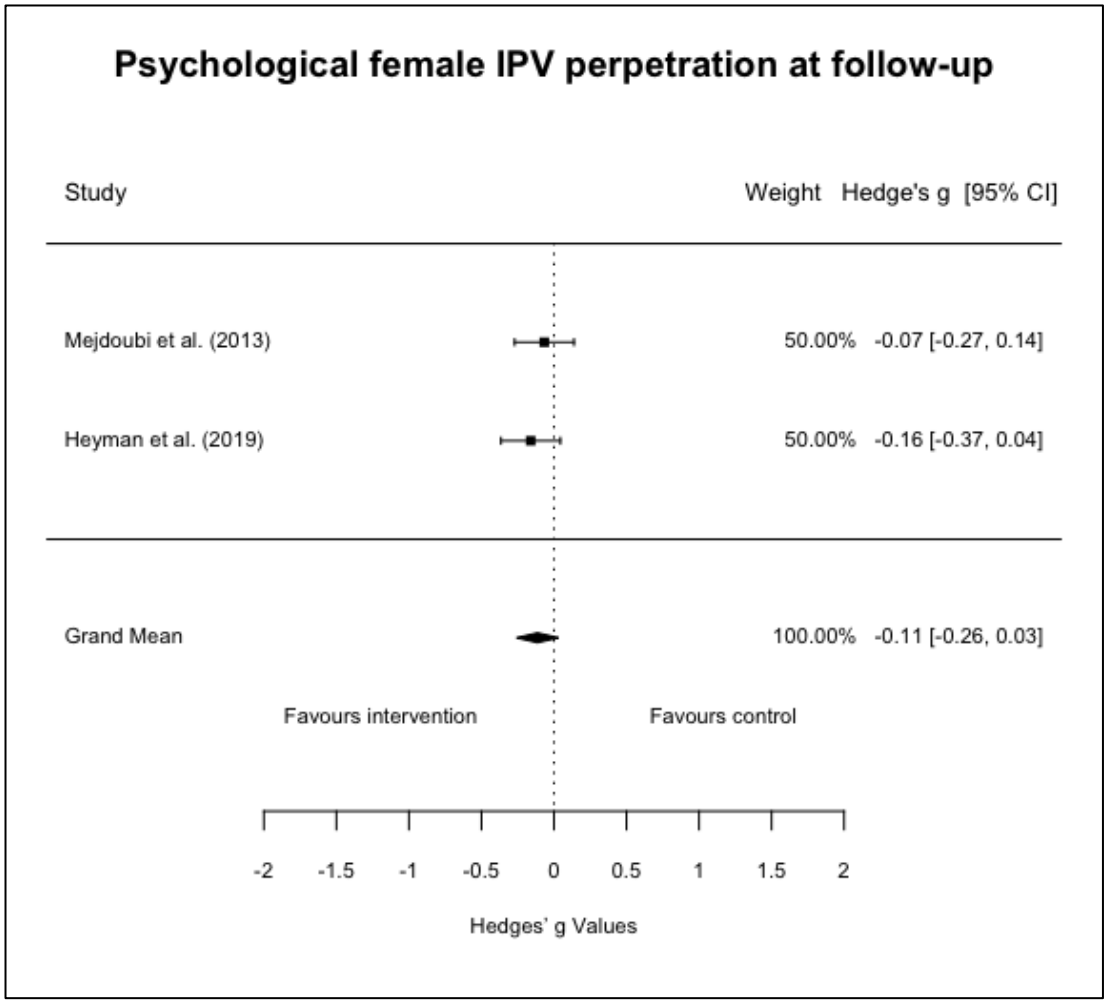

Figure 18

Female perpetration – sexual IPV (follow-up)

Only Mejdoubi et al. (2013) reported on the effect of the intervention on sexual female IPV perpetration at follow-up, finding a small, significant effect (Hedge's g=-0.81; 95% CI=-1.28, -0.34).

4.4 Subgroup analyses

4.4.1 Subgroup analysis: Overall IPV female victimisation (post-intervention)

Subgroup analyses revealed that while parenting programmes that included both *child-and-couple relations* content had a very small, insignificant effect on overall IPV female victimisation at post-intervention (Hedge's g=-0.08, 95% CI=-0.24, 0.07, p=0.293), parenting interventions that only included *child-parent relations* content notably had a significant and slightly greater, although still small, effect (Hedges g=-0.18, 95% CI=-0.34, -0.03, p=0.02) (*Figure 19*). A test for subgroup differences, however, revealed a non-significant Chi^2 statistic of 0.67 (p=0.41), indicating that there do not appear to be different intervention effects between the two subgroups. Heterogeneity was low and non-significant in both groups. Of note, however, since the subgroup analyses included eight and two studies in each group, the present results need to be interpreted with caution.

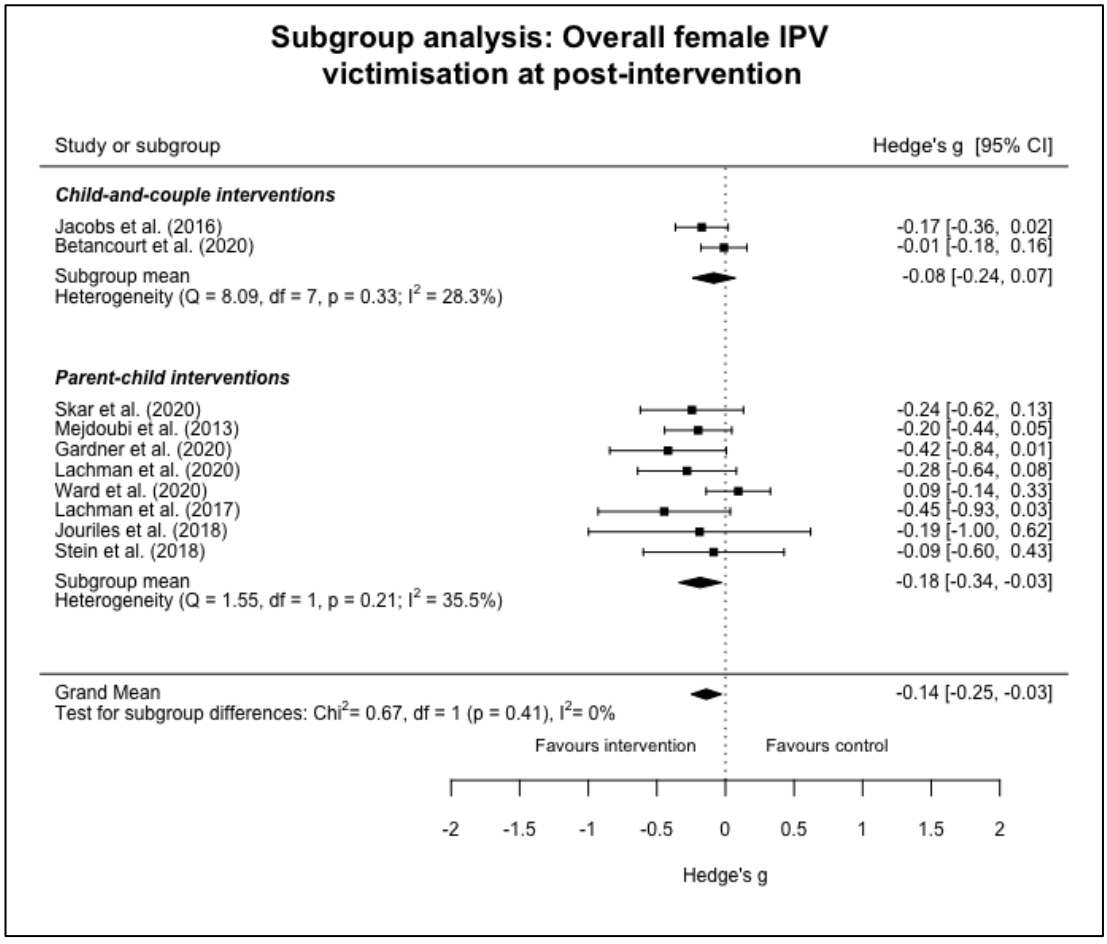

Figure 19

4.4.2 Subgroup analysis: Physical IPV female victimisation (post-intervention)

Subgroup analyses revealed that while parenting interventions that included both *child-and-couple relations* content had a small, significant effect on physical IPV female victimisation at post-intervention (Hedges g=-0.17, 95% CI=-0.30, -0.04, p=0.011), programmes that only included *child-parent relations* content notably had a larger, significant effect (Hedges g=-0.44, 95% CI=-0.87, -0.02, p=0.042) on physical IPV female victimisation (*Figure 20*). A test for subgroup differences, however, found a Chi^2 statistic of 1.42 (p=0.23), indicating that the differences in intervention effects between these two subgroups were not statistically significant. No heterogeneity was detected in either group. Since the subgroup analyses included four and two studies in each group, interpretation of these findings, however, warrants caution.

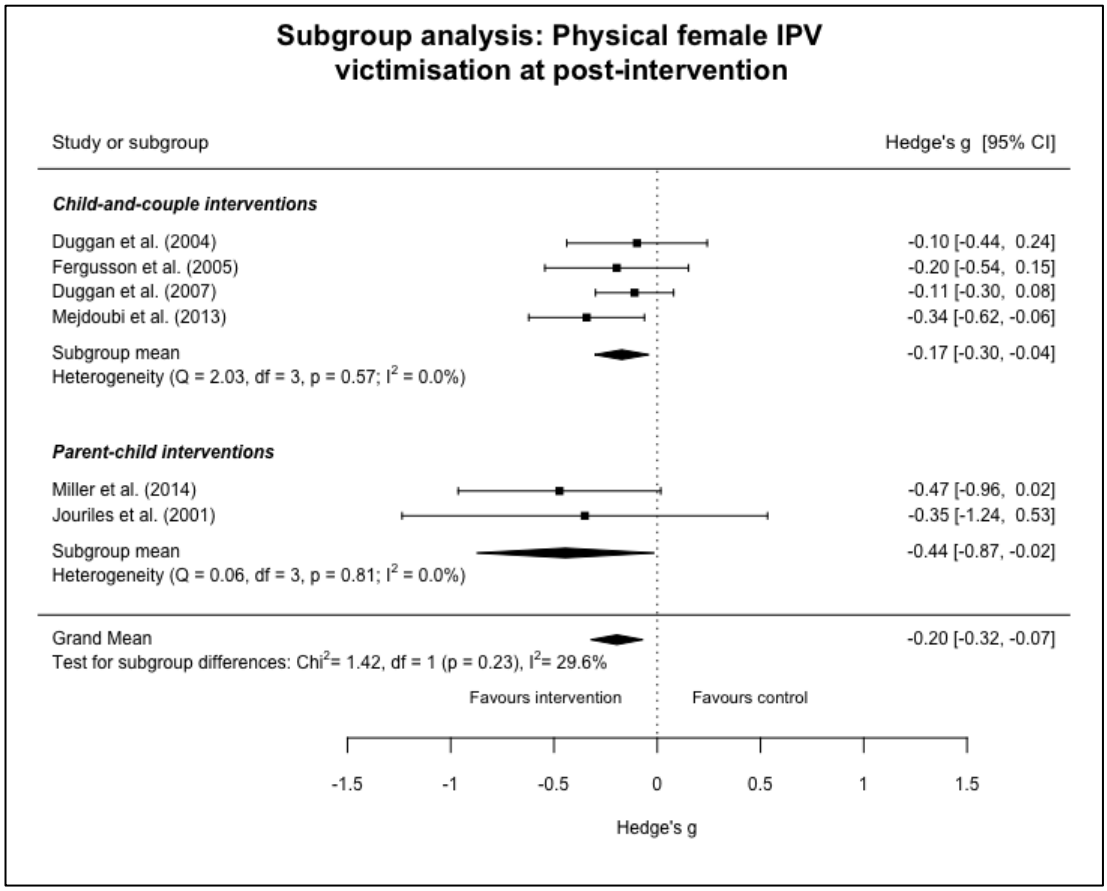

Figure 20

5 Discussion

5.1 Summary of main results

IPV victimisation
Overall there was moderate-quality evidence showing a greater reduction in IPV female victimisation in the parenting interventions compared to the controls. More specifically, meta-analyses results revealed that at post-intervention, there was a significant reduction of IPV female victimisation in both overall and physical IPV in the intervention groups. None of these reductions, however, were significant at follow-up. There were also no significant differences found in psychological IPV female victimisation, and only one study reported sexual IPV female victimisation, yet this finding was also non-significant. Given the low numbers of studies included in some of the meta-analyses, however, these findings should be treated with caution. None of the studies included in the review reported on male IPV victimisation.

Interestingly, in terms of the significant reductions that were found in both overall and physical IPV female victimisation, these do not appear to be driven by parenting interventions that also include *couple relations* content. Indeed, findings of the subgroup analyses examining whether differences in intervention content (i.e. interventions with or without *couple relations* content) had an influence on the effect of the interventions on IPV outcomes, yielded no significant differences between the two groups. While bearing in mind that the subgroup differences were not significant, it is notable that the interventions *without* couple relations content appeared to have a marginally larger effect. As before, caution is needed, considering the low number of studies in some subgroups.

IPV perpetration
There was low to very low-quality evidence showing a greater reduction in male IPV perpetration in parenting interventions compared to controls at post-intervention. More specifically, meta-analysis results revealed a significant reduction in physical male IPV perpetration in the intervention groups at post-intervention. However, while these results are encouraging, given the small number of studies included (n=2) in this analysis, these findings should be treated with caution and further research is still needed.

A finding that warrants particular attention is the significant *increase* in overall male IPV perpetration that was found at follow-up. This finding suggests that the reduction in IPV perpetration observed at post-intervention, may not only have failed to be maintained in the longer-term, but may also have led to an increase in male IPV perpetration. This possible iatrogenic effect highlights the urgent need for further research on the longer-term effect of parenting interventions on male IPV perpetration, in order to ensure the interventions are not causing harm. While this finding is evidently important, it should be interpreted with caution considering that only one of the two studies shows an increase in male IPV perpetration, while the other shows a reduction in

male IPV perpetration. In terms of female IPV perpetration, meta-analysis results showed a significant reduction in both overall and physical female IPV perpetration. Of note, however, none of these effects were not significant at follow-up.

5.2 Overall completeness and applicability

Completeness
This review aimed to investigate the effect of parenting interventions on IPV in parents and caregivers with children aged 0-12 years old. In terms of completeness, while some studies reported specific types of IPV (e.g. physical or psychological IPV), most studies reported 'overall' IPV (e.g. the overall CTS score which combines numerous types of IPV). Hence, while studies that reported overall IPV still addressed the research question (i.e. the effect of parenting interventions on IPV), in terms of completeness, studies that delineated the specific types of IPV allowed for a more complete analysis surrounding the effect of parenting interventions on not only *overall* IPV, but also on different *types* of IPV. Accordingly, as discussed in the conclusion, it would be beneficial for more studies to delineate the type of IPV experienced or perpetrated.

Applicability
In terms of applicability, the studies included were conducted in a wide range of countries, with diverse ethnic groups, differently defined risk groups, and in a variety of settings including both community centres and participants' homes. While approximately half of the included studies were conducted in the US, the others were conducted in a range of both high- and low-income countries which increases the applicability and generalisability of the findings. The review also included a comprehensive range of parenting interventions, which can be seen to further enhance the generalisability of the results. Notably, however, there was an overall low proportion of male caregivers in the studies, with relatively few interventions specifically aimed at male caregivers and fathers (with a few exceptions, e.g. Kohli et al., 2020; Stover, 2015; Stover et al., 2019), which limits the applicability of the current evidence to predominantly female caregivers.

5.3 Quality of the evidence

The overall quality of the evidence was assessed using the GRADE approach and is presented, along with explanations of the assessments made (i.e. downgrading or upgrading the certainty of evidence), in *Table 9* (Higgins et al., 2019). Overall, the body of evidence was rated between moderate to very low. For outcomes measured at post-intervention, the quality of evidence was rated as moderate for overall IPV female victimisation and perpetration, and as low to very low for physical and psychological IPV female victimisation and for male IPV perpetration. For all of the outcomes measured at follow-up, the quality of evidence was rated as very low, except for physical IPV female victimisation, which was rated as low. The main reasons for downgrading the quality of the evidence included risk of bias, imprecision, and publication bias (*Table 9*).

Table 9 Summary of Findings and Quality of Evidence

Quality assessment								Summary of Findings				
Outcome	**No of participants (studies)**	**Study design**	**Risk of bias**	**Inconsistency**	**Indirectness**	**Imprecision**	**Publication bias**	**Sample size**		**Effect**		**Quality of Evidence (GRADE)**
								Intervention	**Control**	**Effect size**	**Confidence Intervals**	
Post-intervention												
Female Victimisation - Post-intervention												
Overall IPV	2089 (10 studies)	randomised trials	not serious	not serious	not serious	not serious	strongly suspected [a]	1069	1020	-0.14	(-0.25, -0.03)	⊕⊕⊕◯ **MODERATE**
Physical IPV	1589 (6 studies)	randomised trials	serious [c]	not serious	not serious	not serious	strongly suspected [b]	856	733	-0.20	(-0.32, -0.07)	⊕⊕◯◯ **LOW**
Psychological IPV	1079 (3 studies)	randomised trials	serious [c]	not serious	not serious	serious [d]	strongly suspected [b]	614	465	-0.07	(-0.20, 0.07)	⊕◯◯◯ **VERY LOW**
Male Victimisation - Post-intervention												
No study measured this outcome	–	–	–	–	–	–	–	–	–	–	–	–
Male Perpetration - Post-intervention												
Overall IPV	1191 (3 studies)	randomised trials	not serious	serious [h]	not serious	serious [d g]	strongly suspected [b]	601	590	-0.25	(-0.60, 0.11)	⊕◯◯◯ **VERY LOW**
Physical IPV	386 (2 studies)	randomised trials	serious [e]	not serious	not serious	serious [g]	strongly suspected [b]	197	189	-0.23	(-0.43, -0.03)	⊕◯◯◯ **VERY LOW**
Female Perpetration - Post-intervention												
Overall IPV	830 (2 studies)	randomised trials	not serious	not serious	not serious	not serious	strongly suspected [b]	493	337	-0.29	(-0.43, -0.14)	⊕⊕⊕◯ **MODERATE**
Physical IPV	652 (3 studies)	randomised trials	serious [c]	not serious	not serious	not serious	strongly suspected [b]	353	299	-0.24	(-0.40, -0.08)	⊕⊕◯◯ **LOW**
Psychological IPV	634 (2 studies)	randomised trials	serious [c]	not serious	not serious	serious [d g]	strongly suspected [b]	344	290	-0.13	(-0.30, 0.04)	⊕◯◯◯ **VERY LOW**
Follow-up												
Female Victimisation - Follow-up												
Overall IPV	1140 (3 studies)	randomised trials	not serious	serious [h]	not serious	serious [d]	strongly suspected [b]	640	500	-0.73	(-1.90, 0.45)	⊕◯◯◯ **VERY LOW**
Physical IPV	1166 (4 studies)	randomised trials	serious [f]	not serious	not serious	serious [d]	strongly suspected [b]	579	587	-0.16	(-0.35, 0.03)	⊕⊕◯◯ **LOW**

Psychological IPV	1017 (2 studies)	randomised trials	serious [e]	not serious	not serious	serious [d g]	strongly suspected [b]	560	457	-0.0005	(-0.14, 0.14)	⊕○○○ **VERY LOW**
Male Victimisation - Follow-up												
No study measured this outcome	–	–	–	–	–	–	–	–	–	–	–	–
Male Perpetration - Follow-up												
Physical IPV	398 (2 studies)	randomised trials	serious [c]	not serious	not serious	serious [d g]	strongly suspected [b]	201	197	0.26	(0.06, 0.46)	⊕○○○ **VERY LOW**
Female Perpetration - Follow-up												
Overall IPV	1054 (2 studies)	randomised trials	not serious	serious [h]	not serious	serious [d g]	strongly suspected [b]	595	459	-1.48	(-4.48, 1.52)	⊕○○○ **VERY LOW**
Physical IPV	846 (3 studies)	randomised trials	serious [f]	serious [h]	not serious	serious [d]	strongly suspected [b]	434	412	-0.17	(-0.47, 0.14)	⊕○○○ **VERY LOW**
Psychological IPV	828 (2 studies)	randomised trials	serious [f]	not serious	not serious	serious [d g]	strongly suspected [b]	425	403	-0.11	(-0.26, 0.03)	⊕○○○ **VERY LOW**

Explanations:
a. Publication bias was suspected due to asymmetrical funnel plot (*Figure 21*)
b. While there were not sufficient studies available to create a funnel plot for this outcome, publication bias was suspected due to the predominately positive results of the studies, which favoured the intervention
c. The study that had a large weight for the overall effect estimate was classified to be at serious risk of bias because of bias due to missing outcome data and bias due to measurement of the outcome
d. The confidence intervals cross one (the line of no effect)
e. The study that had a large weight for the overall effect estimate was classified as at serious risk of bias because of bias due to measurement of the outcome
f. One of the two studies that had a large weight for the overall effect estimate was classified as at serious risk of bias because of bias due to measurement of the outcome
g. Outcome based on a low number of studies
h. Considerable statistical heterogeneity (high I^2)

Abbreviations: IPV: intimate partner violence; GRADE: Grading of Recommendations, Assessment, Development and Evaluation (Schünemann et al., 2013)

Publication bias

Publication bias was assessed by constructing a contour-enhanced funnel plot for the outcome overall IPV female victimisation at post-intervention, which upon visual inspection suggests publication bias (*Figure 21*). Funnel plots with a contour overlay (indicating areas of statistical significance and non-significance) can aid the interpretation of a funnel plot by helping distinguish asymmetry due to publication bias from that which arises due to other factors (Peters, Sutton, Jones, Abrams, & Rushton, 2008). Since in *Figure 21* studies appear to be missing in regions where findings would be statistically non-significant and unfavourable to the intervention, this supports the likelihood that the asymmetry is a result of publication bias. Due to insufficient studies it was not possible to construct funnel plots for the other outcomes.

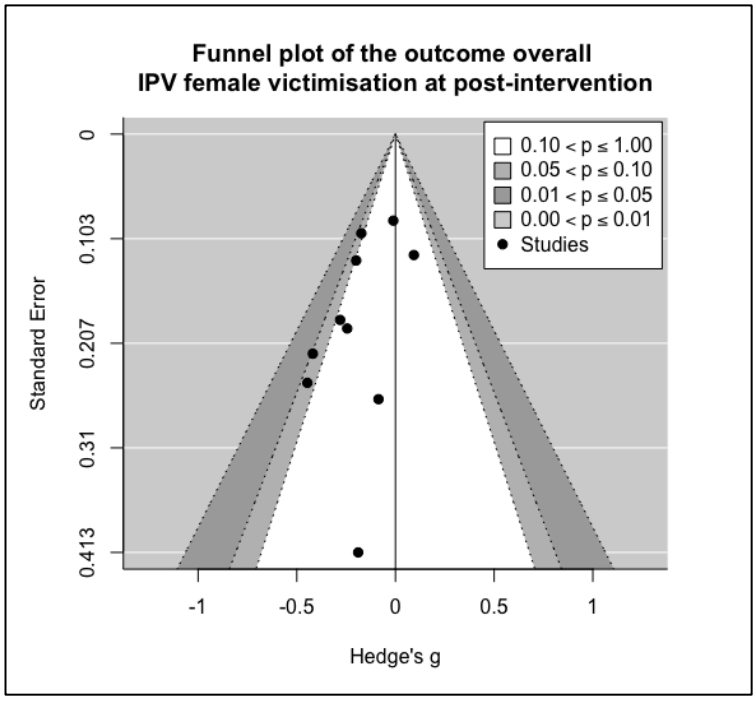

Figure 21

5.4 Potential biases in the review process

While a comprehensive search was conducted, it is possible that decisions surrounding the inclusion or exclusion of studies may have introduced bias in the review findings. For instance, one of the inclusion criteria specified that multicomponent parenting interventions would be included if at least 50% of the intervention consisted of parenting content. In some cases, outlines of programme content were unavailable, making it unclear whether at least 50% of the programme consisted of parenting content. However, in such cases, to mitigate bias when making judgements whether a programme met the inclusion criteria or not, study authors were contacted (Appendix A) to obtain clarification. Further, while it is recommended that at least two reviewers are involved in the review process to

minimise inconsistencies and bias (Higgins et al., 2019), this was not possible in the context of an MSc thesis.

5.5 Strengths and limitations

To the author's knowledge, this is the first systematic review to synthesise evidence surrounding the effect of parenting interventions on IPV. This review thus offers a unique contribution to the fields of parenting and IPV. Three particular strengths of this review include: the comprehensive, sensitive search strategy employed, the inclusion of parenting interventions from a variety of countries, and the focus on RCTs, a study design which, if well-executed, is often regarded to offer the highest quality evidence for investigating intervention effects (Balshem et al., 2011).

There are also limitations of this review worth discussing. First, while including study design (RCT) in the search strategy helped to increase the specificity of the search, this may have led to less well-indexed studies being missed. However, this trade off was necessary since without this, the search result would have yielded more than 270,000 studies. A second notable limitation is the range of parenting interventions included. While efforts were made to make the intervention inclusion criteria clear and transparent, some may argue that differences in the included interventions, such as differences in intervention duration, make them challenging to compare. However, research indicates that longer parenting interventions may not necessarily lead to larger effects, and that after a certain threshold, an intervention may not result in any greater effects in terms of parenting outcomes (Bakermans-Kranenburg, Van IJzendoorn, & Juffer, 2003; Mihelic, Morawska, & Filus, 2017).

Another limitation is the low number of studies included in many of the meta-analyses (n=2 for seven out of the fifteen meta-analyses), which means the findings need to be interpreted with caution. Indeed, if more studies measured IPV outcomes and could be included in the meta-analyses, the confidence in the results could be strengthened (Guolo & Varin, 2017).

A fourth limitation is associated with the severity level of the IPV outcomes measured. One study, Mejdoubi et al. (2013), separated their IPV outcomes based on IPV severity level (using the severity levels defined in the CTS tool), with Level 1 indicating more severe IPV and Level 2 indicating less severe IPV (Straus et al., 1996). Mejdoubi et al. (2013) only found slight variations in terms of the effect of the intervention in relation to the IPV severity level. Notably, however, none of the other studies in the review separated IPV outcomes based on severity (even when using the CTS tool), and as such, the Level 1 and Level 2 IPV data from Mejdoubi et al. (2013) were combined in order to be consistent. However, since it is possible that parenting interventions may have different effects on different levels of IPV severity, this should be further examined in future research by providing IPV data disaggregated based on severity.

6 Conclusion

6.1 Implications for policy and practice

The findings of this review have numerous important implications for both policy and practice. Indeed, this review offers promising, albeit tentative, evidence that parenting interventions, even those without a component focusing on couple relations, may have a positive effect on reducing IPV. More specifically, the results of this review suggest that parenting interventions may reduce both overall and physical IPV female victimisation. These findings are of particular relevance given the growing emphasis in policy on increasing multisector collaboration and global efforts to reduce IPV and CM (e.g. Sustainable Development Goals, INSPIRE Strategies For Ending Violence Against Children (WHO, 2016)).

These results are also of high importance for policymakers and practitioners seeking to combine and maximise prevention efforts, especially in resource-limited contexts (Bacchus et al., 2017). Notably, despite the high co-occurrence of CM and IPV, in the past these two issues have predominately been addressed separately (Guedes & Mikton, 2013). However, even with the growing recognition surrounding the intersections between CM and IPV (Guedes et al., 2016), there is a paucity of research on prevention efforts targeting both issues. The present review thus offers valuable, preliminary evidence on how existing interventions, such as parenting programmes, may be part of a multi-faceted response that might have the potential to address both forms of violence concurrently. Indeed, these results are likely to feed into a new WHO guideline on parenting interventions, in which IPV is one of the proposed secondary outcomes of general parenting interventions (F. Gardner, personal communication, 6 August, 2020).

6.2 Implications for research

The results of this review also have implications for research. First, future research should aim to address the limitations in the current evidence base. For instance, when measuring IPV, more studies should seek to distinguish between different types of IPV (e.g. physical, psychological, and sexual IPV) in order to better delineate how parenting interventions may have a different effect on different types of IPV. Second, future studies should also focus on conducting more long-term assessments. Especially in light of the result indicating that male IPV perpetration appeared to have increased at follow-up, long-term assessments are vital to ensure that interventions are not causing harm. Third, considering the high co-occurrence of CM and IPV (Guedes et al., 2016), there is also a need for studies on parenting intervention to more routinely measure IPV. Evidence from more trials would allow for more subgroup analyses to be conducted, which may offer further insights on how variations in intervention content and delivery may impact IPV outcomes differently.

Fourth, while a full discussion surrounding the shortcomings of the CTS tool is beyond the scope of this review, given the extensive use of the CTS in research and

the growing emphasis on measuring IPV it is important to acknowledge that certain limitations of the tool warrant greater consideration in future studies. Of note, various scholars have highlighted that the CTS likely renders a 'gendered systematic reporting bias' (Loseke & Kurz, 2005, p.83), which, due to characteristics of its design, results in the tool *underestimating* violence perpetrated by men, whilst *overestimating* violence perpetrated by women. Notably, while some researchers stress that all forms of violence are detrimental, and that men's and women's use of violence is equivalent (Straus, 2005), other scholars are wary of this perspective and posit that this approach can be harmful, and argue that men's and women's use of violence should not be deemed equivalent because of the substantial differences in context, causes, and consequences (Loseke & Kurz, 2005). These beliefs underscore the inevitable theoretical and political debates that surrounds IPV, debates which notably also have implications both in terms of how IPV is measured in research, but also how interventions are designed and carried out in practice, and the importance of taking these concerns into consideration in future research.

7 References

7.1 Included studies

Betancourt, T. S., Jensen, S. K. G., Barnhart, D. A., Brennan, R. T., Murray, S. M., Yousafzai, A. K., … Kamurase, A. (2020). Promoting parent-child relationships and preventing violence via home-visiting: A pre-post cluster randomised trial among Rwandan families linked to social protection programmes. *BMC Public Health*, *20*(1). https://doi.org/10.1186/s12889-020-08693-7

Duggan, A., Caldera, D., Rodriguez, K., Burrell, L., Rohde, C., & Crowne, S. S. (2007). Impact of a statewide home visiting program to prevent child abuse. *Child Abuse and Neglect*, *31*(8), 801–827. https://doi.org/10.1016/j.chiabu.2006.06.011

Duggan, A., Fuddy, L., Burrell, L., Higman, S. M., McFarlane, E., Windham, A., & Sia, C. (2004). Randomized trial of a statewide home visiting program to prevent child abuse: Impact in reducing parental risk factors. *Child Abuse and Neglect*, *28*(6), 623–643. https://doi.org/10.1016/j.chiabu.2003.08.008

Fergusson, D., Horwood, J., & Ridder, E. (2005). *Early Start Evaluation Report* (Early Start Project). Retrieved from https://www.earlystart.co.nz/wp-content/uploads/2016/04/evalreport2005.pdf

Gardner, F., Lachman, J. M., Cheah, P., Tapanya, S., Ward, C., &, & McCoy, A. (2020). Randomized controlled trial of an evidence-informed parenting intervention to prevent violence against young children by parents and primary caregivers in Thailand. *Manuscript in Preparation.*

Heyman, R. E., Slep, A. M. S., Lorber, M. F., Mitnick, D. M., Xu, S., Baucom, K. J. W., … Niolon, P. H. (2019). A Randomized, Controlled Trial of the Impact of the Couple CARE for Parents of Newborns Program on the Prevention of Intimate Partner Violence and Relationship Problems. *Prevention Science*, *20*(5), 620–631. https://doi.org/10.1007/s11121-018-0961-y

Jacobs, F., Easterbrooks, M. A., Goldberg, J., Mistry, J., Bumgarner, E., Raskin, M., … Fauth, R. (2016). Improving adolescent parenting: Results from a randomized controlled trial of a home visiting program for young families. *American Journal of Public Health*, *106*(2), 342–349.

Jouriles, E. N., McDonald, R., Spiller, L., Norwood, W. D., Swank, P. R., Stephens, N., … Buzy, W. M. (2001). Reducing conduct problems among children of battered women. *Journal of Consulting and Clinical Psychology*, *69*(5), 774–785. https://doi.org/10.1037/0022-006X.69.5.774

Jouriles, E. N., Rosenfield, D., McDonald, R., Vu, N. L., Rancher, C., & Mueller, V. (2018). Children exposed to intimate partner violence: Conduct problems, interventions, and partner contact with the child. *Journal of Clinical Child & Adolescent Psychology*, *47*(3), 397–409.

Kohli, A., Jayasekara, P., & McLean, L. (2020). *An Evaluation of the REAL Fathers Initiative Scale-Up in Northern Uganda.* The Prevention Collaborative. Retrieved from https://prevention-collaborative.org/wp-content/uploads/2020/02/Study-Summary-REAL-Fathers-low-res-Final.pdf

Lachman, J. M., Alampay, L. P., Alinea, C., Gardner, F., Hutchings, J., Ward, C., … Garilao, M. A. (2020). Parenting for Lifelong Health-Philippines: Randomized Controlled Trial of a Culturally-adapted Parenting Program on Reducing the Risk of Violence Against Children in Low-income Filipino Families With Children Aged 2 to 6 Years in Manila. *Manuscript in Preparation.*

Lachman, J. M., Cluver, L., Ward, C. L., Hutchings, J., Mlotshwa, S., Wessels, I., & Gardner, F. (2017). Randomized controlled trial of a parenting program to reduce the risk of child maltreatment in South Africa. *Child Abuse & Neglect*, *72*, 338–351.

Mejdoubi, J., van den Heijkant, S. C. C. M., van Leerdam, F. J. M., Heymans, M. W., Hirasing, R. A., & Crijnen, A. A. M. (2013). Effect of Nurse Home Visits vs. Usual Care on Reducing Intimate Partner Violence in Young High-Risk Pregnant Women: A Randomized Controlled Trial. *PLoS ONE*, *8*(10), 1–12. https://doi.org/10.1371/journal.pone.0078185

Miller, L. E., Howell, K. H., & Graham-Bermann, S. A. (2014). The effect of an evidence-based intervention on women's exposure to intimate partner violence. *American Journal of Orthopsychiatry*, *84*(4), 321–328. https://doi.org/10.1037/h0099840

Skar, A.-M. S. M. S., Sherr, L., Macedo, A., Tetzchner, S. von, & Fostervold, K. I. (2017). Evaluation of parenting interventions to prevent violence against children in Colombia: A randomized controlled trial. *Journal of Interpersonal Violence*, 0886260517736881. https://doi.org/10.1177/0886260517736881

Stein, S. F., Grogan-Kaylor, A. C., Galano, M. M., Clark, H. M., & Graham-Bermann, S. A. (2018). Contributions to Depressed Affect in Latina Women: Examining the Effectiveness of the Moms' Empowerment Program. *Journal of Interpersonal Violence*. https://doi.org/10.1177/0886260518760005

Stover, C. S. (2015). Fathers for Change for Substance Use and Intimate Partner Violence: Initial Community Pilot. *Family Process*, *54*(4), 600–609. https://doi.org/10.1111/famp.12136

Stover, C. S., McMahon, T. J., & Moore, K. (2019). A randomized pilot trial of two parenting interventions for fathers in residential substance use disorder treatment. *Journal of Substance Abuse Treatment*, *104*, 116–127. https://doi.org/10.1016/j.jsat.2019.07.003

Ward, C. L., Wessels, I. M., Lachman, J. M., Hutchings, J., Cluver, L. D., Kassanjee, R., … Gardner, F. (2020). Parenting for Lifelong Health for Young Children: a randomized controlled trial of a parenting program in South Africa to prevent harsh parenting and child conduct problems. *Journal of Child Psychology and Psychiatry*, *61*(4), 503–512.

7.2 Excluded studies

Adams, J. F. (2001). Impact of parent training on family functioning. *Child and Family Behavior Therapy*, *23*(1), 29–42. https://doi.org/10.1300/J019v23n01_03

Adler-Baeder, F., Garneau, C., Vaughn, B., McGill, J., Harcourt, K. T., Ketring, S., & Smith, T. (2018). The Effects of Mother Participation in Relationship Education on Coparenting, Parenting, and Child Social Competence: Modeling Spillover Effects for Low-Income Minority Preschool Children. *Family Process*, *57*(1), 113–130. https://doi.org/10.1111/famp.12267

Anderson, N. L. R., Koniak-Griffin, D., Keenan, C. K., Uman, G., Duggal, B. R., & Casey, C. (1999). Evaluating the outcomes of parent-child family life education. *Scholarly Inquiry for Nursing Practice*, *13*(3), 211–234.

Annan, J., Sim, A., Puffer, E. S., Salhi, C., & Betancourt, T. S. (2017). Improving Mental Health Outcomes of Burmese Migrant and Displaced Children in Thailand: a Community-Based Randomized Controlled Trial of a Parenting and Family Skills Intervention. *Prevention Science*, *18*(7), 793–803. https://doi.org/10.1007/s11121-016-0728-2

Ashburn, K., Kerner, B., Ojamuge, D., & Lundgren, R. (2017). Evaluation of the Responsible, Engaged, and Loving (REAL) Fathers Initiative on Physical Child Punishment and Intimate Partner Violence in Northern Uganda. *Prevention Science*, *18*(7), 854–864. https://doi.org/10.1007/s11121-016-0713-9

August, G. J., Egan, E. A., Realmuto, G. M., & Hektner, J. M. (2003). Parceling component effects of a multifaceted prevention program for disruptive elementary school children. *Journal of Abnormal Child Psychology*, *31*(5), 515–527. https://doi.org/10.1023/A:1025401115430

Ayala, G. X., Elder, J. P., Campbell, N. R., Arredondo, E., Baquero, B., Crespo, N. C., & Slymen, D. J. (2010). Longitudinal intervention effects on parenting of the Aventuras para Niños study. *American Journal of Preventive Medicine*, *38*(2), 154–162.

Baggett, K., Davis, B., Feil, E., Sheeber, L., Landry, S., Leve, C., & Johnson, U. (2017). A Randomized Controlled Trial Examination of a Remote Parenting Intervention: Engagement and Effects on Parenting Behavior and Child Abuse Potential. *Child Maltreatment*, *22*(4), 315–323. https://doi.org/10.1177/1077559517712000

Bailey, E. L., van der Zwan, R., Brooks, A., & Brooks, A. (2015). Keeping It Going: Evidence of Long-Term Improvements After Implementation of the 1-2-3 Magic Parenting Program. *Child and Family Behavior Therapy*, *37*(4), 303–320. https://doi.org/10.1080/07317107.2015.1104776

Bailey, E. L., van der Zwan, R., Phelan, T. W., & Brooks, A. (2012). The 1-2-3 Magic Program: Implementation Outcomes of an Australian Pilot Evaluation With School-Aged Children. *Child and Family Behavior Therapy*, *34*(1), 53–69. https://doi.org/10.1080/07317107.2012.654455

Baker, A. J. L., Piotrkowski, C. S., & Brooks-Gunn, J. (1998). The effects of the Home Instruction Program for Preschool Youngsters (HIPPY) on children's school performance at the end of the program and one year later. *Early Childhood Research Quarterly*, *13*(4), 571–588. https://doi.org/10.1016/S0885-2006(99)80061-1

Bamberger, K. T., Coatsworth, J. D., Fosco, G. M., & Ram, N. (2014). Change in participant engagement during a family-based preventive intervention: ups and

downs with time and tension. *Journal of Family Psychology : JFP : Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, *28*(6), 811–820. https://doi.org/10.1037/fam0000036
Benzies, K. M., & Magill-Evans, J. (2015). Through the eyes of a new dad: Experiences of first-time fathers of late-preterm infants. *Infant Mental Health Journal*, *36*(1), 78–87.
Berlin, L. J., Martoccio, T. L., Appleyard Carmody, K., Goodman, W. B., O'Donnell, K., Williams, J., … Dodge, K. A. (2017). Can typical US home visits affect infant attachment? Preliminary findings from a randomized trial of Healthy Families Durham. *Attachment & Human Development*, *19*(6), 559–579.
Bhopal, S., Verma, D., Divan, G., Hill, Z., Barlow, J., Roy, R., & Kirkwood, B. (2017). Early life stress of infants in the SPRING home visits intervention promoting child growth and development in rural India (SPRING-ELS): development of stress measures for administration at scale. *The Lancet*, *389*, S26.
Bjørknes, R., & Manger, T. (2013). Can Parent Training Alter Parent Practice and Reduce Conduct Problems in Ethnic Minority Children? A Randomized Controlled Trial. *Prevention Science*, *14*(1), 52–63. https://doi.org/10.1007/s11121-012-0299-9
Block, S., Brown, C. A., Barretti, L. M., Walker, E., Yudt, M., & Fretz, R. (2014). A mixed-method assessment of a parenting program for incarcerated fathers. *Journal of Correctional Education (1974-)*, *65*(1), 50–67.
Bogle, K. E. (2007). *Evaluation of a brief group parent training intervention in the context of an after-school program for middle-school students*. University of South Carolina.
Booth-LaForce, C., Oxford, M. L., Barbosa-Leiker, C., Burduli, E., & Buchwald, D. S. (2020). Randomized Controlled Trial of the Promoting First Relationships®Preventive Intervention for Primary Caregivers and Toddlers in an American Indian Community. *Prevention Science*, *21*(1), 98–108.
Bradley, S. J., Jadaa, D.-A., Brody, J., Landy, S., Tallett, S. E., Watson, W., … Stephens, D. (2003). Brief psychoeducational parenting program: An evaluation and 1-year follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, *42*(10), 1171–1178.
Breitenstein, S. M., Brager, J., Ocampo, E. V., & Fogg, L. (2017). Engagement and Adherence With ezPARENT, an mHealth Parent-Training Program Promoting Child Well-Being. *Child Maltreatment*, *22*(4), 295–304. https://doi.org/10.1177/1077559517725402
Breitenstein, S. M., Fogg, L., Ocampo, E. V, Acosta, D. I., & Gross, D. (2016). Parent Use and Efficacy of a Self-Administered, Tablet-Based Parent Training Intervention: A Randomized Controlled Trial. *JMIR MHealth and UHealth*, *4*(2), e36. https://doi.org/10.2196/mhealth.5202
Breitenstein, S. M., Gross, D., Fogg, L., Ridge, A., Garvey, C., Julion, W., & Tucker, S. (2012). The chicago parent program: Comparing 1-year outcomes for african american and latino parents of young children. *Research in Nursing and Health*, *35*(5), 475–489. https://doi.org/10.1002/nur.21489
Breitenstein, S. M., Laurent, S., Pabalan, L., Risser, H. J., Roper, P., Saba, M. T., & Schoeny, M. (2019). Implementation Findings From an Effectiveness-Implementation Trial of Tablet-Based Parent Training in Pediatric Primary Care. *Families, Systems and Health*, *37*(4). https://doi.org/10.1037/fsh0000447
Brigham, G. S., Slesnick, N., Winhusen, T. M., Lewis, D. F., Guo, X., & Somoza, E.

(2014). A randomized pilot clinical trial to evaluate the efficacy of Community Reinforcement and Family Training for Treatment Retention (CRAFT-T) for improving outcomes for patients completing opioid detoxification. *Drug and Alcohol Dependence*, *138*, 240–243.

Brody, G. H., McBride Murry, V., McNair, L., Chen, Y.-F., Gibbons, F. X., Gerrard, M., & Ashby Wills, T. (2005). Linking changes in parenting to parent--child relationship quality and youth self-control: The Strong African American Families Program. *Journal of Research on Adolescence*, *15*(1), 47–69.

Brody, G. H., Murry, V. M., Gerrard, M., Gibbons, F. X., Molgaard, V., McNair, L., … others. (2004). The strong African American families program: Translating research into prevention programming. *Child Development*, *75*(3), 900–917.

Brody, G. H., Yu, T., Miller, G. E., Ehrlich, K. B., & Chen, E. (2019). Preventive parenting intervention during childhood and young black adults' unhealthful behaviors: a randomized controlled trial. *Journal of Child Psychology and Psychiatry*, *60*(1), 63–71. https://doi.org/10.1111/jcpp.12968

Bröning, S., Sack, P.-M., Thomsen, M., Stolle, M., Wendell, A., Stappenbeck, J., & Thomasius, R. (2014). Implementing and evaluating the German adaptation of the "Strengthening Families Program 10-14 "--a randomized-controlled multicentre study. *BMC Public Health*, *14*(1), 83.

Brooks, L. D., Spearn, R. C., Rice, M., Crocco, D., & others. (1988). Systematic training for effective parenting (STEP): An evaluative study with a Canadian population. *Canada's Mental Health*.

Brotherson, S. E., Hektner, J. M., Hill, B. D., & Saxena, D. (2015). Targeting the Transition to Kindergarten: Academic and Social Outcomes for Children in the Gearing up for Kindergarten Program. *Society for Research on Educational Effectiveness*.

Brotman, L., Dawson-McClure, S., Kamboukos, D., Huang, K. Y., Calzada, E. J., Goldfeld, K., & Petkova, E. (2016). Effects of parentcorps in prekindergarten on child mental health and academic performance follow-up of a randomized clinical trial through 8 years of age. *JAMA Pediatrics*, *170*(12), 1149–1155. https://doi.org/10.1001/jamapediatrics.2016.1891

Brotman, L. M., Calzada, E., Huang, K.-Y., Kingston, S., Dawson-McClure, S., Kamboukos, D., … Petkova, E. (2011). Promoting effective parenting practices and preventing child behavior problems in school among ethnically diverse families from underserved, urban communities. *Child Development*, *82*(1), 258–276.

Brotman, L. M., Gouley, K. K., Chesir-Teran, D., Dennis, T., Klein, R. G., & Shrout, P. (2005). Prevention for preschoolers at high risk for conduct problems: Immediate outcomes on parenting practices and child social competence. *Journal of Clinical Child and Adolescent Psychology*, *34*(4), 724–734.

Bugental, D. B., Ellerson, P. C., Lin, E. K., Rainey, B., Kokotovic, A., & O'Hara, N. (2002). A cognitive approach to child abuse prevention. *Journal of Family Psychology*, *16*(3), 243.

Burgess, J. C. (1982). The effects of a training program for parents of preschoolers on the children's school readiness. *Reading Improvement*, *19*(4), 313.

Burke, K., Brennan, L., & Cann, W. (2012). Promoting protective factors for young adolescents: ABCD Parenting Young Adolescents Program randomized controlled trial. *Journal of Adolescence*, *35*(5), 1315–1328.

Burn, M., Lewis, A., McDonald, L., & Toumbourou, J. W. (2019). An Australian adaptation of the Strengthening Families Program: Parent and child mental

health outcomes from a pilot study. *Australian Psychologist*, *54*(4), 261–271.
Bywater, T., Hutchings, J., Daley, D., Whitaker, C., Yeo, S. T., Jones, K., … Edwards, R. T. (2009). Long-term effectiveness of a parenting intervention for children at risk of developing conduct disorder. *British Journal of Psychiatry*, *195*(4), 318–324. https://doi.org/10.1192/bjp.bp.108.056531
Caal, S., Moore, K., Murphy, K., Lawner, E., Rojas, A., & DeMand, A. (2019). Abriendo Puertas: Evaluation of a Parent Education Program for Latinos. *Hispanic Journal of Behavioral Sciences*, *41*(2), 231–249. https://doi.org/10.1177/0739986319839994
Carta, J. J., Lefever, J. B., Bigelow, K., Borkowski, J., & Warren, S. F. (2013). Randomized trial of a cellular phone-enhanced home visitation parenting intervention. *Pediatrics*, *132*(Supplement 2), S167--S173.
Castel, S., Beunard, A., Creveuil, C., Blaizot, X., Proia, N., & Guillois, B. (2016). Effects of an intervention program on maternal and paternal parenting stress after preterm birth: A randomized trial. *Early Human Development*, *103*, 17–25. https://doi.org/10.1016/j.earlhumdev.2016.05.007
Caughy, M., Miller, T. L., Genevro, J. L., Huang, K. Y., & Nautiyal, C. (2003). The effects of Healthy Steps on discipline strategies of parents of young children. *Journal of Applied Developmental Psychology*, *24*(5), 517–534. https://doi.org/10.1016/j.appdev.2003.08.004
Cefai, J., Smith, D., & Pushak, R. E. (2010). Parenting wisely: Parent training via CD-ROM with an Australian sample. *Child and Family Behavior Therapy*, *32*(1), 17–33. https://doi.org/10.1080/07317100903539709
Chamroonsawasdi, K., Suparp, J., Kittipichai, W., & Khajornchaikul, P. (2011). Gender roles, physical and sexual violence prevention in primary extend to secondary school in samutsakorn province, thailand. *Journal of the Medical Association of Thailand*, *93*(3), 358.
Chen, M., & Chan, K. L. (2016). Effects of Parenting Programs on Child Maltreatment Prevention: A Meta-Analysis. *Trauma, Violence & Abuse*, *17*(1), 88–104. https://doi.org/10.1177/1524838014566718
Chinen, M., Bos, H., Murray, M., Hamadani, J., Hossain, N., & Mahmud, M. (2015). Building Parental Capacity to Improve Child Development: Impact Evaluation of an Early Childhood Stimulation Program in Bangladesh. *Society for Research on Educational Effectiveness*.
Day, J. J., & Sanders, M. R. (2018). Do parents benefit from help when completing a self-guided parenting program online? A randomized controlled trial comparing Triple P Online with and without telephone support. *Behavior Therapy*, *49*(6), 1020–1038.
Dion, M. R., & Hershey, A. M. (2010). Relationship education for unmarried couples with children: Parental responses to the Building Strong Families Project. *Journal of Couple & Relationship Therapy*, *9*(2), 161–180.
Dishion, T. J., Shaw, D., Connell, A., Gardner, F., Weaver, C., & Wilson, M. (2008). The family check-up with high-risk indigent families: Preventing problem behavior by increasing parents' positive behavior support in early childhood. *Child Development*, *79*(5), 1395–1414. https://doi.org/10.1111/j.1467-8624.2008.01195.x
Dodge, K. A., Goodman, W. B., Murphy, R. A., O'donnell, K., & Sato, J. (2013). Randomized controlled trial of universal postnatal nurse home visiting: Impact on emergency care. *Pediatrics*, *132*(SUPPL.2), S140–S146. https://doi.org/10.1542/peds.2013-1021M

Dugravier, R., Tubach, F., Saias, T., Guedeney, N., Pasquet, B., Purper-Ouakil, D., … Greacen, T. (2013). Impact of a Manualized Multifocal Perinatal Home-Visiting Program Using Psychologists on Postnatal Depression: The CAPEDP Randomized Controlled Trial. *PLoS ONE*, *8*(8), e72216. https://doi.org/10.1371/journal.pone.0072216

Dumas, J. E., Begle, A. M., French, B., & Pearl, A. (2010). Effects of monetary incentives on engagement in the pace parenting program. *Journal of Clinical Child and Adolescent Psychology*, *39*(3), 302–313. https://doi.org/10.1080/15374411003691792

DuMont, K., Mitchell-Herzfeld, S., Greene, R., Lee, E., Lowenfels, A., Rodriguez, M., & Dorabawila, V. (2008). Healthy Families New York (HFNY) randomized trial: Effects on early child abuse and neglect. *Child Abuse & Neglect*, *32*(3), 295–315.

Duncan, L. G., & Bardacke, N. (2010). Mindfulness-based childbirth and parenting education: Promoting family mindfulness during the perinatal period. *Journal of Child and Family Studies*, *19*(2), 190–202. https://doi.org/10.1007/s10826-009-9313-7

Echols, L. C. (1999). *The effects of parent training on parent and child behaviors*. University of Tennessee, Knoxville.

Edwards, A., & Lutzker, J. R. (2008). Iterations of the SafeCare model: An evidence-based child maltreatment prevention program. *Behavior Modification*, *32*(5), 736–756. https://doi.org/10.1177/0145445508317137

Ehrensaft, M. K., Knous-Westfall, H. M., & Alonso, T. L. (2016). Web-Based Prevention of Parenting Difficulties in Young, Urban Mothers Enrolled in Post-Secondary Education. *The Journal of Primary Prevention*, *37*(6), 527–542. https://doi.org/10.1007/s10935-016-0448-1

Eisner, M., & Meidert, U. (2011). Stages of Parental Engagement in a Universal Parent Training Program. *Journal of Primary Prevention*, *32*(2), 83–93. https://doi.org/10.1007/s10935-011-0238-8

El-Mohandes, A. A. E., Katz, K. S., El-Khorazaty, M. N., McNeely-Johnson, D., Sharps, P. W., Jarrett, M. H., … Herman, A. A. (2003). The effect of a parenting education program on the use of preventive pediatric health care services among low-income, minority mothers: A randomized, controlled study. *Pediatrics*, *111*(6 I), 1324–1332. https://doi.org/10.1542/peds.111.6.1324

Esdaile, S. A. (1996). A Play-Focused Intervention Involving Mothers of Preschoolers. *American Journal of Occupational Therapy*, *50*(2), 113–123. https://doi.org/10.5014/ajot.50.2.113

Fagan, J., & Pearson, J. (2020). Fathers' Dosage in Community-based Programs for Low-income Fathers. *Family Process*, *59*(1), 81–93. https://doi.org/10.1111/famp.12416

Farris, J. R., Bert, S. S. C., Nicholson, J. S., Glass, K., & Borkowski, J. G. (2013). Effective intervention programming: Improving maternal adjustment through parent education. *Administration and Policy in Mental Health and Mental Health Services Research*, *40*(3), 211–223.

Feinberg, M. E., Jones, D. E., Hostetler, M. L., Roettger, M. E., Paul, I. M., & Ehrenthal, D. B. (2016). Couple-focused prevention at the transition to parenthood, a randomized trial: Effects on coparenting, parenting, family violence, and parent and child adjustment. *Prevention Science*, *17*(6), 751–764.

Feinberg, M. E., Jones, D. E., Kan, M. L., & Goslin, M. C. (2010). Effects of family foundations on parents and children: 3.5 years after baseline. *Journal of Family*

Psychology, *24*(5), 532.
Feinberg, M. E., Kan, M. L., & Goslin, M. C. (2009). Enhancing coparenting, parenting, and child self-regulation: Effects of family foundations 1 year after birth. *Prevention Science*, *10*(3), 276–285.
Feldman, M. A., Case, L., & Sparks, B. (1992). Effectiveness of a child-care training program for parents at-risk for child neglect. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, *24*(1), 14.
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. https://doi.org/10.1111/j.1744-6171.1998.tb00022.x
Field, T., Widmayer, S., Greenberg, R., & Stoller, S. (1982). Effects of parent training on teenage mothers and their infants. *Pediatrics*, *69*(6), 703–707.
Forehand, R., Thigpen, J. C., Parent, J., Hardcastle, E. J., Bettis, A., & Compas, B. E. (2012). The role of parent depressive symptoms in positive and negative parenting in a preventive intervention. *Journal of Family Psychology*, *26*(4), 532–541. https://doi.org/10.1037/a0028406
Fossum, S., Ristkari, T., Cunningham, C., McGrath, P. J., Suominen, A., Huttunen, J., … Sourander, A. (2018). Parental and child factors associated with participation in a randomised control trial of an Internet-assisted parent training programme. *Child and Adolescent Mental Health*, *23*(2), 71–77. https://doi.org/10.1111/camh.12193
Frank, T. J., Keown, L. J., & Sanders, M. R. (2014). Enhancing Father Engagement and Interparental Teamwork in an Evidence-Based Parenting Intervention: A Randomized-Controlled Trial of Outcomes and Processes. *Behavior Therapy*, *46*(6), 749–763. https://doi.org/10.1016/j.beth.2015.05.008
Fraser, J. A., Armstrong, K. L., Morris, J. P., & Dadds, M. R. (2000). Home visiting intervention for vulnerable families with newborns: Follow-up results of a randomized controlled trial. *Child Abuse and Neglect*, *24*(11), 1399–1429. https://doi.org/10.1016/S0145-2134(00)00193-9
Fraser, M. W., Day, S. H., Galinsky, M. J., Hodges, V. G., & Smokowski, P. R. (2004). Conduct problems and peer rejection in childhood: A randomized trial of the Making Choices and Strong Families programs. *Research on Social Work Practice*, *14*(5), 313–324.
Fujiwara, T., Kato, N., & Sanders, M. R. (2011). Effectiveness of Group Positive Parenting Program (Triple P) in Changing Child Behavior, Parenting Style, and Parental Adjustment: An Intervention Study in Japan. *Journal of Child and Family Studies*, *20*(6), 804–813. https://doi.org/10.1007/s10826-011-9448-1
Fung, A. L. C., & Tsang, S. H. K. M. (2006). Parent-child parallel-group intervention for childhood aggression in Hong Kong. *Emotional and Behavioural Difficulties*, *11*(1), 31–48. https://doi.org/10.1080/13632750500393300
Gada, S. S., & Kanumakala, S. (2003). Helping parents solve stressful life problems enhances the effectiveness of interventions for child aggression and antisocial behaviour. *Evidence-Based Mental Health*, *6*(4), 120.
Gerards, S. M. P. L., Dagnelie, P. C., Gubbels, J. S., Van Buuren, S., Hamers, F. J. M., Jansen, M. W. J., … Kremers, S. P. J. (2015). The effectiveness of lifestyle triple P in the Netherlands: a randomized controlled trial. *PLoS One*, *10*(4), e0122240.
Gershy, N., Meehan, K. B., Omer, H., Papouchis, N., & Sapir, I. S. (2017). Randomized clinical trial of mindfulness skills augmentation in parent training.

Child & Youth Care Forum, *46*(6), 783–803.
Gewirtz, A. H., DeGarmo, D. S., & Zamir, O. (2016). Effects of a Military Parenting Program on Parental Distress and Suicidal Ideation: After Deployment Adaptive Parenting Tools. *Suicide and Life-Threatening Behavior*, *46*, S23–S31. https://doi.org/10.1111/sltb.12255
Gewirtz, A. H., DeGarmo, D. S., & Zamir, O. (2018). After Deployment, Adaptive Parenting Tools: 1-Year Outcomes of an Evidence-Based Parenting Program for Military Families Following Deployment. *Prevention Science*, *19*(4), 589–599. https://doi.org/10.1007/s11121-017-0839-4
Gewirtz, A. H., Pinna, K. L. M., Hanson, S. K., & Brockberg, D. (2014). Promoting parenting to support reintegrating military families: After deployment, adaptive parenting tools. *Psychological Services*, *11*(1), 31–40. https://doi.org/10.1037/a0034134
Girolametto, L., Verbey, M., & Tannock, R. (1994). Improving joint engagement in parent-child interaction: An intervention study. *Journal of Early Intervention*, *18*(2), 155–167.
Goldfeld, S., Price, A., Smith, C., Bruce, T., Bryson, H., Mensah, F., … Kemp, L. (2019). Nurse home visiting for families experiencing adversity: A randomized trial. *Pediatrics*, *143*(1). https://doi.org/10.1542/peds.2018-1206
Gottfredson, D., Kumpfer, K., Polizzi-Fox, D., Wilson, D., Puryear, V., Beatty, P., & Vilmenay, M. (2006). The Strengthening Washington D.C. Families Project: A randomized effectiveness trial of family-based prevention. *Prevention Science*, *7*(1), 57–74. https://doi.org/10.1007/s11121-005-0017-y
Grace, R., Baird, K., Elcombe, E., Webster, V., Barnes, J., & Kemp, L. (2019). Effectiveness of the volunteer family connect program in reducing isolation of vulnerable families and supporting their parenting: Randomized controlled trial with intention-to-treat analysis of primary outcome variables. *Journal of Medical Internet Research*, *21*(11). https://doi.org/10.2196/13023
Graf, F. A., Grumm, M., Hein, S., & Fingerle, M. (2014). Improving parental competencies: subjectively perceived usefulness of a parent training matters. *Journal of Child and Family Studies*, *23*(1), 20–28.
Griest, D. L., Forehand, R., Rogers, T., Breiner, J., Furey, W., & Williams, C. A. (1982). Effects of parent enhancement therapy on the treatment outcome and generalization of a parent training program. *Behaviour Research and Therapy*, *20*(5), 429–436.
Gross, D., Belcher, H. M. E., Budhathoki, C., Ofonedu, M. E., & Uveges, M. K. (2018). Does parent training format affect treatment engagement? A randomized study of families at social risk. *Journal of Child and Family Studies*, *27*(5), 1579–1593.
Gross, D., Fogg, L., & Tucker, S. (1995). The efficacy of parent training for promoting positive parent—toddler relationships. *Research in Nursing & Health*, *18*(6), 489–499.
Gross, D., Garvey, C., Julion, W., Fogg, L., Tucker, S., & Mokros, H. (2009). Efficacy of the Chicago parent program with low-income African American and latino parents of young children. *Prevention Science*, *10*(1), 54–65. https://doi.org/10.1007/s11121-008-0116-7
Guastaferro, K., Lai, B. S., Miller, K., Chatham, J. S., Whitaker, D. J., Self-Brown, S., … Lutzker, J. R. (2018). Braiding two evidence-based programs for families at-risk: Results of a cluster randomized trial. *Journal of Child and Family Studies*, *27*(2), 535–546.

Guo, M., Morawska, A., & Sanders, M. R. (2016). A randomized controlled trial of group triple P with Chinese parents in Mainland China. *Behavior Modification*, *40*(6), 825–851.

Guttentag, C. L., Landry, S. H., Williams, J. M., Baggett, K. M., Noria, C. W., Borkowski, J. G., … others. (2014). "My Baby & Me": effects of an early, comprehensive parenting intervention on at-risk mothers and their children. *Developmental Psychology*, *50*(5), 1482.

Hackworth, N. J., Matthews, J., Westrupp, E. M., Nguyen, C., Phan, T., Scicluna, A., … Nicholson, J. M. (2018). What influences parental engagement in early intervention? Parent, program and community predictors of enrolment, retention and involvement. *Prevention Science*, *19*(7), 880–893.

Haggerty, K. P., Skinner, M. L., MacKenzie, E. P., & Catalano, R. F. (2007). A randomized trial of Parents Who Care: Effects on key outcomes at 24-month follow-up. *Prevention Science*, *8*(4), 249–260.

Hahlweg, K., Heinrichs, N., Kuschel, A., Bertram, H., & Naumann, S. (2010). Long-term outcome of a randomized controlled universal prevention trial through a positive parenting program: Is it worth the effort? *Child and Adolescent Psychiatry and Mental Health*, *4*. https://doi.org/10.1186/1753-2000-4-14

Hardy, J. B., & Streett, R. (1989). Family support and parenting education in the home: An effective extension of clinic-based preventive health care services for poor children. *The Journal of Pediatrics*, *115*(6), 927–931. https://doi.org/10.1016/S0022-3476(89)80744-9

Heinrichs, N., Kliem, S., & Hahlweg, K. (2014). Four-year follow-up of a randomized controlled trial of Triple P group for parent and child outcomes. *Prevention Science*, *15*(2), 233–245.

Henkemans, O. A. B., Keij, M., Grootjen, M., Kamphuis, M., & Dijkshoorn, A. (2018). Design and evaluation of the StartingTogether App for home visits in preventive child health care. *BMC Nursing*, *17*(1), 41.

Hurley, K., Lambert, M. C., Patwardhan, I., Ringle, J. L., Thompson, R. W., & Farley, J. (2020). Parental report of outcomes from a randomized trial of in-home family services. *Journal of Family Psychology*, *34*(1), 79–89. https://doi.org/10.1037/fam0000594

Ismayilova, L., & Karimli, L. (2020). Harsh parenting and violence against children: a trial with ultrapoor families in Francophone West Africa. *Journal of Clinical Child & Adolescent Psychology*, *49*(1), 18–35.

Ismayilova, L., Karimli, L., Sanson, J., Gaveras, E., Nanema, R., Tô-Camier, A., & Chaffin, J. (2018). Improving mental health among ultra-poor children: Two-year outcomes of a cluster-randomized trial in Burkina Faso. *Social Science and Medicine*, *208*, 180–189. https://doi.org/10.1016/j.socscimed.2018.04.022

Johnson, S., Whitelaw, A., Glazebrook, C., Israel, C., Turner, R., White, I. R., … Marlow, N. (2009). Randomized trial of a parenting intervention for very preterm infants: outcome at 2 years. *The Journal of Pediatrics*, *155*(4), 488–494.

Jungmann, T., Brand, T., Dähne, V., Herrmann, P., Günay, H., Sandner, M., & Sierau, S. (2015). Comprehensive evaluation of the pro kind home visiting program: A summary of results. *Mental Health & Prevention*, *3*(3), 89–97.

Kan, M. L., & Feinberg, M. E. (2014). Can a family-focused, transition-to-parenthood program prevent parent and partner aggression among couples with young children? *Violence and Victims*, *29*(6), 967–980.

Kemp, L., Harris, E., McMahon, C., Matthey, S., Impani, G. V., Anderson, T., …

Zapart, S. (2011). Child and family outcomes of a long-term nurse home visitation programme: A randomised controlled trial. *Archives of Disease in Childhood*, *96*(6), 533–540. https://doi.org/10.1136/adc.2010.196279

Kilburn, M. R., & Cannon, J. S. (2017). Home visiting and use of infant health care: A randomized clinical trial. *Pediatrics*, *139*(1). https://doi.org/10.1542/peds.2016-1274

Kirkland, K., Lee, E., Smith, C., & Greene, R. (2020). Sustained Impact on Parenting Practices: Year 7 Findings from the Healthy Families New York Randomized Controlled Trial. *Prevention Science*, *21*(4), 498–507. https://doi.org/10.1007/s11121-020-01110-w

Kitzman, H., Olds, D. L., Sidora, K., Henderson, C. R., Hanks, C., Cole, R., … Glazner, J. (2000). Enduring effects of nurse home visitation on maternal life course: A 3- year follow-up of a randomized trial. *Journal of the American Medical Association*, *283*(15), 1983–1989. https://doi.org/10.1001/jama.283.15.1983

Krysik, J., & Lecroy, C. W. (2007). The evaluation of Healthy Families Arizona: a multisite home visitation program. *Journal of Prevention & Intervention in the Community*, *34*(1–2), 109–127.

Lachman, J., Spreckelsen, T. F., Wamoyi, J., Wight, D., Maganga, J., & Gardner, F. (2020). Combining Economic Strengthening and Parenting Programmes to Reduce Violence Against Children in Rural Tanzania: A Cluster Randomised Controlled Trial. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3514670

LeCroy, C. W., & Krysik, J. (2011). Randomized trial of the healthy families Arizona home visiting program. *Children and Youth Services Review*, *33*(10), 1761–1766. https://doi.org/10.1016/j.childyouth.2011.04.036

Lee, E., Kirkland, K., Miranda-Julian, C., & Greene, R. (2018). Reducing maltreatment recurrence through home visitation: A promising intervention for child welfare involved families. *Child Abuse and Neglect*, *86*, 55–66. https://doi.org/10.1016/j.chiabu.2018.09.004

Lees, D., Frampton, C. M., & Merry, S. N. (2019). Efficacy of a home visiting enhancement for high-risk families attending parent management programs: a randomized superiority clinical trial. *JAMA Psychiatry*, *76*(3), 241–248.

Leung, C., Tsang, S., & Lo, C. (2017). Evaluation of Parent and Child Enhancement (PACE) Program. *Research on Social Work Practice*, *27*(1), 19–35. https://doi.org/10.1177/1049731515578882

Lewin, A., Hodgkinson, S., Waters, D. M., Prempeh, H. A., Beers, L. S., & Feinberg, M. E. (2015). Strengthening positive coparenting in teen parents: A cultural adaptation of an evidence-based intervention. *The Journal of Primary Prevention*, *36*(3), 139–154.

Li, H. C. W., Chan, S. S. C., Mak, Y. W., & Lam, T. H. (2013). Effectiveness of a parental training programme in enhancing the parent-child relationship and reducing harsh parenting practices and parental stress in preparing children for their transition to primary school: A randomised controlled trial. *BMC Public Health*, *13*(1). https://doi.org/10.1186/1471-2458-13-1079

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. https://doi.org/10.1111/j.1467-8624.2010.01550.x

Molzan, J., Nalbant, H., Bulut, A., & Sahip, Y. (2001). Including expectant fathers in antenatal education programmes in Istanbul, Turkey. *Reproductive Health Matters*, *9*(18), 114–125. https://doi.org/10.1016/S0968-8080(01)90098-9

Morgan, P. J., Collins, C. E., Plotnikoff, R. C., Callister, R., Burrows, T., Fletcher, R., … others. (2014). The 'Healthy Dads, Healthy Kids' community randomized controlled trial: A community-based healthy lifestyle program for fathers and their children. *Preventive Medicine*, *61*, 90–99.

Olds, D. (2007). Improving preschool for low-income children with programmatic randomized controlled trials. *Archives of Pediatrics & Adolescent Medicine*, *161*(8), 807–809.

Olds, D., Henderson Jr, C. R., Cole, R., Eckenrode, J., Kitzman, H., Luckey, D., … Powers, J. (1998). Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial. *Jama*, *280*(14), 1238–1244.

Olds, D. L. (1992). Home visitation for pregnant women and parents of young children. *American Journal of Diseases of Children*, *146*(6), 704–708.

Olds, D. L., Baca, P., McClatchey, M., Ingoldsby, E. M., Luckey, D. W., Knudtson, M. D., … Ramsey, M. (2015). Cluster randomized controlled trial of intervention to increase participant retention and completed home visits in the nurse-family partnership. *Prevention Science*, *16*(6), 778–788.

Olds, D. L., Henderson, C. R., Chamberlin, R., & Tatelbaum, R. (1986). Preventing child abuse and neglect: a randomized trial of nurse home visitation. *Pediatrics*, *78*(1), 65–78.

Olds, D. L., Henderson, C. R., & Kitzman, H. (1994). Does prenatal and infancy nurse home visitation have enduring effects on qualities of parental caregiving and child health at 25 to 50 months of life? *Pediatrics*, *93*(1), 89–98.

Olds, D. L., Henderson Jr, C. R., Phelps, C., Kitzman, H., & Hanks, C. (1993). Effect of prenatal and infancy nurse home visitation on government spending. *Medical Care*, *31*(2), 155–174.

Olds, D. L., Holmberg, J. R., Donelan-McCall, N., Luckey, D. W., Knudtson, M. D., & Robinson, J. (2014). Effects of home visits by paraprofessionals and by nurses on children: follow-up of a randomized trial at ages 6 and 9 years. *JAMA Pediatrics*, *168*(2), 114–121.

Olds, D. L., Kitzman, H., Anson, E., Smith, J. A., Knudtson, M. D., Miller, T., … Conti, G. (2019). Prenatal and infancy nurse home visiting effects on mothers: 18-year follow-up of a randomized trial. *Pediatrics*, *144*(6).

Olds, D. L., Kitzman, H., Cole, R., Robinson, J., Sidora, K., Luckey, D. W., … Holmberg, J. (2004). Effects of nurse home-visiting on maternal life course and child development: age 6 follow-up results of a randomized trial. *Pediatrics*, *114*(6), 1550–1559.

Palmer, M. L., Keown, L. J., Sanders, M. R., & Henderson, M. (2019). Enhancing Outcomes of Low-Intensity Parenting Groups Through Sufficient Exemplar Training: A Randomized Control Trial. *Child Psychiatry & Human Development*, *50*(3), 384–399. https://doi.org/10.1007/s10578-018-0847-z

Robling, M., Bekkers, M.-J., Bell, K., Butler, C. C., Cannings-John, R., Channon, S., … others. (2016). Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial. *The Lancet*, *387*(10014), 146–155.

Rushton, A., Monck, E., Leese, M., McCrone, P., & Sharac, J. (2010). Enhancing adoptive parenting: A randomized controlled trial. *Clinical Child Psychology*

and Psychiatry, *15*(4), 529–542.
Sandner, M., Cornelissen, T., Jungmann, T., & Herrmann, P. (2018). Evaluating the effects of a targeted home visiting program on maternal and child health outcomes. *Journal of Health Economics*, *58*, 269–283.
Schuster, M. A., Wood, D. L., Duan, N., Mazel, R. M., Sherbourne, C. D., & Halfon, N. (1998). Utilization of well-child care services for African-American infants in a low-income community: results of a randomized, controlled case management/home visitation intervention. *Pediatrics*, *101*(6), 999–1005.
Singla, D. R., Kumbakumba, E., & Aboud, F. E. (2015). Effects of a parenting intervention to address maternal psychological wellbeing and child development and growth in rural Uganda: A community-based, cluster-randomised trial. *The Lancet Global Health*, *3*(8), e458–e469. https://doi.org/10.1016/S2214-109X(15)00099-6
Spittle, A. J., Barton, S., Treyvaud, K., Molloy, C. S., Doyle, L. W., & Anderson, P. J. (2016). School-Age Outcomes of Early Intervention for Preterm Infants and Their Parents: A Randomized Trial. *Pediatrics*, *138*(6). https://doi.org/10.1542/peds.2016-1363
Stewart-Brown, S., Patterson, J., Mockford, C., Barlow, J., Klimes, I., & Pyper, C. (2004). Impact of a general practice based group parenting programme: Quantitative and qualitative results from a controlled trial at 12 months. *Archives of Disease in Childhood*, *89*(6), 519–525. https://doi.org/10.1136/adc.2003.028365
Sumargi, A., Sofronoff, K., & Morawska, A. (2015). A Randomized-Controlled Trial of the Triple P-Positive Parenting Program Seminar Series with Indonesian Parents. *Child Psychiatry and Human Development*, *46*(5), 749–761. https://doi.org/10.1007/s10578-014-0517-8
Swift, M. C., Roeger, L., Walmsley, C., Howard, S., Furber, G., & Allison, S. (2009). Rural children referred for conduct problems: evaluation of a collaborative program. *Australian Journal of Primary Health*, *15*(4), 335–340.
Thorell, L. B. (2009). The Community Parent Education Program (COPE): Treatment effects in a clinical and a community-based sample. *Clinical Child Psychology and Psychiatry*, *14*(3), 373–387.
Turner, K. M. T., Richards, M., & Sanders, M. R. (2007). Randomised clinical trial of a group parent education programme for Australian Indigenous families. *Journal of Paediatrics and Child Health*, *43*(6), 429–437. https://doi.org/10.1111/j.1440-1754.2007.01053.x
Wetterborg, D., Enebrink, P., Rhodin, K. L., Forster, M., Risto, E., Dahlström, J., … Ghaderi, A. (2019). A Pilot Randomized Controlled Trial of Internet- Delivered Parent Training for Parents of Teenagers. *Journal of Family Psychology*. https://doi.org/10.1037/fam0000541
Wood, R. G., Moore, Q., Clarkwest, A., & Killewald, A. (2014). The long-term effects of building strong families: A program for unmarried parents. *Journal of Marriage and Family*, *76*(2), 446–463.
Worku, B. N., Abessa, T. G., Wondafrash, M., Lemmens, J., Valy, J., Bruckers, L., … Granitzer, M. (2018). Effects of home-based play-assisted stimulation on developmental performances of children living in extreme poverty: a randomized single-blind controlled trial. *BMC Pediatrics*, *18*(1), 29.
Wright, L. G. (2015). The Mommy and Me Play Program: A Pilot Play Intervention for Low-Income, African American Preschool Families. *Journal of Evidence-Informed Social Work*, *12*(4), 349–368.

Zajicek-Farber, M. L. (2010). Building practice evidence for parent mentoring home visiting in early childhood. *Research on Social Work Practice*, *20*(1), 46–64. https://doi.org/10.1177/1049731509333172

Zemp, M., Milek, A., Cummings, E. M., Cina, A., & Bodenmann, G. (2016). How Couple- and Parenting-Focused Programs Affect Child Behavioral Problems: A Randomized Controlled Trial. *Journal of Child and Family Studies*, *25*(3), 798–810. https://doi.org/10.1007/s10826-015-0260-1

Zhang, R., Huang, R. wena, Gao, X. ronga, Peng, X. minga, Zhu, L. hui, Rangasamy, R., & Latour, J. M. (2018). Involvement of parents in the care of preterm infants: A pilot study evaluating a family-centered care intervention in a Chinese neonatal ICU. *Pediatric Critical Care Medicine*, *19*(8), 741–747. https://doi.org/10.1097/PCC.0000000000001586

7.3 General references

Alhusen, J. L., Ho, G. W. K., Smith, K. F., & Campbell, J. C. (2014). Addressing Intimate Partner Violence and Child Maltreatment: Challenges and Opportunities. In J. E. Korbin & R. D. Krugman (Eds.), *Handbook of Child Maltreatment*. Dordrecht: SpringerN.

Anderson, K., & van Ee, E. (2018). Mothers and children exposed to intimate partner violence: a review of treatment interventions. *International Journal of Environmental Research and Public Health*, *15*(9). https://doi.org/10.3390/ijerph15091955

Armstrong, M. I., Birnie-Lefcovitch, S., & Ungar, M. T. (2005). Pathways between social support, family well being, quality of parenting, and child resilience: What we know. *Journal of Child and Family Studies*, *14*(2), 269–281. https://doi.org/10.1007/s10826-005-5054-4

Austin, A. E., Shanahan, M. E., Barrios, Y. V., & Macy, R. J. (2019). A Systematic Review of Interventions for Women Parenting in the Context of Intimate Partner Violence. *Trauma, Violence, and Abuse*, *20*(4), 498–519. https://doi.org/10.1177/1524838017719233

Bacchus, L. J., Colombini, M., Contreras Urbina, M., Howarth, E., Gardner, F., Annan, J., … Watts, C. (2017). Exploring opportunities for coordinated responses to intimate partner violence and child maltreatment in low and middle income countries: a scoping review. *Psychology, Health and Medicine*, *22*, 135–165. https://doi.org/10.1080/13548506.2016.1274410

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. *Archives of Pediatrics & Adolescent Medicine*, *164*(1), 16–23. https://doi.org/10.1001/archpediatrics.2009.237

Bakermans-Kranenburg, M. J., Van IJzendoorn, M. H., & Juffer, F. (2003). Less is More: Meta-Analyses of Sensitivity and Attachment Interventions in Early Childhood. *Psychological Bulletin*, *129*(2), 195–215. https://doi.org/10.1037/0033-2909.129.2.195

Baldwin, J. R., Arseneault, L., Caspi, A., Fisher, H. L., Moffitt, T. E., Odgers, C. L., … Danese, A. (2018). Childhood victimization and inflammation in young adulthood: A genetically sensitive cohort study. *Brain, Behavior, and Immunity*, *67*, 211–217. https://doi.org/10.1016/j.bbi.2017.08.025

Balshem, H., Helfand, M., Schünemann, H. J., Oxman, A. D., Kunz, R., Brozek, J., … Guyatt, G. H. (2011). GRADE guidelines: 3. Rating the quality of evidence. *Journal of Clinical Epidemiology*, *64*(4), 401–406. https://doi.org/10.1016/j.jclinepi.2010.07.015

Barlow, J. (2014). Preventing child maltreatment and youth violence using parent training and home-visiting programmes. In P. D. Donnelly & C. L. Ward (Eds.), *Oxford Textbook of Violence Prevention: Epidemiology, Evidence, and Policy*. Oxford: Oxford University Press.

Barlow, J., Bergman, H., Kornør, H., Wei, Y., & Bennett, C. (2016, August 1). Group-based parent training programmes for improving emotional and behavioural adjustment in young children. *Cochrane Database of Systematic Reviews*, Vol. 2016. https://doi.org/10.1002/14651858.CD003680.pub3

Barlow, J., Smailagic, N., Bennett, C., Huband, N., Jones, H., & Coren, E. (2011). Individual and group based parenting programmes for improving psychosocial outcomes for teenage parents and their children. *Cochrane Database of*

Systematic Reviews, (3), CD002964–CD002964. https://doi.org/10.1002/14651858.cd002964.pub2
Bennett, C., Barlow, J., Huband, N., Smailagic, N., & Roloff, V. (2013). Group-Based Parenting Programs for Improving Parenting and Psychosocial Functioning: A Systematic Review. *Journal of the Society for Social Work and Research*, *4*(4), 300–332. https://doi.org/10.5243/jsswr.2013.20
Borenstein, M., Hedges, L. V, Higgins, J. P. T., & Rothstein, H. R. (2011). *Introduction to meta-analysis*. John Wiley & Sons.
Chisholm, C. A., Bullock, L., & Ferguson, J. E. (Jef. (2017). Intimate partner violence and pregnancy: epidemiology and impact. *American Journal of Obstetrics and Gynecology*, *217*(2), 141–144. https://doi.org/10.1016/j.ajog.2017.05.042
Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
Daly, M., Bruckhauf, Z., Byrne, J., Pecnik, N., Samms-Vaughan, M., Bray, R., & Margaria, A. (2015). *Family and parenting support: Policy and provision in a global context*.
Effective Practice and Organisation of Care (EPOC). (2013). Data collection form. EPOC Resources for review authors.
Feinberg, M. E. (2003). The Internal Structure and Ecological Context of Coparenting: A Framework for Research and Intervention. *Parenting*, *3*(2), 95–131. https://doi.org/10.1207/S15327922PAR0302_01
Feinberg, M. E., Boring, J., Le, Y., Hostetler, M. L., Karre, J., Irvin, J., & Jones, D. E. (2020). Supporting Military Family Resilience at the Transition to Parenthood: A Randomized Pilot Trial of an Online Version of Family Foundations. *Family Relations*, *69*(1), 109–124. https://doi.org/10.1111/fare.12415
Fisher, R. J., & Katz, J. E. (2000). Social-desirability bias and the validity of self-reported values. *Psychology & Marketing*, *17*(2), 105–120. https://doi.org/10.1002/(SICI)1520-6793(200002)17:2<105::AID-MAR3>3.0.CO;2-9
Gardner, F., & Leijten, P. (2017). Incredible Years parenting interventions: current effectiveness research and future directions. *Current Opinion in Psychology*, *15*, 99–104. https://doi.org/10.1016/j.copsyc.2017.02.023
Gardner, F., Leijten, P., Melendez-Torres, G. J., Landau, S., Harris, V., Mann, J., … Scott, S. (2019). The Earlier the Better? Individual Participant Data and Traditional Meta-analysis of Age Effects of Parenting Interventions. *Child Development*, *90*(1), 7–19. https://doi.org/10.1111/cdev.13138
Gardner, F., Montgomery, P., & Knerr, W. (2016). Transporting Evidence-Based Parenting Programs for Child Problem Behavior (Age 3–10) Between Countries: Systematic Review and Meta-Analysis. *Journal of Clinical Child and Adolescent Psychology*, *45*(6), 749–762. https://doi.org/10.1080/15374416.2015.1015134
Gibbs, A., Corboz, J., & Jewkes, R. (2018). Factors associated with recent intimate partner violence experience amongst currently married women in Afghanistan and health impacts of IPV: A cross sectional study. *BMC Public Health*, *18*(1), 593. https://doi.org/10.1186/s12889-018-5507-5
Gracia, E., Rodriguez, C. M., Martín-Fernández, M., & Lila, M. (2017). Acceptability of Family Violence: Underlying Ties Between Intimate Partner Violence and Child Abuse. *Journal of Interpersonal Violence*,

886260517707310. https://doi.org/10.1177/0886260517707310
Guedes, A., Bott, S., Garcia-Moreno, C., & Colombini, M. (2016). Bridging the gaps: a global review of intersections of violence against women and violence against children. *Global Health Action*, *9*(1), 31516. https://doi.org/10.3402/gha.v9.31516
Guedes, A., & Mikton, C. (2013). Examining the intersections between child maltreatment and intimate partner violence. *Western Journal of Emergency Medicine*, Vol. 14, pp. 377–379. https://doi.org/10.5811/westjem.2013.2.16249
Guolo, A., & Varin, C. (2017). Random-effects meta-analysis: The number of studies matters. *Statistical Methods in Medical Research*, *26*(3), 1500–1518. https://doi.org/10.1177/0962280215583568
Guyatt, G. H., Oxman, A. D., Sultan, S., Glasziou, P., Akl, E. A., Alonso-Coello, P., … Schünemann, H. J. (2011). GRADE guidelines: 9. Rating up the quality of evidence. *Journal of Clinical Epidemiology*, *64*(12), 1311–1316. https://doi.org/10.1016/j.jclinepi.2011.06.004
Haggerty, K. P., Mcglynn-Wright, A., & Klima, T. (2013). Promising parenting programmes for reducing adolescent problem behaviours. *Journal of Children's Services*, *8*(4), 229–243. https://doi.org/10.1108/JCS-04-2013-0016
Hart, T., Fann, J. R., & Novack, T. A. (2008). The dilemma of the control condition in experience-based cognitive and behavioural treatment research. *Neuropsychological Rehabilitation*, *18*(1), 1–21. https://doi.org/10.1080/09602010601082359
Hedges, L. V. (1981). Distribution theory for Glass's estimator of effect size and related estimators. *Journal of Educational Statistics*, *6*(2), 107–128.
Higgins, J. P. T., & Green, S. (2011). *Cochrane Handbook for Systematic Reviews of Interventions*. John Wiley & Sons.
Higgins, J. P. T., Thomas, J., Chandler, J., Cumpston, M. S., Li, T., Page, M., & Welch, V. (2019). *Cochrane handbook for systematic reviews of interventions*. Chichester: Wiley-Blackwell.
Higgins, J. P. T., Thompson, S. G., Deeks, J. J., & Altman, D. G. (2003, September 6). Measuring inconsistency in meta-analyses. *British Medical Journal*, Vol. 327, pp. 557–560. https://doi.org/10.1136/bmj.327.7414.557
Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016, March 1). Global prevalence of past-year violence against children: A systematic review and minimum estimates. *Pediatrics*, Vol. 137. https://doi.org/10.1542/peds.2015-4079
Hong, S., Rhee, T. G., & Piescher, K. N. (2018). Longitudinal association of child maltreatment and cognitive functioning: Implications for child development. *Child Abuse and Neglect*, *84*, 64–73. https://doi.org/10.1016/j.chiabu.2018.07.026
Jouriles, E. N., Mcdonald, R., Slep, A. M. S., Heyman, R. E., & Garrido, E. (2008). Child Abuse in the Context of Domestic Violence: Prevalence, Explanations, and Practice Implications. *Violence and Victims*, *23*(2). https://doi.org/10.1891/0886-6708.23.2.221
Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, *36*(4), 567–589. https://doi.org/10.1007/s10802-007-9201-9
Karam, E. A., & Blow, A. J. (2020). Systemic Family Therapy. *The Handbook of Systemic Family Therapy, The Profession of Systemic Family Therapy*, *1*, 147.
Lachman, J. M., Cluver, L., Ward, C. L., Hutchings, J., Mlotshwa, S., Wessels, I., &

Gardner, F. (2017). Randomized controlled trial of a parenting program to reduce the risk of child maltreatment in South Africa. *Child Abuse & Neglect*, *72*, 338–351.

Lapierre, S. (2008). Mothering in the context of domestic violence: the pervasiveness of a deficit model of mothering. *Child & Family Social Work*, *13*(4), 454–463. https://doi.org/10.1111/j.1365-2206.2008.00563.x

Leijten, P., Dishion, T. J., Thomaes, S., Raaijmakers, M. A. J., Orobio de Castro, B., & Matthys, W. (2015). Bringing Parenting Interventions Back to the Future: How Randomized Microtrials May Benefit Parenting Intervention Efficacy. *Clinical Psychology: Science and Practice*, *22*(1), 47–57. https://doi.org/10.1111/cpsp.12087

Li, M., D'Arcy, C., & Meng, X. (2016, March 1). Maltreatment in childhood substantially increases the risk of adult depression and anxiety in prospective cohort studies: Systematic review, meta-analysis, and proportional attributable fractions. *Psychological Medicine*, Vol. 46, pp. 717–730. https://doi.org/10.1017/S0033291715002743

Liles, S., Usita, P., Irvin, V. L., Hofstetter, C. R., Beeston, T., & Hovell, M. F. (2012). Prevalence and Correlates of Intimate Partner Violence Among Young, Middle, and Older Women of Korean Descent in California. *Journal of Family Violence*, *27*(8), 801–811. https://doi.org/10.1007/s10896-012-9471-z

Loseke, D. R., & Kurz, D. (2005). Men's violence toward women is the serious social problem. In *Current Controversies on Family Violence* (pp. 79–96). https://doi.org/10.4135/9781483328584.n5

Lüdecke, D. (2019). esc: Effect Size Computation for Meta Analysis.

Marshall, A. D., Feinberg, M. E., & Daly, K. A. (2019). Children's emotional and behavioral reactions to interparental aggression: The role of exposure to within-incident, cross-dyad aggression spillover. *Journal of Family Psychology*, *33*(5), 617–628. https://doi.org/10.1037/fam0000525

McCoy, A., Melendez-Torres, G. J., & Gardner, F. (2020, May 1). Parenting interventions to prevent violence against children in low- and middle-income countries in East and Southeast Asia: A systematic review and multi-level meta-analysis. *Child Abuse and Neglect*, Vol. 103, p. 104444. https://doi.org/10.1016/j.chiabu.2020.104444

Mihelic, M., Morawska, A., & Filus, A. (2017). Effects of Early Parenting Interventions on Parents and Infants: A Meta-Analytic Review. *Journal of Child and Family Studies*, *26*(6), 1507–1526. https://doi.org/10.1007/s10826-017-0675-y

Morris, A. S., Robinson, L. R., Hays-Grudo, J., Claussen, A. H., Hartwig, S. A., & Treat, A. E. (2017). Targeting Parenting in Early Childhood: A Public Health Approach to Improve Outcomes for Children Living in Poverty. *Child Development*, *88*(2), 388–397. https://doi.org/10.1111/cdev.12743

National Institute of Statistics of Rwanda ORC Macro. (2006). *Rwanda Demographic and Health Survey 2005.* Retrieved from https://dhsprogram.com/pubs/pdf/FR183/FR183.pdf

Nurse-Family Partnership (NFP). (2017). Nurse-Family Partnership Overview. Retrieved from https://nfpinternational.ucdenver.edu/nfp-model#:~:text=During home visits the NFP,%2C and health %26 human services.

Olds, D. L., Kitzman, H. J., Cole, R. E., Hanks, C. A., Arcoleo, K. J., Anson, E. A., … Stevenson, A. J. (2010). Enduring effects of prenatal and infancy home visiting by nurses on maternal life course and government spending: Follow-up

of a randomized trial among children at age 12 years. *Archives of Pediatrics and Adolescent Medicine*, *164*(5), 419–424. https://doi.org/10.1001/archpediatrics.2010.49

Peacock-Chambers, E., Ivy, K., & Bair-Merritt, M. (2017, December 1). Primary care interventions for early childhood development: A systematic review. *Pediatrics*, Vol. 140. https://doi.org/10.1542/peds.2017-1661

Peat, J. K., Mellis, C., Williams, K., & Xuan, W. (2002). *Health science research : a handbook of quantitative methods*. SAGE.

Peters, J. L., Sutton, A. J., Jones, D. R., Abrams, K. R., & Rushton, L. (2008). Contour-enhanced meta-analysis funnel plots help distinguish publication bias from other causes of asymmetry. *Journal of Clinical Epidemiology*, *61*(10), 991–996. https://doi.org/10.1016/j.jclinepi.2007.11.010

Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences : a practical guide*. Blackwell Pub.

Probst, J. C., Wang, J. Y., Martin, A. B., Moore, C. G., Paul, B. M., & Samuels, M. E. (2008). Potentially violent disagreements and parenting stress among American Indian/Alaska native families: Analysis across seven states. *Maternal and Child Health Journal*, *12*(SUPPL. 1). https://doi.org/10.1007/s10995-008-0370-0

RStudio Team. (2020). *RStudio Team*. Retrieved from http://www.rstudio.com/

Ruiz-Pérez, I., & Plazaola-Castaño, J. (2005). Intimate partner violence and mental health consequences in women attending family practice in Spain. *Psychosomatic Medicine*, *67*(5), 791–797.

Schünemann, H., Brożek, J., Guyatt, G., & Oxman, A. (2013). GRADE handbook for grading quality of evidence and strength of recommendations. Updated October 2013. The GRADE Working Group, 2013. *Available from Guidelinedevelopment. Org/Handbook*.

Sherin, K. M., Sinacore, J. M., Li, X. Q., Zitter, R. E., & Shakil, A. (1998). Hits: A short domestic violence screening tool for use in a family practice setting. *Family Medicine*, *30*(7), 508–512. Retrieved from https://pubmed.ncbi.nlm.nih.gov/9669164/

Sterne, J., Savović, J., Page, M., Elbers, R., Blencowe, N., Boutron, I., … Higgins, J. (2019). RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ*, *366*.

Straus, M. A. (2005). Women's violence toward men is a serious social problem. In *Current Controversies on Family Violence* (pp. 55–78). https://doi.org/10.4135/9781483328584.n4

Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2) development and preliminary psychometric data. *Journal of Family Issues*, *17*(3), 283–316.

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. https://doi.org/10.1111/j.1467-8624.2004.00750.x

Tang, L., & Fielding, R. (2014). Psychopharmacology and Complementary and Nonconventional Treatments in Oncology. In *Psychopharmacology in Oncology and Palliative Care* (pp. 101–126). https://doi.org/10.1007/978-3-642-40134-3_7

Taylor, C. A., Guterman, N. B., Lee, S. J., & Rathouz, P. J. (2009). Intimate partner violence, maternal stress, nativity, and risk for maternal maltreatment of young

children. *American Journal of Public Health*, *99*(1), 175–183. https://doi.org/10.2105/AJPH.2007.126722
Tran, N. K., Van Berkel, S. R., Van IJzendoorn, M. H., & Alink, L. R. A. (2017). The association between child maltreatment and emotional, cognitive, and physical health functioning in Vietnam. *BMC Public Health*, *17*(1), 1–13. https://doi.org/10.1186/s12889-017-4258-z
UNICEF. (2014). *Ending Violence Against Children: Six Strategies for Action*. New York.
UNICEF. (2017). *Preventing and Responding to Violence Against Children and Adolescents Theory of Change Acknowledgements*. Retrieved from www.unicef.org
UNSD. (2015). *The World's Women 2015: Trends and Statistics*. UN.
Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, *36*(6), 1–48.
Von Hippel, P. T. (2015). The heterogeneity statistic I2 can be biased in small meta-analyses. *BMC Medical Research Methodology*, *15*(1), 35. https://doi.org/10.1186/s12874-015-0024-z
WHO. (2013). *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva, Switzerland.
Wilson, D. B. (2017). *Practical meta-analysis effect size calculator [Online calculator]*.
World Health Organization. (2016). INSPIRE: Seven strategies for ending violence against children. In *World Health Organization*. Retrieved from http://www.who.int
Yap, M. B. H., Morgan, A. J., Cairns, K., Jorm, A. F., Hetrick, S. E., & Merry, S. (2016, December 1). Parents in prevention: A meta-analysis of randomized controlled trials of parenting interventions to prevent internalizing problems in children from birth to age 18. *Clinical Psychology Review*, Vol. 50, pp. 138–158. https://doi.org/10.1016/j.cpr.2016.10.003

8 Appendices

8.1 Appendix A: Contact with experts and researchers

List of experts and researchers contacted:

Name of expert	Email	Correspondence
Heidi Stoeckl	heidi.stoeckl@lshtm.ac.uk	Inquiry regarding additional relevant studies
Lorraine Sherr	l.sherr@ucl.ac.uk	Inquiry regarding additional relevant studies
Frances Gardner	frances.gardner@wolfson.ox.ac.uk	Inquiry regarding additional relevant studies
Anne Duggan; Kathryn Harding	aduggan@jhu.edu kharding@preventchildabuse.org	Clarifying quantity of parenting content in intervention (Healthy Families Alaska)
Anne Duggan; Megan Bair-Merritt	aduggan@jhu.edu megan.bair-merritt@bmc.org	Clarifying quantity of parenting content in intervention (Hawaii Healthy Start)
Francine Jacobs	francine.jacobs@tufts.edu	Clarifying quantity of parenting content in intervention (Healthy Families Massachusetts)
Jennifer Fraser	jennifer.fraser@sydney.edu.au	Clarifying quantity of parenting content in intervention (Home visiting programme in Australia)
Ane-Marthe Solheim Skar	a.m.s.skar@psykologi.uio.no	Clarifying quantity of parenting content in intervention (International Child Development Programme)
Mark E. Feinberg	mef11@psu.edu	Clarifying quantity of parenting content in intervention (Family Foundations programme)

Example of correspondence with experts and researchers:

Dear [researcher's title and name],

I hope this email finds you well. My name is [name removed to maintain anonymity for marking] and I am a postgraduate student at the University of Oxford pursuing an MSc in Evidence-Based Social Intervention and Policy Evaluation. For my thesis, I am conducting a systematic review on parenting and multicomponent interventions (where at least 50% of the program content focuses on parenting). In particular, I am including studies of interventions that have also measured intimate partner violence (IPV) outcomes.

I am getting in touch because I came across your (publication / research article / other relevant connection to the thesis) and am wondering if you are aware of any other reports or studies of interventions (whether published or unpublished) that might be of relevance for my work? I have completed my search and have attached the current list of included studies to this email.

Many thanks in advance.

Kind regards,
[name removed to maintain anonymity for marking]

8.2 Appendix B: Search strategies for different databases

EMBASE (Ovid) [18 May 2020] *Applied filters: English language*

1.	((parent* adj3 (program* or intervent* or train*)) OR (mother* adj3 (program* or intervent* or train*)) OR (father* adj3 (program* or intervent* or train*)) OR (caregiv* adj3 (program* or intervent* or train*)) OR (family adj3 (program* or intervent* or train*))).tw.
2.	(exp child parent relation/) AND (program* or intervent*))).tw.
3.	(home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies).tw.
4.	#1 OR #2 OR #3
5.	(exp infant/) OR (toddler/) OR (pre-school child/) OR (baby or babies or child$ or toddler$ or infant$ or preschool$ or pre-school$).tw.
6.	#4 AND #5
7.	(randomised controlled trial or randomized controlled trial or randomised trial or randomized trial or random allocation or control group).mp.
8.	#6 AND #7

PSYCINFO (Ovid) [18 May 2020] *Applied filters: English language*

1.	((parent* adj3 (program* or intervent* or train*)) OR (mother* adj3 (program* or intervent* or train*)) OR (father* adj3 (program* or intervent* or train*)) OR (caregiv* adj3 (program* or intervent* or train*)) OR (family adj3 (program* or intervent* or train*))).tw.
2.	(exp parenting AND (program* or intervent*))).tw.
3.	(home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies).tw.
4.	#1 OR #2 OR #3
5.	(baby or babies or child$ or toddler$ or infant$ or preschool$ or pre-school$).tw.
6.	#4 AND #5
7.	(randomised controlled trial or randomized controlled trial or randomised trial or randomized trial or random allocation or control group).mp.
8.	#6 AND #7

CINALH Plus (EBSCO) [18 May 2020] *Applied filters: English language*

1.	TI ((parent* N3 (program* or intervent* or train*)) OR (mother* N3 (program* or intervent* or train*)) OR (father* N3 (program* or intervent* or train*)) OR (caregiv* N3 (program* or intervent* or train*)) OR (family* N3 (program* or intervent* or train*))) OR AB ((parent* N3 (program* or intervent* or train*)) OR (mother* N3 (program* or intervent* or train*)) OR (father* N3 (program* or intervent* or train*)) OR (caregiv* N3 (program* or intervent* or train*)) OR (family* N3 (program* or intervent* or train*)))
2.	TI (home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies) OR AB (home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies)
3.	(MH "Parenting") AND ((TI (program* or intervent* or train*) OR AB (program* or intervent* or train*)))
4.	#1 OR #2 OR #3
5.	(MH "Child, Preschool") OR (MH "Infant, Newborn") OR TI (baby or babies or child* or toddler* or infant* or preschool* or pre-school*) OR AB (baby or babies or child* or toddler* or infant* or preschool* or pre-school*)
6.	#4 AND #5
7.	TX (randomised controlled trial or randomized controlled trial or randomised trial or randomized trial or random allocation or control group)
8.	#6 AND #7

ERIC (EBSCO) [18 May 2020] *Applied filters: English language*

1.	TI ((parent* N3 (program* or intervent* or train*)) OR (mother* N3 (program* or intervent* or train*)) OR (father* N3 (program* or intervent* or train*)) OR (caregiv* N3 (program* or intervent* or train*)) OR (family* N3 (program* or intervent* or train*))) OR AB ((parent* N3 (program* or intervent* or train*)) OR (mother* N3 (program* or intervent* or train*)) OR (father* N3 (program* or intervent* or train*)) OR (caregiv* N3 (program* or intervent* or train*)) OR (family* N3 (program* or intervent* or train*)))
2.	(DE “Child Rearing”) AND ((TI (program* or intervent* or train*) OR AB (program* or intervent* or train*)))

3.	TI (home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies) OR AB (home visit* or home visit* services or family nurse or nurse family or nurse family partnership or family nurse partnership or child management strategies)
4.	#1 OR #2 OR #3
5.	TI (baby or babies or child* or toddler* or infant* or preschool* or pre-school*) OR AB (baby or babies or child* or toddler* or infant* or preschool* or pre-school*)
6.	#4 AND #5
7.	TX (randomised controlled trial or randomized controlled trial or randomised trial or randomized trial or random allocation or control group)
8.	#6 AND #7

CENTRAL [18 May 2020] *Applied filters: English language*

1.	((parent* NEAR/3 (program* or intervent* or train*)):ti,ab) OR ((mother* NEAR/3 (program* or intervent* or train*)):ti,ab) OR ((father* NEAR/3 (program* or intervent* or train*)):ti,ab) OR ((caregiv* NEAR/3 (program* or intervent* or train*)):ti,ab) OR ((family* NEAR/3 (program* or intervent* or train*)):ti,ab)
2.	(“home visit*” or “home visit* services” or “family nurse” or “nurse family” or “nurse family partnership” or “family nurse partnership” or “child management strategies”):ti,ab
3.	MeSH descriptor: [Parenting] explode all trees
4.	(program* or intervent* or train*):ti,ab
5.	#1 OR #2 OR (#3 AND #4)
6.	MeSH descriptor: [Child] explode all trees
7.	MeSH descriptor: [Infant] explode all trees
8.	(infant*:ti,ab) OR (baby*:ti,ab) OR (babies*:ti,ab) OR (toddler*:ti,ab) OR (preschool*:ti,ab) OR ("pre school"*:ti,ab)
9.	#5 AND (#6 OR #7 OR #8)

10.	(“randomised controlled trial” or “randomized controlled trial” or “randomised trial” or “randomized trial” or “random allocation” or “control group”)
11.	#9 AND #10

ProQuest (Dissertation & Theses) [18 May 2020] *Applied filters: English language*

1.	(ab(parent* NEAR/3 (program* OR intervent* OR train*)) OR ti(parent* NEAR/3 (program* OR intervent* OR train*))) OR (ab(mother* NEAR/3 (program* OR intervent* OR train*)) OR ti(mother* NEAR/3 (program* OR intervent* OR train*))) OR (ab(father* NEAR/3 (program* OR intervent* OR train*)) OR ti(father* NEAR/3 (program* OR intervent* OR train*))) OR (ab(caregiv* NEAR/3 (program* OR intervent* OR train*)) OR ti(caregiv* NEAR/3 (program* OR intervent* OR train*))) OR (ab(family* NEAR/3 (program* OR intervent* OR train*)) OR ti(family* NEAR/3 (program* OR intervent* OR train*)))
2.	ti (“home visit” OR “home visitation” OR “home visiting” “home visit* services” OR “family nurse” OR “nurse family” OR “nurse family partnership” OR “family nurse partnership” OR “child management strategies”) OR ab (“home visit” OR “home visitation” OR “home visiting” OR “home visit* services” OR “family nurse” or “nurse family” OR “nurse family partnership” OR “family nurse partnership” OR “child management strategies”)
3.	SU.EXACT("Parenting") AND (ab(program* OR intervent* OR train*) OR ti(program* OR intervent* OR train*))
4.	#1 OR #2 OR #3
5.	(ab(baby or babies or child* or toddler* or infant* or preschool* or pre-school*) OR ti(baby or babies or child* or toddler* or infant* or preschool* or pre-school*))
6.	#4 AND #5
7.	ti (“randomised controlled trial” OR “randomized controlled trial” OR “randomised trial” or “randomized trial” OR “random allocation” OR “control group”) OR ab (“randomised controlled trial” OR “randomized controlled trial” OR “randomised trial” or “randomized trial” OR “random allocation” OR “control group”)
8.	#6 AND #7

8.3 Appendix C: Data collection form

Data Collection Form

Adapted from the Cochrane Collaboration data collection form
for intervention reviews – RCTs (EPOC, 2013)

General Information

Date form completed *(dd/mm/yyyy)*	
Report title *(title of paper/report that data are extracted from)*	
Study ID *(e.g. author name, year)*	
Report ID *(e.g. duplicate publications, follow-up studies)*	
Publication type *(e.g. full report, abstract)*	
Study author contact details	
Citation:	

Study eligibility

Study Characteristics	**Eligibility criteria** *(full details of eligibility criteria found in Table 3 of main text)*	**Eligibility criteria met?** Yes	No	Unclear	**Location in text/source** *(pg/¶/fig/table)*
Type of study	Randomised controlled trial	☐	☐	☐	
	Cluster randomised controlled trial	☐	☐	☐	
Participants	Parents/caregivers with a child under 12 years, or expecting a child where the child was born during the intervention (or studies with children over 12 years if mean age of sample is not over 12 years)	☐	☐	☐	
Type of intervention	Is it a parenting intervention?	☐	☐	☐	
	Does at least 50% of the programme consist of parenting content?	☐	☐	☐	
Type of comparison	Does it have a control group? (i.e. control group with no treatment, treatment-as-usual, waitlist controls, or an active control group?)	☐	☐	☐	
Types of outcome measure	Does it report quantitative IPV-related outcomes?	☐	☐	☐	
Decision	☐ Include in review ☐ Exclude from review Notes:				

DO NOT PROCEED IF STUDY EXCLUDED FROM REVIEW

Characteristics of included studies

Methods

	Descriptions as stated in report/paper	**Location in text/source** *(pg/¶/fig/table)*
Aim of study		
Study design		
Unit of allocation *(by individuals, cluster/ groups)*		
Start date		
End date		
Duration of participation *(from recruitment to last follow-up)*		
Notes:		

Participants

	Descriptions as stated in report/paper *Include comparative information for each intervention or comparison group if available*	**Location in text/source** *(pg/¶/fig/table)*
Population description *(from which study participants are drawn)*		
Setting *(including country, location, delivery / social context)*		
Inclusion criteria		
Exclusion criteria		
Method of recruitment of participants *(e.g. phone, mail, clinic patients)*		
Total no. randomised		
Clusters *(if applicable, no., type, no. people per cluster)*		
Baseline imbalances		
Withdrawals and exclusions		

Age		
Sex		
Race/ethnicity		
Other relevant sociodemographic details		
Notes:		

Intervention groups

Intervention Group 1

Copy and paste table for each intervention and comparison group

	Description as stated in report/paper	**Location in text/source** *(pg/¶/fig/table)*
Group name		
No. randomised to group *(specify whether no. people or clusters)*		
Theoretical basis *(include key references)*		
Description *(e.g. content, dose, components)*		
Duration of treatment period		
Timing *(e.g. frequency, duration of each episode)*		
Delivery *(e.g. mechanism, medium, intensity, fidelity)*		
Providers *(e.g. no., profession, training, ethnicity etc. if relevant)*		
Notes:		

.

Outcomes

Outcome 1

Copy and paste the appropriate table for each outcome, as required

	Description as stated in report/paper						**Location in text/source** *(pg/¶/fig/table)*
Outcome definition *(with diagnostic criteria if relevant)*							
Unit of measurement *(if relevant)*							
Scales: upper and lower limits *(indicate if high or low score is good)*							
Person measuring/ reporting							
Time points measured *(specify if from start /end of intervention)*							
Time points reported							
Measurement tool							
Is outcome/tool validated?							
Imputation of missing data *(e.g. assumptions made for ITT, etc.)*							
Power *(e.g. power & sample size calculation, level of power achieved)*							
Results	Intervention			Control			
	Mean	SD *(or other variance, specify)*	No. of participants	Mean	SD *(or other variance, specify)*	No. of participants	
(time point, subgroup, etc., adjust and copy rows as needed)							
Unit of analysis *(by individuals, cluster/ groups)*							
Any other results reported							
Statistical methods used/ appropriateness of these							
Reanalysis required / possible? *(specify)*							
Reanalysed results							
Notes:							

Other information

	Description as stated in report/paper	**Location in text/source** *(pg/¶/fig/table)*
Key conclusions of study authors		
References to other relevant studies		
Correspondence required for further study information		
Study funding sources *(incl. role of funders)*		
Possible conflicts of interest *(for study authors)*		
Notes:		

8.4 Appendix D: Ethical approval

Department of Social Policy and Intervention
University of Oxford

Barnett House, 32 Wellington Square,
Oxford, OX1 2ER, United Kingdom
www.spi.ox.ac.uk

[redacted]
Department of Social Policy and Intervention
University of Oxford

SPI_DREC_20_20

20th March 2020

Dear [redacted]

A systematic review of interventions addressing both child maltreatment and intimate partner violence

Your application for research ethics approval in connection with your research project has been considered by the Departmental Research Ethics Committee (DREC) in accordance with the procedures laid down by the University for Ethical Approval.

I am pleased to inform you that, on the basis of the information provided, the proposed research has been judged as meeting appropriate ethical standards and DREC approval has been granted.

If any revisions to your research methodology are made subsequent to this approval, these must be detailed in writing and submitted to DREC immediately.

Yours sincerely,

[redacted]

Dr Jamie M. Lachman
Chair of DREC

Point of contact: ethics@spi.ox.ac.uk | +44 (0) 1865 280734
General enquiries: tel. +44 (0) 1865 270325

8.5 Appendix E: Excluded studies and reason for exclusion

Reason for exclusion	Study author(s) and year
Wrong intervention or multi-component intervention where parenting content is less than 50%	Ayala et al. (2010) Bhopal et al. (2017) Booth-LaForce, Oxford, Barbosa-Leiker, Burduli, & Buchwald (2020) Brigham et al. (2014) Brody et al. (2005) Brody, Yu, Miller, Ehrlich, & Chen (2019) Brody et al. (2004) L. M. Brotman et al. (2011) Castel et al. (2016) Caal et al. (2019) Dishion et al. (2008) Dodge, Goodman, Murphy, O'Donnell, & Sato, 2013) Duncan & Bardacke, 2010) DuMont et al. (2008) Feinberg et al. (2016) Feinberg, Jones, Kan, & Goslin (2010) Feinberg, Kan, & Goslin (2009) Lewin et al. (2015) Dion & Hershey (2010) Morgan et al. (2014) Johnson et al. (2009) LeCroy & Krysik (2011) Krysik & Lecroy (2007) Kan & Feinberg (2014) J. A. Fraser, Armstrong, Morris, & Dadds (2000) Olds et al. (1998) Olds (2007) Olds (1992) Olds, Henderson, & Kitzman (1994) Olds et al. (2015) Olds et al., 1994) Olds, Henderson Jr, Phelps, Kitzman, & Hanks (1993) Olds et al. (2014) Olds et al. (2019) Olds et al. (2004) Olds et al. (2014) Olds, Henderson, Chamberlin, & Tatelbaum (1986) Robling et al. (2016) Wood, Moore, Clarkwest, & Killewald (2014)
Ineligible population	Adams (2001) Annan, Sim, Puffer, Salhi, & Betancourt (2017) Anderson et al. (1999) Bogle (2007) Brotherson, Hektner, Hill, & Saxena (2015) Brotman et al. (2016) Brotman et al. (2005)

	Bugental et al. (2002) Burgess (1982) Burke, Brennan, & Cann (2012) Burn, Lewis, McDonald, & Toumbourou (2019) Bröning et al. (2014) Forehand et al. (2012) Gershy, Meehan, Omer, Papouchis, & Sapir (2017) J. Lachman et al. (2020) Ismayilova & Karimli (2020) Ismayilova et al. (2018)
Ineligible study design	Adler-Baeder et al. (2018) Ashburn, Kerner, Ojamuge, & Lundgren (2017) Block et al. (2014) Chamroonsawasdi, Suparp, Kittipichai, & Khajornchaikul (2011)
Ineligible outcome / did not measure IPV	August, Egan, Realmuto, & Hektner (2003) Baggett et al. (2017) Bailey, van der Zwan, Brooks, & Brooks (2015) Bailey, van der Zwan, Phelan, & Brooks (2012) Baker, Piotrkowski, & Brooks-Gunn (1998) Bamberger, Coatsworth, Fosco, & Ram (2014) Benzies & Magill-Evans (2015) Berlin et al. (2017) Bradley et al. (2003) Breitenstein et al. (2012) Breitenstein, Brager, Ocampo, & Fogg (2017) Breitenstein et al. (2019) Breitenstein, Fogg, Ocampo, Acosta, & Gross (2016) Brooks, Spearn, Rice, Crocco, & others (1988) Bjørknes & Manger (2013) Brody et al. (2019) Bywater et al. (2009) Carta, Lefever, Bigelow, Borkowski, & Warren (2013) Caughy, Miller, Genevro, Huang, & Nautiyal (2003) Cefai, Smith, & Pushak (2010) Chen & Chan (2016) Chinen et al. (2015) Dugravier et al. (2013) Day & Sanders (2018) Dugravier et al. (2013) Dumas, Begle, French, & Pearl (2010) Hurley et al. (2020) Esdaile (1996) Echols (1999) Edwards & Lutzker (2008) Ehrensaft, Knous-Westfall, & Alonso (2016) Eisner & Meidert (2011) El-Mohandes et al. (2003) Fagan & Pearson (2020) Feldman, Case, & Sparks (1992)

	Fraser, Day, Galinsky, Hodges, & Smokowski (2004) Fennell & Fishel (1998) Frank, Keown, & Sanders (2014) Fung & Tsang (2006) Field, Widmayer, Greenberg, & Stoller (1982) Farris, Bert, Nicholson, Glass, & Borkowski (2013) Fossum et al. (2018) Fujiwara, Kato, & Sanders (2011) Gada & Kanumakala (2003) Gerards et al. (2015) Guo, Morawska, & Sanders (2016) Gewirtz, DeGarmo, & Zamir (2018) Gewirtz, Pinna, Hanson, & Brockberg (2014) Gewirtz, DeGarmo, & Zamir (2016) Girolametto, Verbey, & Tannock (1994) Goldfeld et al. (2019) Gottfredson et al. (2006) Grace et al. (2019) Graf, Grumm, Hein, & Fingerle (2014) Griest et al. (1982) Gross et al., 2009) Gross, Belcher, Budhathoki, Ofonedu, & Uveges (2018) Gross, Fogg, & Tucker (1995) Guastaferro et al. (2018) Guttentag et al. (2014) Hackworth et al. (2018) Haggerty, Skinner, MacKenzie, & Catalano (2007) Hahlweg, Heinrichs, Kuschel, Bertram, & Naumann (2010) Hardy & Streett (1989) Henkemans, Keij, Grootjen, Kamphuis, & Dijkshoorn (2018) Heinrichs, Kliem, & Hahlweg (2014) Jungmann et al. (2015) Kemp et al. (2011) Kilburn & Cannon (2017) Kirkland, Lee, Smith, & Greene (2020) Kitzman et al. (2000) Leung, Tsang, & Lo (2017) H. C. W. Li, Chan, Mak, & Lam (2013) Molzan, Nalbant, Bulut, & Sahip (2001) Lowell, Carter, Godoy, Paulicin, & Briggs-Gowan (2011) Lee, Kirkland, Miranda-Julian, & Greene (2018) Lees, Frampton, & Merry (2019) Palmer, Keown, Sanders, & Henderson (2019) Rushton, Monck, Leese, McCrone, & Sharac (2010) Sandner, Cornelissen, Jungmann, & Herrmann (2018) Schuster et al. (1998) Stewart-Brown et al. (2004) Singla, Kumbakumba, & Aboud (2015)

	Spittle et al. (2016) Sumargi, Sofronoff, & Morawska (2015) Swift et al. (2009) Thorell (2009) Turner, Richards, & Sanders (2007) Worku et al. (2018) Wright (2015) Wetterborg et al. (2019) Zajicek-Farber (2010) Zemp, Milek, Cummings, Cina, & Bodenmann, 2016) Zhang et al. (2018)

8.6 Appendix F: Example of risk of bias assessment

Study: Miller et al. (2014)

Response options in RoB2 for the signalling questions:
Yes (Y); Probably yes (PY); Probably no (PN); No (N); No information (NI);

Domain 1: Risk of bias arising from the randomization process

Signalling questions	Comments / Support for judgement	Response options
1.1 Was the allocation sequence random?	Quote: 'Women were randomly assigned to either the treatment or comparison condition using a block randomization paradigm.' (Miller et al., 2014, p.323)	Y
1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions?		PY
1.3 Did baseline differences between intervention groups suggest a problem with the randomization process?	Quote: 'There were no significant differences between the groups on any study variable at baseline, indicating successful randomization.' (Miller et al., 2014, p.323)	N
Risk-of-bias judgement		Low

Domain 2: Risk of bias due to deviations from the intended interventions (*effect of assignment to intervention*)

Signalling questions	Comments / Support for judgement	Response options
2.1. Were participants aware of their assigned intervention during the trial?	Comment: people delivering the intervention were aware of participants' assigned intervention, even though the interviewers were blind to group assignment	Y
2.2. Were carers and people delivering the interventions aware of participants' assigned intervention during the trial?		N
2.3. <u>If Y/PY/NI to 2.1 or 2.2</u>: Were there deviations from the intended intervention that arose because of the trial context?	Quote: 'women in the treatment and comparison conditions could choose to pursue other services beyond the treatment offered. They may have independently sought out individual or group counselling, advocacy, or informal support during the course of the study, and these services may have contributed to the decrease in IPV at follow-up. Unfortunately, we do not have	PY

	data on the additional services that participants may have obtained. (Miller et al., 2014, p.326) Comment: since data were not collected about additional services that might have contributed to the decrease in IPV and further deviations from the intended intervention may have occurred, this was rated as PY to err on the side of caution	
2.4 If Y/PY to 2.3: Were these deviations likely to have affected the outcome?	Comment: not applicable	NA
2.5. If Y/PY/NI to 2.4: Were these deviations from intended intervention balanced between groups?	Comment: not applicable	NA
2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention?	Quote: 'The current study used an intent-to-treat approach to analysis, which preserves the original randomized assignments regardless of whether or not participants completed treatment.' (Miller et al., 2014, p.324)	Y
2.7 If N/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized?	Comment: not applicable	NA
Risk-of-bias judgement		Some concerns

Domain 3: Missing outcome data

Signalling questions	Comments / Support for judgement	Response options
3.1 Were data for this outcome available for all, or nearly all, participants randomized?	Quote: 'At the 6- to 8-month follow-up, 41% of the sample was unable to be located.' (Miller et al., 2014, p.323)	N
3.2 If N/PN/NI to 3.1: Is there evidence that the result was not biased by missing outcome data?	Quote: 'Drop rates were neither significantly different by group assignment nor in the level of violence experienced at entry into the study' (Miller et al., 2014, p.323)	Y
3.3 If N/PN to 3.2: Could missingness in the outcome depend on its true value?	Quote: It is promising that women's attrition appeared to be unrelated to the level of violence they reported, but it is certainly possible that those women who failed to	PY

3.4 <u>If Y/PY/NI to 3.3</u>: Is it likely that missingness in the outcome depended on its true value?	participate in the follow-up interview were those that had experienced more significant revictimization. (Miller et al., 2014, p.326)	PN
Risk-of-bias judgement		Some concerns

Domain 4: Risk of bias in measurement of the outcome

Signalling questions	**Comments / Support for judgement**	**Response options**
4.1 Was the method of measuring the outcome inappropriate?	Comment: no indications that the method of measuring the outcome was inappropriate	N
4.2 Could measurement or ascertainment of the outcome have differed between intervention groups?	Comment: no indications that the measurement or ascertainment of the outcome could have differed between the intervention groups	PN
4.3 <u>If N/PN/NI to 4.1 and 4.2</u>: Were outcome assessors aware of the intervention received by study participants?	Quote: 'the data on victimization were provided by self-reports.' (Miller et al., 2014, p.327) Comment: outcome assessors were the participants since self-reports (i.e. participant-reported data) were used, and notably, the participants were also aware of the intervention	Y
4.4 <u>If Y/PY/NI to 4.3</u>: Could assessment of the outcome have been influenced by knowledge of intervention received?	Quote: 'Thus, they were motivated to receive assistance and support related to violence exposure, and this may limit the generalizability of our findings. A comparison group who received no treatment was essentially put on a wait list for the weeks that the treatment group received services. However, it would have been preferable to have a control group that received at least some attention, or another form of treatment, to control for the effects of attention.' (Miller et al., 2014, p.327)	PY
4.5 <u>If Y/PY/NI to 4.4</u>: Is it likely that assessment of the outcome was influenced by knowledge of intervention received?		NI
Risk-of-bias judgement		Some concerns

Domain 5: Risk of bias in selection of the reported result

Signalling questions	**Comments / Support for judgement**	**Response options**
5.1 Were the data that produced this result analysed in accordance with a pre-	Comment: the study was not pre-registered and there was no protocol available. Only some of the outcome measurements specified in the methods section of the study were	N

specified analysis plan that was finalized before unblinded outcome data were available for analysis?	provided (e.g. is unclear whether sexual coercion was measured or not, since it was briefly mentioned but not reported separately in the results)	
Is the numerical result being assessed likely to have been selected, on the basis of the results, from...		
5.2. ... multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain?	Comment: as suggested in the comment above, it was unclear whether sexual coercion was measured or not, since it was briefly mentioned but not reported separately in the results, so the outcomes may have been selected on the basis of the results, i.e. certain favourable results selected over potentially unfavourable (e.g. sexual coercion) results	PY
5.3 ... multiple eligible analyses of the data?	Comment: since no pre-specified analysis plan was available it is unclear whether the result assessed was selected, on the basis of the result, from multiple data analyses conducted	NI
Risk-of-bias judgement		High

Overall risk of bias

Risk-of-bias judgement		High

8.7 Appendix G: Sensitivity analysis