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## IMPRoving Outcomes for children exposed to domestic Violence (IMPROVE): an evidence synthesis

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Nicky Stanley, Harriet MacMillan, Alison Shaw, Marianne Hester,  
Peter Bryden and Gene Feder*



**National Institute for  
Health Research**



# IMPRoving Outcomes for children exposed to domestic Violence (IMPROVE): an evidence synthesis

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# Abstract

## IMPRoving Outcomes for children exposed to domestic Violence (IMPROVE): an evidence synthesis

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**Background:** Exposure to domestic violence and abuse (DVA) during childhood and adolescence increases the risk of negative outcomes across the lifespan.

**Objectives:** To synthesise evidence on the clinical effectiveness, cost-effectiveness and acceptability of interventions for children exposed to DVA, with the aim of making recommendations for further research.

**Design:** (1) A systematic review of controlled trials of interventions; (2) a systematic review of qualitative studies of participant and professional experience of interventions; (3) a network meta-analysis (NMA) of controlled trials and cost-effectiveness analysis; (4) an overview of current UK provision of interventions; and (5) consultations with young people, parents, service providers and commissioners.

**Settings:** North America (11), the Netherlands (1) and Israel (1) for the systematic review of controlled trials of interventions; the USA (4) and the UK (1) for the systematic review of qualitative studies of participant and professional experience of interventions; and the UK for the overview of current UK provision of interventions and consultations with young people, parents, service providers and commissioners.

**Participants:** A total of 1345 children for the systematic review of controlled trials of interventions; 100 children, 202 parents and 39 professionals for the systematic review of qualitative studies of participant and professional experience of interventions; and 16 young people, six parents and 20 service providers and commissioners for the consultation with young people, parents, service providers and commissioners.



**Interventions:** Psychotherapeutic, advocacy, parenting skills and advocacy, psychoeducation, psychoeducation and advocacy, guided self-help.

**Main outcome measures:** Internalising symptoms and externalising behaviour, mood, depression symptoms and diagnosis, post-traumatic stress disorder symptoms and self-esteem for the systematic review of controlled trials of interventions and NMA; views about and experience of interventions for the systematic review of qualitative studies of participant and professional experience of interventions and consultations.

**Data sources:** MEDLINE, Cumulative Index to Nursing and Allied Health Literature, PsycINFO, EMBASE, Cochrane Central Register of Controlled Trials, Science Citation Index, Applied Social Sciences Index and Abstracts, International Bibliography of the Social Sciences, Social Services Abstracts, Social Care Online, Sociological Abstracts, Social Science Citation Index, World Health Organization trials portal and clinicaltrials.gov.

**Review methods:** A narrative review; a NMA and incremental cost-effectiveness analysis; and a qualitative synthesis.

**Results:** The evidence base on targeted interventions was small, with limited settings and types of interventions; children were mostly < 14 years of age, and there was an absence of comparative studies. The interventions evaluated in trials were mostly psychotherapeutic and psychoeducational interventions delivered to the non-abusive parent and child, usually based on the child's exposure to DVA (not specific clinical or broader social needs). Qualitative studies largely focused on psychoeducational interventions, some of which included the abusive parent. The evidence for clinical effectiveness was as follows: 11 trials reported improvements in behavioural or mental health outcomes, with modest effect sizes but significant heterogeneity and high or unclear risk of bias. Psychoeducational group-based interventions delivered to the child were found to be more effective for improving mental health outcomes than other types of intervention. Interventions delivered to (non-abusive) parents and to children were most likely to be effective for improving behavioural outcomes. However, there is a large degree of uncertainty around comparisons, particularly with regard to mental health outcomes. In terms of evidence of cost-effectiveness, there were no economic studies of interventions. Cost-effectiveness was modelled on the basis of the NMA, estimating differences between types of interventions. The outcomes measured in trials were largely confined to children's mental health and behavioural symptoms and disorders, although stakeholders' concepts of success were broader, suggesting that a broader range of outcomes should be measured in trials. Group-based psychoeducational interventions delivered to children and non-abusive parents in parallel were largely acceptable to all stakeholders. There is limited evidence for the acceptability of other types of intervention. In terms of the UK evidence base and service delivery landscape, there were no UK-based trials, few qualitative studies and little widespread service evaluation. Most programmes are group-based psychoeducational interventions. However, the funding crisis in the DVA sector is significantly undermining programme delivery.

**Conclusions:** The evidence base regarding the acceptability, clinical effectiveness and cost-effectiveness of interventions to improve outcomes for children exposed to DVA is underdeveloped. There is an urgent need for more high-quality studies, particularly trials, that are designed to produce actionable, generalisable findings that can be implemented in real-world settings and that can inform decisions about which interventions to commission and scale. We suggest that there is a need to pause the development of new interventions and to focus on the systematic evaluation of existing programmes. With regard to the UK, we have identified three types of programme that could be justifiably prioritised for further study: psycho-education delivered to mothers and children, or children alone; parent skills training in combination with advocacy; and interventions involving the abusive parent/caregiver. We also suggest that there is need for key stakeholders to come together to explicitly identify and address the structural, practical and cultural barriers that may have hampered the development of the UK evidence base to date.

**Future work recommendations:** There is a need for well-designed, well-conducted and well-reported UK-based randomised controlled trials with cost-effectiveness analyses and nested qualitative studies. Development of consensus in the field about core outcome data sets is required. There is a need for

further exploration of the acceptability and effectiveness of interventions for specific groups of children and young people (i.e. based on ethnicity, age, trauma exposure and clinical profile). There is also a need for an investigation of the context in which interventions are delivered, including organisational setting and the broader community context, and the evaluation of qualities, qualifications and disciplines of personnel delivering interventions. We recommend prioritisation of psychoeducational interventions and parent skills training delivered in combination with advocacy in the next phase of trials, and exploratory trials of interventions that engage both the abusive and the non-abusive parent.

**Study registration:** This study is registered as PROSPERO CRD42013004348 and PROSPERO CRD420130043489.

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# Glossary

**CM group** An intervention group in which both child and non-abusive mother received a psychoeducational intervention.

**CO group** An intervention group in which only the child received an intervention.

**Cochrane Central Register of Controlled Trials** A database of controlled trials and other studies of health-care interventions from bibliographic databases (mainly MEDLINE and EMBASE), and other published and unpublished sources that are difficult to access.

**Cumulative Index to Nursing and Allied Health Literature** An index of English language and other (selected) language journals about nursing, allied health, biomedics and health care.

**EBSCOhost** An information service that provides online access to electronic bibliographic databases.

**EMBASE** Excerpta Medica database of biomedical and pharmacological database of published literature.

**Medical Literature Analysis and Retrieval System Online** A bibliographic database of life sciences and biomedical information compiled by the United States National Library of Medicine.

**OVIDSP** Ovid Technologies, Inc., part of the Wolters Kluwer group of companies, which provides access to online bibliographic databases.

**Preferred Reporting Items for Systematic Reviews and Meta-Analyses** An evidence-based minimum set of items for reporting in systematic reviews and meta-analyses (see [www.prisma-statement.org/](http://www.prisma-statement.org/)).

**ProQuest** An information and technology service providing online access to journals and electronic bibliographic databases.

**PROSPERO** An international prospective register of randomised controlled trials (see [www.crd.york.ac.uk/PROSPERO/](http://www.crd.york.ac.uk/PROSPERO/)).

**PsycINFO** A database of abstracts of literature in the field of psychology. It is produced by the American Psychological Association and distributed on the Association's APA PsycNET database.





## List of abbreviations

ASSIA	Applied Social Science and Abstracts Index	IBSS	International Bibliography of the Social Sciences
AVA	Against Violence and Abuse	ICER	incremental cost-effectiveness ratio
BCCEWH	British Columbia Centre of Excellence for Women's Health	IMPROVE	IMPRoving Outcomes for children exposed to domestic Violence
CAMHS	child and adolescent mental health services	IPV	interparental violence
CASP	Critical Appraisal Skills Program	KIDSCREEN-52	Health-related Quality of Life Screening Instrument for Children and Adolescents
CBCL	Child Behaviour Checklist	K-SADS-PL	Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version
CBT	cognitive-behavioural therapy	MEP	Moms' Empowerment Program
CCT	controlled clinical trial	MeSH	medical subject headings
CD	conduct disorder	NICE	National Institute for Health and Care Excellence
CEAC	cost-effectiveness acceptability curve	NIHR	National Institute for Health Research
CGP	community group programme	NMA	network meta-analysis
CI	confidence interval	NSPCC	National Society for the Prevention of Cruelty to Children
CINAHL	Cumulative Index to Nursing and Allied Health Literature	ODD	oppositional defiant disorder
CONSORT	Consolidated Standards of Reporting Trials	PEDSQL	pediatric quality of life inventory
CrI	credible interval	PhD	Doctor of Philosophy
DAP	Domestic Abuse Project of Minneapolis	PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
DART	Domestic Abuse, Recovering Together	PSSRU	Personal Social Services Research Unit
DSM-IV	<i>Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition</i>	PTSD	post-traumatic stress disorder
DVA	domestic violence and abuse	RCT	randomised controlled trial
ECBI	Eyberg Child Behavior Inventory	SD	standard deviation
Fi-Op	Family Interaction for Improving Occupational Performance	SE	standard error
GP	general practitioner	SMD	standardised mean difference
HARV	Hyndburn and Ribble Valley Domestic Violence Team	WHO	World Health Organization
HEN	Health Evidence Network	WLC	waitlist control
HITS	Hurt-Insult-Threaten-Scream scale		



## Plain English summary

Children who are exposed to domestic violence and abuse (DVA) are more likely to experience emotional and behavioural problems in childhood, adolescence and adulthood than children who are not exposed to DVA. There are existing programmes that try to prevent or reduce the damage that DVA causes to children. However, there is a lack of research on whether or not these programmes make a difference to children in the short and long term. Therefore, we do not know if the types of support offered to children in the UK and elsewhere are helpful and well received (acceptable), nor whether or not they represent good value for money.

The purpose of this study was to review existing evidence and opinion on the clinical effectiveness, cost-effectiveness and acceptability of programmes for children exposed to DVA. The aim of bringing together different types of knowledge was to identify gaps in the evidence and to identify promising programmes that should be studied and tested in more detail in future research.

We concluded that more experimental studies should be conducted in the UK to better understand which programmes work and which do not; that effectiveness should be measured against outcomes that are relevant and important to children, parents, service providers and policy-makers, rather than to researchers only; and that studies should examine whether or not different types of programmes are more or less effective and acceptable for different groups of people. We also identified three types of programme that we recommend should be prioritised for further evaluation in the UK.



# Scientific summary

## Background

Domestic violence and abuse (DVA) is threatening behaviour, violence or abuse between adults who are relatives, partners or ex-partners. Exposure to DVA during childhood and adolescence increases the risk of negative behavioural and health outcomes across the lifespan. There is a moderate to strong association between children's exposure to DVA and internalising symptoms (e.g. anxiety, depression), externalising behaviours (e.g. aggression) and trauma symptoms. There are also links between children's exposure to violence and disrupted social development, poor academic attainment, engagement in risky health behaviours and other physical health consequences. Exposure to DVA in childhood is associated with negative outcomes in adulthood, such as mental health problems, conduct disorder and criminal behaviour, as well as DVA victimisation and perpetration. Despite strong evidence that exposure to DVA is damaging to children in the short and long term, there is a paucity of evidence about clinically effective and cost-effective interventions that aim to prevent or limit the impairment that DVA may cause to children's health and well-being.

## Aim of the evidence synthesis

The aim of the evidence synthesis was to formulate recommendations for further research in the UK and internationally, that looks to evaluate interventions to improve outcomes for children exposed to DVA.

We answered seven research questions:

1. What is the nature of the evidence base evaluating targeted interventions to improve outcomes for children exposed to DVA?
2. What is the nature of existing interventions to improve outcomes for children exposed to DVA?
3. What is the evidence that existing interventions are clinically effective?
4. What is the evidence that existing interventions are cost-effective?
5. How are outcomes defined and measured in evaluations of existing interventions?
6. What is the evidence that existing interventions are acceptable to stakeholders and feasible to deliver?
7. What is the nature of the UK evidence base and service delivery landscape?

## Methods

### Design

A systematic review of controlled trials of interventions, a systematic review of qualitative studies of participant and professional experience of interventions, a network meta-analysis (NMA) and cost-effectiveness analysis of controlled trials, mapping of trial outcomes with baseline measures in longitudinal studies, an overview of current UK provision and consultations with young people, parents, service providers and commissioners on synthesis findings.

### Data sources

For the systematic reviews: MEDLINE, Cumulative Index to Nursing and Allied Health Literature, PsycINFO, EMBASE, Cochrane Central Database of Controlled Trials, Science Citation Index, Applied Social Science and Abstracts Index, International Bibliography of the Social Sciences, Social Services Abstracts, Social Care Online, Sociological Abstracts, Social Science Citation Index, the World Health Organization trials portal and Clinicaltrials.gov. For the mapping of outcomes: MEDLINE, Science Citation Index Expanded and Social Sciences Index Expanded. For the overview of current UK provision: organisational websites and grey literature repositories.

### Study selection

- Published reports of controlled trials of any intervention measuring behavioural, mental health or social and school outcomes for children aged < 18 years of age (or their parents) who had been exposed to DVA. If the trial included children not exposed to DVA, it was excluded unless outcomes for exposed children were reported separately.
- Published empirical qualitative studies focusing on children's, parents' or stakeholders' views and experiences of receiving or delivering child-focused interventions following children's exposure to DVA.
- Cost estimates based on the number of sessions reported for the intervention and qualification of staff in the trials, relating these to the standardised mean differences (SMDs) between interventions generated from the NMA.
- Published reports of longitudinal or cohort studies that measured internalising or externalising symptoms as potential predictors of longer-term outcomes, or which measured childhood predictors of relevant adult states.
- Reports from government departments, charities and official bodies that described any UK-based intervention implemented after 2003 for children aged < 18 years (or their parents) who had been exposed to DVA and that aimed to improve child outcomes.

### Data extraction

The systematic reviews involved independent data extraction by two reviewers. The data extraction for the NMA, mapping and overview of current UK service provision was undertaken by one reviewer.

### Assessment of validity

- The Cochrane risk-of-bias tool was applied by two independent reviewers to random sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment and incomplete outcome data.
- The Critical Appraisal Skills Program tool was applied by two independent reviewers.

### Main outcome measures

For the systematic review of controlled trials of interventions and NMA: internalising and externalising symptoms and behaviour, mood, depression, post-traumatic stress disorder symptoms, self-esteem; for the systematic review of qualitative studies of participant and professional experience of interventions: views about and experience of interventions; and for the mapping of trial outcomes with baseline measures in longitudinal studies: DVA perpetration and victimisation, criminality, substance abuse and mental health problems.

### Review methods

A narrative review of the trials that constitute the primary studies; a qualitative synthesis using meta-ethnographic methods to identify first-, second- and third-order constructs from the primary studies; a NMA and incremental cost-effectiveness analysis; and an extrapolation of predictors of adult problems measured in the primary studies. In *Chapter 9* we report the findings of the synthesis by the seven research questions posed above.

## Results

### Nature of the evidence

The evidence base is underdeveloped, with limited empirical evidence of clinical effectiveness or cost-effectiveness and acceptability of interventions. We identified 13 completed trials (nine of which were randomised), published between 1995 and 2015, with a total of 1345 participants. Most were conducted in the USA, and none was conducted in the UK or in low- or middle-income countries. Two studies had a low/unclear risk of bias, but most trials had an unclear or high risk of bias overall. Our quality appraisal was hampered by poor reporting of studies.

We identified five peer-reviewed qualitative studies published between 1992 and 2012, with a total sample of 100 children, 202 parents and 39 professionals. Most of the studies were conducted in the USA, although one was UK based. None was linked to a trial or quantitative study, although two focused on models (psychotherapy and psychoeducation) for which we found (unrelated) trials. Study quality was generally high.

A review of the grey literature on UK programmes identified 26 reports covering 19 programmes. Of the 19 interventions identified, 17 had undergone evaluation in 21 studies. Studies were mostly characterised by small samples, with evaluation largely focusing on the process of delivery and acceptability of programmes.

### **Nature of the interventions**

From the small body of trial and qualitative evidence that we identified, we found six types of intervention that were evaluated in the peer-reviewed literature: (1) psychotherapy; (2) psychoeducation; (3) advocacy; (4) guided self-help; (5) parenting skills training plus advocacy; and (6) advocacy plus psychoeducation.

Trials most frequently evaluated psychotherapeutic and psychoeducational interventions delivered to non-abusive parents (mostly mothers) and children. None of the trials evaluated interventions including the abusive parent, or lower-intensity interventions, such as self-help. Qualitative evaluative studies, some of which included both the abusive and non-abusive parent, mostly explored experiences of receiving and delivering psychoeducational interventions.

Interventions were most often offered based on children's exposure to DVA, rather than on their specific clinical profile or broader social needs. There was variation in the format (group, individual, dyad or mixed) and duration of programmes. Most of the interventions evaluated in the trials were targeted at pre-school- to middle-school-age children, and delivered in specialist DVA settings or unspecified community-based settings by graduates with expertise in disciplines allied to mental health.

UK programmes were largely psychoeducational, with few psychotherapeutic and no parenting interventions that were tailored to the specific needs of children and parents who have experienced DVA. Interventions were based on children's exposure to DVA and were not specific to the presentation of particular problems. They were offered to a broader age group than addressed in the peer-reviewed literature, but none was offered to parents of infants. UK programmes were also delivered in DVA service or community settings by a broader range of professionals than was evident in the peer-reviewed literature.

### **Evidence of clinical effectiveness**

Eleven of 13 trials reported improvements in behavioural or mental health outcomes, with modest effect sizes. However, high or unclear risk of bias, heterogeneity of studies and minimal replication makes uncertain conclusions about effectiveness, particularly comparative effectiveness. Comparator interventions were equally heterogeneous, making conventional meta-analysis or even direct comparison between interventions impossible. We therefore used NMA to pool evidence across a connected network of intervention comparisons, making a consistency assumption about similarity of effects if all trials had included all interventions. For reviews of complex interventions there is also an assumption that interventions of the same category are also similar across studies, which is not often the case. Therefore, the findings of the NMA must be considered hypothesis-generating rather than conclusive.

Based on the findings of the NMA, interventions delivered to the child only were relatively more effective at improving children's mental health outcomes. In particular, interventions that had a psychoeducational component and that were delivered in a group format had the highest chance of being effective, although there was large uncertainty in this finding. Interventions delivered to (non-abusive) parents and children were most likely to be effective at improving children's behavioural outcomes. In particular, parenting skills training plus concurrent DVA advocacy for parents was more effective than other interventions, although there was also some evidence to suggest that psychoeducation delivered in parallel to parents and children could improve behavioural outcomes.



These findings suggest that interventions that are effective at reducing children's mental health symptoms may be different from those that are effective for reducing children's behaviour problems. This is evidence for targeting interventions to children's needs or clinical profiles, rather than providing the same programme for all children exposed to DVA. This proposition requires further investigation to determine if one model is more effective than others for reducing specific problems.

### **Evidence of cost-effectiveness**

None of the trials that we reviewed in this evidence synthesis conducted an economic analysis. Our analysis was based on the NMA, and, by virtue of this, the same strong assumptions. It was designed to inform research recommendations, not the implementation of one intervention over another.

In terms of children's mental health outcomes, a psychoeducational intervention delivered to the child is likely to be most cost-effective [incremental cost-effectiveness ratio (ICER) > £858/SMD], although at a very high willingness-to-pay threshold (ICER > £22,575/SMD), cognitive-behavioural therapy may be equally cost-effective.

For children's behavioural outcomes, a psychoeducational intervention provided to parents and children in parallel is likely to be the most cost-effective at a lower willingness-to-pay threshold (ICER > £3782/SMD), with parenting skills plus advocacy becoming relatively more cost-effective at a higher willingness-to-pay threshold (ICER > £8017/SMD).

### **Defining and measuring outcomes**

Trials largely measured children's symptoms and disorders; their heterogeneity hampered the synthesis of evidence across trials. The qualitative studies that we reviewed and our consultations with young people, parents and professionals suggest that, although symptom reduction is considered an important benefit, desirable outcomes extend to functional status such as school attainment, the ability to cope with challenges, self-expression and self-regulation, a sense of well-being and improvements in the quality of important relationships. Agreement on a core outcome set for the field, informed by stakeholders and including negative or adverse effects of interventions, would ensure that trials evaluate effectiveness against outcomes that are relevant and important to stakeholders and would help to synthesise findings across trials.

### **Acceptability to stakeholders**

Based on the qualitative studies, the UK grey literature and consultations with stakeholders, group-based psychoeducational interventions delivered to children and non-abusive parents in parallel are acceptable to children and parents. Perceived benefits included those derived from the group process and those derived from the therapeutic content of the intervention. However, specific components of this type of intervention (safety planning, sexual abuse prevention) were problematic for some children and parents. There is uncertainty over the most acceptable delivery format for older children and teenagers, as well as over how acceptability may vary according to individual factors, such as readiness to engage in a therapeutic intervention and ethnicity.

Psychoeducational interventions also appear to be acceptable to those delivering services, as well as feasible to implement, although the success and sustainability of this intervention may depend on the broader community response to DVA and the stability and culture of the organisation hosting it. More research is needed on the acceptability and feasibility of interventions in different settings.

Important questions also remain regarding if and when it may be appropriate to offer psychoeducational interventions that include the abusive parent. This warrants investigation, given the increasing focus on whole family interventions in the UK and the absence of evidence of effectiveness. Guided self-help may be an acceptable lower intensity intervention to enhance the quality of parent-child communication, but there is no evidence of its effectiveness. We found limited evidence relating to the acceptability of other types of interventions.

### **The UK evidence base and service profile**

It is striking that there are no UK-based trials and a paucity of qualitative research on interventions for children exposed to DVA. It was, nevertheless, heartening to observe a culture of service evaluation emerging in the DVA sector; for example, we found 21 evaluations of 19 different programmes. Although there can be little doubt that more robust studies are needed, there is also a case for looking at ways to maximise the quality of service evaluation as well as the value of the information that is produced more routinely for the purpose of service monitoring.

The UK response to children exposed to DVA mostly consists of group-based psychoeducational interventions that are delivered either to the child alone or to the child and their non-abusive parent in parallel. This type of intervention was identified as promising in our synthesis. The other promising intervention that we identified, namely parenting skills training plus advocacy, is not currently implemented.

The findings of our review of the UK grey literature and consultations with professionals indicate that the response to children who have been exposed to DVA is largely led by the specialist DVA sector, which is currently suffering severe budget cuts. Such cuts are undermining the development of evidence-based services for this vulnerable group of children.

## **Conclusion**

There is an urgent need for more high-quality studies, particularly trials, that are designed to produce actionable, generalisable findings that can be implemented in real-world settings and that can inform decisions about which interventions to commission and scale.

### **Research recommendations (in priority order)**

1. Well-designed, conducted and reported UK-based RCTs with cost-effectiveness analyses and nested qualitative studies are needed to evaluate the clinical effectiveness, cost-effectiveness and acceptability of targeted interventions for children exposed to DVA.
2. Development of a consensus in the field about a core outcome data set.
3. Exploration of the acceptability and effectiveness of interventions for specific groups of children and young people, differentiated by ethnicity, age, trauma exposure and clinical profile.
4. Investigation of the context in which interventions are delivered, including organisational setting and the broader community context, as well as the influence of contextual factors on intervention fidelity and effectiveness.
5. Evaluation of qualities, qualifications and disciplines of personnel delivering interventions.
6. Prioritisation of psychoeducational interventions and parent skills training delivered in combination with advocacy in the next phase of trials.
7. Exploratory trials of interventions that engage the abusive and non-abusive parent.

## **Study registration**

This study is registered as PROSPERO CRD42013004348 and PROSPERO CRD420130043489.

## **Funding**

Funding for this study was provided by the Public Health Research programme of the National Institute for Health Research.



# Chapter 1 Introduction

## Background to the evidence synthesis

Domestic violence and abuse (DVA) is threatening behaviour, violence or abuse between adults who are relatives, partners or ex-partners.<sup>1</sup> It is a breach of human rights as well as a major public health and clinical problem, and, although it occurs in all types of relationships and cuts across all sections of society, it is a gendered problem: women are more likely to be injured, to require medical attention or hospitalisation and to fear for their lives as a result of violence, and men are more likely to perpetrate violence. Until relatively recently, most DVA epidemiological research has focused on the prevalence, impact and prevention of violence between partners or ex-partners. The impact of DVA on children has received less attention, although the negative sequelae of exposure to DVA have been well documented.<sup>2-5</sup> In the past decade, children's exposure to DVA has been defined as a form of child maltreatment,<sup>6</sup> requiring a health-care and societal response.

Given the importance of this issue and the need to understand the evidence for interventions with children exposed to DVA, the National Institute for Health Research (NIHR) Public Health Research (PHR) programme commissioned a scoping study. The aim of this research was to synthesise existing evidence on the clinical effectiveness, cost-effectiveness and acceptability of existing interventions, for the purposes of prioritising interventions for further investigation and identifying further research questions.

This chapter summarises the epidemiology of children's exposure to DVA, evidence on targeted interventions for children who have been exposed to DVA, and the UK policy and service delivery contexts of programmes for children exposed to DVA. The chapter ends with a description of the aims, objectives, research questions and scope that guided our synthesis.

## Epidemiology

### Defining exposure to domestic violence and abuse

Early research characterised children as 'witnessing' DVA, which implied the direct observation of violence between adults.<sup>7</sup> The term 'exposure', which is more common in recent studies, is broader in scope and includes instances in which children see, hear, are directly involved in (e.g. attempt to intervene), experience the aftermath of assaults that occur between their caregivers, or are otherwise aware of abuse or threatening behaviour between adults.<sup>2,8</sup> It also pertains to those children who may ostensibly be unaware of the occurrence of abuse but may be affected indirectly by disrupted family processes and poor parental mental health.<sup>8</sup> This broader concept of exposure is, to some extent, reflected in the UK's definition of 'significant harm', which sets out the legal basis or threshold criteria on which a family court can make a care or supervision order that justifies compulsory intervention in family life in the best interests of children,<sup>9</sup> and which was updated in 2002<sup>10</sup> to include the 'impairment from seeing or hearing the ill treatment of another person'.

We do not yet know whether or not different forms of exposure have differential effects on children's adjustment and other outcomes. Research and service delivery tend to treat exposure to DVA as a 'homogenous unitary' phenomenon (see Gonzalez *et al.*<sup>11</sup> for an exception), despite differentiation in the adult-focused literature between different types of partner violence that are marked by a greater or lesser degree of coercive control or bidirectionality of abusive behaviour between adults.<sup>12</sup>

### **Prevalence of children's exposure to domestic violence and abuse**

A UK national study of children's mental health carried out in 2004 found that, based on parent reports, 4% of children had witnessed severe abuse putting it as the most frequently reported type of childhood trauma for children aged < 16 years.<sup>13</sup> A more recent large-scale study carried out by the National Society for the Prevention of Cruelty to Children (NSPCC)<sup>14</sup> estimated that 3.3% of children aged < 11 years had witnessed at least one incident of domestic violence or threatening behaviour in the preceding 12 months, as had 2.9% of young people aged 11–17 years. A total of 12% of children aged < 11 years and 18.4% of young people aged 11–17 years had witnessed at least one incident of domestic violence or threatening behaviour in their lifetime.

The most frequent type of reported DVA documented by the survey entailed one parent throwing or breaking things in the context of an argument, although consistent with the earlier survey, 3.8% of children surveyed had witnessed severe abuse (kicking, choking and beating up).<sup>13,14</sup>

UK prevalence figures are similar to those in other high-income countries that have measured children's exposure to DVA. For example, the US National Survey of Children's Exposure to Violence<sup>15</sup> reported that among the target sample of > 4500 children, approximately one-sixth had witnessed an assault between parental partners in their lifespan, and that 6% had witnessed an assault between parental partners in the past year.

### **Risk and protective factors for exposure to domestic violence and abuse**

Numerous risk factors are associated with DVA perpetration and victimisation at individual, family, community and societal levels (see MacMillan and Wathen<sup>16</sup> for an overview). These include parental history of childhood maltreatment, drug and alcohol use, unemployment, young age, presence of mental health issues, social isolation, poverty and associated household factors (e.g. overcrowding).<sup>16–19</sup> The presence of these risk factors in families with interparental violence (IPV) creates an environment of pervasive adversity for the child, in which multiple stressors can accumulate and impinge upon the child's development.<sup>20</sup>

### **Exposure to multiple forms of abuse**

Children exposed to one incident of violent victimisation are likely to be repeatedly exposed to the same type of violence<sup>21</sup> and are at greater risk of experiencing multiple different types of victimisation, known as poly-victimisation.<sup>22</sup> For example, Hamby *et al.*<sup>23</sup> demonstrated a close association between witnessing partner violence and experiencing other types of family violence. Of the children and young people who had witnessed DVA in the past year, 33.9% had experienced other types of maltreatment; the proportion for lifetime exposure to DVA was more than half (56.8%).

Serious case file reviews both in the UK and in the USA further highlight the co-occurrence between DVA and child maltreatment, with DVA noted in one-third to half of cases in which children were killed or seriously harmed,<sup>24,25</sup> and, although the risk of maltreatment increases with the severity of abuse, less serious forms of violence (e.g. pushing and shoving) may also increase the risk of maltreatment.<sup>26</sup>

### **Impact of exposure to domestic violence and abuse on children's health and well-being**

In addition to the risk of physical harm, exposure to DVA during childhood and adolescence increases the risk of negative mental health outcomes, with a moderate to strong association between children's exposure to DVA and internalising symptoms (e.g. anxiety, depression), externalising behaviours (e.g. aggression) and trauma symptoms.<sup>2,3,5</sup> Children exposed to DVA are two to four times more likely to exhibit clinically significant problems than children from non-violent homes.<sup>3</sup> There are also associations between children's exposure to DVA and disrupted social development, poor academic attainment, engagement in risky health behaviours and other physical health consequences,<sup>3,27,28</sup> although uncertainty over the magnitude and consistency of detrimental effects on these domains of children's functioning remains. Evidence relating to children's emotional and behavioural development is less equivocal.<sup>29</sup> Several studies suggest that boys and girls may be affected differently by exposure,<sup>2,4</sup> but the moderating role of sex is uncertain.<sup>30,31</sup>

Exposure to DVA in childhood is associated with negative outcomes in adulthood, such as mental health problems, conduct disorder (CD) and criminal behaviour, as well as DVA victimisation and perpetration.<sup>31–33</sup> There is considerable evidence to suggest that the risk of negative outcomes in adulthood is mediated by adjustment difficulties, particularly behaviour problems that develop during childhood and adolescence.<sup>34</sup>

Although exposure to DVA is undoubtedly a significant stressor in children's lives, there is considerable variation in their reactions and adaptation following exposure,<sup>35,36</sup> with several studies indicating that a significant minority of children exposed to DVA are not adversely affected in terms of behavioural or health outcomes, reflecting resilience to this adverse family context, at least in the short term. Factors such as maternal mental health, the quality of parenting and children's perceptions of abuse potentiate or mitigate the risk of poor outcomes for children exposed to DVA.<sup>35,36</sup> There is also heterogeneity in adult outcomes of exposed children; most will neither suffer long-term harm, nor perpetrate or experience DVA in adulthood.<sup>37</sup>

## Overview of interventions

### Evidence of effectiveness

The most direct way of preventing the negative consequences of DVA for children is to prevent or end the violence itself.<sup>38</sup> Systematic reviews highlight the lack of evidence for effective interventions to prevent the initiation of DVA and, therefore, to prevent children's exposure to it.<sup>39,40</sup> There is some evidence that community-based advocacy is a promising strategy for reducing the frequency and severity of DVA (especially physical violence) once it has taken place, but replication of these results is needed.<sup>40</sup> Furthermore, few studies examining the effectiveness of advocacy quantify the effects of reduced DVA on children's health and well-being (see *Chapter 3* for exceptions).

The most common approach to preventing or reducing the harm associated with DVA is to provide services directly to children and their parents once abuse has taken place.<sup>41</sup> Based on frequently used definitions set out by the Institute of Medicine,<sup>42</sup> interventions offered after exposure to DVA can be categorised as selective or indicated prevention (preventing full-blown disorder) or as treatment. Selective preventative interventions are offered to all exposed children or to parents of exposed children based on the increased risk of maladjustment, irrespective of children's clinical profiles. Indicated preventative interventions are targeted at children showing signs or symptoms of mental, emotional or behavioural disorders who do not meet diagnostic criteria for these disorders. Interventions for children with diagnosed conditions are known as treatments. In this report we refer to all interventions aimed at exposed children as targeted; where appropriate, we distinguish between the populations of the children who were specifically targeted.

Two systematic reviews have identified a range of (often) complex targeted interventions delivered solely to children, or to children and their non-abusive parents following exposure to abuse. Rizo *et al.*<sup>41</sup> categorised interventions evaluated in 31 studies into four categories: (1) counselling/therapy; (2) crisis/outreach; (3) parenting; and (4) multicomponent. They noted that, despite the different approaches of the programmes, they shared common aims for children (e.g. learning about and dealing with IPV, enhancing communication, reducing psychological distress and enhancing well-being) and non-abusing parents (developing knowledge of the impact of DVA on children, developing parenting skills, increasing self-esteem and parenting efficacy). Owing to the methodological shortcomings of the studies reviewed, the authors were not able to draw conclusions about the effectiveness of specific interventions, and recommended that studies seek to recruit larger samples, account for missing data, follow up participants beyond the end of the intervention and use randomised experimental designs with statistical techniques to account for the correlated nature of the data.

A second review, conducted by the British Columbia Centre of Excellence for Women's Health (BCCEWH),<sup>43</sup> built on the work by Rizo *et al.*,<sup>41</sup> although it also included qualitative evaluative studies and grey literature. The authors categorised interventions into seven categories to reflect the therapeutic technique, the target population and whether the intervention was single- or multicomponent. This review concluded that there was moderate to strong evidence that psychotherapeutic interventions delivered to mothers and

children improved child outcomes, moderate evidence for psychoeducational interventions delivered to children, moderate evidence for parenting-focused interventions, and mixed evidence for psycho-educational interventions delivered to mothers and children. However, these conclusions were founded mostly on non-experimental research. It is also notable that of the studies identified, only three were conducted in the UK (two peer-reviewed studies; one study in the grey literature). Nevertheless, the findings of this review informed the recent National Institute for Health and Care Excellence (NICE) guidance on DVA.<sup>44</sup>

### **Stakeholder views on targeted interventions**

Research conducted in the UK has suggested that children most frequently report that they want to feel safe and that they want someone to talk to about their experiences,<sup>45-48</sup> identifying talking as a strategy to reassure them that they are not alone.<sup>45</sup> In these earlier reports, children often identified their mothers as the person to whom they most want to be able to talk and the person from whom they most want support,<sup>47</sup> although they also felt reticent about sharing their experiences owing to concerns that they may upset and burden their parent.<sup>46,47</sup> Likewise, it was noted that mothers may be reluctant to talk to children, thereby creating a 'conspiracy of silence' in families affected by DVA.<sup>49,50</sup> In an evaluation of materials designed to assist mothers and their children to rebuild their relationships in refuges (shelters) and community-based settings in the aftermath of DVA (discussed in detail in *Chapter 4*), mothers and children described the positive benefits of engaging in shared activities, including spending time together, and of enhanced communication, both in general and with regard to experiences of abuse.<sup>49,51</sup> Children also identified teachers, family members and peers as people to whom they would talk, and several evaluations highlighted the significant role that specialist domestic abuse workers have in helping children to understand their experiences.<sup>49</sup>

A UK Delphi consultation involving just under 300 participants<sup>52</sup> sought consensus among survivors of child sexual abuse, DVA, rape and sexual assault, as well as among experts in the field, on an effective mental health service response for people affected by these issues. With regard to interventions for children exposed to DVA, a broad range of approaches was viewed as helpful in reducing the harms associated with DVA, including play therapies, attachment-based approaches, cognitive-behavioural therapy (CBT) for older children, child psychotherapy, eye movement desensitisation and reprocessing, and, in some instances in which the abusive party remains in the family setting, family therapy. Approaches that were deemed to be inappropriate for this group were mediation/reconciliation, joint therapy with an abuser and cognitive approaches that are not suited to the cognitive maturation of the child. The inclusion of the abusive parent or party in therapeutic interventions represented a key area of disagreement among respondents. With regard to the process of delivering services, professionals and survivors agreed that the choice of therapeutic intervention for children should be needs-led and guided by the age and maturity of the child, their individual experiences and the degree of victimisation, and that children should be able to access interventions independently of their parents and their parents' therapeutic requirements.

### **UK policy context**

Government policy in England and the devolved nations recognises the impact of DVA on children and emphasises the need for support for those who are at risk of, or who have experienced, DVA.<sup>53-55</sup> English policy places a particular focus on prevention and early intervention, whereas other nations explicitly recognise the need for targeted services for children once they have been exposed to DVA. Overall, national policy has been largely focused on the response to children by the health and social care sectors. In 2011, a government-commissioned review of child protection in the UK<sup>56</sup> emphasised the high prevalence of children experiencing DVA in the home and the links between DVA and child protection, and argued that service development should reflect this high prevalence. In 2014, guidelines developed by NICE<sup>44</sup> to underpin the response of health- and social-care professionals and commissioners to DVA made the specific recommendation that interventions should be commissioned that aim to strengthen the relationship between the child and their non-abusive parent or carer through the delivery of joint or parallel sessions that include advocacy, therapy and other support that addresses the impact of DVA on parenting. This is consistent with the more general recommendation in the World Health Organization (WHO) guidelines for children to be offered psychotherapeutic interventions. In 2010, following an independent review of child

and adolescent mental health services (CAMHS), the UK Government identified children experiencing DVA as a vulnerable group requiring mental health services engagement.<sup>57</sup> This was reiterated in a second review of CAMHS, which recommended the development of a better service for vulnerable groups of children and young people, including those who have been exposed to DVA.<sup>58</sup>

### UK service delivery landscape

Despite the importance of specialist provision for children exposed to DVA being recognised in UK national policy, mapping studies indicate that provision for these children is patchy. Humphreys *et al.*<sup>59</sup> mapped the availability of support for children and families affected by DVA. A telephone questionnaire completed by nearly all of the 326 specialist DVA service providers approached indicated that 69% of services in England and 89% of services in Wales, Scotland and Northern Ireland employed specialist children's workers, with the most frequent forms of support offered being group-based support for pre-school-aged (72% in England, 89% in Wales, Scotland and Northern Ireland) and school-aged children (69%, 89%), one-to-one support (this did not include counselling, 61%, 89%) and advocacy for children (72%, 86%). However, services reported that these efforts were being hampered by underfunding. A total of 12% of English refuge groups and 14% ( $n = 10$ ) of refuge groups in the rest of the UK reported that they were unable to provide any children's services owing to a lack of funding; and 42% of refuge groups in England and 60% of refuge groups in the rest of the UK were dependent on volunteers to keep their children's programmes going.

As part of the same study, a survey of children's charities found that, of the 449 (60%) charities that responded, < 2% reported offering dedicated projects dealing specifically with women, children and/or men from families affected by DVA, although a large number of non-specialist projects (74%) considered DVA to be relevant to service users and dealt with it during the course of their work. In a third component to the study, 20% of social services departments reported that there was no provision for work with children, women or men in DVA situations in their local area, and specific service provision for children living in situations of DVA featured in only 20% of children's services plans.

A second mapping study of services in London, undertaken a decade later, described a similar picture of service provision, marked by significant gaps and unsustainable services.<sup>50</sup> In line with the earlier study, a survey of key individuals and services with a role in responding to DVA indicated that the majority of specialist services (56%) were provided by the voluntary sector. The majority (76%) of respondents also perceived gaps in DVA services for children, with the most frequently mentioned being a lack of counselling, group work and school-based prevention activities. However, the low response rate to the survey (19%, 193/1020) means that its findings are prone to participation bias. Radford *et al.*<sup>50</sup> noted that some of the gaps in service provision had been created or exacerbated by funding difficulties, with interviewees reporting innovative services being run for a pilot period and subsequently closed owing to a lack of sustainable funding.

Qualitative interviews ( $n = 79$ ) with professionals identified a particular gap in support that fell between universal services and the acute specialist mental health services provided by CAMHS. In addition, documentary analysis identified limited evidence of support being provided for children living with domestic violence where the risk (of serious harm) to the mother was not perceived to be high, suggesting that children's need for support was not perceived as independent from that of their non-abusing parent. Radford *et al.*<sup>50</sup> also noted that proactive responses to DVA by frontline services, such as the police, often had limited impact owing to the lack of support available to children in the community. There were also gaps noted in services for young people who had grown up living with DVA and were now abusive in their adult relationships. Violence from older boys towards their mothers was also a particular concern.

Mothers reported particular difficulties in securing timely access to children's services, in particular to CAMHS as well as, in some cases, negative experiences of engaging with social workers who had made them feel responsible for abuse. However, other mothers reported a more helpful response.



In England and Wales, CAMHS have a remit to deliver services to children experiencing high levels of distress and mental health disorders. However, despite exposure to DVA being the most frequent type of trauma experienced by children and young people,<sup>13</sup> a CAMHS mapping exercise carried out in 2008–9<sup>57</sup> found that only 7% ( $n = 320$ ) of participating services described themselves as providing targeted services for children experiencing DVA. There is little published material describing what these specialist services are.<sup>60</sup> The coercive and often chronic nature of DVA, which is specifically directed at a child's parent by a perpetrator with whom the child almost always has an ongoing emotional relationship, coupled with the distinct possibility of re-exposure, means that standardised treatments, even those that are trauma-informed, may not be appropriate for this group of children and parents.<sup>61,62</sup> Research with adult survivors of DVA suggest that psychological interventions that do not directly address DVA may be perceived as unhelpful, and that DVA-informed interventions are preferred.<sup>63</sup>

## Rationale for the evidence synthesis

Despite strong epidemiological evidence that children's exposure to DVA is associated with impairment in physical and mental health in childhood and into adulthood, there is limited evidence of effective interventions that aim to prevent or limit negative outcomes.

With regard to the UK context, there is a near absence of studies that robustly address questions of effectiveness, despite evidence that these interventions are offered as part of the response to exposed children. We cannot assume that interventions trialled in other countries are automatically applicable to UK populations. Indeed, health- and social-care research is littered with examples of promising interventions that have proved difficult to replicate and scale up when transported to other countries.<sup>64,65</sup> The recent evaluation of the Family Nurse Partnership is a case in point, whereby an intervention found to be effective in the USA<sup>66</sup> failed to outperform usual care in the UK,<sup>67</sup> at least in the short term. However, other types of interventions have survived the journey between countries.<sup>68</sup>

The evidence base for interventions targeted at children who have been exposed to DVA needs to be strengthened, which requires prioritisation of interventions for further study and appropriate research designs. This will help to maximise research investment and minimise wastage.<sup>69-71</sup> This is especially relevant in a harsh funding climate, which shows no signs of improving any time soon, and at a time when mental health research receives disproportionately low investment in relation to its disease burden and to investment in researching other conditions.<sup>72</sup>

The prioritisation of research requires, first, a systematic assessment of what is already known or being researched, as well as identification of evidence gaps.<sup>70,71</sup> Second, it requires attention to the needs of research evidence users, to ensure that research addresses relevant questions and uncertainties in order that it might inform real-world decisions about which services to commission and to whom to offer them.<sup>69,71,73</sup> Third, it requires attention to the broader context, including the existing service delivery environment, the attitudes of policy-makers towards research and the capacity to carry out, use and fund research.<sup>69</sup>

The IMPROving Outcomes for children exposed to domestic Violence (IMPROVE) study sought to bring these different types of evidence together, with the aim of informing decisions about the future research that is needed.

## Aim, objectives and research questions

### Aim

The aim of this evidence synthesis was to formulate recommendations for further research, undertaken in the UK and internationally, that seeks to evaluate interventions that aim to improve outcomes for children exposed to DVA.

## Objectives

To generate these recommendations, we applied evidence synthesis methods to provide a comprehensive overview of all available research evidence relating to the clinical effectiveness, cost-effectiveness and acceptability of targeted interventions for children exposed to DVA. We then contextualised this evidence in the current UK service delivery landscape, taking account of the views and priorities of stakeholders.

We specified five objectives at the outset of this study, namely to:

1. conduct systematic reviews of existing studies evaluating the acceptability and short-term benefits of interventions targeted to children exposed to domestic violence
2. estimate the potential medium-to-long-term clinical benefits of interventions tested in controlled experimental studies
3. estimate the cost-effectiveness of selected interventions
4. calculate the expected value of partial perfect information to help identify research priorities for future trials of these interventions
5. formulate recommendations for further research in consultation with survivors of DVA, young people and service providers.

The synthesis answered seven research questions to address these objectives.

## Research questions

1. What is the nature of the evidence base evaluating targeted interventions to improve outcomes for children exposed to DVA?
2. What is the nature of existing interventions to improve outcomes for children exposed to DVA?
3. What is the evidence that existing interventions are clinically effective?
4. What is the evidence that existing interventions are cost-effective?
5. How are outcomes defined and measured in evaluations of defined interventions?
6. What is the evidence that existing interventions are acceptable to stakeholders and feasible to deliver?
7. What is the nature of the UK evidence base and service delivery landscape?

## Scope of the evidence synthesis

- Interventions delivered to children or the parents or caregivers of children aged < 18 years.
- Defined programmes or interventions that aimed to improve outcomes for children exposed to DVA. Eligible interventions included those delivered to parents only, children only or to both parties, provided that child outcomes were reported. Any duration of intervention and any setting were included.
- With respect to primary peer-reviewed studies we focused on controlled experimental studies and peer-reviewed qualitative evaluations.

We did not include interventions designed to prevent forced marriage, female genital mutilation, (so-called) honour-based violence and trafficking in relation to children or other acts classed as child maltreatment. If these acts were perpetrated against an adult carer, then a study of an intervention to mitigate their effect on children would have been included in the synthesis.



## Chapter 2 Design and overview of methods

### Design

We undertook a mixed-methods study to draw together and synthesise different forms of evidence. This approach reflects the epistemologically broad definition of evidence and methodological practices articulated in guideline development by bodies such as the Health Evidence Network (HEN) of the WHO<sup>74</sup> and NICE.<sup>75</sup>

Our study had six components (*Figure 1*); detailed methods are reported in individual chapters. First, we conducted systematic reviews of trials and peer-reviewed qualitative studies. We used the information gathered from the review of trials in a network meta-analysis (NMA) and a cost-effectiveness analysis, and planned to extrapolate the effects of the various interventions into the long term. Alongside the systematic reviews, we investigated current UK service delivery in a scoping review of the UK grey literature. We also consulted with young people and parents who had experienced DVA, as well as professionals delivering or commissioning targeted programmes, to identify perceived gaps in service provision and priorities for future research. The findings of each component of the study were synthesised and used to formulate our conclusions and recommendations.

### Report structure

*Chapter 3* reports the systematic review of controlled experimental studies (objective 1).

*Chapter 4* reports the systematic review and meta-synthesis of qualitative studies of children's, parents' and professionals' experiences of receiving or delivering specific interventions (objective 1).

*Chapter 5* reports the NMA to compare the relative effectiveness of different types of intervention programmes, along with estimates of the cost-effectiveness of these interventions (objectives 2 and 3).

*Chapter 6* reports the mapping of the baseline predictors measured in longitudinal cohort studies to trial outcomes, categorised into broad band indices of adjustment (internalising and externalising). However, it stops short of extrapolating the estimated short-term effects of receiving a particular type of intervention into adulthood (objective 2).

*Chapter 7* reports a review of current approaches to targeted intervention used in the UK, along with a review of UK service evaluations (objectives 1 and 5).

*Chapter 8* reports a synthesis of key themes to emerge from six consultation meetings with young people and mothers exposed to DVA and professionals responsible for delivering and commissioning targeted interventions for children (objective 5).

*Chapter 9* synthesises findings across the study components to address the research questions set out in *Chapter 1*.

*Chapter 10* presents our conclusions and offers recommendations for strengthening the quality and quantity of research in this field. We then highlight several types of interventions that we suggest should be prioritised for further research in the UK. We finish by highlighting some of the outstanding evidence gaps revealed by our study (objective 5).

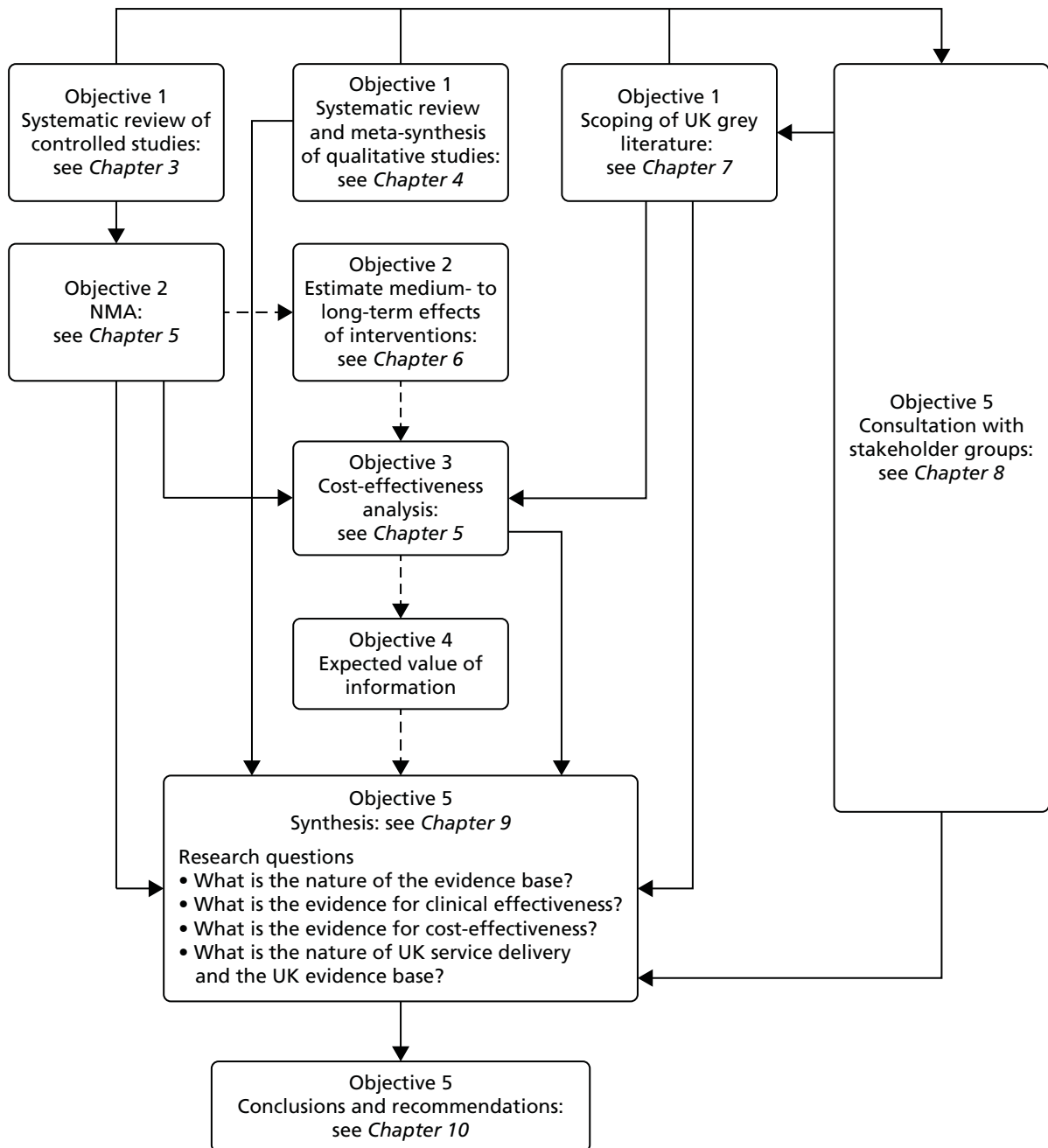


FIGURE 1 Conceptual structure of study and report.

### Deviations from the initial protocol

With regard to the review of qualitative studies, we initially intended to include studies that reported stakeholders' preferences for particular interventions and the acceptability of different models, even if respondents had no direct experience of receiving an intervention. Owing to the number of papers identified and our interest in the different perspectives of three groups of informants (children, parents and professionals), we had to narrow the scope of our review to those studies reporting the views of people with first-hand experience of child-focused interventions. This meant that we were unable to produce findings on what would encourage or deter children and parents from taking up the offer of such an intervention in the first place. This remains an important piece of work to be undertaken to inform service providers about interventions that may be more or less acceptable to different groups, or at different points in the abuse trajectory.

We planned to map the outcomes measured in trials to the baseline measures of child and adolescent mental health and behaviour assessed in longitudinal cohort studies, and to use the results from the longitudinal studies to extrapolate the effects of the various interventions over the long term (using estimates from the NMA). However, given the uncertainty in the findings derived from the NMA, and further assumptions that would have been required to project outcomes into adulthood, it would have been misleading to model the longer term impact of interventions offered in childhood and, therefore, we did not model the medium- and long-term effectiveness of interventions (objective 2). The fact that we were unable to do this is a finding of this synthesis. The absence of robust estimates of long-term outcomes of participation in a specialist intervention following exposure to DVA remains a significant evidence gap. Finally, we were unable to fulfil objective 4 of the study, given that there was too much uncertainty in our cost-effectiveness analysis to support the expected value of partial perfect information analysis that we specified in our original protocol.

### **Public and patient involvement**

We held two sets of meetings with three stakeholder groups: (1) young people with experience of using DVA services; (2) mothers with experience of using DVA services; and (3) professionals involved in commissioning and delivering services to families affected by DVA.

One set of meetings was held at the outset of the study, at which point groups commented on the need for research, as well as the scope and design of the study. Professionals, in particular, drew our attention to the need to focus on the role of context at multiple levels, which resulted in context becoming a much stronger theme in the synthesis than it might otherwise have been. The second set of meetings was held in the later stages of the study when preliminary results were available for discussion. At this stage, the groups worked with us to identify key messages and knowledge gaps.

The stakeholder groups that contributed to the study had a dual role: first, they acted as advisors to the study and, second, they contributed directly to the research (see *Chapter 8*). We recognise that the contribution of stakeholder views and experiences to the study falls outside the conventional remit of patient and public involvement (PPI) in research (which relates to research that is carried out with or by members of the public rather than about or for them). However, the challenge of identifying individuals with experience of DVA and use of DVA services to contribute to this study meant that we worked with these groups in both capacities.



# Chapter 3 Systematic review of interventions for children exposed to domestic violence and abuse: evidence from controlled trials

## Aim

The aim of this chapter is to systematically review the current evidence for clinical effectiveness deriving from controlled experimental studies, including randomised controlled trials (RCTs) and non-randomised controlled clinical trials (CCTs).

## Background

Two other reviews have systematically evaluated interventions for children exposed to DVA. To inform the 2014 guidelines on DVA, NICE commissioned the BCCEWH to review evidence for interventions that were 'effective in identifying and responding to children who were exposed to domestic violence' and, thus, had a broader remit than the review we report in this chapter. They included studies published in English between 2000 and 2012, with a wide range of study designs: RCTs, CCTs, cross-sectional studies, cohort studies, observational studies and qualitative studies.<sup>43</sup> The second review, by Rizo *et al.*,<sup>41</sup> summarised studies of interventions 'that either directly or indirectly target children exposed to domestic violence' and included studies published in English with 'quantitative methodologies', with the exception of case studies. Thus, the scope of this study research question was also broader than ours, as they were looking at indirect evidence, and they also included study designs other than controlled trials.<sup>41</sup>

Rizo *et al.*<sup>41</sup> divided their studies into four categories of interventions: (1) counselling and therapy; (2) crisis and outreach; (3) parenting; and (4) multicomponent. Their multicomponent category was broad, including studies that combined any two interventions, such as parenting skills training and psychological therapy, as well as studies measuring the outcome of comprehensive services including mental health services, after-school clubs, summer camps, legal services and advocacy.<sup>41</sup> BCCWEH divided their studies into seven categories, based on three characteristics of the intervention: (1) single or multiple components; (2) delivery to the child only or to the mother and child; and (3) content, for example, therapy, advocacy or parenting.<sup>43</sup> In our review we described interventions according to their therapeutic components or approaches such as psychotherapy, advocacy and psychoeducation. We then classified studies by their main component or components (if two components were of equal weight in the intervention). Our reason for doing this was to provide a means of synthesising the data in relatively few studies, across a diverse range of interventions and means of delivery, that would enable us to retain the main therapeutic focus of the intervention while reducing complexity.

Our search was broad, as we aimed to identify both evidence on effects of interventions from controlled trials, and reports of qualitative studies examining the views of people experiencing interventions, from which we prepared a systematic review of the qualitative evidence (see *Chapter 4*). To complement these reviews, we summarise evaluations of UK programmes for children exposed to DVA (see *Chapter 7*).

## Methods

The protocol for this systematic review was registered on PROSPERO.<sup>76</sup> We followed the methods for conducting reviews described in the Cochrane Handbook and the structure of reporting for Cochrane



reviews of interventions.<sup>77</sup> We also applied Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines and completed a PRISMA checklist.<sup>78</sup>

### Criteria for including papers in the review

#### Study design

We included RCTs and studies in which participants were allocated to receive an intervention, a control or no intervention without randomisation. All other study designs were excluded, as were letters, comments and references with no abstract.

#### Participants

We included studies of children and adolescents aged < 18 years who had been exposed to DVA. If the trial population included children who has not been exposed to DVA, we included it only if outcomes for exposed children were reported separately.

#### Intervention

We included studies investigating any programme or intervention with the aim of improving behavioural, mental health or social and educational outcomes for children exposed to DVA. Eligible interventions included those delivered to parents only, to children only or to both parties, provided that child outcomes were reported. Any duration of intervention and any setting were included.

#### Outcomes

To be included, studies had to have reported child outcomes. These could include any of the following:

1. child behaviour (e.g. aggression, antisocial behaviour, CD)
  - i. child behaviour disorders [e.g. diagnosis of oppositional defiant disorder (ODD)]
  - ii. child behaviour symptoms [e.g. as determined by Child Behaviour Checklist (CBCL)]
2. children's mental health [e.g. depression, anxiety, self-harm, post-traumatic stress disorder (PTSD)]
  - i. depression
    - psychiatric disorders (diagnoses of depression)
    - psychiatric symptoms (e.g. as determined by the Child Depression Inventory)
  - ii. anxiety
    - psychiatric disorders [diagnoses of anxiety; e.g. Anxiety Disorders Interview Schedule for *Diagnostic and Statistical Manual of Mental Disorders*-Fourth Edition (DSM-IV – Child Version)]
    - psychiatric symptoms (e.g. as determined by the Multidimensional Anxiety Scale for Children)
  - iii. self-harm
    - psychiatric disorders (diagnoses of self-harm)
    - psychiatric symptoms (e.g. as determined by Deliberate Self-Harm Inventory)

## iv. PTSD

- psychiatric disorders (diagnoses of PTSD)
- psychiatric symptoms (as determined by PTSD Reaction Index for children, Children's Impact of Traumatic Events Scale)

3. school attainment
4. school attendance or school functioning
5. children's self-esteem, self-competence or self-efficacy (e.g. as determined by a self-perception profile for children)
6. children's happiness/social relationships (e.g. as determined by Gesten's Health Resources Inventory)
7. child quality of life [e.g. as determined by KINDL (a generic quality-of-life instrument for children),<sup>79</sup> pediatric quality of life inventory (PEDSQL), Health-related Quality of Life Screening Instrument for Children and Adolescents (KIDSCREEN-52), child health and illness profile – child edition, as determined by PEDSQL]
8. intervention of social services (children taken into care, child protection services, care conferences, etc.).

We excluded studies that did not report child outcomes or that did not have a control group (either concurrent or temporal).

### Search methods

We identified search terms from the literature by checking indexing in the relevant databases, and, by using thesauri of the electronic databases, we identified appropriate subheadings. For example, for MEDLINE we used medical subject headings (MeSH) and text word terms for <Children and adolescents> combined with MeSH and text word terms for <domestic violence>. We then combined these with text word terms for <exposure of children to domestic violence or witnessing or growing up with domestic violence>. We searched for literature in MEDLINE (1946 to April 2013), PsycINFO (1806 to April 2013) and EMBASE (1974 to April 2013) on the OVIDSP platform; in the Cumulative Index to Nursing and Allied Health Literature (CINAHL) on EBSCOhost (1937 to April 2013); in the Cochrane Central Register of Controlled Trials (CENTRAL) on The Cochrane Library (1890 to April 2015); in the Science Citation Index, Social Science Citation Index on Web of Science (1900 to April 2013); in the Applied Social Science and Abstracts Index (ASSIA) (1987 to April 2013), International Bibliography of the Social Sciences (IBSS) (1951 to April 2013), Social Services Abstracts (1980 to April 2013) and Sociological Abstracts (1963 to April 2013) on ProQuest; in Social Care Online (socialcareonline.org.uk) (1980 to April 2013); in the WHO trials portal (1999 to April 2013); and in Clinicaltrials.gov (2000 to April 2013). All databases were searched from inception to April 2013. We used neither a filter to limit the search by study methodology nor date or language limits. We excluded letters and editorials, and records for which there was no abstract. For details of search terms used for MEDLINE, see *Appendix 1*. We reran the searches in September 2015 in MEDLINE, PsycINFO, EMBASE, CINAHL and CENTRAL, and as this update was for this quantitative review, we used search filters for controlled studies taken from the InterTASC website and the Cochrane Handbook of reviews of interventions.<sup>80-82</sup> For details of search terms for the update, see *Appendix 2*.

### Data collection and analysis

For the selection of studies, two reviewers (EH and TM) independently screened the titles and abstracts of all potentially eligible references. Full-text reports of all potentially eligible trials were retrieved and assessed independently by the same reviewers. Cases of disagreement were resolved by consensus and recourse to a third reviewer if necessary (GF).

For data extraction and management, data were extracted independently on a bespoke form by two reviewers (TM, and RB or EH). Any disagreements were resolved by discussion and recourse to a third reviewer if necessary (GF). The following types of data were extracted from included studies: country, setting, intervention (type, frequency and intensity), practitioners, population, outcome types reported, number of participants and length of follow-up. We also extracted parameters to assess the risk of bias.

### **Assessment of risk of bias in the primary studies**

The risk of bias in the primary studies was assessed independently by two reviewers (TM and AC or RB), with recourse to a third reviewer (GF) who resolved disagreements. We assessed risk of bias on the following domains using the Cochrane risk-of-bias tool:<sup>83</sup> random sequence generation (selection bias), allocation concealment (selection bias), blinding of participants and personnel (performance bias), blinding of outcome assessment (detection bias) and incomplete outcome data (attrition bias).

### **Data synthesis**

We categorised studies as a basis for a narrative synthesis to answer the following questions:

1. What is the direction of treatment effect?
2. What is the size of the effect?
3. Is the effect common across all studies?
4. What is the strength of evidence for the effect?

Had there been sufficient data (e.g. data on the same outcome from at least three studies of the same design, intervention and population), we planned to pool data in a meta-analysis to allow quantification of the direction of treatment effect and consistency of treatment effect. We did not proceed to classical meta-analysis, as the studies were too variable in both intervention type and participants; therefore, the estimated overall effect would have little context-specific meaning,<sup>84</sup> although we did use the study findings in a NMA (see *Chapter 5*). We examined treatment effect direction and consistency with a structured (tables and descriptive text) narrative summary of the evidence from the studies. When data were available, we calculated effect sizes as standardised mean differences (SMDs) (Hedges's adjusted *g*).<sup>85</sup>

### **Intervention types**

Interventions were categorised according to both the types of component intervention offered within the programme and the relative emphasis on each component both in terms of time and therapeutic focus. We defined components as psychotherapy, play-based therapeutic interventions, parenting skills training interventions, advocacy and psychoeducation (see *Table 9*). This categorisation is similar to that used in the BCCEWH review,<sup>43</sup> although we did not use their single- or multicomponent categorisation. In addition, we noted whether the studies were aimed at children exposed to DVA or at children exposed to DVA who also met criteria for behavioural or emotional problems. The constituent parts of each intervention were categorised independently by two team members. A decision on the final categorisation for synthesis was made by the full team. Interventions were then further distinguished by the target population for the intervention. We provide definitions of constituent parts of interventions in *Table 1*.

From the descriptions of the intervention programmes we identified 'components' that constituted each intervention. These components were then used in the NMA (see *Table 1*).

### **Narrative synthesis**

We grouped outcomes under broad headings corresponding to each intervention type, as described above. We then grouped studies by age of children, setting, duration and frequency of intervention.

**TABLE 1** Definitions of intervention types

Intervention type	Description of intervention
Advocacy	A trained advocate may help women (and their children) with emotional and social support to build a network and develop friendships and assist with access to housing services, child care and child services (e.g. tutor or counselling); obtain and cope with legal services (e.g. protection orders and custody); and obtain material goods and financial assistance (adapted from Sullivan and Bybee <sup>86</sup> )
Psychoeducation	<i>Interventions aimed mainly or solely at changing attitudes and/or resilience through increasing the understanding of factual health information or subjective experience. Information may be delivered via didactic techniques or within the context of a group discussion facilitated by professional or lay leaders. The disseminated information is generic without any consideration of individual barriers or the generation of an individualised action plan. Although behaviour change may be encouraged, its actual implementation will be at the discretion of the individual concerned</i> <i>Reproduced from Bee et al.,<sup>87</sup> box 3, under the Non-Commercial Government Licence v1.0 (<a href="http://www.nationalarchives.gov.uk/doc/non-commercial-government-licence/non-commercial-government-licence.htm">www.nationalarchives.gov.uk/doc/non-commercial-government-licence/non-commercial-government-licence.htm</a>)</i>
Psychotherapy	Psychotherapy is based on therapeutic relationships developed through talking or play, depending on age. The child has an opportunity to work towards a better understanding of themselves, their relationships and their established patterns of behaviour. Psychotherapists also apply their framework of thinking to work with parents, families and carers and to training and supporting other professionals who work with children, young people and families to encourage a deeper understanding of the child's perspective. This definition of psychotherapy is based on that of the Northern School of Child and Adolescent Psychiatry, with the caveat that the intervention need not be delivered by trained psychotherapists <sup>88</sup>
Play therapy	In the UK, play therapy is defined as the dynamic process between child and play therapist in which the child explores, through the medium of play, issues, past and current, conscious and unconscious, that are affecting the child's life in the present <sup>89</sup>
Parenting skills training	<i>Parenting skills training aims to change parenting behaviours by teaching positive reinforcement as a practice to reduce coercive parenting. Using instruction, practice and feedback parents are taught a set of child management skills to increase desirable and decrease undesirable child behaviour, to enhance communication and positive parent-child relations</i>

Jouriles et al.<sup>90</sup>

## Results

### Search

A total of 34 relevant papers referring to 13 primary research studies with 1345 participants were identified (*Figure 2*).<sup>61,90–119,122–124</sup> See *Appendix 3* for a list of papers that report each study, with one paper identified as the main paper for the study. When we refer to a study in this report we reference only this main paper, unless we need to refer to data that are not reported in the main paper. We identified one protocol to a study that was ongoing.<sup>62</sup>

The search identified 9489 records for assessment from electronic databases and six additional records from reference lists of included papers. We excluded 9402 records as not relevant from reading the title and abstract (see *Figure 2*). A total of 87 papers were identified as potentially relevant and the full-text articles were assessed for eligibility. We excluded 52 full-text articles and recorded reasons for exclusion (see *Figure 2*). For a list of references to excluded studies, see *Appendix 4*.

### Description of primary studies

None of the studies were set in the UK. Ten of the 13 completed studies were from the USA: four from Texas,<sup>90,91,93,100</sup> three from Illinois,<sup>96,98,99</sup> and one each from Pennsylvania,<sup>61</sup> California<sup>92</sup> and Oklahoma.<sup>94</sup> One study was from Canada,<sup>97</sup> one was from Israel<sup>101</sup> and one was from the Netherlands.<sup>95</sup> Nine studies

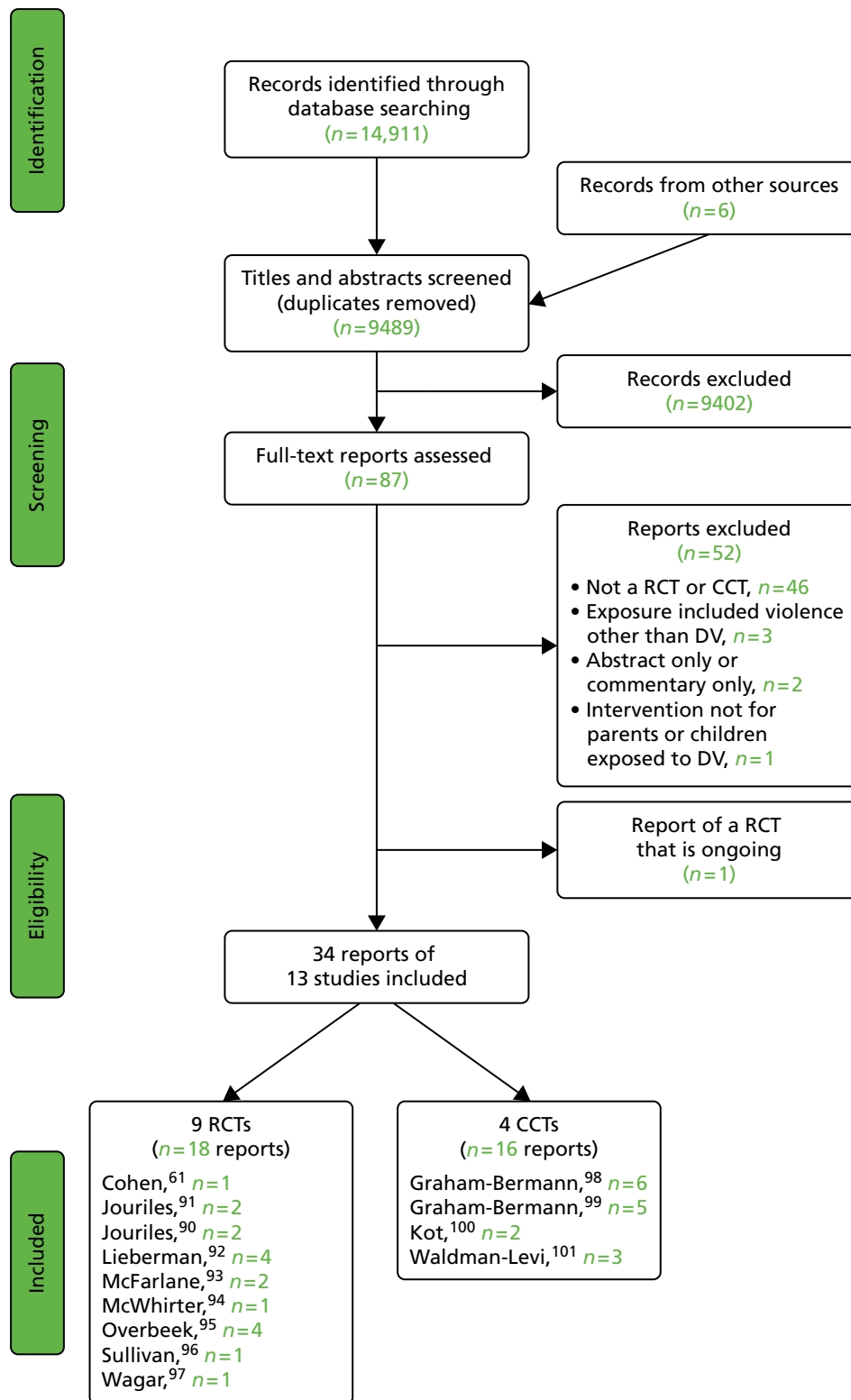


FIGURE 2 Flow chart showing selection of papers.

were RCTs<sup>61,90-97</sup> and four were CCTs, where allocation was quasi-random; participants were allocated sequentially<sup>98,99</sup> according to the timing of their stay in a refuge,<sup>100</sup> or no specific allocation method was reported.<sup>101</sup> Studies varied in size, but most were relatively small, ranging from 66 to 258 participants. There were 1345 participants in total. Studies were published between 1995 and 2015 (Table 2 and see Appendix 5).

**TABLE 2** Characteristics of studies: participants, context and population overview

Criterion	Characteristic	Number of studies	Study reference
Study design	RCT	9	61,90–97
	Controlled trial	4	98–101
Number of participants	≤ 50 participants	4	91,94,97,100
	51–100 participants	4	90,92,96,101
	> 100 participants	5	61,93,95,98,99
Country	USA	10	61,90–96,98–100
	Canada	1	97
	Israel	1	101
	Netherlands	1	95
Sex of parent	Female	12	61,90–94,96–101
	Mix of female and male	1	95
Place of recruitment	Primary care clinic	1	93
	Referred from shelter	6	61,90,91,94,100,101
	Community and shelter	4	92,96,98,99
	Community	1	97
	Child family services or police	1	95
Place of habitation	Domestic violence shelters	3	94,100,101
	The community	3	61,95,96
	A shelter but moving out to a home	2	90,91
	Either a shelter or a home	2	98,99
	Not stated	3	92,93,97
Exposure to DVA characterised?	DVA exposure overall reported	10	61,90,91,94–99,101,102
	Not reported	3	92,93,100
Duration of DVA characterised?	Duration of DVA exposure for children reported	3	61,95,98
	Not reported	10	90–94,96,97,99–101
Co-occurring child physical or sexual abuse	Reported	5	92,95,96,98,101
	Not reported	8	61,90,91,93,94,97,99,100
Comorbidities or other trauma exposures	Reported	2	61,92
	Not reported	11	90,91,93–101
Ongoing DVA/exposure from perpetrator	Reported	10	61,90–92,95–99,101
	Not reported	3	93,94,100
Age of child	Young (18 months – 6 years)	4	92,99–101
	Pre-teen (4–12 years)	6	90,91,94–96,98
	Pre-teen to teen (7–14 years) <sup>a</sup>	2	61,97
	All ages (intervention aimed at women)	1	93

continued

**TABLE 2** Characteristics of studies: participants, context and population overview (*continued*)

Criterion	Characteristic	Number of studies	Study reference
Sex of child	Female approximately 30%	1	97
	Female approximately 50%	7	61,92,93,95,96,98,99
	Female approximately 60–70%	3	91,100,101
	Not stated	2	90,94
Exclusion criteria <sup>b</sup>	Developmental disorder (child)	4	61,92,95,101
	Serious mental health problems (child)	5	61,90–92,95
	Serious mental health problems (mother)	5	61,90–92,95
	Receiving services for behaviour problems (child)	1	90
	Maternal abuse of child	1	92
	Living with abusive partner	2	90,95
	Living in domestic violence shelter	1	61
	Homelessness	1	92
	None explicitly stated	8	93,94,96–101

a Very few at 14 years.

b More than one per study may be recorded.

The study in progress<sup>62</sup> is an assessment of the efficacy of a 6-week, pre-intervention preparatory programme for parents and children undertaking a longer trauma-focused CBT intervention similar to that described by Cohen *et al.*<sup>61</sup> (see *Appendix 6*).

### Assessment of the risk of bias

Overall, four studies were assessed as being at high risk of bias,<sup>98–101</sup> two were assessed as being at low/unclear risk,<sup>94,95</sup> and for the remaining seven studies it was unclear whether they were at high or low risk<sup>61,90–93,96,97</sup> (*Table 3* and see *Appendix 7*). Four studies were not randomised and were rated as being at high risk of bias for random sequence generation and allocation concealment.<sup>98–101</sup> In studies of psychological interventions, it is not possible to blind participants to allocation<sup>83,120</sup> and, therefore, all studies were rated at high risk of bias for blinding for subjective outcome. Attrition bias was high, as many studies had a high dropout rate, had not used any methods to deal with missing data, or provided too few data for us to assess whether or not attrition was treatment-related. We rated four studies as being at low risk of bias for incomplete outcome data.<sup>94–97</sup> Often, the studies did not report the information needed to assess the risk of bias, leading to the high proportion of domains assessed as being at unclear risk of bias.

### Outcome measures

Studies included reports of child behaviour, self-esteem and psychological outcomes such as anxiety, depression and PTSD. None of the studies measured self-harm, school attainment, school attendance, abuse in children's or adolescents' own relationships, child quality of life, reporting of concerns about children to social services, or intervention by social services (see *Appendix 8*).

### Participants

Four studies included children aged  $\leq 6$  years, one of which included infants.<sup>92,99–101</sup> Six studies included children aged between 4 years and 12 years.<sup>90,91,94–96,98</sup> Two studies recruited children from 7 to 14 years of

TABLE 3 Characteristics of studies: risk of bias

Study ID	Overall assessment of risk of bias	Selection bias		Performance bias	Detection bias (blinding of outcome assessment)	Attrition bias
		Random sequence generation	Allocation concealment	Blinding of participants	Subjective outcomes	Incomplete outcome data
Cohen 2011 <sup>61</sup>	Unclear	✓	✓	✗	✗	✗
Graham-Bermann 2007 <sup>98,103-105</sup>	High	✗	✗	✗	✗	✗
Graham-Bermann 2015 <sup>99,106-109</sup>	High	✗	✗	✗	✗	✗
Jouriles 2001 <sup>91,110</sup>	Unclear	?	?	✗	✗	?
Jouriles 2009 <sup>90,111</sup>	Unclear	✓	?	✗	✗	?
Kot 1996 <sup>100,112</sup>	High	✗	✗	✗	✗	✗
Lieberman 2005 <sup>92,113,114</sup>	Unclear	?	?	✗	✗	?
McFarlane 2005 <sup>115</sup>	Unclear	✓	?	✗	✗	✗
McWhirter 2011 <sup>94</sup>	Low/unclear	✓	✓	✗	✗	✓
Overbeek 2012 <sup>95,116,117</sup>	Low/unclear	✓	✓	✗	✗	✓
Sullivan 2002 <sup>96</sup>	Unclear	✓	✗	✗	✗	✓
Wagar 1995 <sup>97</sup>	Unclear	?	?	✗	✗	✓
Waldman-Levi 2011 <sup>101,118,119</sup>	High	✗	✗	✗	✗	✗

✗, high risk of bias; ✓, low risk of bias; ?, unclear risk of bias.

age.<sup>61,97</sup> One study tested an intervention specifically for women, but, to be eligible, women were required to have at least one child aged between 18 months and 18 years; no direct intervention was offered to these children.<sup>93</sup> We found no studies of interventions targeting older adolescents (15–18 years). Of the interventions involving parents, all eight were aimed at the non-abusive parent; in all but one study these parents were mothers. In Overbeek *et al.*'s study,<sup>95</sup> 95% of non-abusive parents were mothers and 5% (148/155) were fathers (see *Table 2* and *Appendix 5*).<sup>95</sup>

The studies undertaken in the USA included participants from a range of ethnic backgrounds (white, African American and Hispanic), except for the study by Graham-Bermann *et al.*,<sup>98</sup> which reported no Hispanic children in its sample. Eight of the nine US studies reported that 30–49% of participants were African American,<sup>61,90,91,93,96,98-100</sup> with one study including just 14.7% African American participants.<sup>92</sup> The study by Waldman-Levi,<sup>101</sup> conducted in Israel, included children from Asian, African, European and American backgrounds. The study by Overbeek *et al.*<sup>95</sup> included 19% of children from Turkey/Morocco, 20% from the Antilles or Surinam and 18% from other countries.

### Characterisation of abuse

Eight studies used a variety of methods to report exposure of children to DVA (see *Appendix 9*). Three studies did not describe their participants' current exposure to DVA.<sup>93,94,100</sup> Cohen *et al.*<sup>61</sup> reported that



14% of mothers (non-abusive parents) were experiencing ongoing trauma related to DVA during the study. Graham-Bermann *et al.*,<sup>98</sup> in their 2007 study, found that women experienced between 1 and 252 events of DVA, and in their 2015 study that women reported 173 events [standard deviation (SD) 131.9 events] in the preceding year.<sup>108</sup> McWhirter<sup>94</sup> reported that the level of abuse prior to the study was 15 or higher on the Hurt-Insult-Threaten-Scream (HITS) measure for IPV, where HITS scores range from 4 to 20 and a cut-off of 10.5 reliably identifies victims of domestic violence, with 91% sensitivity and 96% specificity.<sup>94,121</sup> Wagar and Rodway<sup>97</sup> reported that children witnessed a mean of 1.5 violent incidents per week (SD 0.8 violent incidents per week) during the study, and Sullivan *et al.*,<sup>96</sup> using a Likert scale to measure three aspects of abuse (ridicule/control, threat of harm, actual harm), recorded a mean score of 1.5 violent incidents per week (SD 0.9 violent incidents per week) for the sample at the start of the intervention.

The duration of children's exposure to DVA was reported in only three studies (see *Table 2* and *Appendix 9*). Cohen *et al.*<sup>61</sup> reported that six children had been exposed for 2 years, 23 for 2.5 years and 95 for > 5 years.<sup>61</sup> Graham-Bermann *et al.*<sup>98</sup> and Overbeek *et al.*<sup>95</sup> reported that the mean length of abusive relationships was 10 years.<sup>95,98</sup> Given that the mean age of children was 9.6 years (SD 2.6 years) in the study by Cohen *et al.*,<sup>61</sup> 8.3 years (SD 2.1 years) in the Graham-Bermann<sup>98</sup> study and 9.2 years (SD 1.5 years) in the Overbeek *et al.*<sup>95</sup> study, we can see that the majority of children had been exposed for most, if not all, of their lives.

Three studies<sup>93,94,100</sup> did not report whether or not there was ongoing contact with the perpetrator of the abuse. Jouriles *et al.*<sup>90,91</sup> and Waldman-Levi and Weintraub<sup>101</sup> reported no contact with the perpetrator. Graham-Bermann *et al.*<sup>99</sup> reported that some families were intact, and thus, were living with the perpetrator, but no numbers were provided.<sup>99</sup> Wagar and Rodway<sup>97</sup> reported 'no contact in most cases'; four studies reported that 14–17% of non-abusive parents were living with the perpetrator, with 51–68% still having contact with the perpetrator (see *Table 2* and *Appendix 9*).<sup>61,92,95,96</sup>

### Co-occurring abuse to children

Five studies reported whether or not children had experienced physical or sexual abuse (see *Table 2* and *Appendix 9*). Lieberman *et al.*<sup>92</sup> reported that 19% of children had experienced physical abuse and 15% had experienced sexual abuse. Graham-Bermann *et al.*<sup>98</sup> reported that 30% of children were physically harmed during the year prior to the study, with 33% of those being harmed weekly and 12% having received a significant physical injury.<sup>105</sup> Sullivan *et al.*<sup>96</sup> used a composite score based on combining three scales of emotional abuse, physical abuse and physical injury to describe abuse to the child. The higher the score, the greater the abuse, with 0 corresponding to no abuse. They found a mean score of 1.4 (SD 0.9) on the composite scale of abuse prior to the intervention, which decreased to 0.7 (SD 0.6; range 0–5.0) at 4 months' follow-up.<sup>96</sup> Waldman-Levi and Weintraub<sup>101</sup> reported that 65% of children in the experimental group and 30% of children in the control group experienced physical punishment. In the study carried out by Overbeek *et al.*,<sup>95</sup> the non-abusive parent reported a mean of six episodes of psychological maltreatment of the child by themselves and 13.4 episodes by their partner in the past year (range 0–104 episodes). Mean incidents of physical child maltreatment by the non-abusive parent and the abusive parent over the past year were reported as 0.5 (range 0–15) and 13.9 (range 0–104), respectively.<sup>95</sup>

### Setting, recruitment and targeting of interventions

Studies recruited from a range of settings, although mostly from women's shelters (refuges) or a combination of women's shelters and community DVA services. One study recruited from a primary care clinic<sup>97</sup> and one from child family services and the police<sup>95</sup> (see *Table 2* and *Appendix 5*).

Eligibility criteria for all studies specified that children be exposed to DVA. Some studies, however, set additional clinical criteria. Cohen *et al.*<sup>61</sup> required children to be experiencing PTSD symptoms; both Jouriles *et al.*<sup>90,91</sup> studies recruited children who met DSM-IV diagnostic criteria for ODD and CD.<sup>90,91</sup> Lieberman *et al.*<sup>92</sup> recruited mother-child dyads for whom there were 'clinical concerns about the child's behaviour or mother's parenting after the child witnessed or overheard marital violence'.<sup>92</sup> Although one study recruited through primary care and women and child clinics,<sup>115</sup> the inclusion criteria were simply that women

experienced DVA and had a child (see *Table 2* and *Appendix 5*). None of the interventions was provided to abusive parents (*Table 4*).

### Categorisation of intervention programme

Ten different intervention programmes were assessed in the 13 studies. Two studies by Jouriles *et al.*<sup>90,91</sup> assessed the effects of a parenting plus advocacy programme in a feasibility study published in 2001<sup>91</sup> and in a larger study in 2009.<sup>90</sup> Overbeek *et al.*<sup>95</sup> assessed the effects of the psychoeducational intervention devised and assessed by Graham-Bermann *et al.* in 2007<sup>98</sup> and in 2015,<sup>99</sup> with small adaptations for cultural applicability. The 10 programmes were generally complex. To assess the effects of these components in a NMA (see *Chapter 5*), we identified and labelled the individual components that constituted each programme. Across these 10 programmes, we identified seven component parts: (1) advocacy; (2) emotional support; (3) group activities; (4) parenting skills training; (5) play therapy; (6) psychoeducation and psychotherapy; and (7) various control conditions (*Table 5*). To synthesise the results of studies for this review, we categorised the interventions using their main therapeutic emphasis based on the components above. From this emerged five distinct intervention categories: (1) psychotherapeutic (including play therapy); (2) psychoeducational; (3) parenting skills training plus advocacy; (4) psychoeducation plus advocacy; and (5) advocacy (*Table 6*). We used the main therapeutic aspects of the intervention as the basis for categorisation and did not include the mode of delivery (group or individual), or the intervention target (mother, child or mother and child) as this would have created too many classifications into which to divide the relatively few studies.

The format and target of delivery differed between interventions (see *Table 5*). Seven interventions delivered individual components to either mothers alone, children alone or non-abusive parent–child dyads (see *Table 5*). Some were delivered in a group format and others used a mixture of individual and group

**TABLE 4** Characteristics of studies: intervention description

Criterion	Characteristic	Number of studies	Study reference
Intervention targeted for	Child with PTSD symptoms	1	61
	Child with behavioural problems	3	90–92
	All children	9	93–101
Intervention delivered to	Child	3	97,100,101
	Parent	1	93
	Parent and child	9	61,90–92,94–96,98,99
Intervention delivered by	Social workers (master's level)	1	61
	Trainee clinical psychologists	1	92
	Graduate clinical psychologists	2	90,91
	Graduate clinical psychologists and therapists from mental health clinics	1	98
	Social workers and trained mental health care professional	1	95
	Social workers and graduate clinical psychologists	1	99
	Therapists	3	94,100,101
	Undergraduates	1	96
Not stated	2	93,97	

continued

**TABLE 4** Characteristics of studies: intervention description (*continued*)

Criterion	Characteristic	Number of studies	Study reference
Setting	Not stated	3	92,94,97
	At home	3	90,91,96
	Community (various)	4	61,93,98,99
	Community (not specified)	1	95
	Shelters	2	100,101
Payment of participants	Yes	8	90–93,95,96,98,99
	Not stated	5	61,94,97,100,101
Training in the intervention	Yes	10	61,90,91,94–96,98–101
	Not reported	3	92,93,97
Treatment fidelity delivered	Assessed with video or audio tapes	3	61,95,101
	Through weekly supervision	6	92–94,96,98,99
	Not reported	4	90,91,97,100
Manualised therapy	Yes	10	61,90–92,94,95,97–99,101
	Not reported	3	93,96,100
Therapist supervision	Yes	9	61,90–92,94,95,98,99,101
	Not reported	4	93,97,100,101
Duration of intervention	≤ 2 weeks	1	100
	5–10 weeks	7	61,94,95,97–99,101
	16 weeks	1	96
	8–12 months	3	90–92
	18 months	1	93
Frequency of intervention	Daily	1	100
	Twice weekly	2	96,99
	Weekly	9	61,90–92,94,95,97,98,101
	Four times over 18 months	1	93
Control intervention was less frequent than active intervention?	Yes	3	90–92
Control had no scheduled face-to-face contact?	Yes	1	93
Type of control intervention	WLC or no intervention	5	96–100
	Minimum control	4	90,91,93,101
	Active control	3	61,92,94
	Attention placebo	1	95

WLC, waitlist control.

TABLE 5 Components of the interventions and characterisation of delivery

Study ID	Intervention arm	Intervention type	Intervention arm (described by authors)	Psychotherapy CBT	Psychotherapy	Play therapy	Psychoeducation	Parenting skills training	Advocacy	Emotional support	Group activities	Opportunity for play	Written information	No intervention	WLC
Cohen 2011 <sup>61</sup>	Intervention	CBT	Trauma-focused CBT	○□△			○□								
	Control	Psychoeducation	Child-centred therapy	○□△											
Kot 1996 <sup>100,112</sup>	Intervention	Psychoeducation (play)	Play therapy			○	●								
	Control	No intervention	WLC				●								○
<sup>a</sup> Lieberman 2005 <sup>92,113,114,123</sup>	Intervention	Psychotherapy (attachment)	Child-parent psychotherapy	□△											
	Control	Advocacy	Clinical case management						□						
Graham-Bermann 2007, 2015 <sup>88,103-105,122,124</sup>	Intervention	Psychoeducation	Kids' Club and MEP				●■▲								
	Intervention	Psychoeducation	Kids' Club			●									
	Control	No intervention	WLC												○
Jouriles 2001 <sup>91,110</sup> Jouriles 2009 <sup>80,111</sup>	Intervention	Parenting skills and advocacy	Multicomponent family intervention: social and instrumental support and problem-solving skills, child management skills				□	□	□						○
	Control	Advocacy	Existing services management						□						

continued

TABLE 5 Components of the interventions and characterisation of delivery (continued)

Study ID	Intervention arm	Intervention type	Intervention arm (described by authors)	Psychotherapy CBT	Psychotherapy: Play therapy	Psychoeducation	Parenting skills training	Advocacy	Emotional support	Group activities	Opportunity for play	Written information	No intervention	WLC
McFarlane 2005 <sup>93,115</sup>	Intervention	Advocacy	Nurse case management					□						
	Control	Brief written advice	Referral card									□		
McWhirter 2011 <sup>94</sup>	Intervention 1	CBT	Goal-oriented CBT group therapy	●■▲										
	Intervention 2	Emotion-focused psychological therapy	Emotion-focused CBT group therapy	●■▲										
Overbeek <sup>95,116,117</sup>	Intervention	Psychoeducation	Specific factors intervention programme	●■▲										
	Control	Group meetings	Non-specific control intervention							●■▲				
Sullivan 2002 <sup>96</sup>	Intervention	Advocacy and psychoeducation	'The Learning Club'	●				□						
	Control	No intervention	Control										□	○
Wagar 1995 <sup>97</sup>	Intervention	Psychoeducation	Group psychoeducation	●										
	Control	No intervention	WLC											○
Waldman-Levi <sup>101,118,119</sup>	Intervention	Play therapy	Play therapy		△									
	Control	Opportunities for play	Control (access to the play room)										△	

MEP, Moms' Empowerment Program; WLC, waitlist control; ○, child individual; ●, child group; □, mother individual; ■, mother group; ▲, mother and child together (dyad) individual;

▲, mother and child together (dyad) group.

a In Lieberman *et al.*,<sup>92</sup> the advocacy control arm placed emphasis on access to psychological services: the paper reports that 55% (n = 17) of children had individual treatment and 45% (n = 14%) received separate individual psychotherapy.

**TABLE 6** Categorisation of intervention of included studies

Study ID	Categorisation of intervention
<b>Psychotherapeutic interventions</b>	
Cohen 2011 <sup>61</sup>	Psychotherapy CBT vs. psychoeducation
Lieberman 2005 <sup>92,113,114,123</sup>	Psychotherapy (attachment) vs. advocacy
McWhirter 2011 <sup>94</sup>	Psychotherapy CBT vs. psychotherapy
Kot 1996 <sup>100,112</sup>	Play therapy vs. WLC
Waldman-Levi 2011 <sup>101,118,119</sup>	Play therapy vs. opportunities for play
<b>Parenting skills and advocacy</b>	
Jouriles 2001 <sup>91,110</sup>	Parenting skills and advocacy vs. advocacy
Jouriles 2009 <sup>90,111</sup>	Parenting skills and advocacy vs. advocacy
<b>Psychoeducation</b>	
Graham-Bermann 2007 <sup>98,104,105,122</sup>	Psychoeducation child and mother vs. psychoeducation child vs. WLC
Graham-Bermann 2015 <sup>99,106–109</sup>	Psychoeducation child and psychoeducation mother vs. no intervention
Wagar 1995 <sup>97</sup>	Psychoeducation vs. control
Overbeek 2012 <sup>95,116,117</sup>	Psychoeducation for child and mother (Kids' Club) vs. control programme not specific for DVA
<b>Advocacy and psychoeducation</b>	
Sullivan 2002 <sup>96</sup>	Advocacy and psychoeducation vs. control
<b>Advocacy</b>	
McFarlane 2005 <sup>93</sup>	Advocacy vs. control
WLC, waitlist control.	

formats. The time frame over which the interventions were delivered differed, ranging from 2 weeks to 18 months. Most psychotherapeutic and psychoeducation programmes were 5–10 weeks in duration, but Lieberman *et al.*<sup>92</sup> delivered a long-term psychotherapy programme of 50 weeks and McFarlane *et al.*<sup>115</sup> provided advocacy for 18 months (see *Table 4* and *Appendix 5*). A complete list of studies by categories is provided (see *Table 6*).

### **Manualisation of interventions, details of personnel, training of staff, supervision and assessment of treatment fidelity**

People in a variety of different professions delivered interventions in these studies, and this variation was observed across all studies; different professions were not seen to be delivering specific intervention types. Psychotherapeutic interventions were delivered by a range of people, including social workers,<sup>61</sup> clinical psychologists,<sup>92</sup> occupational therapists and unspecified counsellors or therapists.<sup>94,100</sup> Parenting skills training and advocacy were delivered by clinical psychology students<sup>90,91</sup> psychoeducation was delivered by social workers, mental health professionals,<sup>95</sup> social work and clinical psychology graduates, and people described as group leaders.<sup>97</sup> Advocacy and psychoeducation was delivered by female undergraduates plus group leaders (not specified)<sup>96</sup> and advocacy alone was delivered by nurses.<sup>115</sup> Most of the interventions were manualised, included specific training for personnel, monitored treatment fidelity and included supervision. Although most reported that fidelity to treatment was measured, few reported the results of these assessments (see *Table 4* and *Appendix 5*).

### Comparator interventions

Five studies used a comparison that was either a waitlist control (WLC) or delayed control, treatment as usual or no intervention.<sup>96–100</sup> Four studies used a minimum active intervention, such as allowing mothers to access a play room with their children,<sup>101</sup> telephoning monthly to offer advocacy support<sup>90,91</sup> or providing a referral card with useful local information on services plus a telephone support number.<sup>93</sup> One study provided a group activity of similar duration and intensity as the intervention, but without the focus on DVA.<sup>95</sup> Four studies used an active control of psychotherapy,<sup>61,94</sup> psychoeducation<sup>98</sup> or advocacy<sup>92</sup> (see *Table 4* and *Appendix 5*).

### Psychotherapeutic interventions

Five studies examined the effectiveness of psychotherapeutic interventions. Cohen *et al.*<sup>61</sup> compared the effects of CBT with child-centred therapy for children with PTSD symptoms. The intervention was delivered in eight group sessions over 8 weeks to non-abusive parents and their children, in which two sessions brought the mothers and children together. Lieberman *et al.*<sup>92,113,114,123</sup> compared child–parent psychotherapy (in which the mother–child relationship is focused on as the means of therapeutic change) with telephone advocacy, where Doctor of Philosophy (PhD)-level practitioners telephoned the mothers on a monthly basis and advised them about mental health services for psychotherapy. The children were aged 3–5 years. The intervention was delivered to non-abusive parent and child dyads weekly for 50 weeks. Lieberman *et al.*<sup>92</sup> reported that 55% ( $n = 17$ ) of children and 45% ( $n = 14$ ) of mothers and children from the control group received psychotherapy as a result of the advocacy intervention. McWhirter<sup>94</sup> compared two types of psychotherapy, namely goal-oriented CBT and emotion-focused CBT. There was no further targeting of this intervention beyond children who had been exposed to DVA. The psychotherapy was delivered weekly to the children and to the non-abusive parents in separate groups for 5 weeks. Kot<sup>100,112</sup> examined the effectiveness of a 12-session play therapy intervention delivered daily over 2–3 weeks to individual children, aged 4–10 years in combination with eight psychoeducational sessions. Therapy was delivered by three trained counsellors including a registered play therapist. Waldman-Levi<sup>101,118,119</sup> investigated the effects of a play therapy intervention for children aged 1–5 years, designed to improve mother–child communication and play behaviour. It was delivered to the non-abusive parent and child dyads by occupational therapists, who were trained in delivering the Family Interaction for Improving Occupational Performance (Fi-Op) intervention. Fi-Op was delivered once or twice per week for 8 weeks while the women and children were residing in a women’s refuge. The play therapy differed from that in the Kot *et al.* study<sup>100</sup> in that it was provided daily to children only, whereas Waldman-Levi *et al.*<sup>101</sup> provided weekly play sessions to mother and child and modelled good play behaviour to mothers to improve parent–child communication. Therapists also differed; Kot *et al.*<sup>100</sup> included one PhD-level play therapist and two master’s-level play therapists, and Waldman-Levi *et al.*<sup>101</sup> had occupational therapists with 10 years’ experience of paediatric occupational therapy who had been trained to deliver Fi-Op. For both studies the therapists were trained specifically in play therapy.

### Psychoeducational interventions

Four studies examined the effectiveness of psychoeducational interventions. Graham-Bermann *et al.*<sup>98,104,105</sup> conducted a three-arm trial: (1) parallel group-based interventions for the children (Kids’ Club) and their non-abusive parents [Moms’ Empowerment Program (MEP)]; (2) a group-based intervention delivered to children alone (Kids’ Club); and (3) WLC. The intervention was delivered weekly to non-abusive parents and children aged 6–12 years over 10 weeks. The children’s groups were age-specific (6–8 years, 9–12 years) with five to seven children per group. The interventions were delivered by trained graduate clinical psychology students and local mental health services therapists. Graham-Bermann *et al.* replicated this study for pre-school children and compared parallel group-based interventions for younger, pre-school children aged 4–6 years (Pre-Kids’ Club) and their non-abusive parents (MEP) with a control group which received no intervention. The intervention was delivered twice weekly over 5 weeks by trained social workers and graduate psychology students.<sup>99</sup> Overbeek *et al.*<sup>95</sup> evaluated the clinical effectiveness of an intervention based on that developed by Graham-Bermann and adapted to take account of cultural differences in the Netherlands (e.g. attention to the context of child welfare, as both parents are afforded parenting rights in the Netherlands; more non-verbal activities, as there is a diversity of immigrant backgrounds and languages

in the Netherlands; and use of the term 'caregiver parent', as some attending parents were fathers). The intervention was delivered to children aged 6–12 years and their non-abusive parent. The psychoeducational intervention focusing on DVA was delivered by mental health-care professionals, with social workers delivering group sessions without DVA content to the control arm.<sup>95</sup> Wagar and Rodway<sup>97</sup> compared the effectiveness of a group psychoeducational programme delivered to children aged 8–13 years with a WLC. The intervention was delivered weekly for 10 weeks. The content of the psychoeducation delivered to children in all four studies included identification of emotions, safe methods of expressing emotions including anger, and correct attribution of responsibility for violence. Psychoeducation methods were tailored for a younger age group (4–6 years) in the study by Graham-Bermann *et al.*<sup>99</sup> The psychoeducation content delivered to parents was similar for the three studies as they followed the same programme, that is, the MEP, with the aims of educating women about the effects of DVA on themselves and their children, building parenting competence and managing child behaviour, and helping parents to understand and correctly attribute children's emotions.<sup>95,98,99</sup>

### Parenting skills training plus advocacy interventions

Two studies looked at the effects of an intervention combining parenting skills training with advocacy support for parents and mentoring for children compared with the provision of monthly telephone-based advocacy for parents.<sup>90,91</sup> The intervention was delivered on an individual basis to non-abusive parents and children aged 4–9 years in their homes, approximately weekly for 8 months. The intervention was targeted at children about whom concerns had been raised with regard to the child's behaviour. Mothers were provided with advocacy (emotional and instrumental support), for example listening and supporting, help to access housing or legal services and help with developing problem-solving skills. Mothers were also given parent skills training that included instruction, practice and feedback, and helped them to develop warm regard for, and positive relationships with, their children. The skills training was tailored around experiences of DVA.

While the non-abusive parents were receiving parenting skills training and advocacy, the children were looked after by students who 'served as mentors' (e.g. providing positive support and 'prosocial' models). The intervention was delivered by clinical psychology graduates who were trained and provided with weekly supervision.

### Advocacy plus psychoeducation

Sullivan *et al.*<sup>96</sup> evaluated the effectiveness of an advocacy intervention provided to non-abusive parents combined with a psychoeducational intervention (The Learning Club) delivered to children aged 7–11 years. The advocacy was delivered to women on an individual basis over 16 weeks in their homes; The Learning Club was delivered weekly to children in groups over 10 weeks. Advocacy was delivered by highly trained female 'paraprofessionals'. Psychoeducation was delivered to children by group leaders with extensive experience of working with children. Advocacy delivered to the parents comprised emotional and instrumental support with the aim of helping mothers to achieve their goals. Advocacy for the child was in the form of emotional support for children and an assessment of their needs and goals. The Learning Club was psychoeducation for children which helped children to understand safety, emotions and respect for themselves and others.

### Advocacy

McFarlane *et al.*<sup>93,115</sup> assessed the effects of an advocacy intervention delivered by nurses plus a referral card detailing the availability of local resources compared with the provision of a referral card alone. The intervention was delivered to the non-abusive parent only. No intervention was offered to children. After the initial visit, nurses visited women in the intervention arm of the study at 6, 12 and 18 months, provided the women with a 15-item safety plan that aimed to improve safety behaviour and provided supportive care as 'empathetic listeners' as well as advocacy. The content of the advocacy differed from that delivered in both the Jouriles *et al.* studies<sup>90,91</sup> (see *Parenting skills training plus advocacy*) in that it did not include the same level of emotional support, befriending or social support. Rather, it focused on what women could expect from abuse intervention services and referrals for job training needs.



### Theory underpinning the interventions

We looked at the publications associated with each study to assess whether or not the intervention was described within theoretical frameworks (i.e. whether or not reference was made to relevant theory when talking directly about the intervention) and whether or not the causal mechanism by which the intervention was expected to have an effect on the stated outcomes was described. Four studies provided a theoretical grounding for the study and set out the theory for how each part of their intervention would lead to change in outcomes.<sup>90,95,100,101</sup> Graham-Bermann *et al.*<sup>99</sup> did not use a theoretical framework and Jouriles *et al.*<sup>91</sup> had a grounding in theory but did not describe a stepwise, causal mechanism. However, both sets of authors have described the theory underpinning their interventions well in their earlier publications.<sup>90,98</sup> Two studies grounded their intervention in theory but did not provide details about the pathway to change<sup>93,96</sup> and three studies provided neither background theory nor a causal pathway.<sup>61,94,97</sup> We recognise that there may be additional papers to those we identified for each study or training manuals providing additional details that we were unable to locate, and so we cannot be definitive. Nonetheless, there is scope for interventionists to provide more detail as to how interventions are designed to meet their aims through theories of child development, and parent–child interactions.

### Sample size and retention of study participants

Studies were mostly small, with eight recruiting fewer than 80 participants<sup>90–92,94,96,97,100,101</sup> and only two with more than 200 participants.<sup>93,98</sup> Attrition ranged from 5% to 52% across the 13 studies. Five studies had good participant retention with under 10% attrition,<sup>91,93,95,96</sup> and four of these studies paid their participants for participating: three paid for both initial participation and for follow-up visits<sup>93,95,96</sup> and one paid for participation with few details.<sup>91</sup> Five studies were nearly as successful, with between 13% and 16% dropping out;<sup>90,92,94,98,122</sup> of these, four studies paid their participants and one did not.<sup>94</sup> Three studies lost between 43% and 52% of their participants.<sup>61,100,101</sup> This high attrition rate may in part have been attributable to participants moving from living in shelters to going back to the community after enrolment in the study<sup>100,101</sup> or because of very open inclusion criteria whereby mothers with substance abuse and mental health problems were included in the study, thus representing a more pragmatic study design.<sup>61</sup> However, none of these studies paid their participants to take part in the study or to complete follow-up assessments. Overall, it was hard to determine the precise reasons for variation in participant retention, but providing financial incentives to parents for their time looks like it might be a helpful strategy. Establishing safe protocols to follow up participants who move home or move from a refuge to their own home, which were given as the reasons for high attrition reported in two studies,<sup>100,101</sup> might also prevent attrition.

## Effects of interventions

Effects of all interventions for outcomes of interest are presented in *Table 7*. Results are reported by type of intervention and then type of outcome. Within the type of outcome we differentiate between those studies in which, in addition to exposure to DVA, the children met criteria for behavioural or emotional problems (see *Categorisation of intervention programme*) and those that simply accepted children on the basis that they had been exposed to DVA. We provide forest plots (see *Appendix 10*). For an overview of results with less detail, see *Table 8*. Many studies reported maternal outcomes and child outcomes that were not pre-specified in our protocol (see *Appendix 8*).

### Psychotherapeutic interventions

The size of the study and the risk of bias indicate that caution in interpreting findings from some of the studies in this section must be exercised. Kot *et al.*<sup>100</sup> reported just 22 completing treatment; this was a controlled trial without randomisation, and thus was scored as being at high risk of bias. These factors, coupled with a very short follow-up time, mean that we have less confidence in the strength of this evidence. Cohen *et al.*<sup>61</sup> recruited 124 participants and met criteria for low risk of bias for two important domains concerning selection bias; therefore, we are more confident in the data reported from this study. McWhirter *et al.*<sup>94</sup> recruited 50 participants and had a low risk of both selection and attrition bias. Lieberman *et al.*'s study<sup>92</sup> was judged as

TABLE 7 Outcome for studies organised by intervention type. For additional child and maternal outcomes see Appendix 8

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
<b>Studies investigating psychotherapeutic interventions</b>							
<i>Anxiety</i>							
SCARED	Cohen 2011 <sup>61</sup>	8 weeks	124	Psychotherapy: CBT	Psychotherapy	SMD -0.27 (-0.63 to 0.08)	GLIMM 5.13 (95% CI 1.31 to 8.96)
<i>Mood</i>							
EB <sup>a</sup>	McWhirter 2011 <sup>94</sup>	5 weeks	46	Psychotherapy: CBT	Psychotherapy	SMD -0.18 (-0.76 to 0.40)	ANOVA: $F(1,46) = 7.00$ ; $p < 0.05$
<i>Depression</i>							
CDI	Cohen 2011 <sup>61</sup>	8 weeks	124	Psychotherapy: CBT	Psychotherapy	SMD -0.27 (-0.63 to 0.08)	GLIMM -1.41 (95% CI -0.41 to 3.23)
SSI-DC-03-Dep	Lieberman 2005 <sup>92</sup>	50 weeks	NK	Psychotherapy	Advocacy <sup>b</sup>	High-risk group: SMD 0.00 (-0.46 to 0.46) <sup>c</sup> Low-risk group: SMD -0.24 (-0.69 to 0.22)	GLIMM High-risk group: $d = 0.80$ ; $t = 3.26$ ; $p < 0.001$ Low-risk group: $d = 0.23$ ; $t = 1.10$ ns <sup>h</sup>
<i>Internalising symptoms</i>							
CBCL-Internalising	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD -1.14 (-2.06 to -0.23) <sup>d</sup>	ANCOVA $F(1, 19) = 3.978$ ; $p < 0.05$
<i>PTSD</i>							
DC-03-TSD	Lieberman 2005 <sup>92</sup>	50 weeks	65	Psychotherapy	Advocacy <sup>b</sup>	SMD -0.61 (-1.11 to -0.11)	GLIMM $d = 0.63$ $F = 10.48$ ; $p < 0.0001$ ; $df = 1, 59$
UCLA PTSD RI	Cohen 2011 <sup>61</sup>	8 weeks	124	Psychotherapy: CBT	Psychotherapy	SMD -0.47 (-0.83 to -0.11)	GLIMM 5.50 (95% CI 1.37 to 9.63)
K-SADS-PL total (PTSD) <sup>9</sup>	Cohen 2011 <sup>61</sup>	8 weeks	124	Psychotherapy: CBT	Psychotherapy	SMD -0.48 (-0.84 to -0.13)	GLIMM 1.63 (95% CI 0.44 to 2.82)

continued

TABLE 7 Outcome for studies organised by intervention type. For additional child and maternal outcomes see Appendix 8 (continued)

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
Diagnosis K-SADS-PTSD	Cohen 2011 <sup>61</sup>	8 weeks	124	Psychotherapy: CBT	Psychotherapy	RD -0.13 (-0.32 to 0.07)	-
Diagnosis DC-03-TSD	Lieberman 2005 <sup>92</sup>	50 weeks	65	Psychotherapy	Advocacy <sup>b</sup>	RD -0.29 (-0.48 to -0.10)	$\chi^2 = -6.43; p < 0.01$
<b>Behaviour</b>							
Children's peer conflict <sup>c</sup>	McWhirter 2011 <sup>94</sup>	5 weeks	46	Psychotherapy: CBT	Psychotherapy	SMD 0.54 (-0.05 to 1.13) <sup>e</sup>	ANOVA $F(1, 46) = 4.97; p < 0.05$
CBCL-Total	Lieberman 2005 <sup>92</sup>	50 weeks	65	Psychotherapy	Advocacy <sup>b</sup>	SMD -0.23 (-0.72 to 0.26)	GLM $d 0.24 F = 5.77; p < 0.05$
CBCL-Total	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD -1.44 (-2.40 to -0.48) <sup>d</sup>	ANCOVA $F(1, 19) = 9.56; p < 0.01$
CBCL-Total	Cohen 2011 <sup>61</sup>	8 weeks	124	Psychotherapy: CBT	Psychotherapy	SMD 0.07 (-0.29 to 0.42)	GLM MD 1.43 (95% CI -8.53 to 5.85)
CBCL-Externalising	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD -1.17 (-2.09 to -0.25) <sup>d</sup>	ANCOVA $F(1, 19) = 4.39; p = 0.05$
<b>Play</b>							
CPSBRS: physical proximity <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD 0.99 (0.09 to 1.89)	ANCOVA $F(1, 19) = 13.56; p < 0.01$
CPSBRS: play themes <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD 0.58 (-0.27 to 1.44)	ANCOVA $F(1, 19) = 12.182; p < 0.01$
CPSBRS: affection <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD 0.44 (-0.41 to 1.28)	ANCOVA $F(1, 19) = 2.185; p > 0.05$
CPSBRS: contact <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD -0.01 (-0.84 to 0.83)	ANCOVA $F(1, 19) = 0.305; p > 0.05$
CPSBRS: self-direction <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD 0.21 (-0.63 to 1.05)	ANCOVA $F(1, 19) = 0.187; p > 0.05$
CPSBRS: mood <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD 0.71 (-0.15 to 1.58)	ANCOVA $F(1, 19) = 2.678; p > 0.05$

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
CPSBRS: food nurturing <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD -0.35 (-1.20 to 0.49)	ANCOVA/F(1, 19) = 0.365; p > 0.05
CPSBRS: aggression <sup>m</sup>	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD 0.03 (-0.81 to 0.87)	ANCOVA/F(1, 19) = 1.912; p > 0.05
RKPPS: symbolic dimension	Waldman-Levi 2011 <sup>118</sup>	8 weeks	37	Play therapy	M/C play time	-	MMU11.5; p < 0.01
RKPPS: space management	Waldman-Levi 2011 <sup>118</sup>	8 weeks	37	Play therapy	M/C play time	-	MMU123.5; p > 0.05
RKPPS: material management	Waldman-Levi 2011 <sup>118</sup>	8 weeks	37	Play therapy	M/C play time	-	MMU131; p > 0.05
RKPPS: participation	Waldman-Levi 2011 <sup>118</sup>	8 weeks	37	Play therapy	M/C play time	-	MMU126.5; p > 0.05
TOP	Waldman-Levi 2011 <sup>118</sup>	8 weeks	37	Play therapy	M/C play time	-	MMU126.5; p > 0.05
<b>Self-esteem</b>							
Self-esteem <sup>i</sup>	Waldman-Levi 2011 <sup>118</sup>	5 weeks	46	Psychotherapy: CBT	Psychotherapy	SMD -0.07 (-0.65 to 0.51)	F(1,46) = 7.87; p < 0.05
JPPSST	Kot 1996 <sup>100,112</sup>	2 weeks	22	Play therapy	WLC	SMD -1.10 (-2.01 to -0.19)	ANCOVA/F(1, 19) = 48.96; p < 0.001
<b>Studies investigating parenting skills and advocacy</b>							
<i>Internalising symptoms</i>							
CBCL-Internalising <sup>j</sup>	Jouriles 2001 <sup>91</sup>	24 months	30	Parent skills + advocacy	Advocacy	SMD -0.52 (-1.26 to 0.21)	t(27) = -1.43; p > 0.05
CBCL-Internalising (thresh) <sup>j</sup>	Jouriles 2001 <sup>91</sup>	24 months	30	Parent skills + advocacy	Advocacy	RD -0.35 (-0.60 to -0.11)	$\chi^2 = -5.74$ ; p < 0.05
Happiness/social relations	Jouriles 2001 <sup>91</sup>	24 months	30	Parent skills + advocacy	Advocacy	SMD 0.49 (-0.25 to 1.22)	t(28) = -1.74; p < 0.05
<i>Behaviour</i>							
CBCL-Externalising	Jouriles 2009 <sup>90</sup>	8 months	36	Parent skills + advocacy	Advocacy	SMD -0.74 (-1.42 to -0.06)	- <sup>k</sup>
CBCL-Externalising	Jouriles 2009 <sup>90</sup>	8 months	66	Parent skills + advocacy	Advocacy	-	WHLM d 0.66 (95% CI 0.11 to 1.19)

continued

**TABLE 7** Outcome for studies organised by intervention type. For additional child and maternal outcomes see Appendix 8 (continued)

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
CBCL-Externalising	Jouriles 2009 <sup>90</sup>	20 months	66	Parent skills + advocacy	Advocacy	–	HLM $d$ 0.63 (95% CI 0.04 to 1.20)
CBCL-Externalising <sup>l</sup>	Jouriles 2009 <sup>90</sup>	24 months	30	Parent skills + advocacy	Advocacy	SMD –0.62 (–1.36 to 0.12)	$t(28) = -1.68; p < 0.05$ (1-tailed)
CBCL-Externalising threshold 60 <sup>l</sup>	Jouriles 2001 <sup>91</sup>	16 months	30	Parent skills + advocacy	Advocacy	RD –0.38 (–0.68 to –0.07)	$\chi^2(4, 36) = -9.66; p < 0.05^f$
DSM-IV ODD or CD	Jouriles 2001 <sup>91</sup>	24 months	30	Parent skills + advocacy	Advocacy	RD –0.38 (–0.68 to –0.07)	$\chi^2 = -4.47; p < 0.05$
CBCL-Externalising threshold 60	Jouriles 2001 <sup>91</sup>	24 months	30	Parent skills + advocacy	Advocacy	RD –0.38 (–0.68 to –0.07)	$\chi^2 = -4.47; p < 0.05$
Problem behaviours ECBI	Jouriles 2009 <sup>90</sup>	8 months	66	Parent skills + advocacy	Advocacy	–	HLM $d$ 0.17 (95% CI –0.36 to 0.70)
OCB (DSM-IV)	Jouriles 2009 <sup>90</sup>	8 months	66	Parent skills + advocacy	Advocacy	–	HLM $d$ 0.52 (95% CI –0.05 to 1.07)
Problem behaviours ECBI	Jouriles 2009 <sup>90</sup>	20 months	66	Parent skills + advocacy	Advocacy	–	HLM $d$ 0.66 (0.03 to 1.26)
OCB (DSM-IV)	Jouriles 2009 <sup>90</sup>	20 months	66	Parent skills + advocacy	Advocacy	–	HLM $d$ 0.57 (95% CI –0.03 to 1.15)
<b>Studies investigating psychoeducation</b>							
<i>Depression and internalising behaviour</i>							
CDI <sup>l</sup>	Graham-Bermann 2007 <sup>98</sup>	8 months	116	Psychoeducation CO	Psychoeducation CM	SMD 0.05 (–0.32 to 0.41)	– <sup>n</sup>
CDI	Overbeek 2012 <sup>95</sup>	EoT	113	Psychoeducation	Group activity	SMD 0.01 (–0.37 to 0.40)	No effect
CDI	Overbeek 2012 <sup>95</sup>	6 months	113	Psychoeducation	Group activity	SMD 0.12 (–0.28 to 0.53)	No effect
CBCL-Internalising	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	116	Psychoeducation CM	WLC	–	HLM $d = 0.19$ ns
CBCL-Internalising	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	116	Psychoeducation CO	WLC	–	HLM $d = 0.02$ ns

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
CBCL-Internalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	59	Psychoeducation CM	–	–	65% reduction in the percentage of children in the clinical range $\chi^2(1,59) = 23.02; p < 0.01$
CBCL-Internalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	60	Psychoeducation CO	–	–	35% reduction in the percentage of children in the clinical range $\chi^2(1,60) = 10.67; p < 0.01$
CBCL-Internalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	60	WLC	–	–	24% reduction in the percentage of children in the clinical range $\chi^2(1,59) = 30.30; p < 0.01$
CBCL-Internalising	Graham-Bermann 2015 <sup>99</sup>	BL to EoT 5 weeks	120	Psychoeducation CM	No intervention	–	MLRA $-0.111$ ; not significant reduction in score
CBCL-Internalising	Graham-Bermann 2015 <sup>99</sup>	BL to 8 months	120	Psychoeducation CM	No intervention	–	MLRA $-0.475$ ; $p < 0.01$ for female children only
CBCL-Internalising	Graham-Bermann 2015 <sup>99</sup>	BL to EoT 5 weeks	120	Psychoeducation CM	No intervention	–	20% reduction in the percentage of children in the clinical range in the intervention vs. 6% reduction in the percentage of children in the clinical range children clinical range in the control
CBCL-Internalising	Graham-Bermann 2015 <sup>99</sup>	BL to 8 months	120	Psychoeducation CM	No intervention	–	9% reduction in the percentage of children in the clinical range children borderline range in the intervention vs. 3% reduction in the percentage of children in the clinical range children borderline range in the control

continued

TABLE 7 Outcome for studies organised by intervention type. For additional child and maternal outcomes see Appendix 8 (continued)

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
CBCL-Internalising	Graham-Bermann 2015 <sup>99</sup>	BL to 8 months	120	Psychoeducation CM	No intervention	-	12% increase in number of children in borderline range in the intervention group vs. 9% increase in number of children in borderline range in control group
	Graham-Bermann 2015 <sup>99</sup>	BL to EoT 5 weeks	120	Psychoeducation CM	No intervention	-	Intervention group: $d = 0.18$ ; control group: $d = 0.15$
	Graham-Bermann 2015 <sup>99</sup>	BL to 8 months	120	Psychoeducation CM	No intervention	-	Intervention group: $d = 0.01$ ; control group: $d = 0.07$
	Overbeek 2012 <sup>95</sup>	EoT	113	Psychoeducation	Group activity	SMD -0.03 (-0.38 to 0.32)	No effect
CBCL-Internalising mothers' report	Overbeek 2012 <sup>95</sup>	6 months	Psychoeducation	Group activity	SMD 0.04 (-0.32 to 0.39)	No effect	
<b>PTSD</b>							
TSCC: child	Overbeek 2012 <sup>95</sup>	EoT	113	Psychoeducation	Group activity	SMD 0.22 (-0.22 to 0.66)	No effect
TSCC: child	Overbeek 2012 <sup>95</sup>	6 months	113	Psychoeducation	Group activity	SMD 0.02 (-0.43 to 0.47)	No effect
TSCYC: parent	Overbeek 2012 <sup>95</sup>	EoT	113	Psychoeducation	Group activity	SMD -0.17 (-0.56 to 0.21)	No effect
TSCYC: parent	Overbeek 2012 <sup>95</sup>	6 months	113	Psychoeducation	Group activity	SMD -0.07 (-0.46 to 0.32)	No effect
<b>Behaviour</b>							
CBCL-Externalising	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	116	Psychoeducation CM	WLC	-	HLM $d = 0.23$ ; $p < 0.05$
CBCL-Externalising	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	114	Psychoeducation CO	WLC	-	HLM $d = 0.01$ ns
CBCL-Externalising	Graham-Bermann 2007 <sup>98</sup>	EoT to 8 month	118	Psychoeducation CM	Psychoeducation CO	Psychoeducation CO	HLM $d = 0.65$ ; $p < 0.001$

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
CBCL-Externalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	59	Psychoeducation CM	-	-	48% reduction in the percentage of children in the clinical range ( $\chi^2 = 22.28$ ; $p < 0.001$ )
CBCL-Externalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to EoT 10 weeks	60	Psychoeducation CO	-	-	28% reduction in the percentage of children in the clinical range ( $\chi^2 = 4.03$ ; $p < 0.05$ )
CBCL-Externalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to 8 months	59	Psychoeducation CM	-	-	77% reduction in the percentage of children in the clinical range ( $\chi^2 = 17.35$ ; $p < 0.001$ )
CBCL-Externalising <sup>o</sup>	Graham-Bermann 2007 <sup>98</sup>	BL to 8 months	60	Psychoeducation CO	-	-	50% reduction in the percentage of children in the clinical range ( $\chi^2 = 0.92$ ; $p = 0.338$ )
CBCL-Externalising	Overbeek 2012 <sup>95</sup>	EoT	113	Psychoeducation	Group activity	SMD -0.19 (-0.54 to 0.16)	No effect
CBCL-Externalising	Overbeek 2012 <sup>95</sup>	6 months	113	Psychoeducation	Group activity	SMD 0.01 (-0.34 to 0.37)	No effect
<b>Studies investigating advocacy and psychoeducation</b>							
Self-esteem	Sullivan 2002 <sup>96</sup>	EoT to 4 months	78	Advocacy + psychoeducation	No intervention	No SD (not estimable)	$ANCOVA_t = 1.89$ ; $p < 0.05$
<b>Studies investigating advocacy</b>							
Internalising symptoms	McFarlane 2005 <sup>115</sup>	6 months	103	Advocacy	Usual care	SMD 0.06 (-0.33 to 0.44)	ANOVA ns
CBCL-Internalising 1.5-5 years	McFarlane 2005 <sup>115</sup>	12 months	103	Advocacy	Usual care	SMD 0.05 (-0.34 to 0.44)	ANOVA ns
CBCL-Internalising 1.5-5 years	McFarlane 2005 <sup>115</sup>	24 months	103	Advocacy	Usual care	SMD -0.16 (-0.55 to 0.23)	ANOVA ns

continued



**TABLE 7** Outcome for studies organised by intervention type. For additional child and maternal outcomes see Appendix 8 (continued)

Outcome	Study ID	Assessment timing	n	Intervention A	Intervention B	Effect size (95% CI)	Author analyses
CBCL-Internalising 6-18 years	McFarlane 2005 <sup>115</sup>	6 months	130	Advocacy	Usual care	SMD 0.06 (-0.29 to 0.40)	ANOVA ns
CBCL-Internalising 6-18 years	McFarlane 2005 <sup>115</sup>	12 months	103	Advocacy	Usual care	SMD 0.07 (-0.28 to 0.41)	ANOVA ns
CBCL-Internalising 6-18 years	McFarlane 2005 <sup>115</sup>	24 months	103	Advocacy	Usual care	SMD 0.03 (-0.31 to 0.37)	ANOVA ns
<b>Behaviour</b>							
CBCL-Externalising 1.5-5 years	McFarlane 2005 <sup>115</sup>	6 months	103	Advocacy	Usual care	SMD -0.10 (-0.49 to 0.28)	ANOVA ns
CBCL-Externalising 1.5-5 years	McFarlane 2005 <sup>115</sup>	12 months	103	Advocacy	Usual care	SMD -0.02 (-0.41 to 0.36)	ANOVA ns
CBCL-Externalising 1.5-5 years	McFarlane 2005 <sup>115</sup>	24 months	103	Advocacy	Usual care	SMD 0.14 (-0.25 to 0.52)	ANOVA ns
CBCL-Externalising 6-18 years	McFarlane 2005 <sup>115</sup>	6 months	130	Advocacy	Usual care	SMD 0.05 (-0.29 to 0.40)	ANOVA ns
CBCL-Externalising 6-18 years	McFarlane 2005 <sup>115</sup>	12 months	103	Advocacy	Usual care	SMD 0.00 (-0.34 to 0.34)	ANOVA ns
CBCL-Externalising 6-18 years	McFarlane 2005 <sup>115</sup>	24 months	103	Advocacy	Usual care	SMD -0.03 (-0.37 to 0.31)	ANOVA ns
CBCL-Total 1.5-5 years	McFarlane 2005 <sup>115</sup>	6 months	103	Advocacy	Usual care	SMD -0.12 (-0.51 to 0.27)	ANOVA ns
CBCL-Total 1.5-5 years	McFarlane 2005 <sup>115</sup>	12 months	103	Advocacy	Usual care	SMD -0.01 (-0.39 to 0.38)	ANOVA ns
CBCL-Total 1.5-5 years	McFarlane 2005 <sup>115</sup>	24 months	103	Advocacy	Usual care	SMD 0.14 (-0.25 to 0.53)	ANOVA ns
CBCL-Total 6-18 years	McFarlane 2005 <sup>115</sup>	6 months	130	Advocacy	Usual care	SMD -0.09 (-0.43 to 0.26)	ANOVA ns
CBCL-Total 6-18 years	McFarlane 2005 <sup>115</sup>	12 months	103	Advocacy	Usual care	SMD -0.09 (-0.43 to 0.26)	ANOVA ns
CBCL-Total 6-18 years	McFarlane 2005 <sup>115</sup>	24 months	103	Advocacy	Usual care	SMD 0.16 (-0.18 to 0.51)	ANOVA ns

ANOVA, analysis of variance; BL, baseline; CI, confidence interval; CPSBRS, Child Play Session Behavior Rating Scale; CDI, Child Depression Inventory; CM, intervention group in which both child and non-abusing parent received intervention; CO, intervention group in which the child only received an intervention; *d*, Cohen's *d*; DC-03-TSD, semistructured interview for diagnostic classification 0-3 of traumatic stress disorder for clinicians; *df*, degrees of freedom; EB, Emotional Barometer Analogue scale; ECBI, Eyberg Child Behavior Inventory; EoT, end of treatment; GLM, generalised logistic modelling; HLM, hierarchical linear modelling; HSP, Harter's self-perception scale; JPPST, Joseph Pre-School and Primary Self-Concept Screening Test; K-SADS-PL, Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version; K-SADS-PTSD, Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version post-traumatic stress disorder; M/C, mother and child; MD, mean difference; MLRA, multilevel regression analysis; MHLM, multivariate hierarchical logistic modelling; MWU, Mann-Whitney *U*-test; NK, not known; ns, not significant; OCB, oppositional child behaviour; RD, relative difference; R-KPPS, Revised Knox Preschool Play Scale; RR, risk ratio; SCARED, Screen for child-related emotional disorders; SSI-DC-03-Dep, semistructured interview for diagnostic classification DC-03 depression; thresh, number meeting threshold for clinical cut-off; UCLA PTSD RI, University of California, Los Angeles Post-Traumatic Stress Disorder Reaction Index; *t*, *t*-test; TOP, test of playfulness; TSCYC, Trauma Symptom Checklist for Young Children; TSCC, Trauma Symptom Checklist for Children.

a Analysed with ANCOVA.

b Advocacy with access to psychological therapies.

c Data from two high-risk groups (four or more traumatic stressful events in past year) and low-risk groups (fewer than four traumatic stressful events) added together using RevMan calculator.<sup>125</sup>

d Imbalance in baseline scores for internalising, externalising and total behaviours as measured by CBCL.

e Our calculation of SMD based on final scores only.

f Chi-squared test was calculated on change in number over threshold from baseline to follow-up.

g K-SADS-PTSD refers to the summation of hyperarousal, re-experiencing and avoidance subscales.

h Post hoc subgroup analysis: only depression reduced for the high-risk group (high risk = four or more traumatic stressful events; low risk = fewer than four traumatic stressful events, unclear on time frame).

i Single-item scale based on 5-point Likert-type format.

j Jouriles 2001 found no difference between treatment and controls for either internalising or externalising CBCL symptoms. For externalising symptoms they also looked at the number above the cut-off of the 90th centile, [as advised by Achenbach;<sup>126</sup> Externalising *T* scores greater than or equal to 60 (the 90th percentile; a cut point recommended by Achenbach,<sup>126</sup> for distinguishing clinical from subclinical problems).] From Jouriles *et al.*<sup>91</sup>] and found significantly fewer in the intervention group than in the control group.

k Linear regression indicates CBCL-Internalising and CBCL-Externalising problems reduced over time. Rates were similar for intervention and control but there were no differences between intervention and control.

l No data for control group at 8 months.

m There are eight domains to the play scale. For all subscales a high score indicated a more positive outcome, except for the 'aggression' subscale where a low score was more beneficial. The authors found no difference for any of them.

n Data from Hiltz-Hymes PhD no analysis of depression.

o Number of children classified as being in the clinical range (< score of 60 according to Achenbach<sup>126</sup>).

#### Note

Dashes (–) indicate that data were not sufficient to calculate SMDs.

Emotional Barometer Analogue scale scores were measured on a 7-point scale using a ruler to measure distance between pre- and post-treatment points.

DC-03-TSD uses a standardised format to systematise the traumatic stress disorder diagnostic criteria of the Diagnostic Classification Manual for Mental Health and Developmental Disorders of Infancy and Early Childhood.<sup>127</sup>

TABLE 8 Summary of findings

Study details		Psychological symptom outcomes				Behaviours		Risk of bias				
Study ID	Format	Comparison	Anxiety	PTSD	Depression	Internalising symptoms CBCL	Mood		Self-esteem	CBCL-Total	Externalising behaviours CBCL	Behaviour other measures
<b>Psychotherapeutic</b>												
Cohen 2011 <sup>61</sup>	Child individual MIDI	CBT vs. CT	CBT +	CBT +	=	=						Unclear
Lieberman 2005 <sup>92</sup>	MIDI	PTh vs. advocacy <sup>a</sup>		Psychotherapy + <sup>b</sup>	= <sup>c</sup>				Psychotherapy +			Unclear
McWhirter 2011 <sup>94</sup>	CG MG DG	GO CBT vs. EF CBT				GO CBT +			GO CBT +		GO CBT + <sup>d</sup>	Low/ unclear
Kot 1998 <sup>100</sup>	Child individual MI	Play therapy vs. WLC				PlayTh +			PlayTh +		= <sup>e</sup>	High
Waldman-Levi <sup>118</sup>	DI	Play therapy vs. M/C play time									= <sup>e</sup>	High
<b>Parenting skills and advocacy</b>												
Jouriles 2001 <sup>91</sup>	MI child individual	PaAd vs. advocacy			=					PaAd + <sup>f</sup>	PaAd + <sup>g</sup>	Unclear
Jouriles 2009 <sup>90</sup>	MI child individual	PaAd vs. advocacy			= <sup>h</sup>					PaAd + <sup>i</sup>	PaAd + <sup>j</sup>	Unclear
<b>Psychoeducation</b>												
Graham-Bermann 2007 <sup>98</sup>	CG MG DG	Ped CM vs. Ped CO			=					+		High
		Ped CM vs. WLC			=					+		
		Ped CO vs. WLC			=					=		
		CM				CM + <sup>k</sup>					CM + <sup>l</sup>	
		CO				CO + <sup>k</sup>					CO + <sup>l</sup>	
		WLC				WLC + <sup>k</sup>					= WLC + <sup>l</sup>	

Study details		Psychological symptom outcomes				Behaviours		Risk of bias				
Study ID	Format	Comparison	Anxiety	PTSD	Depression	Internalising symptoms CBCL	Mood	Self-esteem	CBCL-Total	Externalising behaviours CBCL	Behaviour other measures	Risk of bias
Graham-Bermann 2015 <sup>99</sup>	CG MG	PEd CM vs. no intervention				CM +						High
Wagar 1995 <sup>97</sup>	CG											Unclear
Overbeek 2012 <sup>117</sup>	CG MG DG	PEd CM DVA vs. PEd CM Gen	=		=	=				=		Low
<b>Advocacy and psychoeducation</b>												
Sullivan 2002 <sup>96</sup>	CG MI child individual	Advocacy PEdCO vs. control							AdPEd +			Unclear
<b>Advocacy</b>												
McFarlane 2005 <sup>115</sup>	MI	Advocacy vs. usual care								=		Unclear
<p>=, no difference between groups in effect size; +, benefit to one group; AdPEd, advocacy plus psychoeducation; CG, child group; CT, child-centred therapy; DG, mother-child-dyad group; DI, child-mother-dyad individual; EF CBT, emotion-focused cognitive-behavioural therapy; GO CBT, goal-oriented cognitive-behavioural therapy; MCC, mother and child; MG, mother group; MI, mother individual; PaAd, parenting skills training plus advocacy; PEd CM, psychoeducation content delivered to mothers and children; PEd CM DVA, psychoeducation DVA content delivered to mothers and children; PEd CM Gen, general psychoeducation content delivered to mothers and children; PEd CO, psychoeducation delivered to child only; PlayTh, play therapy; PTh, psychotherapy.</p> <p>a 65% of those receiving advocacy sought independent psychotherapy.</p> <p>b This study also found reduced numbers of children diagnosed with PTSD in the psychotherapy group compared with the advocacy group.</p> <p>c In a post hoc subgroup of high-risk children psychotherapy reduced depression.</p> <p>d This study measured child-peer conflict, not externalising behaviour.</p> <p>e These studies measured play behaviour scales, not externalising behaviour.</p> <p>f At 5-8 months there was no difference between groups; at 24 months, symptoms were reduced for children in the intervention group.</p> <p>g At end of treatment there were fewer children with ODD or CD in the intervention group than in the control group.</p> <p>h At 24 months, fewer children in the intervention group than in the control reached the cut-off for clinical internalising problems.</p> <p>i At both 5-8 months and 24 months.</p> <p>j Similar numbers of children at end of treatment (8 months) had problem disorders as measured by Eyberg Child Behavior Inventory and Oppositional Child Behaviour Inventory, but at 20 months this persisted only for Oppositional Child Behaviour Inventory score.</p> <p>k Reduction in number in clinical range over time from baseline to end of treatment (10 weeks).</p> <p>l Reduction in number in clinical range over time from baseline to end of treatment (10 weeks) and from end of treatment to 8-month follow-up.</p>												

being at 'unclear' risk of bias, as a lack of reporting prevented assessment. In addition, some triallists used post hoc analysis of subgroups; we have indicated where this is the case.

## Internalising mental health outcomes (anxiety, mood, depression)

### ***Studies with an intervention targeted at children exposed to domestic violence and abuse who met additional symptom criteria***

One study measured anxiety and reported that children receiving CBT had a greater improvement in anxiety at the end of treatment than children receiving child-centred therapy. Children in this study were exposed to DVA and met criteria for PTSD symptoms.<sup>61</sup> Depression was measured in two studies (see *Table 7* and *Appendix 9*). Cohen *et al.*<sup>61</sup> found no difference between the depression scores of children receiving CBT and those receiving other psychotherapy.<sup>61</sup> However, in a post hoc analysis of subgroups at 6-month follow-up,<sup>113</sup> Lieberman *et al.*<sup>92</sup> found that for children at high risk (those who had experienced more than four traumatic stressful events) the 50-week psychotherapy intervention had reduced depression scores compared with those children whose parents were given advocacy. For children in the low-risk group, the depression scores were similar for both intervention groups. The sample in this study comprised children for whom there were concerns about the child's behaviour or the mother's parenting.<sup>92</sup>

### ***Studies that included children growing up with domestic violence and abuse but that did not require additional symptom criteria for recruitment***

McWhirter<sup>94</sup> found that children receiving goal-oriented CBT had improved mood compared with children receiving emotion-focused CBT in a study at low risk of selection and attrition bias (see *Table 3*).<sup>112</sup> This study, which had very few participants, was at high risk of bias and had a very short follow-up period, reported a reduction in internalising symptoms and improved self-worth 2 weeks after cessation of play therapy compared with control children. Therefore, we must view these results with some caution (see *Table 7* and *Appendix 9*).

## Post-traumatic stress disorder symptoms

### ***Studies with an intervention targeted at children exposed to domestic violence and abuse who met additional symptom criteria***

Post-traumatic stress disorder symptoms were measured in two studies. Cohen *et al.*<sup>61</sup> found that children receiving CBT had reduced PTSD scores at the end of treatment compared with children receiving child-centred psychotherapy; Lieberman *et al.*<sup>92</sup> also found that children and parents allocated to psychotherapy had improved PTSD symptom scores compared with children whose parents were allocated to advocacy. In terms of diagnostic threshold, although Lieberman *et al.*<sup>92</sup> found fewer children reaching clinical diagnosis for PTSD among those receiving 50 weeks of psychotherapy than among those whose parents were allocated to advocacy, Cohen *et al.*<sup>61</sup> found that similar numbers of children met the threshold for clinical diagnosis across both groups.

### ***Studies that included children growing up with domestic violence and abuse but that did not require additional symptom criteria for recruitment***

Post-traumatic stress disorder symptoms were not measured in any of the studies in which the inclusion criterion was exposure to DVA with no additional concern for child symptoms.

## Child behaviour

### ***Studies with an intervention targeted at children growing up with domestic violence and abuse who met additional symptom criteria***

Two studies, by Cohen *et al.*<sup>61</sup> and Lieberman *et al.*,<sup>92</sup> reported an improvement in child behaviour for children receiving the experimental intervention compared with those receiving the control (see *Table 6*).

### ***Studies including children exposed to domestic violence and abuse without additional symptom criteria***

Kot *et al.*<sup>100</sup> demonstrated an improvement in child behaviour for children receiving play therapy compared with children in the control group; however, as mentioned previously, this study is at high risk of bias, had very few participants and a short follow-up period (see *Table 7*).<sup>100</sup> McWhirter,<sup>94</sup> in a relatively small study ( $n = 50$ ) but one at low risk of selection and attrition bias, reported an improvement in peer conflict (see *Table 7* and *Appendix 10*). Kot *et al.*<sup>100</sup> and Waldman-Levi<sup>118</sup> found no effect of play therapy interventions on play behaviour (see *Table 7* and *Appendix 10*). Kot *et al.*<sup>100</sup> reported that children allocated to the play intervention showed better 'physical proximity' and 'play themes' scores than children in the delayed control group, and Waldman-Levi<sup>118</sup> reported improved play scale scores compared with children in the attention control group (see *Table 7*).

### **Self-esteem**

#### ***Studies with an intervention targeted at children growing up with domestic violence and abuse who met additional symptom criteria***

Self-esteem was not measured in any of the studies of indicated interventions.

#### ***Studies that included children growing up with domestic violence and abuse but that did not require additional symptom criteria for recruitment***

McWhirter<sup>94</sup> reported that children given goal-oriented CBT psychotherapy had improved self-esteem compared with those given emotion-focused CBT. Kot *et al.*<sup>100</sup> found that children given play therapy for 2 weeks had improved self-esteem compared with children in the delayed control group (see *Table 7*).

### **Parenting with advocacy interventions**

The size and risk of bias of the two studies included in this section indicate caution in interpreting findings included here. Overall, both studies were found to be at unclear risk of bias because there was a lack of reporting; Jouriles *et al.*,<sup>91</sup> a feasibility study, recruited only 33 participants. However, Jouriles *et al.*<sup>90</sup> recruited 66 participants, and this study was assessed as being at low risk of bias for sequence generation, although it was at high risk of bias for allocation concealment.

### **Internalising mental health outcomes (anxiety, mood, depression)**

#### ***Studies with an intervention targeted at children growing up with domestic violence and abuse who met additional symptom criteria***

At 5–8 months (end of treatment), internalising symptoms were reduced at similar rates for those children assigned to the intervention (parenting and advocacy for mothers plus adult mentor for the child) and those assigned to the control group (parents given monthly telephone calls).<sup>91</sup> At 24 months' follow-up, although similar scores for internalising symptoms for both groups were reported, fewer children in the group whose mothers received parenting plus advocacy reached the cut-off for problem internalising symptoms (90th centile of whole group) than in the control group. Children whose mothers were given advocacy and parenting skills training were 'happier' at 24 months, according to mothers' reports, than children whose mothers were given advocacy only (see *Table 7*).<sup>91</sup>

### **Child behaviour**

#### ***Studies with an intervention targeted at children growing up with domestic violence and abuse who met additional symptom criteria***

At 8 months (end of treatment), although Jouriles *et al.*<sup>91</sup> found no effect of the intervention on symptom scores for child externalising problems, Jouriles *et al.*<sup>90</sup> reported an improvement in child externalising problems. At follow-up (16 and 24 months' for Jouriles<sup>91</sup> and 20 months' for Jouriles<sup>90</sup>) both studies found that children whose parents received parenting skills training and advocacy had improved externalising problems compared with children in the control group.<sup>90,91,110</sup> At end of treatment, there were fewer

children with either ODD or CD in the group given parenting skills training and advocacy than in the group with telephone support.<sup>90</sup> At 24 months, fewer children in the intervention group than in the control group met the CBCL cut-off threshold for problem behaviours in the Jouriles<sup>91</sup> study of 36 families. However, for the Jouriles *et al.*<sup>90</sup> study at 8 months (end of treatment), there were similar numbers in each group of children with problem behaviours as measured with other tools, including the Eyberg Child Behavior Inventory (ECBI) and oppositional child behaviour. At 20 months' follow-up, Jouriles *et al.*<sup>90</sup> reported that, although there were similar numbers in each group of children with problem oppositional child behaviour, there were fewer children with problem behaviours as measured with ECBI.

### Post-traumatic stress disorder symptoms

No outcomes reported.

### Self-esteem

No outcomes reported.

### Psychoeducational interventions

The size of the studies and the risk of bias indicate that caution in interpreting findings from some of the studies in this section must be exercised. The two studies by Graham-Bermann *et al.*<sup>98,99</sup> both recruited > 100 participants; however, they were both scored as being at high risk of selection bias and attrition bias and were rated at 'high' risk of bias overall. Wager and Rodway<sup>97</sup> reported insufficient details for us to assess risk of bias, and thus we had to rate it as 'unclear'. They did, however, recruit > 40 participants. However, greater confidence can be placed in the data reported in the study by Overbeek *et al.*,<sup>95</sup> as this was rated as being at low risk of bias, and recruited 164 participants.

### Internalising mental health outcomes (anxiety, mood, depression)

#### ***Studies that included children growing up with domestic violence and abuse but that did not require additional symptom criteria for recruitment***

Although three studies investigated the effects of a psychoeducational intervention, one study<sup>97</sup> did not measure depression, anxiety or a composite score of internalising symptoms (anxiety, withdrawal and depression). Graham-Bermann *et al.*<sup>98</sup> measured both internalising symptoms, and Hiltz-Hymes<sup>104</sup> measured childhood depression. From the data included in the Hiltz-Hymes thesis,<sup>104</sup> we found that at 8 months, depression scores were similar for children where both the child and the non-abusing parent received a psychoeducational intervention (CM group) and where children only received a psychoeducational intervention (CO group); there were no data reported for the control group, as it was a WLC and all the participants received an intervention (see *Table 7* and *Appendix 9*).

At baseline, children in the CM group had higher scores for internalising symptoms than those in the CO group or WLC. At end of treatment (10 weeks) and at end of follow-up (8 months), the authors found that internalising scores were similar for children across all groups, with no evidence of an effect (see *Table 7*). However, the number of children in the clinical range was reduced by 65% in the CM group, 35% in the CO group and 24% in the WLC group when measured at end of treatment (10 weeks). No data were reported for the 8-month follow-up (see *Table 7*).

Graham-Bermann *et al.*<sup>99</sup> looked at the rate of change over time of internalising symptoms of children aged 4–6 years, and found that those in the Kids' Club (with mothers attending the MEP) had improved internalising symptoms at the end of treatment and at 8 months compared with those in the no intervention control (see *Table 7* and *Figure 30*). The authors present a multiple logistic regression analysis (MLRA) and found a treatment effect of 0.475 improvement in internalising symptoms, but this appears to be valid only for girls in the group (the trial was not stratified by sex).

Overbeek *et al.*<sup>95</sup> assessed the effects of the same intervention as that in the Graham-Bermann<sup>98</sup> study, given to children and mothers, but compared it with an intervention given to children and mothers that was essentially similar except it had no DVA content. They found no difference in either depression or general internalising symptoms between the children in the intervention and control groups, reporting that symptoms ameliorated over time for both groups (see *Table 7* and *Figure 30*).<sup>95</sup>

### Post-traumatic stress disorder symptoms

Overbeek *et al.*<sup>95</sup> found no difference in PTSD symptoms between the children in the intervention and control groups for either child or non-abusing parent rated scales, reporting that symptoms of PTSD ameliorated over time for both groups (see *Table 7* and *Figure 30*).

### Child behaviour

Although three studies investigated the effects of a psychoeducational intervention, one study<sup>97</sup> did not measure child externalising problems. The Graham-Bermann *et al.*<sup>98</sup> study did not report a direct comparison of CBCL scores for the three groups at end of treatment, or for CO and CM groups at follow-up. As there was a baseline imbalance in externalising behaviour scores, with children in the CM group having higher scores than those in the CO group or WLC group, we did not calculate SMDs for these outcomes. The authors provided a description of baseline imbalance; however, this did not match the data presented in their tables, which added to our concerns about this study. The authors assessed differences between the intervention groups by assessing the change in scores from baseline to follow-up for each group and then comparing the changes, reporting that from baseline to end of treatment, children in the CM group had improved scores compared with children in the WLC group. However, the scores of the CO children were no different from the WLC scores. From end of treatment to 8-month follow-up, children in the CM group had improved scores compared with children in the CO group. There was no control group comparison at this time, as those children on the waitlist had been treated. Using a cut-off score of 60 to indicate the clinical range, the authors reported a 48% reduction from baseline to end of treatment in the numbers of children in the clinical threshold in the CM group, and a 28% reduction in the CO group. From the end of treatment to the 8-month follow-up, these reductions continued with a 77% reduction in children reaching clinical threshold for the CM group and a 50% reduction for the CO group. However, the reduction of 50% for the CO group was found to be not statistically significant (see *Table 7*).<sup>128</sup> Overbeek *et al.*<sup>95</sup> found no difference in child behaviour between the intervention or control groups whether reported by non-abusive parents, children or teachers. They reported, like Graham-Bermann *et al.*,<sup>98</sup> that symptoms ameliorated over time for both groups (see *Table 7* and *Figure 31*).

### Self-esteem

No outcomes reported.

## Psychoeducation plus advocacy intervention

### Internalising mental health outcomes (anxiety, mood, depression)

No outcomes reported.

### Post-traumatic stress disorder symptoms

No outcomes reported.

### Child behaviour

No outcomes reported.

### Self-esteem

Children in the Sullivan study<sup>96</sup> receiving psychoeducation, whose non-abusing parents were given advocacy, had better self-esteem than those given no intervention (see *Table 7*). This study was rated as being at 'unclear' risk of bias; therefore, it is difficult to define our certainty in the data presented.



## Advocacy

### Internalising mental health outcomes (anxiety, depression)

One study by McFarlane *et al.*<sup>93</sup> was rated as 'unclear' for risk of bias and, therefore, it is difficult to define our certainty in the data presented. The study reported the effect of advocacy for non-abusive parents and offered no other intervention to the child. Measuring child internalising symptoms (anxiety, withdrawal and depression), the study found no evidence of treatment effect for any age group when the advocacy and control groups were compared<sup>115</sup> (see *Table 7* and *Appendix 9*).

### Post-traumatic stress disorder symptoms

No outcomes reported.

### Child behaviour

Child internalising symptoms and externalising problems were not improved for children whose non-abusive parents had been given advocacy, compared with those whose parents did not receive an intervention<sup>93</sup> (see *Table 7* and *Appendix 9*).

### Self-esteem

No outcomes reported.

## Psychoeducation plus advocacy

### Internalising mental health outcomes (anxiety, mood, depression)

No outcomes reported.

### Post-traumatic stress disorder symptoms

No outcomes reported.

### Child behaviour

No outcomes reported.

## Discussion

### Summary of findings

We identified 10 RCTs and three CCTs, with a total of 1345 participants, reporting results on the effectiveness of a range of interventions delivered to different combinations of children and their non-abusive parents. In 12 studies 100% of parents were mothers, and in one study 95% of parents were mothers. None of the studies was UK-based. We found no interventions delivered to families that included the perpetrator of DVA. The majority of studies were at high or unclear risk of bias, and four studies had fewer than 50 participants, which means that we must interpret their findings with caution. Studies targeted programmes to different age groups of children, ranging from 18 months to 14 years, but none evaluated programmes for older adolescents. Some studies targeted interventions to children with trauma symptoms or behavioural problems, while others targeted children exposed to DVA without any clinical inclusion criteria. The comparator interventions varied across studies to the extent that, even when two studies assessed the effects of the same intervention,<sup>95,106</sup> we could not directly compare their results because the comparator arms differed. Interventions were delivered to children and parents in a variety of formats, including delivery to individuals, to dyads of mother and child together, and to groups of children and groups of parents with some joint sessions.

The heterogeneity of the studies, the virtual absence of replication and the high and unclear risk of bias makes any overall conclusions about the effectiveness of these interventions in general or for specific populations of children uncertain.

## Summary of the effects of interventions

### Psychotherapeutic interventions

Short-term trauma-focused CBT compared with other short-term psychotherapy given to mothers, children and dyads showed an improvement in anxiety for children (7–14 years) presenting with trauma symptoms but no effect on depression.<sup>61</sup> Short-term goal-oriented CBT compared with emotion-focused CBT improved child mood and self-esteem (in children aged 6–12 years).<sup>94</sup> Long-term psychotherapy delivered to mother and child dyads had no effect (relative to advocacy) on depression symptoms in younger (3- to 5-year-old) children. Both short-term trauma-focused CBT (compared with child-centred therapy) and long-term child–parent psychotherapy (compared with advocacy) improved PTSD symptoms in participating children, but longer-term psychotherapy reduced only the proportion of children (aged 3–5 years) with a clinical diagnosis of PTSD.<sup>61,92</sup>

Short-term CBT compared with other short-term psychotherapy reduced children's (aged 6–12 years) peer conflict in one study,<sup>94</sup> but in a second study (of children aged 7–17 years targeted for trauma symptoms), did not reduce internalising symptoms or externalising problems.<sup>61</sup> Long-term psychotherapy compared with advocacy for mothers and children reduced overall behavioural problems in children aged 3–5 years who were selected because of behaviour problems.<sup>92</sup>

Two studies assessed the effects of play therapy, and both identified a positive effect.<sup>100,118</sup> Intensive play therapy given daily for 2 weeks for 4- to 10-year-old children reduced overall measures of internalising symptoms and externalising problems, and increased self-esteem.<sup>100</sup> However, this non-randomised study was very small, with only 11 participants and marked baseline imbalance for externalising problems. Mother–child play therapy for younger children (aged 1–5 years) given weekly for 8 weeks improved mother–child interaction and child play skills but not play behaviour.<sup>101</sup> Neither study used randomised allocation and each study had relatively few participants and high attrition; therefore, we can see that more studies are needed to further investigate the usefulness of this intervention.

### Parenting skills and advocacy

There was some evidence from two studies rated as being at 'Unclear' risk of bias that externalising problems and the numbers of children meeting threshold criteria for problem behaviours or diagnoses of ODD or CD by the end of treatment might be improved by parenting skills training and advocacy delivered to mothers of children aged 4–9 years.<sup>90,91</sup> This improvement was maintained at 24-month follow-up.<sup>91</sup> Neither study found an improvement in internalising symptoms at the end of treatment or at 2-year follow-up, although one of the studies found that fewer children met criteria for clinical concern for internalising symptoms at 24-month follow-up.<sup>91</sup>

### Psychoeducation

Three studies assessed the effects of the same short-term (9-week) trauma-focused psychoeducation programme on mothers and children in separate groups. One study enrolled children (aged 6–12 years) and delivered the intervention to children only or to children and mothers and compared these conditions with a WLC;<sup>98</sup> the second compared the same psychoeducation intervention delivered to 4- to 6-year-old children and their mothers with no intervention.<sup>99</sup> The third compared the same intervention (content, format and intensity) delivered to children and mothers with a similar intervention without a DVA focus.<sup>95</sup> There is good evidence that there was no effect for this intervention on internalising symptoms, PTSD, depression or externalising problems when compared with an attention control.<sup>95</sup> Data from the two studies by Graham-Bermann *et al.*<sup>98,99</sup> must be treated with more caution, as these studies were rated as being at high risk of bias and indicate that internalising symptoms may be reduced. One study indicated that externalising problems were reduced for the intervention groups (both mother and child and child only) compared with the control at the end of treatment, but at 8-month follow-up, the mother and child group only showed a significant change in the percentage of children in the clinical range on externalising problems compared with the control group.<sup>98</sup> The authors reported a reduction in the number of children in the clinical range from the end of treatment to 8-month follow-up for internalising symptoms, for all interventions.<sup>98,99</sup>

### Advocacy plus psychoeducation

The study examining advocacy given to mothers and psychoeducation for children (aged 7–11 years) reported an improvement of the child's feelings of self-worth from the end of treatment to 4-month follow-up; however, this study was rated at 'unclear' risk of bias and so the data must be interpreted with caution.<sup>96</sup>

### Advocacy

Advocacy given to mothers alone, evaluated in a study of 258 participants at 'unclear' risk of bias, did not change measures of children's internalising symptoms or externalising problems.<sup>93</sup>

### Overall completeness and applicability of evidence

Interventions were mostly delivered to pre-teens and teenagers up to the age of 14 years, and only one study included children under the age of 4 years.<sup>101</sup> Although the majority of studies included samples representing a range of ethnicities, it is not clear if these studies are relevant to the UK, as none of the studies was UK-based. Interventions focused on children and their mothers as non-abusive parents, except one in which some of the abused parents were men, although they formed only a small proportion (7/155) of recruited participants.<sup>95</sup> We are aware that there are studies of family-based interventions that include children and both abusive and non-abusive parents;<sup>129,130</sup> however, these programmes have not yet been assessed in controlled trials. Studies reported a range of situations in which the child has contact or lives with the abusive parent, although some interventions required families to be out of contact with the abusive partner. Children in families in which the perpetrator is still in the home, or is in contact, may have needs that differ from those of children who are experiencing the upheaval of living in shelters (as well as the safety they offer). Some studies and interventions targeted children presenting with or assessed for behavioural problems<sup>91,92</sup> or trauma symptoms (PTSD),<sup>61</sup> whereas others were open, including any children exposed to DVA.

A range of outcomes were reported across studies, but just three measured PTSD and depression, and we were especially surprised to find that only one study measured anxiety, when feelings of anxiety may be a daily experience for many children who are exposed to DVA. Seven studies used the CBCL to measure externalising behaviour<sup>90,91,93,95,98–100</sup> and internalising symptoms and, of these, two did not publish outcome data for both domains.<sup>90,98</sup> None of the studies measured self-harm, school attendance, school attainment or children's quality of life. Few of the studies set out to examine adverse events or harms that might ensue from the intervention, for example an increase in child maltreatment, without which studies might provide an overly positive picture of the effects of their interventions.<sup>131</sup> We recommend that a core set of outcomes be developed for children exposed to DVA including harm to the child and adverse events;<sup>132,133</sup> the set should be applicable to all forms of DVA and could be used in assessing effectiveness of interventions. We were also disappointed by the absence of cost-effectiveness analyses or even reporting of costs, although this is consistent with its absence more generally in the DVA research field.<sup>134</sup>

Some replication of intervention was attempted. The Kids' Club and MEP were replicated in the two studies by Graham-Bermann *et al.*<sup>98</sup> in children aged 6–12 years and later in children aged 4–6 years, modifying the Kids' Club for pre-school children.<sup>99</sup> The Kids' Club and MEP were also tested in the Netherlands in the study by Overbeek *et al.*<sup>95</sup> Difficulty in consolidating the data from these replications was encountered because of the age difference of children in the case of the studies of Graham-Bermann *et al.*<sup>98,99</sup> and in the comparator arm in the case of the study in the Netherlands, which had an active control rather than no intervention or a waitlist. Jouriles *et al.*<sup>90,91</sup> replicated their intervention in two studies, namely a feasibility study and a control, without changing any facet of the intervention content or study design.

Description of the mechanisms by which interventions could be hypothesised to lead to change in the stated outcomes of each study was reported well in eight of the 13 studies.<sup>90–92,95,98–101</sup> However, two studies provided background theory without setting out a clear pathway of how outcomes would be achieved,<sup>93,96</sup> and three studies appeared to present no theory at all.<sup>61,94,97</sup> We note that multiple publications or the generous word count of the PhD thesis may be necessary for this level of exposition. Although we have

been able to systematically characterise the components of the interventions, we were unable to define the role of these components in the causal pathway leading to benefit, no effect or harm to those children receiving them. This would better inform interpretation and extrapolation of findings, as well as the design of future interventions and trials.<sup>135</sup>

### Quality of the evidence

Only two studies had a low/unclear risk of bias overall,<sup>94,95</sup> and four were rated as being at 'high' risk of bias, mainly because they did not use randomisation to allocate participants, did not conceal allocation and had a high rate of attrition.<sup>98-101,122</sup> Seven studies were rated as 'unclear' overall and this was mainly because our assessment was hampered by a lack of detail in reporting the study design and conduct.<sup>61,90-93,96,97</sup> We are aware that authors often want to publish more detail, but find this difficult owing to the word limits of most journals. This could partly be mitigated by the publication of protocol papers, more widespread requirements to report trials in concordance with Consolidated Standards of Reporting Trials (CONSORT) guidance,<sup>136-138</sup> and the use of web-based extra appendices. The lack of reporting has undermined the utility of the research findings, which, had we had the relevant information, may have promoted the research to categorisation as low risk of bias. Only one completed study<sup>95</sup> and one ongoing study<sup>62</sup> had a published protocol; these can be enormously helpful in allowing more transparent reporting of study methods and guarding against outcome reporting bias.

Eight studies recruited fewer than 80 participants<sup>90-92,94,96,97,100,101</sup> and four studies recruited 50 or fewer participants.<sup>91,94,97,100</sup> This casts doubt on the ability of a study to detect a meaningful difference in outcome data between the intervention and control. Participant retention was poor across most studies, with attrition of between 5% and 52%, and three studies losing > 40% of participants.<sup>61,100,101</sup> Many participants dropped out before the intervention started. Paying participants for their time appeared to help with study retention. High attrition may also reflect the fact that participants are experiencing a chaotic period in their lives, moving from a shelter to a safe home or returning to an abusive relationship, for example. Incorporating safe protocols to follow up participants who move home or return to their abuser might also help to mitigate attrition, and using qualitative research embedded in the trial can help to identify reasons for withdrawal.

Most of the studies delivering a psychoeducational or psychotherapeutic intervention had used manuals, assessed treatment fidelity, reported training of staff and provided supervision (see *Table 3*), but none assessed therapeutic alliance. Assessing these technical aspects of psychological interventions helps to identify why a treatment works and the mechanism by which it leads to specific effects.<sup>139-142</sup>

Consideration must be given to comparator interventions. For example, Overbeek *et al.*<sup>95</sup> conducted a trial at low risk of bias and reported that their intervention performed no differently to their comparator across all outcomes measured. They used an attention control. It may have been beneficial to have included a WLC arm as a true comparison, but the study authors were precluded from doing so by their ethics committee.<sup>95</sup>

No studies provided stratification at randomisation to account for sex, exposure to DVA or co-occurring child maltreatment. One study, by McFarlane *et al.*,<sup>93</sup> did publish data for different sexes, and one study, by Lieberman *et al.*,<sup>92</sup> published data from post hoc subgroup analyses of children at high risk versus children at relatively low risk.

Follow-up was generally short, with only four studies reporting beyond the end of treatment up to 2 years.<sup>90,91,95,99</sup> We applaud those studies for taking the difficult but important step of making assessments beyond the end of the intervention. Studies with WLC were largely unable to report beyond the end of treatment.<sup>96-98,100</sup>

### **Agreement with other published studies or reviews**

There are two systematic reviews of interventions for children exposed to DVA with a broader scope than ours; these include maltreated children or exposure to community violence and studies other than controlled trials. Rizo *et al.* included 31 studies and BCCEWH included 37 studies.<sup>41,43</sup> We identified an additional three studies published since these reviews.<sup>95,101,122</sup> The BCCEWH review identified seven categories of interventions based on the number of components [single ( $n = 4$ ) or multiple ( $n = 3$ )], delivery of the intervention to the mother and child or to the child alone. Categories included psychoeducation, therapy, advocacy and parenting and provide a listing of the strength of evidence for each before going on to highlight the methodological problems including the lack of RCTs, the lack of follow-up beyond the end of treatment and the lack of gender-based analyses in spite of the gendered nature of DVA and the potential gendered effects of exposure to DVA.<sup>43</sup> Rizo *et al.*<sup>41</sup> defined four types of intervention: (1) counselling/therapy; (2) crisis/outreach; (3) parenting; and (4) multicomponent intervention programmes. They recognised the rigour of the content of studies by Graham-Bermann *et al.*,<sup>98</sup> Jouriles *et al.*,<sup>91</sup> Lieberman *et al.*,<sup>92</sup> McFarlane *et al.*,<sup>93</sup> Sullivan *et al.*<sup>96</sup> and Wagar and Rodway,<sup>97</sup> while making constructive criticism of the methodological robustness. However, they were unable to state which of the four approaches held the most promise for the future. They suggest that studies be set up with the content rigour of those listed above and with additional methodological rigour of experimental design with random allocation, that appropriate statistical analyses be used, and that larger population samples be recruited.

### **Limitations (potential biases in the review process)**

Our first search of 10 electronic bibliographic databases was from inception to April 2013 (see *Appendix 1*). We reran the searches for this review in September 2015. We expedited the search by limiting it to the five main medical electronic bibliographic databases and employing study filters (see *Appendix 2*). By omitting sociological electronic bibliographic databases it could be argued we may have missed studies; however, we believe that this is unlikely, as this had not been the origin of any of our included studies to that point. In our risk-of-bias assessment we did not assess reporting outcome bias. This was because only one included study had a protocol and we would have had to have scored 'unclear' for all studies. However, it may have been useful to assess this, as several studies appeared to have measured some outcomes and not reported them; for example, two studies purported to have measured two broad-band indices of adjustment using the CBCL (internalising and externalising), but published the data on only one of the domains.<sup>90,98</sup> It can be difficult to publish null or negative data in some journals, but all trial data should be available for the compilation of meaningful metasyntheses.

### **Recommendations**

We would exhort future triallists to adopt robust randomisation procedures and provide clear and thorough reporting including the registration or publication of a study protocol. Future studies need to recruit samples of sufficient size to have the power to detect meaningful differences in outcome between intervention and control, and should work towards high retention of study participants, possibly by using qualitative research nested within the trial design. Scope for follow-up assessments at meaningful time points post intervention (e.g. 6 months, 1 year and 2 years) should also be considered. Outcomes measured should cover all facets of child development and health, including quality of life, mental health, behaviour, school attendance and school performance, and costs should be measured so that commissioners can assess the viability of introducing programmes. Triallists might consider using stratification of randomisation to assess the effects of important subgroups, such as sex, presenting symptoms, level of DVA exposure and current or past exposure.

# Chapter 4 Experiences of interventions following exposure to domestic violence and abuse: a qualitative synthesis of the views of children, parents and stakeholders

## Aim and objectives

The aim of this chapter is to identify and synthesise child, parent and stakeholder experiences of child-focused intervention programmes aimed at reducing the risk of negative child outcomes following exposure to DVA. Using qualitative synthesis methods, we sought to integrate current qualitative evidence and to develop new interpretive knowledge regarding beneficial and challenging aspects of interventions from the perspective of those involved in receiving and delivering interventions. It is important to note that in this chapter we discuss perceived benefits to the families, which cannot necessarily be interpreted as evidence of effectiveness of an intervention. We assess the evidence for clinical effectiveness of interventions in *Chapter 3* of this report.

The specific objectives of the qualitative review were:

- to identify and synthesise the experiences of children, parents and stakeholders regarding child-focused interventions following children's exposure to domestic abuse;
- to highlight key components within and across programmes that are perceived to be of value to children, parents and stakeholders;
- to identify barriers to and facilitators of uptake of and engagement with different types of child-focused intervention programmes.

## Background

Qualitative research on the experiences of those receiving and delivering interventions for children exposed to DVA is a valuable resource for enhancing the understanding of the effectiveness of interventions gained through RCT evidence. The value of qualitative evidence alongside RCTs is well established,<sup>143</sup> and syntheses of such qualitative evidence are increasingly common, although the methods for integrating evidence from diverse sources and methodological approaches remains underdeveloped.<sup>144</sup> Including data from both qualitative and quantitative studies can convey a more complete picture of the evidence, with quantitative data providing the evidence for the size and direction of the effects of an intervention and qualitative data providing detailed experiences of those using and delivering the intervention. Syntheses of qualitative evidence may illuminate why an intervention is effective (or not), how it brings benefits (or otherwise) and how it could be optimised.<sup>145,146</sup> Qualitative syntheses may also highlight a broader range of benefits, or indeed harms, that are not captured in the relatively small number of primary and secondary outcomes measured in trials. In the review reported in this chapter, we adopted an interpretive approach to synthesis,<sup>144,147,148</sup> seeking to develop higher order constructs that go beyond those articulated within the original studies, rather than simply aggregating and summarising the existing qualitative evidence. Our aim was to identify phenomena within the qualitative evidence and to translate these across studies to build new 'third-order constructs' and a line-of-argument synthesis<sup>149</sup> about child, parent and stakeholder experiences of interventions. Drawing on the synthesis, we developed recommendations for future interventions for children exposed to DVA.

## Methods

We planned to identify qualitative research that reported the experiences of children receiving interventions because they had been identified as living with DVA, the experiences of the parents of children receiving an intervention or the experiences of practitioners delivering interventions to children exposed to DVA. There are a variety of possible approaches to qualitative synthesis,<sup>147,148,150–153</sup> with many overlapping features.<sup>151</sup> In this review, we draw on the principles and techniques of meta-ethnography,<sup>149</sup> including the identification of first-, second- and third-order constructs, the translation of constructs across studies and the development of an overarching synthesis (in our case, line-of-argument). We aim for explicit, transparent and comprehensive reporting of each stage of the review process, in line with the Enhancing Transparency in REporting the synthesis of Qualitative research guidance.<sup>151</sup> In our review, we used a systematic search and prespecified a set of parameters for the studies that we would include in our review.<sup>154</sup>

### *Types of studies*

We included only qualitative research studies and excluded surveys or quantitative studies that contained descriptive free-text data. Our eligibility criteria were:

- Empirical qualitative studies (standalone or discrete components of mixed-method studies) employing qualitative methods for data collection and analysis. For example, an interview study using detailed thematic or narrative analysis would be included, but a survey report with free-text responses analysed quantitatively would be excluded.
- Studies focusing on children's, parents' or stakeholders' views and experiences of receiving or delivering child-focused interventions following children's exposure to domestic abuse.
- Published articles or reports that have undergone some level of peer review.

### *Participants*

- Children who have been exposed to DVA and have received a child-focused intervention.
- Parents of children exposed to DVA who have received a child-focused or child- and parent-focused intervention.
- Stakeholders involved in developing and/or delivering interventions to children exposed to DVA.

### *Phenomena of interest*

Child, parent or stakeholder views and experiences of:

- receiving or delivering an intervention for children exposed to DVA
- benefits of specific intervention programmes, including specific aspects of interventions that are perceived to be helpful or otherwise
- barriers to and facilitators of uptake of and engagement with interventions.

### *Material content of papers*

We included papers if they contained qualitative data from children, parents or stakeholders and/or author interpretations derived from qualitative research that directly related to children's, parents' or stakeholders' experiences of interventions for children exposed to DVA.

## Search methods

The research team identified search terms by discussing the review objectives and examining indexing of relevant papers in different search databases. We also examined the thesauri of electronic databases to identify appropriate subheadings. For example, for MEDLINE we used MeSH and text word terms for <Children and adolescents> combined with MeSH and text word terms for <domestic violence>.

These were then combined with text word terms for <exposure of children to domestic violence or witnessing or growing up with domestic violence>. Details of all search terms used are given in *Appendix 1*. We searched for literature in MEDLINE (1946 to April 2013), PsycINFO (1806 to April 2013) and EMBASE (1974 to April 2013) on the OVIDSP platform; in CINAHL on EBSCOhost (1937 to April 2013); in CENTRAL on The Cochrane Library (1890 to April 2015); in the Science Citation Index and Social Science Citation Index on Web of Science (1900 to April 2013); in ASSIA (1987 to April 2013), IBSS (1951 to April 2013), Social Services Abstracts (1980 to April 2013) and Sociological Abstracts (1963 to April 2013) on ProQuest; Social Care Online (socialcareonline.org.uk) (1980 to April 2013); the WHO trials portal (1999 to April 2013); and clinicaltrials.gov (2000 to April 2013). All databases were searched from inception to April 2013. We did not use a filter to limit the search by study methodology or date or language limits. We excluded letters and editorials and records for which there were no abstracts.

### Selection of papers

Two reviewers (TM, EH) independently screened titles and abstracts of references identified through the search strategy. Those considered to be relevant by both reviewers were obtained as full-text papers or reports. Eligibility of full-text papers for inclusion into the study was assessed independently by two reviewers (TM, EH) using pre-specified inclusion and exclusion criteria. Any disagreements were resolved by discussion or recourse to a third reviewer (GF or AS). Following previously published qualitative syntheses,<sup>155,156</sup> we also applied two initial screening criteria for each paper to answer the questions 'Is this qualitative research?' and 'Is this paper relevant to the qualitative synthesis?' All included papers were categorised into groups based on whether or not they reported the views of children, parents or stakeholders. Where a paper reported the views of more than one group (e.g. children and parents), we assigned it to both groups (child, parent) to ensure that we included the views of all relevant participants within each group. A flow chart delineating the process of exclusion of reports was prepared (*Figure 3*).

### Data extraction and management

For each paper, two reviewers (TM, EH, AS, GF) independently extracted study data from the abstract, methods, results and discussion sections of papers using a standardised data extraction form. We extracted two types of data:

- views and experiences of children, parents or stakeholders of interventions for children exposed to DVA, reported as quotations in the papers (first-order constructs)
- authors' interpretations representing their analysis and identification of implications based on the qualitative data from all participants in their study (second-order constructs).

We also extracted the following study details: author name(s); publication date; country; methods of data collection and analysis; phenomena of interest; characteristics of the study population; intervention characteristics, including setting, model of intervention delivery (group, individual), core components of the intervention, intervention duration and intensity; and items relating to study quality (*Tables 9 and 10*). Reviewers met to discuss and agree the constructs chosen. Disagreements were resolved by recourse to a third reviewer. A single 'agreed' copy of the constructs was saved.

### Appraisal of study quality

Following the conventions of many published qualitative syntheses,<sup>29,153,163,164</sup> we assessed each included paper using the Critical Appraisal Skills Program (CASP) tool<sup>163</sup> to evaluate the quality of qualitative papers. Two reviewers independently appraised each of the papers meeting the inclusion criteria according to items in the CASP and the total number of questions for which 'yes' (or a positive answer) was obtained to give an indication of the reporting quality of the studies. Each paper was scored out of 10. We took an inclusive approach; thus, rather than excluding relevant papers based on reporting quality, we used the quality appraisal as a form of 'sensitivity analysis' (see *Discussion*) to explore how removing studies judged to be of poorer quality impacted on the synthesis findings.



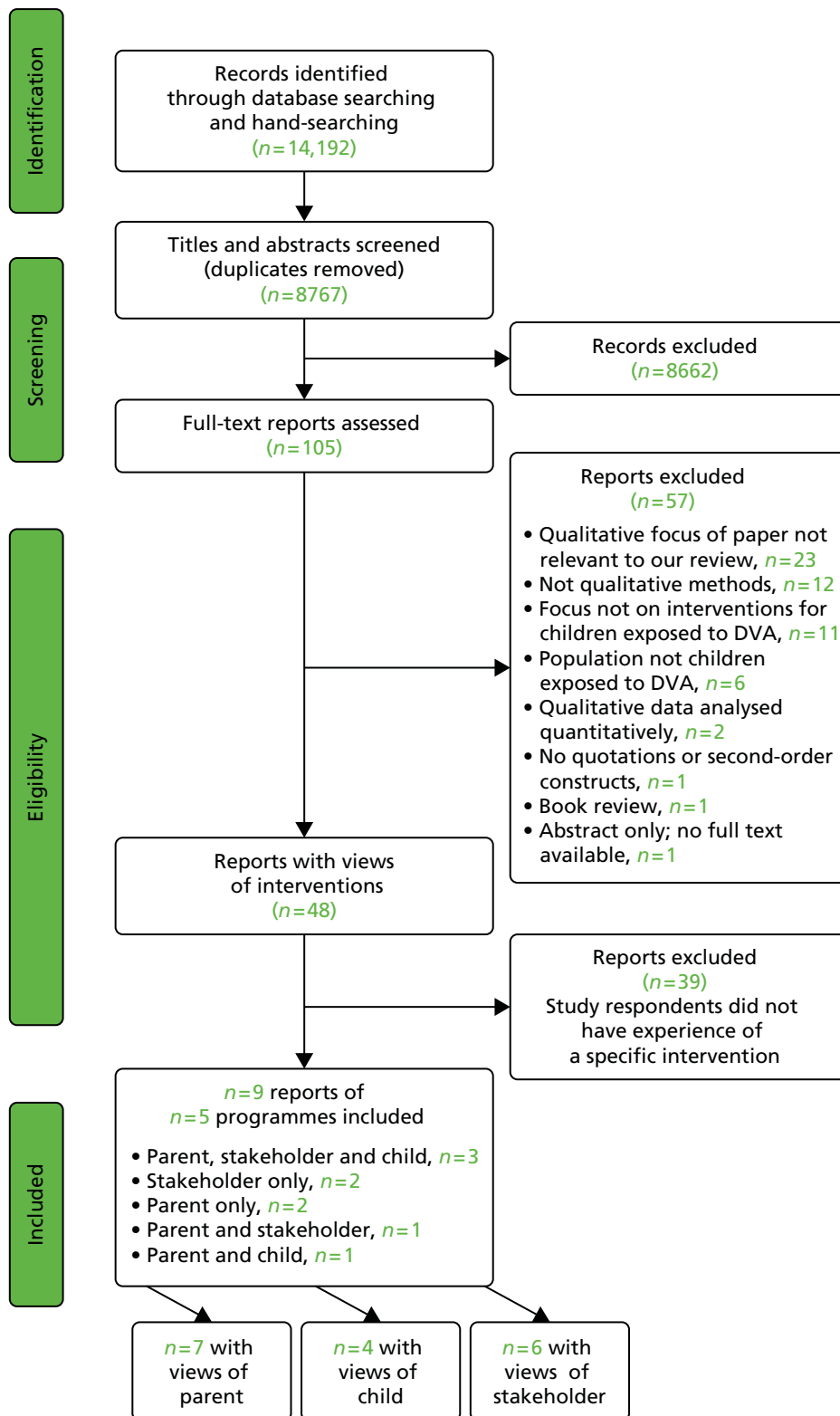


FIGURE 3 Flow of studies through the review process.

TABLE 9 Summary of study details

Programme	Study ID, country	Respondents	Intervention	Delivered to	Setting	Programme	Characteristics of children	Data collection	Method of analysis
1	Paris 1998, <sup>157</sup> USA	Children <i>n</i> = 1f, <i>n</i> = 3 m Parents (both) <i>n</i> = 8 m, <i>n</i> = 6f Stakeholders <i>n</i> = 14	Group parallel psychoeducation for parents and children	Children, both parents, parallel separate sessions (some conjoint parental and familial sessions)	University of Florida campus	RSVP programme and BIP	7–8 years: <i>n</i> = 3; 12 years: <i>n</i> = 1	Focus groups	Constant comparison
2	Peled 1992, <sup>130</sup> USA	Children <i>n</i> = 30 Parents (both) <i>n</i> = 16 m, <i>n</i> = 5f Stakeholders <i>n</i> = 9	Group parallel psychoeducation for parents and children	Children, mothers, some fathers; parallel separate sessions; some fathers attended a programme for perpetrators of abuse	Community DVA services	Parents' DAP	4–12 years: <i>n</i> = 30	Interviews and observation	Naturalistic research paradigm; inductive content analysis
	Peled 1998, <sup>158</sup> USA	Children <i>n</i> = 14 Parents <i>n</i> = 12 m	Group parallel psychoeducation for parents and children	Children, mothers, some fathers; parallel separate sessions; some fathers attended a programme for perpetrators of abuse	Community DVA services	Parents' DAP	Mean age 11.3 years (range 10–13 years)	Interviews	Inductive content analysis; phenomenological inquiry; naturalistic enquiry
	Peled 1999, <sup>159</sup> USA	Parents (both) <i>n</i> = 64 mother/caregiver, <i>n</i> = 41 father/caregiver	Group parallel psychoeducation for parents and children	Children, mothers, some fathers; parallel separate sessions; some fathers attended a programme for perpetrators of abuse	Community DVA services	Parents' DAP	Aged 4–18 years	Structured telephone interview	Inductive content analysis

continued

TABLE 9 Summary of study details (continued)

Programme	Study ID, country	Respondents	Intervention	Delivered to	Setting	Programme	Characteristics of children	Data collection	Method of analysis
3	Humphreys 2006, <sup>49</sup> UK	Mothers <i>n</i> = 45	Activities to improve mother-child communication	Mother and child (dyads)	Refuge	'Talking to my Mum'	Aged 5–16 years	Focus groups	Action research
	Humphreys 2011, <sup>51</sup> UK	Children <i>n</i> = 52; female <i>n</i> = 25 Mothers <i>n</i> = 45 Stakeholders (Refuge workers) <i>n</i> = 15	Activities to improve mother-child communication	Mother and child (dyads)	Refuge	'Talking to my Mum'	Aged 5–16 years	Focus groups	Action research; grounded research theory
4	Kearney 2012 <sup>60</sup>	Mothers <i>n</i> = 5; stakeholders (therapists) <sup>a</sup>	Group psychoeducation	Mothers with children attending therapy (child intervention not described)	Community DVA services	Maternal group psychoeducation for children receiving therapy	Aged 5–12 years	Interviews	Not described
5	Thompson 2009, <sup>161</sup> USA	Stakeholder (therapist/author): <i>n</i> = 1	Child play therapy	Children (small group)	School	Play therapy	Aged 6–7 years	Participant observation	Erickson's analytic induction; linking statements about the data based on evidentiary warrant
	Thompson 2011, <sup>162</sup> USA	As above	Child play therapy	Children (small group)	School	Play therapy	Aged 6–7 years	Participant observation	Erickson's analytic induction; linking statements about the data based on evidentiary warrant

BIP, Batterers' intervention programme; DAP, Domestic Abuse Project of Minneapolis; f, father/male caregiver; m, mother/female caregiver; RSVP, Responsible Steps Towards Violence Prevention. a Number not stated.

TABLE 10 Quality markers of each paper as measured with CASP

CASP item	Humphreys 2006 <sup>49</sup>	Humphreys 2011 <sup>51</sup>	Kearney 2012 <sup>60</sup>	Paris 1998 <sup>157</sup>	Peled 1992 <sup>130</sup>	Peled 1998 <sup>158</sup>	Peled 1999 <sup>159</sup>	Thompson 2009 <sup>161</sup>	Thompson 2011 <sup>162</sup>
Total 'Yes', <i>n</i>	8	10	7	10	10	10	7	10	10
Total 'No', <i>n</i>	2	0	2	0	0	0	3	0	0
Total 'Cannot tell', <i>n</i>	0	0	1	0	0	0	0	0	0
How valuable is the research to this metasynthesis (key, useful, marginal, not relevant)?	Key	Key	Useful/marginal <sup>a</sup>	Useful	Key	Key	Key	Useful	Useful
Was there a clear statement of aims of the research?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is a qualitative methodology appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was the research design appropriate to address the aims of the research?	Yes	Yes	Yes	Yes <sup>b</sup>	Yes	Yes	Yes	Yes	Yes
Was the recruitment strategy appropriate to the aims of the research?	Yes	Yes	Yes	Yes <sup>b</sup>	Yes	Yes	Yes	Yes	Yes
Were the data collected in a way that addresses the research issue?	Yes	Yes	Cannot tell	Yes	Yes	Yes	Yes	Yes	Yes
Has the relationship between researcher and participants been adequately considered?	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Have ethical issues been taken into consideration?	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes <sup>c</sup>
Was the data analysis sufficiently rigorous?	Yes	Yes	No	Yes <sup>b</sup>	Yes	Yes	No	Yes	Yes
Is there a clear statement of findings?	No	Yes	Yes	Yes <sup>b</sup>	Yes	Yes	Yes	Yes	Yes
How valuable is the research? <sup>d</sup>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<sup>a</sup> Highly relevant to our review but uncertain quality because of lack of reporting in paper.

<sup>b</sup> Yes, but hard to elucidate from the report.

<sup>c</sup> Retrospective analysis. No mention of formal ethical review but it is clear that ethical considerations were taken into account in the main study from which the analysis derives.

<sup>d</sup> Did the researchers discuss the contribution of the study to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research-based literature)? Do they identify new areas in which research is necessary? Have the researchers discussed whether or not, or how, the findings can be transferred to other populations or considered other ways in which the research may be undertaken?

### Data analysis and synthesis

We synthesised studies using the principles and methods of meta-ethnography,<sup>149</sup> which have been used in several systematic reviews and qualitative syntheses, with the aim of deriving new interpretations and conceptual insights.<sup>149,153,155,164</sup> We sought to identify first- and second-order constructs in the papers and to translate these across the papers in order to generate third-order constructs. The levels of construct can be defined as follows:

- First-order constructs: children's, parents' or stakeholders' accounts of receiving or delivering child-focused interventions, reported as quotes from interviews, observations or field notes.
- Second-order constructs: interpretations of the authors of the paper regarding children's, parents' and stakeholders' experiences of interventions, derived from the qualitative data from all participants in their study.
- Third-order constructs: views and interpretations of the synthesis team, derived from the identified first- and second-order constructs, and translation of these across all the papers included in the review.

#### Stage 1

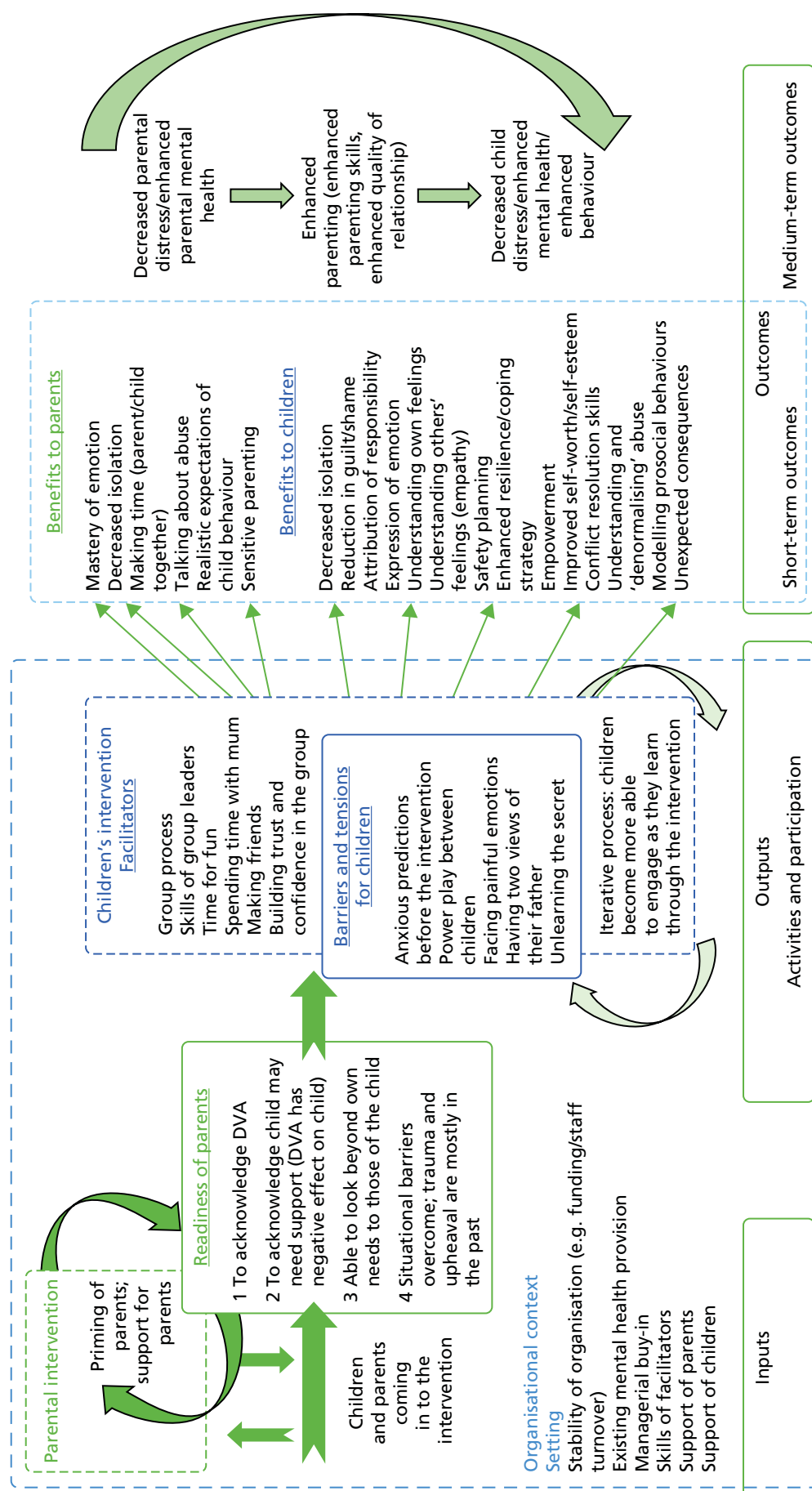
Papers were read by two reviewers (any two of TM, EH, GF or AS). Rather than conducting line-by-line coding of the papers to generate reviewer-identified themes, as is common within thematic synthesis,<sup>146</sup> we took the author-identified themes with supporting participant quotations as our data. Each reviewer independently identified all first- and second-order constructs that were relevant to the review aims and extracted these into a table. The two reviewers for each paper compared their extractions and amalgamated these into one combined table of first- and second-order constructs for each paper within each respondent group (child, parent, stakeholder).

#### Stage 2

Working as a team and taking one respondent group at a time (child, parent, stakeholder), two or three reviewers met to read through all the first- and second-order constructs for all the papers within that group. Focusing on the second-order constructs and using the relevant first-order constructs to illustrate these, and ensuring that all first-order data were represented by second-order constructs, the team compared the second-order constructs across papers within each respondent group. This enabled us to see if different authors used different language to describe and label the same experience or phenomenon. We thus sought to translate the constructs across papers in order to develop new overarching third-order constructs that included the interpretations of the synthesis team. This was done for each respondent group. Our generation of third-order constructs was largely inductive but was guided by issues of interest to the synthesis team. Therefore, the broad overarching third-order constructs that we generated were shaped by the team's interest in factors that may aid or inhibit engagement in interventions for children exposed to DVA. However, the subconstructs within each broad third-order construct were inductively derived from the translation process. As part of this process, we developed a table of third-order constructs and a conceptual diagram for each respondent group to represent the key third-order constructs and how they might relate to each other (*Figure 4*; see *Appendices 11–13*).

#### Stage 3

We next sought to synthesise the third-order constructs with their associated subconstructs into a 'line of argument'<sup>149</sup> for each respondent group (child, parent, stakeholder), before integrating the data for all respondent groups relevant to each third-order construct. This included the development of an overarching conceptual diagram for the respondent groups combined. The aim of the conceptual diagram is to visually represent the key valued components of child-focused interventions, the barriers to and facilitators of uptake and engagement, and the specific derived benefits or challenges as articulated by study participants, interpreted by the authors of the original papers and reinterpreted and synthesised by the review team (*Table 11*).



**FIGURE 4** Conceptual diagram depicting relationships of third-order constructs between parents, children and stakeholders engaged in interventions for children exposed to DVA.

TABLE 11 Synthesis of constructs for children, parents and stakeholders

Construct	Papers in which constructs were reported (high-quality scoring CASP = 9)	Lower quality scoring (CASP = 6 or 7)
<b>1 Readiness to engage with interventions</b>		
1.1	Readiness from the children's perspective	
1.1.1	Change and adaptation: the context for children's readiness	
	Paris 1998 <sup>157</sup>	
	Peled 1998 <sup>158</sup>	
	Thompson 2011 <sup>162</sup>	
1.1.2	Children's readiness: being willing to 'break the secret'	
	Humphreys 2011 <sup>51</sup>	
	Paris 1998 <sup>157</sup>	
	Peled 1992 <sup>130</sup>	
1.1.3	Children's readiness: understanding and acknowledging DVA	
	Paris 1998 <sup>157</sup>	
	Peled 1992 <sup>130</sup>	
	Peled 1998 <sup>158</sup>	
1.2	Readiness from the parents' perspective	
1.2.1	Fathers' readiness to acknowledge that their relationship has been affected by domestic abuse	Peled 1999 <sup>159</sup>
1.2.2	Parents' readiness to acknowledge the impact of domestic abuse on children	Humphreys 2011 <sup>51</sup>
		Humphreys 2006 <sup>49</sup>
		Kearney 2012 <sup>160</sup>
		Peled 1999 <sup>159</sup>
1.2.3	Parents' readiness to look beyond their own needs to those of their children	Humphreys 2011 <sup>51</sup>
		Kearney 2012 <sup>160</sup>
		Peled 1999 <sup>159</sup>
1.2.4	Parents' readiness: stability and time to engage in an intervention	Humphreys 2011 <sup>51</sup>
		Humphreys 2006 <sup>49</sup>
		Peled 1999 <sup>159</sup>
1.3	Readiness from the stakeholders' perspective	Peled 1992 <sup>130</sup>
1.3.1	Dimensions of readiness for children the perspective of stakeholders	Thompson 2009 <sup>161</sup>
		Thompson 2011 <sup>162</sup>
		Peled 1992 <sup>130</sup>
1.3.2	Dimensions of readiness for mothers: the perspective of stakeholders	Humphreys 2011 <sup>51</sup>
		Peled 1992 <sup>130</sup>
1.3.3	The role of priming in preparing parents and children to be ready	Humphreys 2011 <sup>51</sup>
		Peled 1992 <sup>130</sup>
1.3.4	The need for organisational readiness	Humphreys 2011 <sup>51</sup>
1.3.5	Dimensions of stakeholder readiness	Humphreys 2011 <sup>51</sup>
<b>2 Dimensions of benefit derived from interventions and facilitators to benefit</b>		
2.1	Dimensions of benefit and facilitators for children	Peled 1992 <sup>130</sup>
2.1.1	Spending time with mother	Humphreys 2011 <sup>51</sup>
		Peled 1992 <sup>130</sup>
2.1.2	Having fun	Peled 1992 <sup>130</sup>
		Peled 1998 <sup>158</sup>
		Paris 1999 <sup>157</sup>
		Thompson 2011 <sup>162</sup>

TABLE 11 Synthesis of constructs for children, parents and stakeholders (continued)

Construct	Papers in which constructs were reported (high-quality scoring CASP = 9)	Lower quality scoring (CASP = 6 or 7)
2.1.3 Realising you are not alone	Paris 1999 <sup>157</sup> Peled 1992 <sup>130</sup>	
2.1.4 Enhanced behaviour management	Peled 1992 <sup>130</sup>	
2.1.5 Developing emotional intelligence and resilience	Humphreys 2011 <sup>51</sup> Peled 1992 <sup>130</sup> Peled 1998 <sup>158</sup> Thompson 2009 <sup>161</sup>	
2.1.6 Enhanced self-esteem and empowerment	Peled 1992 <sup>130</sup> Thompson 2011 <sup>162</sup>	
2.1.7 Learning violence vocabulary	Peled 1992 <sup>130</sup> Peled 1998 <sup>158</sup>	
2.1.8 Learning safety planning	Peled 1992 <sup>130</sup> Thompson 2011 <sup>162</sup>	
2.1.9 Resocialising and learning to practise prosocial behaviour	Paris 1999 <sup>157</sup> Peled 1992 <sup>130</sup> Peled 1998 <sup>158</sup> Thompson 2009 <sup>161</sup> Thompson 2011 <sup>162</sup>	
2.1.10 Facilitation of the intervention through the group process	Paris 1999 <sup>157</sup> Thompson 2009 <sup>161</sup> Thompson 2011 <sup>162</sup>	
2.2 Dimensions of benefit and facilitators for parents		
2.2.1 Realising you are not alone		Kearney 2012 <sup>160</sup>
2.2.2 Greater understanding of domestic abuse and its impact on children	Paris 1999 <sup>157</sup>	Kearney 2012 <sup>160</sup>
2.2.3 Enhancement of parenting skills and awareness of self as mother	Humphreys 2011 <sup>51</sup>	Kearney 2012 <sup>160</sup>
2.2.4 Greater capacity to manage emotions	Humphreys 2011 <sup>51</sup>	Humphreys 2006 <sup>49</sup> Kearney 2012 <sup>160</sup>
2.2.5 Improved mother-child communication and relationship	Humphreys 2011 <sup>51</sup>	Humphreys 2006 <sup>49</sup>
2.2.6 Working with mothers' strengths	Humphreys 2011 <sup>51</sup>	Humphreys 2006 <sup>49</sup>
2.2.7 Fathers' experiences in group processes	Paris 1999 <sup>157</sup>	
2.2.8 Parents (fathers and mothers) wanted more time	Paris 1999 <sup>157</sup>	Kearney 2012 <sup>160</sup>
<b>3 Barriers, challenges and tensions within interventions</b>		
3.1 Barriers, challenges and tensions from the children's perspective		
3.1.1 Overcoming negative expectations of the intervention	Humphreys 2011 <sup>51</sup> Paris 1999 <sup>157</sup> Peled 1992 <sup>130</sup>	Humphreys 2006 <sup>49</sup>
3.1.2 The burden of managing conflicting images of their fathers	Paris 1999 <sup>157</sup> Peled and Edelson <sup>130</sup>	Peled 1999 <sup>159</sup>

continued



TABLE 11 Synthesis of constructs for children, parents and stakeholders (continued)

Construct	Papers in which constructs were reported (high-quality scoring CASP = 9)	Lower quality scoring (CASP = 6 or 7)
3.1.3 The pain of remembering the past	Humphreys 2011 <sup>51</sup> Peled 1998 <sup>158</sup>	
3.1.4 The emotional risks of safety planning	Peled 1992 <sup>130</sup>	
3.1.5 Sensitivities of learning about sexual abuse prevention	Peled 1992 <sup>130</sup>	
3.1.6 Changing family dynamics and rules: the challenge of 'unlearning' secret keeping	Peled 1998 <sup>158</sup>	
3.1.7 Confidentiality and disclosure within groups: when and with whom can I share?	Peled 1992 <sup>130</sup>	
3.1.8 Managing group dynamics: power, control and silence	Humphreys 2011 <sup>51</sup> Paris 1999 <sup>157</sup> Thompson 2009 <sup>161</sup>	
3.2 Barriers, challenges and tensions from the parents' perspective		
3.2.1 Rejection, power and control: challenges of including both parents in interventions	Paris 1999 <sup>157</sup>	Peled 1999 <sup>159</sup>
3.2.2 The challenges of hearing your children's experiences and emotional response to domestic abuse	Peled 1992 <sup>130</sup>	Humphreys 2006 <sup>49</sup>
3.2.3 The tensions of empowering children	Peled 1992 <sup>130</sup>	
3.2.4 Putting a boundary between child and mother: the tensions of maintaining confidentiality	Peled 1992 <sup>130</sup>	
3.2.5 The tensions of sharing the secret of abuse	Peled 1992 <sup>130</sup>	Peled 1999 <sup>159</sup>
3.2.6 Practical barriers: organising and making time for the intervention	Peled 1992 <sup>130</sup>	Humphreys 2006 <sup>49</sup> Peled 1999 <sup>159</sup>
3.2.7 Divergence of 'ethos'		Peled 1999 <sup>159</sup>
3.3 Barriers, challenges and tensions from the stakeholders' perspective		
3.3.1 Timing of interventions and the disruptive role of crises	Humphreys 2011 <sup>51</sup> Thompson 2009 <sup>161</sup>	
3.3.2 Managing families' expectations of an intervention	Peled 1992 <sup>130</sup>	
3.3.3 Cultural barriers to engagement with interventions	Humphreys 2011 <sup>51</sup>	
3.3.4 Mothers' concerns about maintenance of confidentiality by the organisation	Humphreys 2011 <sup>51</sup>	
3.3.5 Child safety	Paris 1999 <sup>157</sup>	

## Results

### Results of the search

We found 8764 references (see *Figure 3*). From reading the titles and abstracts, we identified 105 references that were potentially relevant to this review of qualitative evidence, and obtained full-text copies. Fifty-seven papers were excluded as a result of not meeting our eligibility criteria. Of the 48 papers remaining, 39 were excluded because they did not report respondents' direct experiences of an intervention but, rather, discussed the effects of DVA on children in broad terms. We identified nine papers reporting on five intervention programmes (see *Appendix 14* and *Table 9*).<sup>49,51,130,157-162</sup>

## Intervention types

Brief details of the studies are reported in *Table 9*, and more detailed descriptions of the interventions are given in *Appendix 14*. Three programmes can be broadly described as psychoeducation (see *Table 1*). For one programme, described by Kearney *et al.*,<sup>160</sup> the psychoeducation was delivered in the USA to mothers only,<sup>160</sup> while their children received a clinical intervention for trauma (that intervention was not described). In this brief 6-week programme, mothers received support and psychoeducation about relationships based on psychodynamic and attributional styles; this programme also included a video element in which one play session was filmed and used to provide parental feedback. This study was investigating the use of this intervention to help support the families in which children were receiving a clinical intervention. In a second programme by Paris,<sup>157</sup> psychoeducation was delivered to families, often including both parents (victims and perpetrators) and children in parallel group sessions for mothers, fathers, children and families together. The intervention was delivered weekly, in 90-minute sessions, for 16 weeks.<sup>129,157</sup> The third programme was described in three papers by Peled and Edelson<sup>130,159</sup> and Peled<sup>158</sup> as a support and education programme and was offered to children whose parents (either victim, perpetrator or both) were receiving an intervention on domestic violence as part of the Domestic Abuse Project of Minneapolis, USA. The intervention was given in parallel sessions to parents and children. Two other types of intervention were identified. The guided self-help intervention by Humphreys *et al.*,<sup>51</sup> 'Talking to my mum', was an intervention provided in refuges in the UK to help to increase meaningful communication between mothers and children once they had left their abuser. Some refuges were in cities with a large British Asian population, and 12 of the 57 families interviewed were from Asian backgrounds. The intervention was delivered by the mother to the child with facilitation by refuge workers.<sup>49,51</sup> Finally, one programme by Thompson<sup>161</sup> delivered play therapy and psychoeducation to four children under the age of 10 years in a school setting in the USA. This intervention had no parental involvement other than providing permission for the children to attend<sup>161,162</sup> (see *Table 9* and *Appendix 14*).

## Respondents

Three papers by Peled and Edelson and by Peled reported the views of children and mothers,<sup>158</sup> parents alone<sup>159</sup> and parents, children and stakeholders<sup>130</sup> who had participated in one state-wide psychoeducation intervention. One paper reporting on a psychoeducational programme for mothers whose children were receiving an intervention for trauma reported the mothers' and stakeholders' (therapist) views.<sup>160</sup> One PhD thesis<sup>129</sup> reported the views of children, mothers (victims of DVA) and fathers (perpetrators of DVA), as well as of stakeholders, for a psychoeducation programme delivered to families, including perpetrators of DVA.<sup>157</sup> Two reports<sup>161,162</sup> (one paper and one PhD thesis) described the views of the author (who was also the therapist) on a school-based, psychoeducation/play-therapy programme delivered to four children under 10. The papers on 'Talking to my Mum' reported mothers' and children's views in one paper<sup>49</sup> and mothers', children's and stakeholders' views in a second paper.<sup>51</sup> Overall, there were four papers reporting children's views, six reporting parents' views and six reporting stakeholders' or practitioners' views. Papers reporting parents' views also included the views of abusive parents (see *Table 9* and *Appendix 14* for full details).

## Synthesis of constructs for children, parents and stakeholders

From the process of 'translating' the second-order constructs across the papers that included child respondents, we developed three broad, overarching (third-order) constructs that related to how children engaged with and experienced interventions, each with a range of subconstructs (see *Table 11*). The three overarching constructs shaped by the interests of the review team, based on the review objectives, were (1) readiness, (2) dimensions of benefit (including factors that facilitated benefits), and (3) barriers, challenges and tensions, each containing a range of subconstructs inductively generated from the papers during the translation process. In translating the first- and second-order constructs from the papers,

including parent and stakeholder respondents, we developed similar overarching third-order constructs of readiness, benefits and tensions, whereas the subconstructs within the overarching constructs varied with respondent type (see *Appendices 11–13*). Below, we present the three overarching third-order constructs with their range of subconstructs, for all three respondent groups. In naming the overarching constructs, we emphasise that they are not mutually exclusive. For example, aspects of readiness may also be interpreted as benefits or barriers. We summarised the barriers, facilitators, tensions and benefits for all three groups in *Tables 12–15*.

### Readiness to engage with interventions

#### Readiness from children's perspectives

All of the papers including child respondents highlighted personal readiness as an important factor for children. We identified three key facets of readiness from the perspective of children: (1) change and adaptation as the context for readiness; (2) willingness to break the secret of violence; and (3) understanding and acknowledging DVA. In thinking about readiness and what it means for children who may engage in an intervention, it is important to acknowledge that readiness is a process. Children may come to an intervention at various stages of readiness and may become more ready to

**TABLE 12** Barriers, facilitators, tensions and benefits for children

Barriers	Facilitators	Tensions	Benefits
Differential readiness for an intervention (e.g. children ready but parents not ready) <sup>153</sup>	Group process sharing and trust <sup>130,157,162</sup>	Realisation of their family situation (i.e. father as abuser can be a burden to children) <sup>130,158</sup>	Talking about DVA <sup>157,158</sup>
Situational readiness: families need to be beyond the upheaval of moving or having to deal with separation, in order to make time <sup>49,153</sup>	Group process, free play time, making friends <sup>130,157,158</sup>	Management of conflicting images of fathers as loving parents and understanding the effect of fathers' abusive behaviour on families <sup>130,158</sup>	Realising that you are not alone (reduces shame and guilt) <sup>130,158</sup>
Expectations of the intervention: children perceive that it would be 'like school' or 'really really hard' <sup>49</sup>	Having fun, enjoyable activities <sup>130,157,158</sup>	Learning about sexual abuse; safety planning was uncomfortable for children <sup>130</sup>	Naming abuse <sup>130,157,158</sup>
Having to miss television, school or activities <sup>49,131</sup>	Mother facilitating work with children (e.g. helping them with the pain of remembering) <sup>51</sup>	Unlearning secret keeping <sup>158</sup>	Learning that abuse is not OK <sup>130,162</sup>
Unwillingness to reveal or talk about a shameful secret <sup>130</sup>	Modelling of prosocial behaviour from adult group facilitators <sup>162</sup>	Empowerment to speak out against abuse may put children in danger, especially if they are still in contact with the perpetrator of DVA <sup>130</sup>	Spending time with their mother <sup>49,51,130</sup>
Unwillingness to talk about the past <sup>51,153,162</sup>	Altruistic motivations: to help their mothers and to help other children <sup>51</sup>		Learning to appreciate their own and their mother's feelings <sup>130,158</sup>
The pain of remembering <sup>158</sup>	Not having to share in the group was reassuring and added to feeling of safety <sup>130</sup>		Correct attribution of responsibility for violence <sup>130,158</sup>
Child–mother relationship (if they think their mother is responsible) <sup>157,158</sup>	Stakeholder who can be an adult confidante for the child <sup>162</sup>		

**TABLE 12** Barriers, facilitators, tensions and benefits for children (*continued*)

Barriers	Facilitators	Tensions	Benefits
Power dynamic between children, adoption of customary roles of victim or taking control over the group. Adoption of passive resistance, or use of aggressive, conflictual play <sup>157,162</sup>	Prosocial and caring behaviour of facilitators towards children <sup>130</sup>		Self-esteem; learning that they are worth respect and care <sup>130,162</sup>
Power dynamic between adults and children; children may perceive adults as powerful and may be less able to speak up <sup>51</sup>	Practitioners being able to assist children through the process of engaging with difficult thoughts and emotions <sup>130</sup>		Improved behaviour management; better able to understand, name, express and manage their emotions. <sup>51,130,161,162</sup>
Unlearning the need to keep secrets and go against family norms. This may be why it takes children a long time to share and trust <sup>157</sup>	Priming may be a helpful precursor both to developing readiness to engage and to providing preparatory information to aid children's understanding of the intervention. Improved understanding of an intervention may enhance its acceptability to potential participants <sup>51,158</sup>		Resocialising and learning to practise prosocial behaviour, and being able to link this behaviour to outcomes <sup>130,158,162</sup>
The time children require to develop sufficient trust to share in a group situation [e.g. if an intervention is short (< 6 weeks)] <sup>157</sup>			Improved mother-child communication <sup>51</sup>
	Free from contact with abusive parent, thus reducing the tension that children and parents felt about managing communication about participation in the intervention <sup>51</sup>		Having fun, enjoyable activities, making friends, free play

**TABLE 13** Barriers, facilitators, tensions and benefits for parents (mothers)

Barriers	Facilitators	Tensions	Benefits
Not wanting to talk about DVA (as a way of protecting the child from upsetting memories) <sup>51</sup>	Working in a group together facilitated mothers to realise that they were not alone <sup>160</sup>	Mothers found it hard to hear their children's views of DVA for the first time <sup>130</sup>	Realising that they are not alone (in the experience of being in a DVA situation and being a parent) <sup>160</sup>
Mothers who had left a family situation to escape DVA must be situationally ready (i.e. able to devote time to attending an intervention once the shock and upheaval of leaving an abusive relationship have passed) <sup>49,51</sup>	Recognising that DVA can affect their children's lives negatively <sup>49,159,160</sup>	Confidentiality of children's groups, as some parents felt excluded and wanted to know more about their child's progress <sup>130</sup>	Parents' understanding of the effect of DVA on children <sup>160</sup>

continued

**TABLE 13** Barriers, facilitators, tensions and benefits for parents (mothers) (*continued*)

Barriers	Facilitators	Tensions	Benefits
Concern about having to take their child out of school or to miss activities <sup>49,51,130,159</sup>	Mothers' attitudes of actively seeking help for their child <sup>51</sup>		Improved mother-child communication <sup>49,51</sup>
	Ability to look beyond their own needs to those of the child <sup>51,159,160</sup>		Learning to master their own negative emotions <sup>160</sup>
	Stakeholders able to offer support to mothers through the process of engaging with their own difficult thoughts and emotions (especially important if mother is not receiving an intervention alongside her child) <sup>49,157</sup>		Enjoying spending time with their children <sup>49</sup>
	Rules about confidentiality were considered reassuring and important in terms of creating trust and 'breaking the secret' <sup>130</sup>		Enhanced parental sensitivity <sup>160</sup>
	Development of relationships of trust with those delivering the interventions <sup>49,51,160</sup>		Resilience (e.g. children's knowledge of safety planning) <sup>130</sup>
	Priming may be a helpful precursor both to developing readiness to engage and in providing preparatory information to aid parents' understanding of the intervention. Improved understanding of an intervention may enhance its acceptability to potential participants <sup>51,158</sup>		

**TABLE 14** Barriers and tensions for parents (fathers/perpetrators) when intervention included both parents

Barriers	Tensions
Fathers not yet ready to acknowledge that they were in a relationship affected by DVA <sup>159</sup>	Some fathers felt that they were being nagged or manipulated <sup>157</sup>
Concern of parents (mother and fathers) about the rejection of or lack of a place for fathers in interventions <sup>159</sup>	Some fathers were able to continue to control their partner through the use of 'veiled threats', and some were able to use the insight gained during their sessions to derail the attempts of their partner to bring about change <sup>157</sup>
Concern of parents (mother and fathers) about the effects on their children of being in a group session with children who had been exposed to more severe abuse <sup>159</sup>	Fathers mentioned finding it difficult to work in the group and felt that they had to respond 'as the facilitators wanted them to' rather than with their 'own' responses <sup>157</sup>
Fathers mentioned that it was difficult for them to organise a service/intervention for their child when they did not have custody rights <sup>159</sup>	Use of established gendered power dynamics in joint (mother and father) group work allowing perpetrators to control group sessions <sup>157</sup>
Fathers reported not agreeing with the feminist perspective of one programme and refused to attend <sup>159</sup>	Ability of fathers to use knowledge from the interventions to gain additional control <sup>157</sup>

TABLE 15 Barriers, facilitators and tensions for stakeholders

Barriers	Facilitators	Tensions
Stakeholders' ability to understand abuse and its impact on mothers and children. A lack of understanding of the degree of trauma experienced by mothers, or why the mothers are not yet able to put their children first, was seen to affect the workers' ability to help women engage with the intervention <sup>51</sup>	Stakeholders have a key role in assisting mothers to engage, especially in situations in which culture might take a role in affecting the mother's readiness <sup>51</sup>	Stakeholders were concerned that parents would think children would be 'fixed' by an intervention, when the intervention, for some children, may be just one step in a long journey <sup>130</sup>
Organisations within which interventions are delivered need to be 'ready'; staff need to be trained appropriately, and management need to be committed to the intervention <sup>51</sup>	The confidentiality of the group was important to women. Of particular concern to them was the safety of children when perpetrators were involved in the programme <sup>51</sup>	The importance of cultural awareness in the facilitators when introducing interventions to mothers and children <sup>130</sup>
Organisations 'in crisis' were not seen to be ideally placed to facilitate the delivery of such an intervention <sup>51</sup>	Organisations already providing similar support (e.g. counselling) were seen as more ready and as having a better foundation on which to deliver interventions <sup>51</sup>	Facilitator concerns that children may feel bad in a group setting if their experience of DVA has been more severe than that of other children <sup>130,159</sup>
	Care in the training of staff and roll-out of a new intervention were necessary	
	Stakeholders' ability to facilitate engagement depends on their own personal traits, training and understanding of the trauma of DVA and its effects on families <sup>51</sup>	

engage with and receive aspects of the intervention as it progresses. Increased readiness to engage is a benefit of participating in an intervention (see *Figure 4*).

### ***Change and adaptation: the context for children's readiness***

Children coming to interventions in the aftermath of DVA have experienced considerable change as their family adjusts to a new reality. This change is not only in their physical and material world – 'the move implied a change of neighbourhoods, school, and general social environment'<sup>158</sup> – but also in relationships with parents and other family members, as a result of often traumatic separation from the abusing parent.<sup>158</sup> Children may experience changes in their own thoughts and feelings about their parents – both abusive and non-abusive – and about their family. Such situational and relational change is an ongoing and complex process and continues 'long after the immediate aftermath of violent incidents'.<sup>158</sup> Change thus forms part of the context within which children come to an intervention.

Change is accompanied by processes of adaptation for children. Peled<sup>158</sup> observed that children have to learn to adapt quickly to their new surroundings in the setting of a shelter. This can be stressful and may result in behaviours such as bed-wetting.<sup>158</sup> Having to adapt may also cause conflict with mothers at a time when children need maternal support. As a consequence, children may need additional support from shelter staff to adjust to the new reality of shelter life. Although some change is difficult for children, a change in living circumstances can bring positive benefits, including safety and emotional and material support, which may prepare a child and parent to begin to acknowledge and deal with the aftermath of abuse.<sup>158</sup>

Adaptation includes coming to terms with a changed relationship with an abusive father. A child may develop new and confusing feelings about their abusive and non-abusive parents in the aftermath of DVA. If a child has moved to live with his or her mother only, access to his or her father is likely to be restricted

and the child may not understand, or may resent, this limitation. Children may have to adapt to seeing their fathers as the perpetrators of abuse as well as the caring fathers whom they love, and they may need to work out how to cope with and reconcile these conflicting images of their fathers. It is possible that children's perceptions of the core problem may shift from 'the abuse itself to the consequences – the difficulties in relationships with fathers'.<sup>158</sup> Relationships with their fathers may remain a difficult issue for children, both throughout their participation in an intervention and beyond.

Relationships and feelings towards mothers may also change. Children may sometimes blame their mothers for their new and unpleasant situation, including restricted access to their fathers. However, children may also develop new understandings of the emotional and practical difficulties that their mothers face, such as having to re-educate themselves to acquire work to provide for their children. This may change the dynamics of their relationship, as the child wishes to demonstrate care and empathy for his or her mother.<sup>158</sup>

These various changes and adaptations are part of the context in which a child enters an intervention and they may impact on his or her readiness to engage.

### ***Children's readiness: being willing to 'break the secret'***

Willingness to 'break the secret' of DVA is an important aspect of children's readiness to start, and to continue to engage with, an intervention. Initial willingness to engage in an intervention was sometimes motivated by altruism, with some children citing the desire to help their mothers and understand their experiences, alongside a wish to help other children in the future, as reasons for joining an intervention.<sup>51</sup>

Breaking the secret of DVA was, however, consistently difficult for children who were often hesitant to talk about their experiences. Particularly in the early stages of an intervention, children often did not want to talk about the past or their fathers. Their mothers' presence facilitated children's engagement with an intervention and helped the children to recognise the value of therapeutic activities.<sup>130</sup>

Children typically required time to develop trust before they felt safe to share their experiences: 'they were willing to discuss violence after several weeks had passed rather than during the first few sessions of the program'.<sup>157</sup> Consequently, although children who had engaged in an intervention often wanted to talk about the abuse, it was not unusual for considerable time to pass before they were ready to talk. In group interventions, it took some time for children to build sufficient trust in one another to enable them to behave and play more spontaneously and to proceed to disclose their experiences and feelings. Developing trust enabled children to feel safe within the group. Group rules, including rules about confidentiality ('whatever was said in the group, stays in the group'<sup>130</sup>), provided reassurance for children and were an important precursor of willingness to 'break the secret'.

Once children had begun to share the secret of DVA, talking about it was usually experienced as beneficial and as a form of stress-relief. During the interventions, children learned that it was acceptable and helpful to break the silence or secret about DVA within their family. Sharing the secret helped children to realise that they were not alone and that there were other children in their situation, and contributed to reducing their sense of shame and guilt.<sup>130</sup> Just being listened to was a new and welcome experience for some children.

However, remembering and talking about the past also carries costs for children. These costs are discussed under the third overarching construct, that is, barriers, tensions and challenges (see *Tensions associated with sharing the secret of abuse*).

Importantly, there may also be differential readiness between children and their mothers, which may impact on engagement with interventions designed to help both children and parents. For example, in Humphreys and Skamballis,<sup>51</sup> a mother described her own reluctance to acknowledge and talk about the effects of DVA, while acknowledging that her daughters had been ready to talk about it for some time, having already discussed it with a special educational needs co-ordinator at their previous school.

This differential readiness between mother and children had delayed their engagement with a family-based intervention.

### ***Children's readiness: understanding and acknowledging domestic violence and abuse***

A gradual process of coming to understand and acknowledge DVA was also an important facet of children's personal readiness to take up and continue with an intervention. Public responses of mothers to abusive situations, such as entering a shelter, are not always accompanied by a shift in children's understanding and awareness of DVA.<sup>158</sup> Children in a shelter may not yet understand the role of DVA in bringing them to the shelter. In addition, children may not conceive of abuse as the most significant problem in their lives; they may be more engaged with other, more immediate, issues including 'feelings of being rejected by their fathers' and 'normal developmental challenges'.<sup>158</sup> The relative 'marginality' of DVA among the array of challenges facing a child may be a barrier to initial readiness to engage with an intervention.

At the start of interventions, children not only may be hesitant to share their experiences but may have limited ability to express what has happened. Children have to learn the language of abuse and how to talk about what they have witnessed or heard. As children engage with interventions, they begin to learn that abuse is not acceptable and to 'de-normalise' the domestic violence to which they have been exposed.<sup>157,158</sup> Part of this process includes attributing responsibility for the abuse to the perpetrator. Some children need assistance in acknowledging that their fathers are responsible, as well as support in recognising the impact of DVA on their mother and the children in the family. Through engaging in supportive interventions, children learn to define and label types of abuse, which helps them to talk about and process what has happened in their lives.<sup>130</sup>

### **Readiness from parents' perspectives**

All of the papers that included parent respondents highlighted readiness as important. Parents not only had to be ready themselves but also had to be ready to allow their children to access interventions. The nature of readiness differed for fathers and mothers. In the papers reviewed, all fathers were identified as 'perpetrators' of domestic abuse (in one paper, the terminology used was 'batterers') and all mothers were 'victims'. When fathers were involved in decisions about child engagement in an intervention, this was in respect of programmes aimed at entire families affected by DVA.

For parents, readiness took four forms: (1) fathers had to be ready to acknowledge that they had been in a relationship affected by DVA; (2) parents had to recognise that exposure to DVA can affect children negatively; (3) parents had to be able to look beyond their own needs to those of their child; and (4) parents needed to have recovered from any immediate traumas arising from separation and to be able to create time to attend an intervention (see *Figure 4*).

As is also the case for children, parents' readiness should be seen as a process: parents may become more ready with exposure to the intervention. Furthermore, some aspects of readiness could arguably be conceived as 'benefits' derived from the intervention (e.g. parents' realisation that their children have been affected by domestic abuse is a benefit for the child) and lack of readiness could be conceived as a barrier to engagement. Importantly, authors highlighted that readiness may require 'priming' or support to move parents to the point of being ready to engage with an intervention.

### ***Fathers' readiness to acknowledge that their relationship has been affected by domestic abuse***

Acknowledging that they were, or had been, in a relationship affected by domestic abuse was a key aspect of readiness for fathers. Failure to recognise a relationship as abusive could impede a father's readiness to attend an intervention and recognise his child's or children's need to receive an intervention. When papers included data from fathers who had participated in a programme for perpetrators, those



who doubted the appropriateness of an intervention for their children were also those who denied that their relationship was abusive.

*I wasn't too involved with it. But I heard about how violence affects children. They never had a problem like that. Their mom is good with them. There was never violence at home. I went to DAP because there was some problems with my marriage.*<sup>159</sup>

### ***Parents' readiness to acknowledge the impact of domestic abuse on children***

Some parents felt that their children had no need of an intervention. Others were aware that if their children visibly witnessed violent acts then an intervention might be desirable. However, many parents were unaware that being brought up in a home with interparental coercive control, in whatever form, is itself sufficient to cause problems. Parents were unlikely to see the value of an intervention if they believed that their children had no knowledge of the violence, were too young to comprehend it, did not witness the violence or if they believed that the DVA was not sufficiently severe to place the children at risk. To become ready to engage in an intervention, parents needed to reach a point at which they understood that witnessing the 'after-effects' of violence was damaging to their children, even if they had not seen the violence itself.<sup>159</sup>

For interventions involving groups of children, parents expressed concerns about bringing their children into contact with children who had lived through more traumatic experiences of violence, which they felt might be harmful for their child. Parents, including perpetrators, tended to 'grade' the violence to which their children had been exposed, and, if they deemed it to be less harmful (e.g. verbal abuse), they were less likely to want their children to engage in an intervention.<sup>159</sup>

Parents' lack of knowledge of the impact of DVA on children, or denial of its impact, is likely to influence parents' readiness to engage themselves or to allow their children to engage with interventions and thus presents a barrier to uptake.

### ***Parents' readiness to look beyond their own needs to those of their children***

A third aspect of parental readiness was the ability to look beyond one's own needs to those of their children, and to prioritise their children's needs. Mothers were motivated to take up an intervention if they noticed a need in their children (as well as themselves) that they wanted to address. For example, mothers who had engaged in an intervention focusing on the mother-child relationship reported that they had done so because they were motivated by a wish to improve communication with their child.<sup>51</sup>

Readiness to engage with an intervention may derive from parents' wishes to improve their relationship with their children and to find out more about their children's feelings about the past and their current situation. Many such parents – often mothers – appeared to be at a stage at which they felt able to be more child-focused in their approach.

Conversely, there were parents who did not wish to engage in such an intervention, as the 'preferred way to deal with the past was not to discuss it. Some saw it as a means of being protective of either themselves or their children'.<sup>51</sup> Concerned that talking about the past with their children could be harmful, parents avoided it.

Despite attending support programmes for themselves in the aftermath of DVA, some parents acknowledged that they had been so focused on their own needs that they had been unable to consider the needs of their children. Parents who are processing their own difficult emotions and experiences may be unable to see beyond these to devote time and emotion to their children's needs. For example, in the words of one father: 'I felt like I had to take care of myself before working with my son'.<sup>159</sup> Furthermore, with the passage of time and improvements in their own situations, parents may not see the need for their children to receive support, particularly if they do not seem to be exhibiting overt difficulties.<sup>159</sup>

### ***Parents' readiness: stability and time to engage in an intervention***

From the papers reporting interventions focused on enhancing mother–child communication, it was apparent that an important, more practical aspect of parental readiness was having the stability and time to engage with an intervention.<sup>49,51</sup> Mothers felt the need to be sufficiently settled and organised in their home lives after leaving an abusive relationship, for example, to attend an intervention.

This resonates strongly with the subconstruct identified under children's readiness, relating to change and adaptation that forms part of the context for readiness. To be ready to engage with an intervention, parents (particularly mothers) need to have moved towards a degree of stability in their home lives and to have not only the emotional capacity, but also the practical capacity to engage.

### **Readiness from stakeholders' perspectives**

Stakeholders who had been involved in delivering interventions for children reported relatively little about child readiness but were more forthcoming about the readiness of parents, particularly mothers. This imbalance may reflect the role of mothers as the 'gatekeepers' through whom children typically access interventions. The majority of stakeholder data on mothers' readiness concerned one intervention, which focused on enhancing mother–child relationships and was delivered within shelters by refuge workers.<sup>49,51</sup>

As already identified for children's and parents' readiness (see *Readiness from children's perspectives* and *Readiness from parents' perspectives*), stakeholders emphasised that readiness was a process or 'journey',<sup>130</sup> which starts before an intervention, develops during engagement, and is likely to continue after completion of the intervention.

### ***Children's and mothers' readiness: the perspective of stakeholders***

As reported under readiness from the perspective of children (see *Readiness from children's perspectives*), trust was identified by stakeholders to be an important precursor for children to be ready to engage with interventions, particularly in the context of group-based interventions. Stakeholders felt that breaking the secret of DVA was difficult for children who needed some time before they felt that they could trust the group enough to disclose and be open about their experiences of witnessing abuse within their families.<sup>161</sup>

From the perspectives of stakeholders, four aspects of mothers' readiness emerged, which overlap and resonate strongly with aspects of readiness already identified from the parents' perspective (see *Readiness from parents' perspectives*). These were (1) being beyond the crisis; (2) living away from the perpetrator; (3) being ready to acknowledge the effects of DVA on their children; and (4) and being ready to acknowledge and focus on their child's needs beyond their own (see *Figure 4*).

Stakeholders were clear that a starting point for meaningful and safe engagement with an intervention was a 'situation of stability',<sup>51</sup> which in practice meant being past the point of crisis in the immediate wake of abuse, being separated from the perpetrator and being over the initial trauma of separation.

Practitioners observed that mothers needed to be at a stage at which they could acknowledge the impact of the abuse on their children and look beyond their own needs to those of their children. The stakeholders felt that it was mothers who were concerned about their children's welfare and the effect of domestic abuse on their children who are most motivated to engage with interventions and the most proactive in seeking help.<sup>51</sup> Stakeholders acknowledged their own key role in assisting mothers to engage with interventions. This was particularly noted in relation to situations in which cultural issues might impact the mother's readiness.

*I didn't feel as though she wanted to take part. But I thought it would be good for her because when she first came to the refuge she didn't have any interaction with her son. And the relationship I could see was deteriorating, but she couldn't handle it. Because she's never been able to be a mother when*

*she was at home, living with the in laws, and to come to this environment and suddenly she has to be a mother . . . it was difficult at the beginning to get her on board.*

*Children's worker<sup>51</sup>*

### ***The role of priming in preparing parents and children to be ready***

Stakeholders uniquely identified the importance of pre-intervention 'priming' work with parents and children, in order to prepare and orient them to be ready to engage with an intervention. Preliminary priming (e.g. by refuge workers) may be a helpful precursor both to developing readiness to engage and in providing preparatory information to aid children's and parents' understanding of the intervention.<sup>49</sup> Improved understanding of an intervention may enhance its acceptability to potential participants, for example, by providing reassurance around confidentiality in the context of group interventions (see *Figure 4*).<sup>130</sup>

From the perspective of stakeholders working with women from minority ethnic groups, the culture of the women and their families might have an important role in the acceptability of an intervention. Common concerns, for example about confidentiality, may be heightened for women from some cultural backgrounds who may have particular concerns about access to information by abusive partners. Careful priming for cultural background might therefore be useful.<sup>51</sup>

### ***The need for organisational readiness***

Stakeholders also identified the need for organisations within which interventions are delivered to be ready. This emerged particularly from papers reporting on an intervention focused on mother-child communication and facilitated by refuge staff. Humphreys *et al.*<sup>51</sup> highlighted that integrating the delivery of such an intervention within the work of a refuge that had established procedures and worker roles required careful management. The organisation needed to be set up or 'ready' to support their refuge staff in this respect.

Organisations 'in crisis' and facing challenges such as staff shortages and inconsistent management practices were not seen to be ideally placed to facilitate the delivery of interventions. Organisations already providing similar support (e.g. counselling) were seen as more ready and as having a better foundation on which to deliver interventions. However, careful training and roll-out of an intervention was still necessary.<sup>51</sup>

Management 'buy in' to the ethos of the intervention was vital to successful roll-out and key to 'paving the way for work between mothers and children to happen'.<sup>51</sup> For an intervention to be well integrated into existing services, organisations were seen to need to provide strong managerial support for front-line workers delivering the intervention and leadership to overcome any organisational barriers to its implementation. Therefore, organisational readiness is an important precursor to parent and child readiness to engage with an intervention.

### ***Dimensions of stakeholder readiness***

Stakeholders or practitioners also need to be ready to deliver the interventions. Stakeholders at times identified tensions or differences between the skills required for their everyday role and the skills required to deliver a specific intervention. For example, refuge workers within a shelter delivering an intervention for mothers and children noted a contrast between the personal and delicate nature of the psychoeducational intervention and the more practical aspects of providing a safe temporary home. In addition, shelter workers might be very busy and may not have prior experience of facilitating an intervention. The goodwill, enthusiasm, skills and resourcefulness of the workers, with organisational support, were seen as key for intervention implementation.<sup>51</sup>

The ability of refuge workers to facilitate engagement with an intervention was seen to depend on the workers' personal traits, training, and their own understanding of abuse and its impact on mothers and children. A lack of understanding of the degree of trauma experienced by mothers, or of why the mothers

are not yet able to put their children first, was seen to affect the workers' ability to help women to engage with the intervention.<sup>51</sup>

### ***Benefits derived from interventions, with facilitating factors***

The second overarching construct in this qualitative synthesis is dimensions of benefit derived from interventions, along with factors facilitating those benefits. Owing to overlap in the benefits articulated by each respondent group, we present two integrated sections: (1) benefits and facilitators for children; and (2) benefits and facilitators for parents, as expressed by all respondent groups. Benefits to stakeholders were not reported in the papers and, therefore, do not appear in the synthesis. When dimensions of benefit were identified only by particular respondents, or agreed on by various respondents, this will be noted. As highlighted previously, some benefits overlap with readiness.

#### **Benefits and facilitators for children**

In the papers, children were seen to experience a range of benefits by engaging in interventions, as recounted by children themselves or as interpreted by parents or by the stakeholders delivering the interventions (see *Figure 4*). The authors of the papers remind us that it is important to acknowledge the diversity of children: although some will respond visibly and relatively quickly, for others the intervention may be 'a first and crucial step in a much longer journey'.<sup>130</sup>

#### ***Spending time with mother***

A recurring benefit was that children valued simply spending time with their mothers. This benefit was particularly apparent in interventions that included a focus on improving mother–child relationship and communication (e.g. Humphreys *et al.*<sup>51</sup>). This benefit was identified by all respondent groups, including children and parents who themselves benefited from spending time with their children (see *Benefits and facilitators for parents*). Spending time together enabled mothers and children to talk and share their feelings, which was seen as beneficial for their relationship (see *Learning violence vocabulary*).

#### ***Realising that you are not alone***

From the perspective of stakeholders, realising that you are not alone was one of the key benefits for children participating in child-focused interventions. Through participation, children learnt that they are not alone – that the things that they have experienced and felt are not unique to them but are experienced by other children in similar contexts – and this gives them reassurance and hope. Knowing that other children are experiencing the same feelings and similar family situations can be immensely helpful to children.<sup>157</sup> This was echoed in the experiences of mothers (see *Benefits and facilitators for parents, Realising that you are not alone*).

#### ***Fun and friendship***

Having fun and experiencing enjoyable activities and interactions was viewed by stakeholders as a crucial dimension of benefit for children, particularly within the context of group interventions. Gratifying group activities such as playing and eating together were seen to provide an important safety net within which serious and difficult material could be dealt with.<sup>130</sup> Having fun and developing friendships were seen as an importance counterbalance to the uncomfortable and painful aspects of group work during psychoeducational programmes, which could be hard work and 'emotionally draining' for children.<sup>162</sup>

The value of fun and friendship was echoed in the accounts of children who described enjoying activities such as playing, drawing and writing within group interventions.<sup>157</sup> Their enjoyment derived both from structured activities during group sessions and from free play, during which they could develop friendships. Their enjoyment helped children to engage and stay with the intervention.

#### ***Learning violence vocabulary***

Stakeholders emphasised the value of children learning a 'violence vocabulary'<sup>130</sup> that enabled them to talk about and share experiences of abuse. This vocabulary was perceived to underpin other benefits, such as enhanced emotional expressiveness (see *Learning safety planning*). Also identified as part of children's readiness to engage with interventions (see *Children's readiness: understanding and acknowledging domestic*

*violence and abuse*), we note that learning a violence vocabulary can be seen as a benefit acquired through participation in an intervention, thus reinforcing the idea that readiness is an ongoing process. Importantly, this new vocabulary enabled children to define and appropriately attribute responsibility for the abuse, helping them to understand that abuse is not acceptable and that conflict between their parents was 'not their fault'.<sup>130</sup>

Mothers shared the view that learning to recognise that abuse is not acceptable is an important benefit for children engaged in interventions. Being asked who is at fault for abuse and learning to attribute blame appropriately and to articulate that 'it's not my fault' were seen as important gains.<sup>130</sup> However, although seen as beneficial, there was also concern from authors that the acquisition of this new understanding would lead to risks for the child, if they expressed this blame within an abusive family context. These risks are dealt with in the next section on challenges (see *Family tensions arising from empowering children*).

### ***Learning safety planning***

One intervention included safety planning for children to protect them from abuse, including sexual abuse, and to alert them about what to do if DVA occurred in their presence. Mothers whose children had experienced this intervention valued this training and felt that it had provided their children with a platform from which to think about and plan how they would respond in the future and from which to talk about these issues within family support sessions. Mothers felt that it had equipped children with strategies that they might put into action in future abuse scenarios, with support from their mothers.<sup>130</sup>

### ***Enhanced behaviour management and learning to practise prosocial behaviour***

Through engaging in interventions, children may increase their ability to manage their own behaviour, by learning new skills to help them respond more positively to difficult or confrontational situations within their families or with their peers. Children articulated an improved capacity to change their own unhelpful behaviour, which had developed in the context of living within a family in which violence was the norm. One example of this related to conflict resolution, whereby interventions were perceived to have given children new skills to avoid or resolve aggressive encounters, for example with siblings.<sup>130</sup>

A benefit highlighted by stakeholders was children's learning and practising of new behaviours through group interventions, equipping them to conduct caring interactions with other children and adults in the future. This benefit was perceived to be acquired through engagement in group interventions and observing positive role modelling by adult facilitators.<sup>130</sup> Participation in a group intervention was perceived to 'resocialise' children who had been exposed to abusive and violent relationships within their homes. Group interventions allowed children to directly experience caring behaviour from adults (group facilitators) and helped them to learn positive patterns of interaction and develop trusting relationships with other children and adults.<sup>157,162</sup>

### ***Developing emotional intelligence and resilience***

The development of greater emotional understanding and resources among children was identified by all respondent groups (children, parents, stakeholders) as an important benefit of engaging in interventions of various types. By emotional intelligence, we mean learning to name, express and understand one's own emotions as well as those of others. Through engagement in interventions, children were supported to develop a greater understanding of their own feelings. Through spending time with their mothers, they were helped to gain a better understanding of their mothers' feelings and how their experiences of abuse had impacted on them both.<sup>51</sup> Children felt that being together helped them to express their feelings to their mothers, which was beneficial for their relationship.

Sharing feelings was also perceived to be a protective strategy for avoiding future distress. For example, in Peled,<sup>158</sup> a child talked about his perception that his mother's illness was due to her silence about the abuse she received from her own father as a child. He felt that his brother could end up with the same illness ('always being sick')<sup>158</sup> if he did not talk about their experiences of domestic abuse. Talking within the intervention was seen as a way of helping to avoid this potential future suffering.

Mothers also recognised improved emotional expressiveness in their children, noting how through participation in a group intervention, their children had acquired the vocabulary to express how they were feeling. This benefit was double-edged, being both encouraging and distressing for the mothers to witness. Despite finding it difficult to see their children experience such sadness, mothers felt that it was helpful for the children to cry and talk about their feelings about the past and about the impact of the abuse, including separation from their father.<sup>130</sup>

Children's enhanced emotional capacity and resources were also recognised by stakeholders. Through engagement in interventions, children were perceived to acquire a better understanding of, and an empathy towards, others' situations, including those of their mothers. They were seen to be better able to understand, name and manage their emotions, through learning appropriate ways in which to express negative feelings such as sadness and anger. Group interventions were seen to help children to learn to share their emotions within a safe space, and to appropriately express their feelings to others without resorting to conflict or violence.<sup>161</sup>

This acquisition of greater emotional understanding and resources through engagement with interventions was echoed in the experiences of mothers (see *Increased capacity to manage emotions*).

### ***Enhanced self-esteem and empowerment***

Children participating in a psychoeducation intervention delivered in parallel with interventions for their non-abusing parent described benefits to their self-esteem. Children had learnt to feel that they were special, that they could be respected and cared for. This was often acquired through positive affirmation and role modelling by the facilitators of the interventions.<sup>130</sup>

Stakeholders also recognised improvements in children's self-esteem as a result of participating in interventions, particularly those delivered to children in a group context. Through positive interactions with other children, they learned self-value and reconceived themselves in affirmative terms (e.g. as brave, a friend, a person who shares or a good listener). As children perceived and talked about themselves in these terms, they built a 'reservoir'<sup>162</sup> of internal resources and coping skills that could equip them for difficult future life experiences (see *Learning safety planning*) and were, thus, empowering.<sup>130</sup>

### **Benefits and facilitators for parents**

Parents (particularly mothers) were seen to experience a range of benefits through engaging in interventions, as articulated by parents themselves or as interpreted by stakeholders delivering the interventions. Benefits for non-abusive parents (all mothers) included realising that they were not alone as parents, developing a greater understanding of DVA and its impact both on themselves and on their children, developing enhanced parenting skills, and developing a sensitivity in working with their children and a mastery of their own negative emotions.<sup>160</sup> From the perspective of stakeholders, mothers also became better engaged with services more widely, in terms of both services targeted at survivors and other services.

### ***Realising that you are not alone***

As was the case for children, an important benefit for many mothers was their realisation that they were not alone and that there were other women and families with similar experiences. Group work seemed to be an important facilitator of this awareness and was identified as valuable by both stakeholders and mothers. Group processes enabled mothers to share their experiences of abuse with others in similar situations and to change their understandings of abuse. Through group participation, mothers developed an awareness that they were not to blame for what had taken place and that other women had children who were experiencing problems because of exposure to abuse.<sup>160</sup>

### ***Greater understanding of domestic abuse and its impact on children***

Where interventions included parallel group sessions for abusive and non-abusive parents, non-abusive parents (mothers), in particular, benefited from a changed understanding of abuse and a reinterpretation

of their own past experience. Whereas previously they had rationalised abuse by reasoning that 'he hit me – he loves me . . . he wants to hold onto me',<sup>160</sup> they learned to see that abuse was unacceptable, not just for them but also for their children.

An important benefit for mothers was a growing realisation of the subtlety of abuse, including a recognition that abuse could be emotional as well as physical. This emerged throughout the course of the intervention and was seen to have the potential to contribute to longer-term positive changes, whether through changes in the women themselves or through changes in their relationships.<sup>157</sup>

Participating in group interventions also enabled women to develop a greater appreciation of the impact of abuse on their children. Taking part in a psychoeducational group intervention was seen to allow mothers to gain new insights into how much their children had been affected by living with DVA and the steps that may be required to help their children to recover from such experiences.<sup>160</sup> Mothers experienced mother-only groups as providing safe, supportive places in which to share their concerns about the effects of DVA on their children, including their children's behaviour.

### ***Enhancement of parenting skills and awareness of the self as mother***

From the perspective of stakeholders delivering group-based interventions, the shared group process also helped mothers to develop their parenting skills, a benefit that was gained not only through the content of the group meetings but also through the sharing of similar experiences, as none of the interventions specifically described parenting skills training. Being in a mother-only group in which women could share mutually difficult experiences and emotions was useful for developing affiliative and nurturing behaviours that could be used to support other women as well as to protect their own children.<sup>160</sup>

Group and individual sessions delivered within a psychoeducational intervention allowed the women to gain a greater awareness of themselves as 'mothers' as well as 'women', thus enhancing their insight into their need to nurture and help their children in the aftermath of DVA. In an intervention for non-abusive mothers, the group process was perceived to provide a safe and contained 'holding' space in which to examine what it means to be a mother. Undertaking focused work on one's role as mother requires the establishment of trust between group facilitators and mothers, which required care and time to develop, as the women could feel vulnerable in 'exposing aspects of their mothering to other people'.<sup>51</sup> Women needed to be reassured that it was safe to reveal things about themselves and their relationships with their children. In such situations, the group took on a caregiving role. Within this, the group facilitators were conceptualised as adopting a 'grandmothering' role in their provision of trusted support to women learning about parenting.<sup>160</sup>

### ***Increased capacity to manage emotions***

As was the case for children, mothers were perceived to develop greater emotional capacity through participating in interventions, becoming more able to reflect on their own and their children's experiences without being swamped by 'crippling emotionality'.<sup>160</sup> Stakeholders delivering the intervention noted how mothers grew better able to identify and manage their emotions, recognise how their emotions impacted on their children, be less overwhelmed by their emotions, more reflexive and more able to cope. Women were seen to develop new levels of insight that would allow them to move forward, both by recognising the seriousness of their situation and also learning to problem-solve and look to the future without being overcome by negative feelings. Having been helped to identify and name emotions such as anger through interventions focused on child–parent communication, mothers and their children were enabled to work positively on a particular emotion identified.<sup>49</sup>

### ***Improved mother–child communication and relationships***

Papers reporting an intervention that focused on mother–child communication identified many benefits for families.<sup>49,51</sup> Mothers' accounts described an initial wariness in talking about abuse with their children, and, for some, this reluctance continued. For many, however, the structured and organised interactions and

availability of a support worker was reassuring; they valued the opportunity to open this dialogue and became confident about doing so.<sup>51</sup>

Sharing and spending time either together, either the mother and child together, or the children or mothers in peer groups, was found to be beneficial and enjoyable in and of itself, outside any abuse-specific content. We previously noted how children valued spending time with their mothers during interventions (see *Spending time with mother*). Through participating in the intervention, mothers observed and experienced positive changes in their relationships with their children, and came to realise that communicating with their children was a skill that they could learn and improve on. They learned to appreciate their child's viewpoint and felt that they had been brought closer together.<sup>49</sup>

Positive changes in mother–child relationships were seen to require relationships of trust with those delivering the interventions, who needed to be 'skilled in working with women and/or children or else highly committed to the notion of strengthening the communication, overcoming the problems of secrecy, and the recovery of the mother–child relationship'.<sup>51</sup> When organisations had few such workers, or lost such workers during the course of an intervention, few children and women took up or remained engaged with the intervention.

### ***The value of a strengths-based approach***

Stakeholders noted the benefits of a strengths-based approach when working with mothers and children during communication-based interventions that focused on the strengths in this relationship and how to build on those to bring about lasting positive change.

The work conducted by Humphreys *et al.*<sup>49</sup> and Humphreys *et al.*<sup>51</sup> involved the provision of an intervention specifically aimed at improving mother–child communication, with the belief that this would be beneficial in improving child behaviour and mental health. They reported that this intervention focused on the strengths of the mother–child relationship and built on those strengths to aid joint recovery.<sup>49</sup> The strengths-based approach was seen to benefit the mother, and to support her in developing her new role as head of the family and someone who is able to meet the needs of her children.

### ***Fathers' engagement with group processes***

Although groups were often experienced positively by parents, fathers participating in family-directed programmes articulated some challenges and frustrations, alongside the perceived benefits. These challenges are reported in *Barriers, challenges and tensions within interventions*.

On a positive note, some fathers noted how they were trying to manage conflict differently and to implement strategies derived from the programme. Of particular note was a strategy that enabled participants to voice their experiences and to engage in genuine work within the groups.

*There is only one thing that she came up with that was pretty good and it worked fairly effectively. It's called a talking stick and it's an Indian thing where you have a stick with some feathers on it . . . and one person at a time holds this stick and speaks his piece and you speak as long as you need to . . . and when you're done, you hand the stick to the other person.*<sup>157</sup>

Although fathers who perpetrated DVA often disliked the concept of talking openly in a group and found it difficult, once undertaken within the context of a safe, supportive group with mutual sharing, it was usually found to be beneficial.<sup>157</sup>

### ***Barriers, challenges and tensions within interventions***

The third and final overarching construct relates to barriers, challenges and tensions within interventions for children exposed to DVA, as experienced by children, parents and stakeholders. We present these from the perspective of each of the three respondent groups (see *Figure 4*).



### **Barriers, challenges and tensions from children's perspectives**

As well as a range of benefits, the papers that included child respondents described certain barriers to engagement with interventions, alongside challenges and tensions that were experienced by children participating in interventions. At times, these barriers were the 'flip side' of the derived benefits and may also relate to children's or parents' readiness to engage in an intervention (see *Figure 4*).

#### ***Overcoming negative expectations of the intervention***

Children may come to an intervention with particular expectations regarding the nature of the intervention and the extent to which it will help them. For example, some children anticipated that the intervention would be 'like school' and be 'really, really hard'.<sup>49</sup> However, it was not unusual, after some participation in an intervention, for children to report that their experience differed positively from their prior expectations.

Children often initially anticipated costs of engagement. These were often situational costs, such as missing school, television or an enjoyable activity.<sup>130</sup> However, there were several examples of the derived benefits of engagement gradually mitigating the perceived costs, as the group experience became something enjoyable that was positively anticipated by children. In the words of one parent talking about her child, 'The more she came the more she wanted to come'.<sup>130</sup>

#### ***The burden of managing conflicting images of fathers***

A recurring emotional strain for children participating in interventions was the tension between conflicting images of their fathers as both loving fathers and abusers. Children often experienced great difficulty perceiving and accepting that their fathers were abusers. There was a tension between the love that children had for their fathers and an understanding of the effect of their fathers' abusive behaviours on their families. Through engagement in interventions, children were confronted with an unpalatable image of their fathers and were required to change their perceptions of their fathers' behaviours to 'socially deviant'.<sup>158</sup> This change was often experienced as painful and it was difficult for children to hold on to and reconcile both ideas of their fathers. As a result, children were often polarised, either viewing their fathers as 'bad' or reframing and excusing their abuse.<sup>158</sup>

In addition, children experienced conflicting messages from their abusive parents who 'simultaneously send messages of love, power, violent aggression, and, sometimes, remorse'.<sup>157</sup> Managing this conflicting information and the realisation that their father's behaviour is unacceptable was a great burden for some children.<sup>130</sup>

#### ***The pain of remembering the past***

Although we have identified willingness to 'break the secret' as an important aspect of readiness to engage with interventions, the process of breaking the secret of DVA and talking about what had happened within their family could carry pain and distress for the children. Children often worried about talking about the past, including their father's abusive behaviour and, in some instances, said very little within the context of the original research interviews, chose to discontinue being interviewed or explicitly asked to stop talking about it, as the pain of remembering difficult experiences was too great.<sup>158</sup>

Within an intervention focused on the child–mother relationship, this difficulty was ameliorated to some degree for children by the positive process of participating in joint activities with their mothers. This helped children to feel safe and sustained their engagement in the activities, as their mothers helped them to see the value of what they were doing together.<sup>51</sup>

#### ***The emotional risks of safety planning***

Although talking with children about how to protect themselves in the future may be an important component of child-focused interventions, the papers highlighted a possible 'unintended tension' arising from this. In the context of an intervention delivered to children within a shelter, discussing safety planning with children who were at the time no longer exposed to DVA caused emotional discomfort for children, as it raised the possibility of encountering violence again in the future.<sup>130</sup> The possibility of future violence

was thus 'forced into the consciousness of some children',<sup>130</sup> which was difficult for children who may have tried to put the violence in the past or deny the potential for future occurrence. Such tensions need to be sensitively and appropriately managed by group leaders.

### ***Sensitivities of learning about sexual abuse prevention***

As noted in relation to benefits, some forms of intervention, such as psychoeducational interventions, may aim to equip children to protect themselves from sexual abuse. In some of the papers,<sup>130</sup> children reported that having to learn about sexual abuse and prevention was something they experienced as uncomfortable, particularly within a group context. Such views expressed by children were supported by the observations of group activities in studies in which researchers had conducted observations alongside interviews. Peled and Edelson<sup>130</sup> in particular noted that discomfort was created within groups when topics with sexual references were discussed, including discussions about 'good touch–bad touch'.

### ***Changing family dynamics and rules: the challenge of 'unlearning' secret keeping***

Children's experiences of exposure to DVA are complex, and children participating in interventions may experience tensions caused by changing family dynamics and rules as a consequence of participating in therapeutic work. As part of the process of breaking the secret of violence within their families, children need to learn new rules for relationships and communication. Children were required to 'unlearn secret keeping' and needed to work in partnership with their mothers to break the secret and expose their families' past to others. These changes in family rules could cause conflicting feelings in the children, including feelings of anger or anxiety.<sup>158</sup>

### ***Confidentiality and disclosure within groups: when and with whom can I share?***

A further challenge for children arose during interventions that prioritised the group process and the confidentiality of what was shared within the group. Although confidentiality might be an important prerequisite for the development of trusting relationships within the group, the primacy of confidentiality could paradoxically cause difficulties for children in knowing when to share and with whom, outside the group intervention context. As a result, children might experience the dilemma of not knowing when it was permissible also to 'share' with family or friends or when they might find this additional sharing helpful.<sup>130</sup>

### ***Managing group dynamics: power, control and silence***

Within group interventions for children, a particular challenge that children might encounter was the playing out of strategies of power and control that they had observed within their own families. In the studies that included observations of group sessions, researchers reported that children often demonstrated through their own behaviour the use of power and control that they had experienced from their caregivers. Consequently, some group members might be silenced as some children retained control of the group through their power play, while other children felt unable to voice their thoughts and feelings.<sup>157</sup>

In addition, through their experiences of abusive family relationships, children might have learned to keep quiet in the face of powerful adults. For this reason, facilitators need to be aware that children might not feel able to speak up in group sessions, as they might perceive the facilitators to be powerful adults with whom the safest strategy was to remain silent.<sup>51</sup>

Overt and covert power struggles in the group could be a barrier to therapeutic work and could take the form of children's passive resistance to engagement in group work or disturbance of group processes through aggressive conflictual 'play' as observed by stakeholders.<sup>161</sup>

### **Barriers, challenges and tensions from the parents' perspective**

The papers that included parent respondents also reported a range of barriers to engagement with interventions, alongside challenges and tensions experienced by parents participating in interventions (see *Tables 13 and 14 and Figure 4*).

***Rejection, power and control: challenges of including both parents in interventions***

Parents often expressed concerns about the rejection or lack of inclusion of (abusive) male partners in interventions for children and families in the wake of DVA.<sup>159</sup> This issue arose even in those programmes that included sessions for father-perpetrators or that recruited children who were still living with both parents.

In papers reporting interventions that involved group work with both mothers and fathers, as was the case for children, overt and covert power struggles along gendered lines were observed and were viewed as potential barriers to therapeutic work. Mothers reported difficulties in creating the changes they felt the intervention required of them because the dynamics of power and control in their relationship remained unchanged and were present within the group, for example in the domination of discussions by male participants.<sup>157</sup>

Group sessions that included mixed groups of both abusing and non-abusing partners were sometimes characterised by a reduction in sharing and confidence. Although mothers often valued mixed group sessions and wanted more time to practise what they were learning, they also articulated some difficulties with being in the same group as their (abusing) partner and wanted additional support and education to help them react to their partner without getting upset within the group context.

Fathers engaged in group-based interventions also experienced difficulties working in the groups and articulated feeling the need to contribute to the groups in a 'socially expected' way (i.e. in a way in which they thought the facilitators wanted them to contribute).<sup>157</sup> Some fathers experienced frustrations around communication and felt that they were being nagged or manipulated, while others were able to continue to control their partners using 'veiled threats' within the groups. Of particular concern to some authors was the way in which some male perpetrators appeared to use the insight that they had gained through attending their programme to derail the efforts of the mothers to bring about change outside the intervention:

*We learned how to do this kind of conversation, you know, mirroring, but when I would attempt to do it on him he would say, you know, 'Oh I know what you're trying to do, you're trying to act like a psychiatrist or something'. You know, he would attack it . . . I mean I learned how to do it but it didn't work because he would get mad.*<sup>157</sup>

***The pain of hearing children's experiences of and emotional responses to domestic violence and abuse***

Where interventions involved group work with parents and children, talking about DVA, bringing to mind memories of past events and challenging perceptions of abuse through psychoeducation could be difficult for parents. Despite acknowledging the value of children talking about their experiences, mothers found it particularly painful to hear their children's views on the abuse for the first time and often felt guilty about the impact of the abuse of their children.<sup>49</sup>

Authors highlighted the need to provide support for mothers to enable them to hear and face their children's experiences and emotions. Children might be dealing with memories and feelings that they had not engaged with before and emotional responses might emerge outside the immediate context of the intervention. The intervention could initiate expression of emotions that children needed support with. In turn, mothers might require additional support in order to support their children.<sup>130</sup>

***Family tensions arising from empowering children***

As noted with regard to benefits, children could feel empowered by the new knowledge about abuse they had acquired, and this might lead to new confrontations with their parents. They could use 'abuse vocabulary' to challenge their parents regarding their communication and behaviour, which may make a parent 'stop and think',<sup>130</sup> but may also result in new risks for the child.

One mother noted that, as a consequence of participating in psychoeducational sessions, her daughter challenged her father and labelled her father's behaviour as abusive. Although the mother was pleased that her daughter could confront her father, the authors of the paper expressed concern that it might endanger a child to speak out in this way.

*A discrepancy between family and group norms regarding children's appropriate roles and behavior in the family may exacerbate already dangerous conditions for the child.<sup>130</sup>*

'Empowered' responses from children could be beneficial as a means of reinforcing the messages that parents received in their own parallel intervention programme. However, the authors cautioned that they may lead to harm to the children if parents are not attending a relevant programme. Parents might perceive their children's responses to be threatening which could initiate further abuse. Regardless of whether or not such responses from children elicited harm from abusive parents, they could be upsetting for non-abusive parents.<sup>130</sup>

### ***Putting a boundary between child and mother: the tensions of maintaining confidentiality***

For parents engaged in interventions that involved parallel groups for parents and children, there were tensions relating to the maintenance of confidentiality. In some of the papers, parents expressed concern about the confidentiality of the children's groups. Although mothers appreciated the value of confidentiality to enable their children to share within their group, confidentiality also carried a cost for the mother-child relationship, as mothers could feel 'shut out'. Mothers expressed feelings of curiosity and at times rejection and loss of control, as they were excluded from knowing what happened and what was discussed in their children's sessions. Confidentiality may lead to a shift in the power balance between mother and child, giving the child 'the advantage of control over desired information'.<sup>130</sup> If perceived as putting a boundary between mother and child and if not described and introduced carefully, confidentiality may be a barrier to mothers' engagement in interventions.

### ***Tensions associated with sharing the secret of abuse***

Parents – both fathers and mothers – expressed concern that their children might be harmed by group interventions through interacting with children who had either been abused themselves or been exposed to more 'serious' levels of domestic violence.

*I felt protective of her where she would be with kids who were more severely abused. My abuse was all physical restraint and a lot of verbal abuse, and all the time. I felt out of place in my group with all the other women who had been severely abused. I didn't want that to happen to my daughter. I felt she'd feel out of place in a group, too, where others had been or seen severe abuse.<sup>159</sup>*

Within a group intervention, children will inevitably compare experiences, and this led to concern among parents. There were two dimensions to this concern: (1) children who learned that other children's experiences were worse than their own might be harmed by hearing about those experiences; and (2) children who learned that their experience was worse than others' experiences (e.g. they have been abused alongside their mothers) might be damaged by the perception that they have an even more shameful secret.<sup>130</sup>

### ***Practical barriers: organising and making time for the intervention***

Some practical barriers were articulated by parents who had begun to engage with interventions. These practical barriers often related to taking their children away from other activities or from school. Parents found it hard to ask their children to leave activities they enjoyed to come to the intervention.<sup>159</sup>

An additional practical barrier for male parents related to access to their children and organising their attendance at an intervention. Fathers enrolled in an adult programme, when asked if they would bring their children to a child programme, explained the difficulties facing those who did not have sole custody

or care arrangements for their children. They often found that it was not possible to organise for their children to attend sessions.<sup>159</sup>

### ***Divergence of 'ethos'***

Where interventions had a particular underlying 'ethos', there was the potential for this to function as a barrier to engagement. Fathers who had engaged in a programme delivered by an agency with a 'feminist' perspective expressed resistance to the views that they encountered during the programme. Although they acknowledged some benefit from the intervention, they articulated opposition to the (feminist) values of the programme, which they viewed as divergent from the (patriarchal) values of their own family.

*I gained from the program, but I am from another culture. We come from a patriarchal culture, and I don't want them to hear feminist stuff which destroys a lot of homes . . . that's when my problems started when my wife became a feminist.<sup>159</sup>*

### **Barriers, challenges and tensions from stakeholders' perspectives**

Finally, we report barriers, challenges and tensions from the perspective of the practitioners (stakeholders) delivering the interventions (see *Table 14* and *Figure 4*).

#### ***Timing of interventions and the disruptive role of crises***

Stakeholders noted the often chaotic and crisis-laden lives of families engaging in interventions. As noted previously in relation to readiness, the timing of the delivery of the intervention was seen to be key in relation to other events taking place in the lives of families. Workers highlighted how crises often disrupted or prevented parents' and children's ongoing engagement with an intervention.<sup>51</sup>

#### ***Managing families' expectations of an intervention***

We noted the need to manage children's expectations of an intervention to enhance engagement (see *Overcoming negative expectations of the intervention*). Those delivering interventions identified a similar need to manage parents' expectations of what they and their children could gain from the interventions. For example, facilitators of psychoeducational groups noted the sometimes discrepant expectations of parents and facilitators regarding the impact of the group on children. Parents could view the group as 'therapy' rather than education and thus expect their child to 'get fixed'; from the perspectives of facilitators, education plus some 'spiritual healing' is what they anticipated.<sup>130</sup> Where parents' expectations were not met, this could lead to disengagement from the intervention, so careful management of parents' expectations may be required at the outset.

#### ***Cultural barriers to engagement with interventions***

As noted (see *Readiness to engage with interventions*), culture may also play a part in families' willingness to engage with interventions. Stakeholders delivering an intervention within a refuge that included many Asian women and children highlighted the sensitivity needed when introducing women and their children to an intervention. For example, they noted the need for a mother who had been unable to take the role of mother within a family home dominated by 'the in-laws' to come to terms with being 'a mother', and to establish a relationship with her child before she was able to engage with the intervention.<sup>51</sup>

Stakeholders drew on this example to emphasise the necessity of organisations and workers to consider how cultural factors might interact with an intervention programme and to be willing to undertake some preparatory 'priming' work with families prior to commencement of an intervention (see *The role of priming in preparing parents and children to be ready*).<sup>51</sup>

#### ***Mothers' concerns about the maintenance of confidentiality by the organisation***

From the perspective of stakeholders, families' engagement with interventions might be inhibited further if women believed that the confidentiality of the programme could be compromised. For women from a variety of backgrounds, there were very strong concerns about information 'leaking out' of the

organisation and falling into the hands of perpetrators.<sup>51</sup> Unless these concerns were allayed, women were likely to resist engagement with an intervention. The maintenance of confidentiality by the organisation and workers delivering the intervention was thus key to encouraging and preserving mothers' engagement with interventions.

### ***Risks to child safety***

The need to protect children participating in programmes was also highlighted by stakeholders, who were concerned about placing children at risk by involving them in a programme that also included abusive parents. Stakeholders indicated that children could be at risk if they were open about the abuse that they had witnessed: 'Kids will be punished if they disclose violence at home and parents find out'.<sup>157</sup> Paris<sup>157</sup> set out key recommendations highlighting the need for child (and adult) safety to be considered at the planning stage 'of a family wide' intervention, and for systems to be set up in advance to manage such situations, including crisis intervention policies and appropriate training of workers.

## **Line-of-argument summary of synthesis**

### ***Readiness***

The personal readiness of children and parents is crucial for engagement with interventions. For children, readiness has three facets: (1) change and adaptation as the context for readiness; (2) willingness to break the secret of violence; (3) and understanding and acknowledging DVA. For children, readiness is a process. Getting to the point of feeling ready to talk about and acknowledge their experiences of living in abusive situations may be the most profound change associated with taking part in an intervention.

To be 'ready', non-abusive parents (mothers) need to have a degree of stability (beyond the initial trauma and practical difficulties associated with separation from the abusive partner) to be ready to accept that DVA may have had a detrimental effect on their children, to be able to look beyond their own needs to those of their children, and to recognise that their children are in need of help. A lack of parental readiness may preclude take-up and, as parents are gatekeepers for their children, may prohibit children's access. For whole-family interventions, perpetrators (fathers) need to acknowledge that the relationship has been abusive, admit and take responsibility for their actions and accept the impact of their abuse on their children before they are able to accept or support a child attending an intervention. Engagement in an intervention may further enhance readiness for parents, as their understanding of abuse and how their children are affected increases. This may increase their willingness to engage in further interventions in the future (see *Figure 4*).

Parents and children may need to be 'primed' to become ready to engage in interventions, for example through the provision of appropriate information about the nature of the intervention, why and how it might be helpful, and reassurances regarding confidentiality. Practitioners also need to be ready to deliver an intervention, in terms of their attitudes, skills and workload management. Practitioner readiness is nested in a context of broader organisational readiness, which includes adequate resourcing, a commitment to upskilling the workforce, workforce stability and acceptance of the validity of the intervention by managers.

### ***Benefits and facilitators***

Children experience a range of benefits through engaging in interventions, from simply enjoying time with their mothers, having fun and making new friends, to the relief of realising that they are not alone and being given a forum and permission to talk about their experiences. In the interventions children learned many new skills and concepts, including denormalising, naming, recognising and labelling abuse, ascribing responsibility for abuse to the abusive parent, developing empathy for their mother and developing skills in expressing emotion, problem-solving, interacting with other children and managing their own behaviour. Through witnessing prosocial behaviour from group leaders, a process of positive feedback, and response to their behaviours and interactions with others, children develop a greater sense of self-efficacy and

esteem. Nevertheless, the benefits to children are not uniform: although some children respond visibly and relatively quickly, for others the intervention represents the first step in a much longer journey.

An important gain for non-abusive mothers participating in interventions was simply spending time with their child/children and learning to communicate with and better understand their child/children. Mothers come to realise that they are not alone in their experience of abuse and in their challenging role of parenting and keeping children safe within the context of a coercive and abusive family. They gain more insight into the nature of abuse and the effect of DVA on their children and may acquire an increased ability to manage their emotions. Although none of the interventions mentioned specific parenting-skills training, the opportunity to share parenting practices with each other and with intervention providers, the use of video-feedback on play sessions, and interventions for increasing mother–child communication may enhance the quality of the mother–child relationship and increase mothers’ self-confidence as parents.

Several factors appear to facilitate benefits to children. Both parents and children identified the significance of the group environment, which appears to deliver benefits in and of itself. Group work enables children and mothers to recognise that they are not alone in their experience of DVA, and this realisation contributes to further disclosure and reduces the experience of stigma. Unstructured free play interspersed with more structured therapeutic activities is crucial for providing opportunities for children to relax and enjoy themselves as well as for revealing to practitioners a little more of children’s internal selves. Similarly, enjoyable activities provide respite and balance the difficult emotional work involved in group interventions (see *Figure 4*).

Mothers may act as facilitators, seeking out interventions and encouraging children to participate. Children’s enhanced emotional expressiveness and empathy can enable them to understand, and offer support to, their mothers. When children and their mothers both participate in programmes, either in parallel or together, the benefits for one can be seen to interact with and augment those for the other. In full-family interventions parents may need more time to work together both in single-sex and mixed-sex groups. However, mixed-sex groups may provide settings within which fathers’ coercive behaviours can be sustained.

### **Barriers, challenges and tensions**

Children in receipt of interventions experience barriers to initial engagement alongside challenges and tensions throughout their participation. Lack of readiness, having to learn to break the secret of DVA, not wanting to talk about the past and anxious predictions of what the intervention might involve can be overcome with input from parents and stakeholders. Children have to manage the difficulties of revisiting painful memories and of conflicting images of their fathers as both caregivers and creators of the abusive situation. Within group interventions, children find the rules of confidentiality useful and reassuring, but these rules can also leave children unsure of how to talk about the group with friends and family. They also have to overcome the need to keep their secret, and learning to trust and share can take several weeks. Children’s expectations about relationships may shape the way in which they engage with an intervention in the first instance. Some children may arrive with clear ideas about gendered control and may use power play to gain control of a group. Others may feel disempowered, and thus to speak up in the presence of other children or adults who they perceive as powerful (see *Figure 4*).

Practical barriers for parents include finding time for interventions in an already busy family schedule. Mothers struggling with the demands of organising a move from an abusive home may have no spare capacity to engage with a new intervention. Once engaged in an intervention, it is upsetting for parents to hear their children’s views and emotional responses to the DVA they have witnessed, and parents may find it difficult to encounter challenges from their child about their own behaviour. Parents may feel that a barrier between them and their children is created by the confidentiality rules for children’s parallel group sessions, and may want to know more of what takes place within them. Fathers can find it difficult to

engage if they disagree with the ethos of the organisation delivering an intervention, particularly when it diverges from a patriarchal perspective.

Stakeholders regard the timing of an intervention to be crucial, highlighting the importance of implementing an intervention when families are beyond the time of immediate crisis and upheaval. However, crisis and upheaval may characterise the lives of families recovering from DVA for long periods of time. It is possible to deliver some forms of intervention in transitional settings with families in crisis. Stakeholders share parental concerns for the safety of children who might, newly empowered by an intervention, stand up to an abusive parent, thereby increasing their risk of harm. Cultural issues also need to be considered for interventions delivered in contexts serving minority ethnic groups, where mothers may be fully mothering their children for the first time.

## Discussion

### Summary of main results

We identified nine papers describing the views of children, parents and stakeholders who attended or facilitated one of five programmes aimed at children who have grown up in a home with DVA.<sup>49,51,130,157-162</sup> Three overarching constructs were developed: (1) 'readiness' to engage in interventions; (2) dimensions of benefit derived from interventions with facilitators; and (3) barriers, challenges and tensions involved in engagement with interventions for children exposed to DVA (see *Figure 4*).

### Quality of the studies

Six of the nine papers were consistently rated as good quality by the review team, that is, they had 'yes' as an answer for all 10 CASP questions (see *Table 10*).<sup>51,130,157,158,161,162</sup> None of the papers had fewer than six 'yes' answers, indicating that all the papers that we identified were of good or acceptable methodological quality according to CASP. Papers scoring < 10 may have done so owing to a lack of space to report methods rather than a lack of research quality. For example, the paper by Humphreys *et al.*<sup>49</sup> scored 8 out of 10 because the statement of findings was brief. This paper appears to be a short report of the first cycle of the action research 'Talking to my Mum' published by Humphreys *et al.* in 2011,<sup>51</sup> in which the authors had more space to describe what they had done, and which earned a score of 10. Therefore, for the Humphreys *et al.*<sup>49</sup> paper, scores reflect a lack of reporting rather than low research quality. The study by Kearney *et al.*<sup>160</sup> was given a 'yes' answer on seven questions. The authors did not describe how the data were collected and there was no reflection on the role of researcher. This paper reports the results of both quantitative and qualitative research studies and, thus, space to report all results in detail was limited. Both Peled and Edelson<sup>130</sup> and Peled<sup>158</sup> were allocated 10 'yes' answers, but Peled and Edelson<sup>159</sup> had just six 'yes' answers. All three Peled papers<sup>130,158,159</sup> were based on the same programme. We believe that the lower score for the 1999 paper<sup>159</sup> reflects a lack of reporting rather than a lapse in quality.

In a sensitivity analysis, we looked at the effects of removing the three studies that scored lower on CASP, in this case < 9 (see *Table 11*).<sup>49,159,160</sup> Overall, 22 of 53 subconstructs were affected by the removal of the three 'lower quality' papers. Only three subconstructs were dependent solely on data from one of these 'lower quality' papers. Two were dependent entirely on data from Peled and Edelson<sup>159</sup> and informed constructs related to perpetrators nested within 'Readiness' (see *Fathers' readiness to acknowledge that their relationship has been affected by domestic violence*) and 'Barriers, challenges and tensions within interventions' (see *Divergence of ethos*). The third subconstruct related to 'Dimensions of benefit derived from interventions and facilitators to benefit' where the construct 'Realising that you are not alone' (mothers) relied entirely on evidence from the Kearney *et al.* paper.<sup>160</sup> Removal of the three lower scoring studies meant that 16 subconstructs were reliant on fewer data but each was maintained by data from an additional one ( $n = 14$ ), two ( $n = 3$ ) or three ( $n = 2$ ) papers (see *Table 11*). Overall, we conclude that removing the studies of 'lower' CASP quality did not have a significant impact on the overarching constructs within our synthesis. If we were to remove the three slightly lower quality papers, three subconstructs would not be present in the synthesis, namely fathers' readiness to acknowledge the effect of DVA on their



children, fathers' difficulty in accepting interventions with an ethos (feminist) divergent from their own (patriarchal), and the benefit to mothers of realising that they are 'not alone' in their parenting situation.

### ***Overall completeness and applicability of evidence***

The studies that we identified were carried out in the USA and the UK. There was a relative paucity of studies reporting the views of different stakeholder groups who had received or delivered an intervention; only nine papers were found in which the children had received an intervention, and these reported on just five different programmes that represented three distinct models of intervention. Interventions included psychoeducational programmes, play therapy and guided self-help materials for parents and children, although individual programmes varied in terms of who they targeted (children only, mothers and children, children and both parents). The number of respondents per intervention type was relatively small, particularly for male (perpetrator) respondents and for the play therapy intervention which was based on four children attending one programme, along with one stakeholder who both delivered the intervention and authored the PhD report and the paper from which we extracted primary data.<sup>161,162</sup>

The quality of all the studies was relatively high, with only three scoring below the maximum 10 points possible on the CASP tool (and even then scoring between 6 and 7). The removal of these lower scoring papers did not substantively change the range of constructs, but it did reduce the number of studies reporting a particular phenomenon.

### ***Support from other reviews and implications for future interventions***

The findings of this review resonate with those of other reviews in this field; for instance, this review has identified the importance of readiness for both children and parents, and those designing and delivering interventions need to consider how readiness for a programme is defined and assessed. Readiness was seen to be an ongoing process and appeared to develop through engagement with the programme we also saw that differential readiness between children and mothers could pose a barrier to engagement. However, another key message is that readiness can be promoted through priming or support and this might involve providing information about the content and form of an intervention, or offering reassurances about confidentiality. This is something that future interventions may be able to incorporate as a formal part of the delivery process to increase rates of initial engagement and ongoing retention.

The format in which an intervention was delivered was significant in that the group setting generated some benefits such as fun and friendships with other children or, for both children and mothers, the realisation that they were not alone in their experience of DVA. Likewise, interventions for mothers and children together offered the added benefit of shared time and activities. The format of an intervention is integral to the acceptability of a programme and is, therefore, an issue that commissioners should consider when making decisions about which model of intervention to fund.

The review identified a rich seam of data on mothers' and children's experiences of receiving a targeted intervention following experience of DVA, but this is countered by the limited range of intervention types considered in these studies. The benefits for mothers and children appeared to interact, with children having opportunities to benefit from mothers' increased awareness of the impact of DVA and parents deriving pleasure and increased confidence in their own parenting from spending time with their children. The review<sup>43</sup> undertaken to inform the NICE guidance on DVA<sup>44</sup> included both quantitative and qualitative studies, and concluded that, for single-focus interventions, those aimed at mothers and children together appeared to be more beneficial for both than interventions aimed at children only. Similarly, they found that multicomponent interventions resulted in improved outcomes for children, which were also linked to improved outcomes for mothers. Stanley's<sup>60</sup> non-systematic review also highlighted evidence for the effectiveness of interventions that targeted mothers and children together in the aftermath of DVA, noting that such interventions harnessed the parent's engagement with the child's perspective on DVA as a mechanism for change.

The data identified in this review summarising fathers' views and stakeholders' views of fathers were rather scant and not very robust compared with the data for children and mothers; this reflects the fact that a

recognition of perpetrators of DVA as fathers has been slow to emerge,<sup>60</sup> and most of the literature reporting interventions that address abusive men's fathering is available as grey literature (see *Chapter 7*). The studies that we identified included samples of only non-abusive mothers and abusive fathers. Although DVA is a heterogeneous phenomenon that sometimes includes bidirectional abuse between adult partners, typically, the burden of suffering is higher for women than for men<sup>165</sup> and, therefore, the findings may not extend to families in which abuse is enacted by both adult caregivers.

It was interesting to note that the perceived benefits of participation in an intervention were much broader than the relatively narrow health-focused outcomes measured in the trials reviewed in *Chapter 3*, highlighting not only the importance of qualitative evaluation in order to capture the full range of potential impact, but also perhaps the need to consider whether outcomes measured in trials could be expanded to reflect some of the benefits voiced by those receiving and delivering interventions.

In relation to this point, this review enabled us to identify tensions and challenges associated with participating in DVA interventions that were not indicated by the quantitative research. Understanding the unintended consequences of an intervention is important for several reasons. Identification of some of the negative aspects of interventions may help to optimise existing or future programmes, for example by planning the timing of an intervention, ensuring effective communication channels with parents and providing transport for families to reach venues. It may also help those delivering programmes to give a full and honest account of what to expect from an intervention to parents and children who are considering taking part. Furthermore, O'Doherty *et al.*<sup>166</sup> underscore the importance of the deliberate and systematic measurement of harm in any type of trial, although they suggest that this is rarely done in the DVA field owing to a lack of approaches and measures. The findings of this review may give some direction as to what to measure.

Although our review highlighted the importance of intrapersonal contexts as a potential moderator of intervention acceptability and impact, relatively little attention was given to the broader context in which interventions were delivered. The nested layers of context (macro, micro and meso) in which an intervention is embedded are likely to have a bearing on the implementation of an intervention and the outcomes that can be achieved, with qualitative methods offering an opportunity to explore these influences.<sup>154,167</sup> The finding relating to organisational readiness resonates with the review of preventative interventions in DVA for children and young people,<sup>168</sup> although it is based on the findings of one study.<sup>49,51</sup> Organisational readiness could be achieved in a variety of ways, but relevant training for staff delivering the intervention was identified as valuable.

Although there was some variation in the setting in which interventions were delivered (see *Table 9*), there were limited data reported on the acceptability of any particular setting; however, as explored in *Chapter 8*, this may have a significant influence on the way in which an intervention is perceived. Workers' skill levels emerged as relevant for engaging and retaining children and mothers in interventions, with some suggestion that the skills required to deliver practical support to families in the aftermath of abuse differ from those required to engage them in therapeutic work. This finding again highlights the need for training but perhaps also for the careful selection of staff to deliver child-focused therapeutic work.

### Limitations

We used an electronic search of bibliographic databases to seek studies for both the qualitative and quantitative review. The electronic search was broad and included key social science and educational databases, and we anticipated that we would identify sufficient studies this way. For this qualitative review we identified 48 studies, of which 39 reported phenomena about children living with DVA and only nine reported the views of parents or children who had been the recipients of a child-focused intervention. However, the number of titles and abstracts retrieved initially was such that we lacked the time to implement broader search strategies outside the electronic search such as 'snowballing' (citation and reference tracking) from included studies as recommended.<sup>169</sup> It is possible that adding additional search methods may have helped us to identify additional studies not found in the electronic searching.

We initially intended to include studies that reported parents' and children's views on the types of interventions that they would have found helpful, even if they had not directly received an intervention. Unfortunately, owing to the number of papers identified and our interest in the perspectives of three different groups of reporters, we had to narrow the scope of our review to those studies reporting the views of people with first-hand experience of an intervention for children. The effect of this was that we could no longer investigate how parents and children might conceive of an appropriate intervention prior to having experienced one. This meant that we were unable to produce findings on what would encourage or deter them from taking up the offer of such an intervention in the first place. This is an important piece of work that still needs to be done so as to guide service providers about the interventions that may be more or less acceptable to different groups or at different points in the abuse trajectory.

This review is based on a small number of qualitative papers, which is not unusual for a qualitative synthesis that prioritises the in-depth interpretive analysis of a small number of papers over a more superficial analysis of a larger number. A simple descriptive summary of the papers might have been sufficient, as some of the second-order constructs were derived from only one paper, for example. However, a descriptive summary may have produced a superficial aggregation of the content of the qualitative evidence, and would not have enabled the development of higher level overarching constructs, nor the clear identification of divergence and convergence in perspective across the diverse range of participant groups (children, parents and stakeholders). Instead, we believe that our systematic interpretive approach has allowed us to reinterpret the evidence to produce overarching constructs that 'go beyond' the findings of the individual primary studies.<sup>170</sup>

# Chapter 5 Informing future research design: a network meta-analysis and cost-effectiveness analysis

## Aim

The aim of this chapter is to aid future decisions on research designs to address the inadequacies in the existing evidence identified in *Chapter 3*, by exploring: (1) which types of intervention, and targets of the interventions, may be effective for improving mental health, behavioural, and social competency and esteem outcomes; and (2) which intervention types may potentially be cost-effective based on short-term outcomes.

## Introduction

As discussed in *Chapter 3*, a conventional pairwise meta-analysis was not conducted, given the highly heterogeneous nature of the study designs, interventions, settings and outcome measures in the primary studies. However, we would like to be able to draw some tentative conclusions as to which interventions, intervention types or formats of intervention delivery may be fruitful to explore in future research studies. NMA is a method for pooling evidence from trials that have compared different interventions (e.g. A vs. B, A vs. C, B vs. C) and, in part, can account for heterogeneity in intervention definitions.

Recently, NMA methods<sup>171–178</sup> have been extended to combine evidence on trials of complex interventions, where the interventions can be categorised using a taxonomy, that is, a categorisation of interventions into groups (as we have done here; see *Chapter 3*). This makes it possible to pool evidence when interventions are heterogeneous, as long as the different intervention categories have been compared, either directly or indirectly, in the trial evidence. For example, Welton *et al.*<sup>179</sup> combined evidence on psychological interventions for patients with coronary heart disease by categorising the interventions in terms of cognitive, behavioural, relaxation, support and educational components, and Chen *et al.*<sup>180</sup> and Madan *et al.*<sup>181</sup> combined evidence on interventions for smoking cessation by categorising the interventions in terms of intensity, tailoring, whether it was pharmacological or non-pharmacological, and mode of delivery. NMA methods make it possible, therefore, to build a model to combine the evidence from the trials identified in our systematic review to obtain coherent estimates of relative effectiveness of interventions on short-term outcomes reported in the included studies. However, it is worth noting at the outset that the heterogeneous nature of the identified evidence requires us to make some big assumptions and, therefore, the results of this part of the evidence synthesis need to be interpreted with appropriate caution.

This chapter begins with a methods section, which details the assumptions made in our NMA; our categorisation of the interventions and outcomes that have been measured in the primary studies; the statistical summaries reported in these studies and used in the NMA; and a description of the NMA models used to obtain pooled summary estimates across the networks of evidence. In the results section, we first present the evidence networks available in this review for (1) intervention comparisons by outcome type and (2) target of intervention comparisons by outcome type, and we then give the results from the NMA for (1) type of intervention and (2) target to whom the intervention is delivered. We then discuss the assumptions made in the NMA analyses, before moving on to describe the cost-effectiveness analysis. We describe the methods used for the cost-effectiveness analysis, give details of our costings, and present results. We conclude with a discussion of the cost-effectiveness analysis, and an overall summary of the findings from this chapter.

## Methods: short-term modelling

### *Network meta-analysis and the consistency assumption*

We used NMA (also known as mixed-treatment comparisons, or multiple treatments meta-analysis) to pool evidence across a connected network of intervention comparisons. NMA is increasingly being used to inform health technology assessments and clinical guidelines<sup>182</sup> and has been used for pharmacological and non-pharmacological interventions. More recently, the methods have been applied to complex interventions,<sup>179</sup> such as those identified in this review. The main assumption made in NMA is that the intervention effects would be expected to be similar in all trials if they had all included all interventions (the consistency assumption).<sup>172</sup> In other words, the populations included in each study should be similar. Importantly for reviews of complex interventions, there is also an assumption that interventions of the same 'type' are similar across studies. So, for example, it is assumed that advocacy interventions are comparable across all studies that include them. In this review, we found that interventions differ in the setting in which they are delivered, the target to whom they are delivered and the format of delivery (individual or in groups) (see *Chapter 3*). Setting may vary between the clinic and the community and between the group and the individual. Targets for the intervention differed by the child's age, developmental stage and level of need, as well as by whether the intervention is delivered to the child only, the parent only, the child–parent dyad or child and parent parallel groups.

### *Definition of interventions*

The intervention comparisons have been made in line with the classification of interventions in *Chapter 3* (and subsequent chapters), in terms of the type of intervention, the target to whom the intervention is delivered, and the setting in which the intervention is delivered. As setting was identical in all arms within a given study, there was no comparative evidence available to make comparisons between settings. We also did not have sufficient evidence to look at combinations of intervention type, setting and target. However, we were able to examine the relative effectiveness of intervention type and target to whom the intervention is delivered, which we consider separately.

It is possible through NMA to estimate a set of coherent effect estimates that allow us to make comparisons across the entire network, as long as the network is connected (i.e. there is a path from any one intervention category to another).<sup>173</sup> We plot network diagrams for each outcome separately for (1) intervention type and (2) target to whom the intervention is delivered, to check whether or not our networks are connected. We make comparisons only between intervention categories that are connected.

### *Definition of outcomes*

As noted in *Chapter 3*, there was little commonality in the outcomes reported across studies, with the main common measurement scale being the CBCL,<sup>183</sup> which includes internalising and externalising scales. The total score is a sum of the CBCL-Internalising, CBCL-Externalising and other components. Eight studies reported on at least one index of the CBCL outcome (*Table 16*).

The outcomes reported could, however, be broadly categorised into mental health, behavioural and social competency and esteem outcomes. *Table 16* shows which (useable) outcomes were reported by each primary study according to type of outcome (full details given in *Table 7*). By 'useable' we mean that sufficient information was reported to include the outcome in the statistical analysis. It was unclear whether the peer conflict outcome reported by McWhirter<sup>94</sup> was a behavioural or social competency and esteem outcome and we therefore consider it in both outcome categories. McFarlane *et al.*<sup>115</sup> broke down their results by age, and we treat these as two separate substudies, for children aged < 5 years and for children and adolescents aged 6–18 years. Wagar and Rodway<sup>97</sup> did not report any outcomes of relevance to our review, and Sullivan *et al.*<sup>96</sup> did not report sufficient information for the results to be used in the evidence synthesis (no SDs given); thus, these studies could not be included in the analysis and are not considered further.

**TABLE 16** Useable outcome measures reported by study and classified according to outcome type

Study number	Name	MH outcomes	BEH outcomes	SCE outcomes	CBCL-Total
1	Graham-Bermann <i>et al.</i> <sup>98</sup>	CBCL-Int	CBCL-Ext		
2	McFarlane <i>et al.</i> <sup>115</sup> (under 5 years)	CBCL-Int	CBCL-Ext		CBCL-Total
3	McFarlane <i>et al.</i> <sup>115</sup> (6–18 years)	CBCL-Int	CBCL-Ext		CBCL-Total
4	Jouriles <i>et al.</i> <sup>91</sup>	CBCL-Int	CBCL-Ext		
5	Kot <sup>112</sup>	CBCL-Int, CPSB Mood	CBCL-Ext, CPSBRS Aggression		CBCL-Total
6	Cohen <i>et al.</i> <sup>61</sup>	CDI, RI, SCARED, K-SADS-PL			CBCL-Total
7	Lieberman <i>et al.</i> <sup>92,114</sup>	DC-03-TSD			CBCL-Total
8	McWhirter <sup>94</sup>	Child self-esteem	Peer conflict	Peer conflict	
9	Jouriles <i>et al.</i> <sup>90</sup>		CBCL-Ext, oppositional child behaviour, ECBI		
10	Waldman-Levi and Weintraub <sup>119</sup>			RKPPS, TOP	
11	Wagar and Rodway <sup>97</sup>				
12	Sullivan <i>et al.</i> <sup>96</sup>				
13	Overbeek <i>et al.</i> <sup>116,117</sup>	CBCL-Int, TSCYC, CDI	CBCL-Ext		

BEH, behavioural; CBCL-Ext, CBCL-Externalising; CBCL-Int, CBCL-Internalising; CDI, child depression inventory; CPSBRS, Child Play Session Behavior Rating Scale; DC-03-TSD, semistructured interview for diagnostic classification 0-3 of traumatic stress disorder for clinicians; MH, mental health; K-SADS-PL, Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version; RI, reaction index; R-KPPS, Revised Knox Preschool Play Scale; SCARED, Screen for child-related emotional disorders; SCE, social competency and esteem; TOP, test of playfulness; TSCYC, Trauma Symptom Checklist for Young Children.

The CBCL-Total score is a composite outcome with MH, BEH, and SCE components, and we therefore classify it separately. Refer to *Chapter 3* for full outcome definitions.

**Note**

DC-03-TSD uses a standardised format to systematise the traumatic stress disorder diagnostic criteria of the Diagnostic Classification Manual for Mental Health and Developmental Disorders of Infancy and Early Childhood.<sup>127</sup>

## Summary statistics reported and used

We define all outcomes so that reductions in the outcome measure represented an improvement. Different studies reported different outcome measures on different scales, and even where the same scale had been used (i.e. CBCL) its application was variable between studies. We therefore perform our NMA on the SMD scale, and report intervention effects as SMDs, with a negative SMD for intervention *k* relative to intervention *b* favouring intervention *k*.

Cohen *et al.*<sup>61</sup> provided information on mean change from baseline, which transform to SMDs using the SDs as reported at baseline, pooled across arms. Jouriles *et al.*<sup>90</sup> reported Cohen's *d* statistic with standard errors (SEs), which provides information directly on SMDs. All other trials with usable data reported means and SEs at baseline and follow-up, for which we use the follow-up measure to estimate mean differences and transform to SMDs using the SDs reported at follow-up, pooled across arms. Kot<sup>112</sup> conducted a non-randomised CCT and there was a high degree of baseline imbalance, especially for the CBCL outcomes. For this reason, we converted the baseline and follow-up results to mean change from baseline,

assuming a correlation of 0.7 between baseline and follow-up measures, which was the estimated correlation from Cohen *et al.*,<sup>61</sup> the only study reporting sufficient information to estimate the correlation (see *Appendix 16*).<sup>131</sup>

Cohen *et al.*'s<sup>61</sup> and Lieberman *et al.*'s<sup>92,114</sup> studies do not report any behavioural outcomes; however, they do report the CBCL-Total, which is a sum of mental health, behavioural and other constructs,<sup>183</sup> along with other mental health outcomes. If we are prepared to assume that the relative intervention effect on the CBCL-Total is approximately the sum of the relative intervention effect on mental health and behavioural outcomes (the additivity assumption), then we can include these studies,<sup>61,92,114</sup> which have direct evidence on mental health outcomes, to estimate intervention effects on behavioural outcomes indirectly using the CBCL-Total composite outcome. Additivity is a big assumption; however, for those studies that report CBCL-Internalising, CBCL-Externalising and CBCL-Total, we found that the data were consistent with this assumption (see *Appendix 17*). All other studies do not use CBCL-Total because they report the breakdown into the CBCL-Internalising and CBCL-Externalising subscales.

## Network meta-analysis model

A technical description of the NMA model is given in *Appendix 18*. A fixed-effects NMA model (where all studies making a particular comparison are assumed to estimate a common effect) is used for the intervention effects owing to a lack of data to estimate a random-effects NMA model (where different studies making a particular comparison are assumed to estimate different, but similar, effects).<sup>173</sup> This is because we had only one or two studies for each pairwise comparison.

Some studies reported more than one outcome of a given type (e.g. Cohen *et al.*<sup>61</sup> reported five different mental health outcomes). In order to include all of the evidence available, we assumed a hierarchical model where the intervention effect for each outcome within a study comes from a common distribution with an outcome-type specific mean and between-outcome variance (assumed the same for mental health and behavioural outcomes).

Results from two separate analyses are presented for different classifications of the interventions: (1) type of intervention; and (2) target to whom the intervention is delivered. For each of these we report a main ('primary') analysis, which includes RCTs only (not CCTs) and does not use the CBCL-Total outcome, and then perform sensitivity analyses on some of the assumptions made in the primary analysis. Sensitivity analyses are reported for inclusion of CCTs as well as RCTs and use of CBCL-Total, via the additivity assumption, to allow inclusion of Cohen *et al.*'s<sup>61</sup> and Lieberman *et al.*'s<sup>92,114</sup> studies to estimate intervention effects on behavioural outcomes.

### Implementation and model fit

All analyses were conducted using a Bayesian Monte Carlo Markov chain simulation approach using the software WinBUGS version 1.4.3 (Imperial College London, London, UK and MRC Biostatistics Unit, Cambridge, UK).<sup>184</sup> The WinBUGS model code and data are given in *Appendix 19*. In all models, a burn-in period of 20,000 or 30,000 iterations gave satisfactory convergence based on inspection of Brooks–Gelman–Rubin plots,<sup>185</sup> and all results presented are based on a further sample of 40,000 or 60,000 iterations (respectively).

We use the posterior mean of the residual deviance<sup>186,187</sup> to assess goodness of fit. The residual deviance measures how close the observed values are to those predicted from the model, so that small values of the residual deviance indicate a better fit. As a rule of thumb, where a posterior mean residual deviance is approximately equal to the number of data points this indicates a good fit. Model fit was satisfactory for all results reported in this chapter.

Note that because the only 'loop' in the networks of comparisons was a three-arm trial (which cannot be inconsistent), it was not possible to assess the consistency of the evidence in these networks.<sup>172</sup> This does not mean that there is no inconsistency, just that we cannot check for it.

## Results: short-term modelling

### Networks of evidence

A key to the abbreviations used for the types and targets of the interventions is given in *Table 17*, and a description of the intervention comparisons made in each study is given in *Table 18*. We describe the evidence networks available first for a comparison of different types of intervention and then for a comparison of different targets of the interventions. As can be seen from *Table 18*, there is no comparative evidence of different formats (i.e. group or individual sessions) for the interventions, and, therefore, we can make no comparisons across formats.

### Network diagrams for types of intervention

*Figures 5–7* show the network of comparisons across intervention types with usable data for mental health, behavioural, and social competency and esteem outcomes, respectively, and for all studies (RCTs and CCTs) included in the quantitative systematic review (*Chapter 3*). Each solid line indicates that a study has made that comparison, and the width of the lines is proportional to the average sample size per arm of each study: the larger the sample, the thicker the line. Note that not all studies report all outcomes (see *Table 16*). As previously noted in *Chapter 3*, the study populations in this review differed across studies; in particular, there was a distinction between studies on children with known health or behaviour problems<sup>61,90–92,114</sup> and those with no stated health or behaviour problems.<sup>94,96–98,112,115,119</sup> It is possible that intervention efficacy may be different across these two subpopulations, which are indicated by dashed and solid lines, respectively, in *Figures 5–7*.

**TABLE 17** Key to abbreviations used for types and targets of interventions ('separately' indicates that the child receives an intervention without the parent, or vice versa)

Intervention type	Description
PTh	Psychotherapy
PEd	Psychoeducational
Adv	Advocacy
Pting	Parenting skills training
PlayTh	Play therapy
Target of intervention	Description
C	Child (separately)
P	Parent (separately)
D	Dyad
C + P	Child and parent (separately)
C + P + D	Child (separately) and parent (separately) and dyad
P + CorD	Parent (separately) and either child (separately) or dyad
P + CorD, parent (separately) and either child (separately) or dyad.	



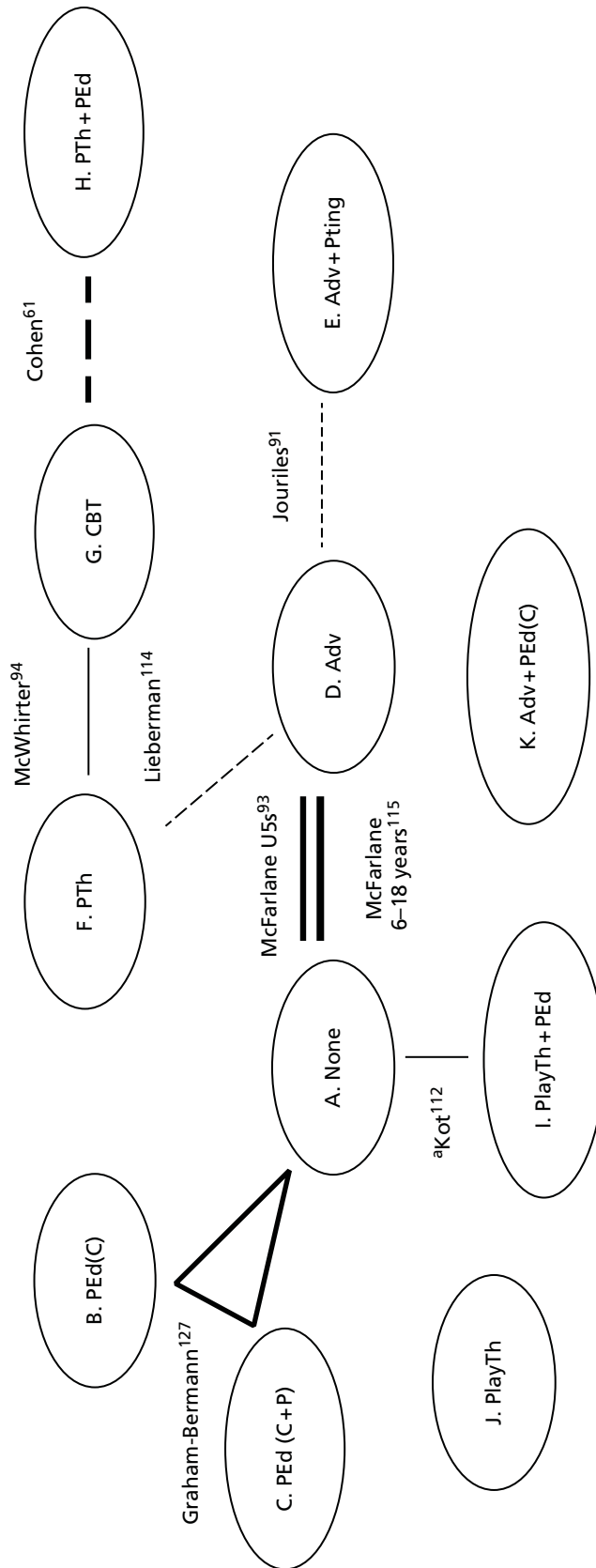
**TABLE 18** Interventions and target of intervention for each arm for each of the included studies. Abbreviations for the interventions and targets used in the results are indicated (see also *Table 16* for key to interventions and target of interventions)

Study number	Name	Arm	Intervention	Target	Format
1	Graham-Bermann <i>et al.</i> <sup>98</sup>	1	PEd	C + P	Group
		2	PEd	C	Group
		3	None	None	None
2	McFarlane <i>et al.</i> <sup>93</sup> (under 5s)	1	Adv	P	Individual
		2	None	None	None
3	McFarlane <i>et al.</i> <sup>115</sup> (16- to 18-year-olds)	1	Adv	P	Individual
		2	None	None	None
4	Jouriles <i>et al.</i> <sup>91</sup>	1	Adv + Pting	C + P	Individual
		2	Adv	P	Individual
5	Kot <sup>112</sup>	1	PlayTh + PEd	C	Individual + group
		2	None	None	None
6	Cohen <i>et al.</i> <sup>61</sup>	1	PTh + PEd	C + P + D	Individual
		2	CBT	C + P + D	Individual
7	Lieberman <i>et al.</i> <sup>92,114</sup>	1	PTh	D	Individual
		2	Adv	P + C or D	Individual
8	McWhirter <sup>94</sup>	1	CBT	C + P + D	Group
		2	PTh	C + P + D	Group
9	Jouriles <i>et al.</i> <sup>90</sup>	1	Adv + Pting	C + P	Individual
		2	Adv	P	Individual
10	Waldman-Levi and Weintraub <sup>119</sup>	1	PlayTh	C + P + D	Individual
		2	None	None	None
11	Wagar and Rodway <sup>97</sup>	1	PEd	C	Group
		2	None	None	Group
12	Sullivan <i>et al.</i> <sup>96</sup>	1	Adv + PEd	C + P	Individual
		2	None	None	None
13	Overbeek <i>et al.</i> <sup>95,116</sup>	1	PEd	C + P	Group
		2	Group activities	C + P	Group

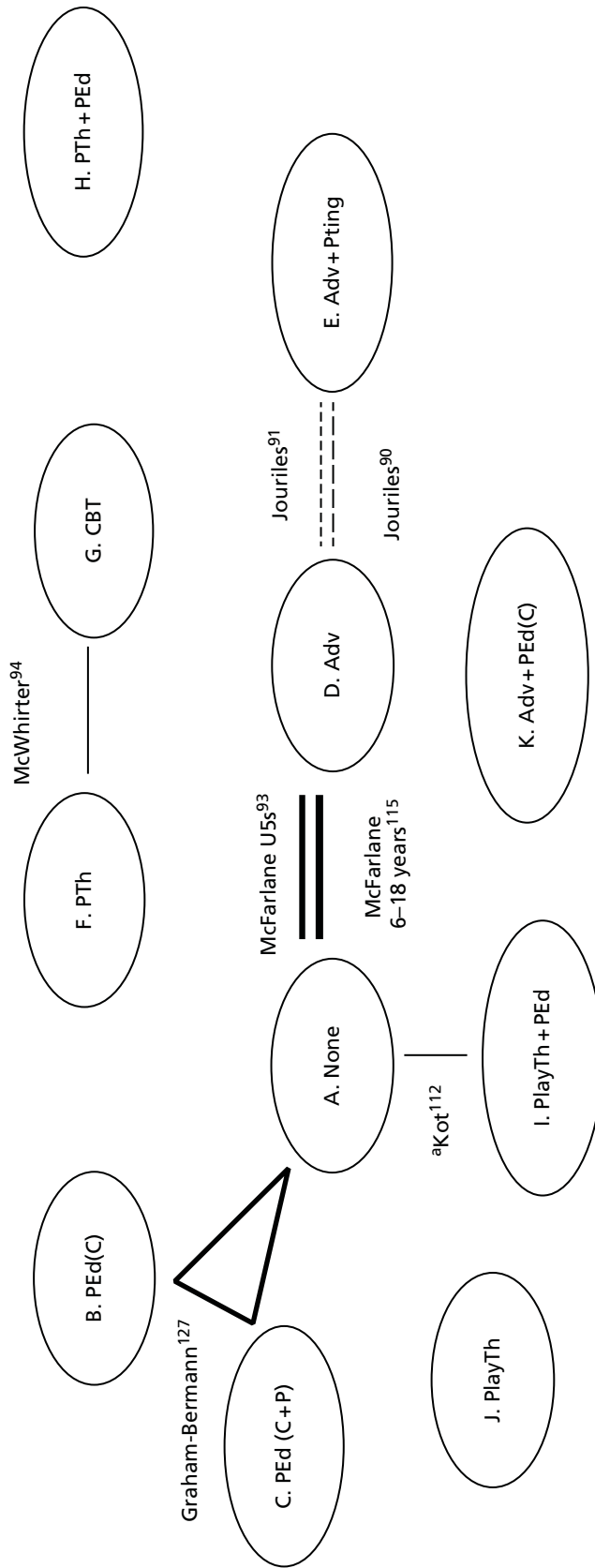
Adv, advocacy; C, child; D, dyad; P, parent; PEd, psychoeducation; PlayTh, play therapy; PTh, psychotherapy; Pting, parenting skills training.

'Child' indicates that the child received an intervention without the parent. 'Parent' indicates that the parent received an intervention without the child. 'Dyad' indicates that the child and parent received an intervention together.

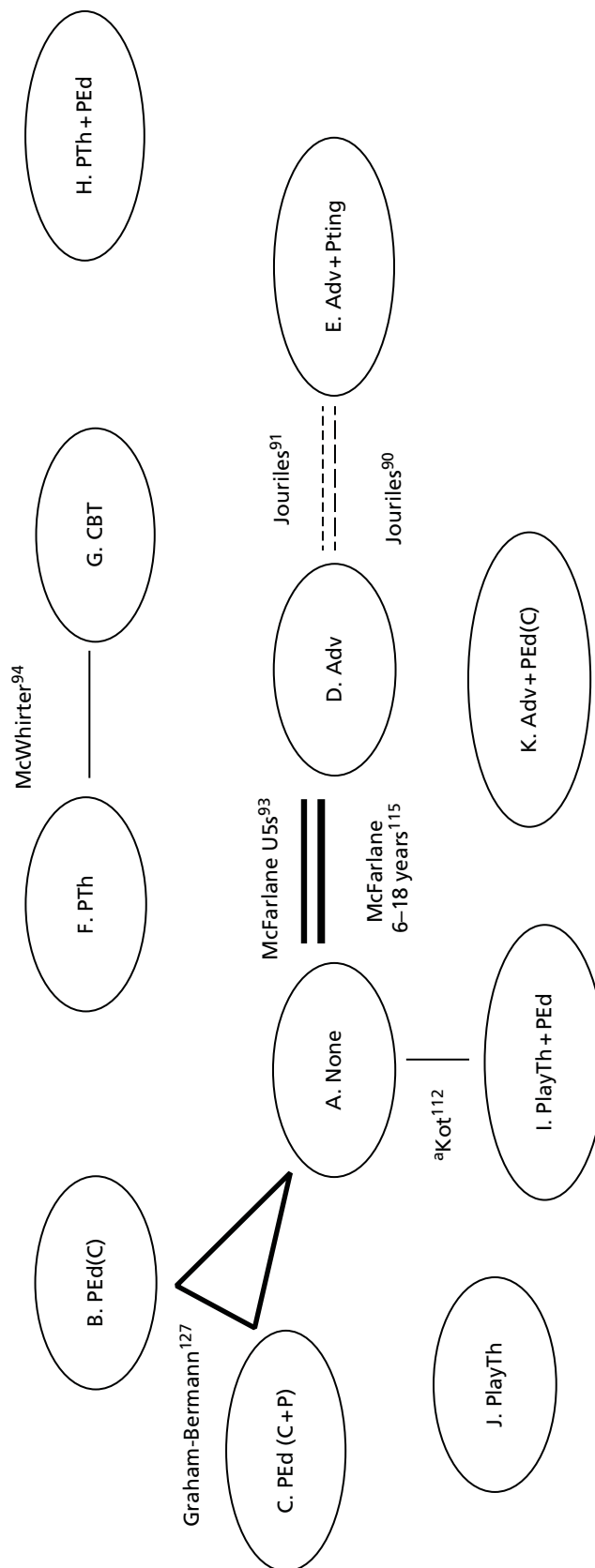
The trial conducted by Overbeek *et al.*<sup>116,117</sup> was ongoing during our study, and results became available only after the statistical analysis for this chapter had been completed. We note that this study only adds a 'spur' to the network diagram and, as such, does not provide information on the rest of the network. In particular, the results from this study do not influence any of the comparisons between intervention types A–K, and provide information on only the comparison intervention types C versus L [i.e. between psychoeducational interventions to child and parent (in parallel) and 'non-specific group activities']. For this reason, this study is excluded from the remaining analyses.



**FIGURE 5** Intervention type: mental health outcomes. Network plot showing all comparisons made across intervention type in the RCTs and CCTs included in the quantitative review with usable data on mental health outcomes. Each connective line represents interventions that have been compared, and the study in which it has been made is indicated. The joined-up triangle represents a three-arm trial.<sup>98</sup> Dashed lines indicate studies on children with known health or behavioural problems, and solid lines indicate studies that do not state whether or not there are health or behavioural problems. The width of the connecting lines is proportional to the average number of subjects per arm (see Table 17 for key to interventions). a, Non-randomised studies (CCTs).<sup>112, 119</sup> PEd, psychoeducation; C, child; P, parent; PlayTh, play therapy; PTh, psychotherapy; Adv, advocacy; Pting, parenting skills training.



**FIGURE 6** Intervention type: behavioural outcomes. Network plot showing all comparisons across intervention type made in the RCTs and CCTs included in the quantitative review with usable data on behavioural outcomes. Each connective line represents interventions that have been compared, and the study in which it has been made is indicated. The joined-up triangle represents a three-arm trial.<sup>98</sup> Dashed lines indicate studies on children with known health or behavioural problems, and solid lines indicate studies that do not state whether or not there are health or behavioural problems. The width of the connecting lines is proportional to the average number of subjects per arm (see Table 17 for key to interventions). a, Non-randomised studies (CCTs). PEd, psychoeducation; C, child; P, parent; PlayTh, play therapy; PTh, play therapy; PTh, psychotherapy; Adv, advocacy; Pting, parenting skills training.



**FIGURE 7** Intervention type: social competency and esteem outcomes. Network plot showing all comparisons across intervention type made in the RCTs and CCTs included in the quantitative review with usable data on social competency and esteem outcomes. Each connective line represents interventions that have been compared, and the study in which it has been made is indicated. The joined-up triangle represents a three-arm trial.<sup>98</sup> Dashed lines indicate studies on children with known health or behavioural problems, and solid lines indicate studies that do not state whether or not there are health or behavioural problems. The width of the connecting lines is proportional to the average number of subjects per arm (see Table 17 for key to interventions). a. Non-randomised studies (CCTs). PEd, psychoeducation; C, child; P, parent; PlayTh, play therapy; PTh, psychotherapy; Adv, advocacy; Pting, parenting skills training.

As explained above, NMA is possible only for connected networks (where there is a path from any one intervention type to another). The network for mental health outcomes (see *Figure 5*) is connected for intervention types A–I, but not for intervention types J (play therapy) and K (advocacy + psychoeducation delivered to the child). It is, therefore, not possible to estimate the relative effect on mental health outcomes of these interventions compared with any of the other interventions. If we restrict the analysis to RCTs only, then Kot<sup>112</sup> is excluded with the consequence that intervention type I (play therapy + psychoeducation) is not connected and we can make comparisons only between intervention types A–H.

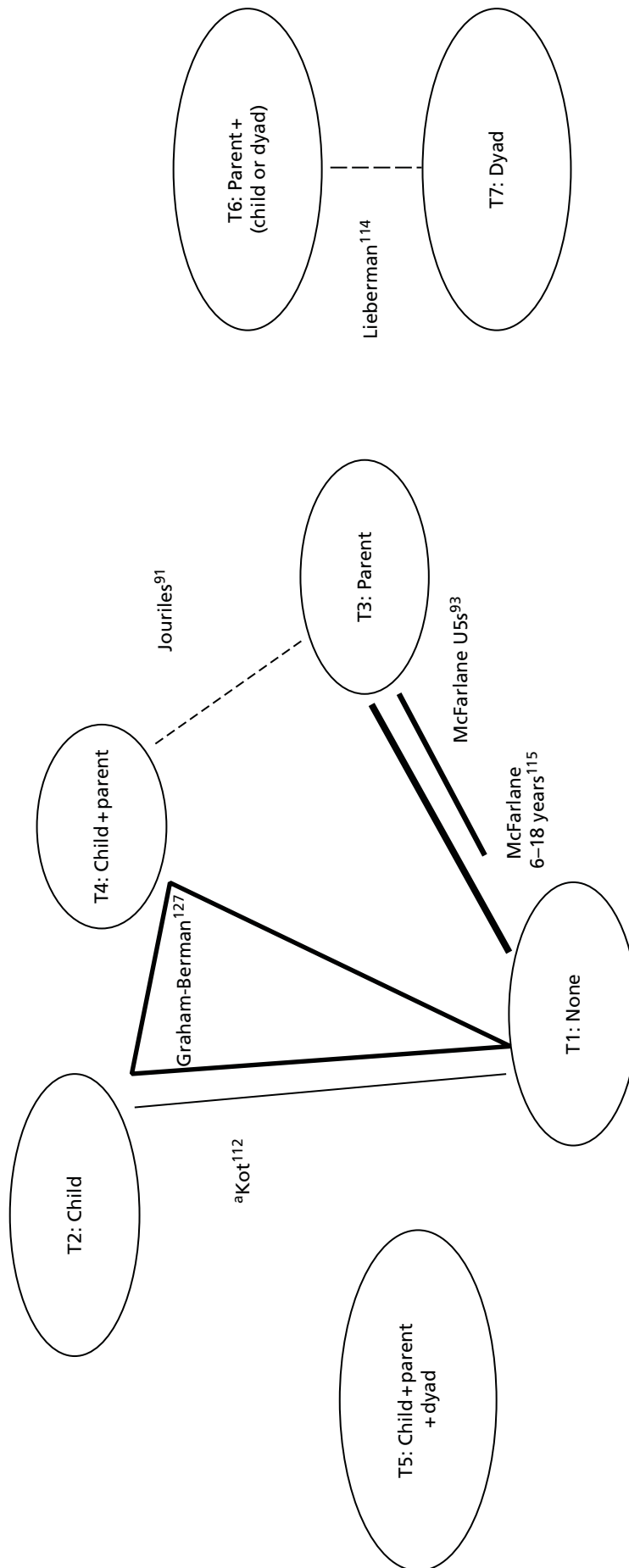
The network for behavioural outcomes (see *Figure 6*) is connected for intervention types A–E, but not for intervention types F–K. We can, therefore, estimate relative efficacy of intervention types only within types A–E. Although Cohen *et al.*'s<sup>61</sup> and Lieberman *et al.*'s studies<sup>92,114</sup> do not report any behavioural outcomes, they do report the CBCL-Total, which is a sum of mental health, behavioural and other constructs.<sup>183</sup> If we are prepared to assume that the relative intervention effect on the CBCL-Total is approximately the sum of the relative intervention effect on mental health and behavioural outcomes (the additivity assumption), then we can include Cohen *et al.*'s<sup>61</sup> and Lieberman *et al.*'s<sup>92,114</sup> studies. This is because Cohen *et al.*'s<sup>61</sup> and Lieberman *et al.*'s studies<sup>92,114</sup> reported mental health outcomes alongside the CBCL-Total, which together with the additivity assumption enabled us to estimate a behavioural relative effect (see *Modelling details*). Including the CBCL-Total outcome for Cohen *et al.*'s<sup>61</sup> and Lieberman *et al.*'s studies<sup>92,114</sup> in this way connected the network for intervention types A–I, but not for J and K, giving a network plot identical to that for mental health outcomes (see *Figure 5*), with the addition of the Jouriles *et al.*<sup>90</sup> study. This is a significant additivity assumption (CBCL-Total relative effect = mental health relative effect + behavioural relative effect); however, for those studies that report CBCL-Internalising, CBCL-Externalising, and CBCL-Total, we found that the data were consistent with this assumption (see *Appendix 17*). If we restrict the analysis to RCTs only, then Kot<sup>112</sup> is excluded with the consequence that intervention type I (play therapy + psychoeducation) is not connected and we can make comparisons only between intervention types A–H.

The network across intervention types for social competency and esteem outcomes is not connected (see *Figure 7*), and, thus, no evidence synthesis is possible. (See *Chapter 3* for the results from the two studies reporting these outcomes.)

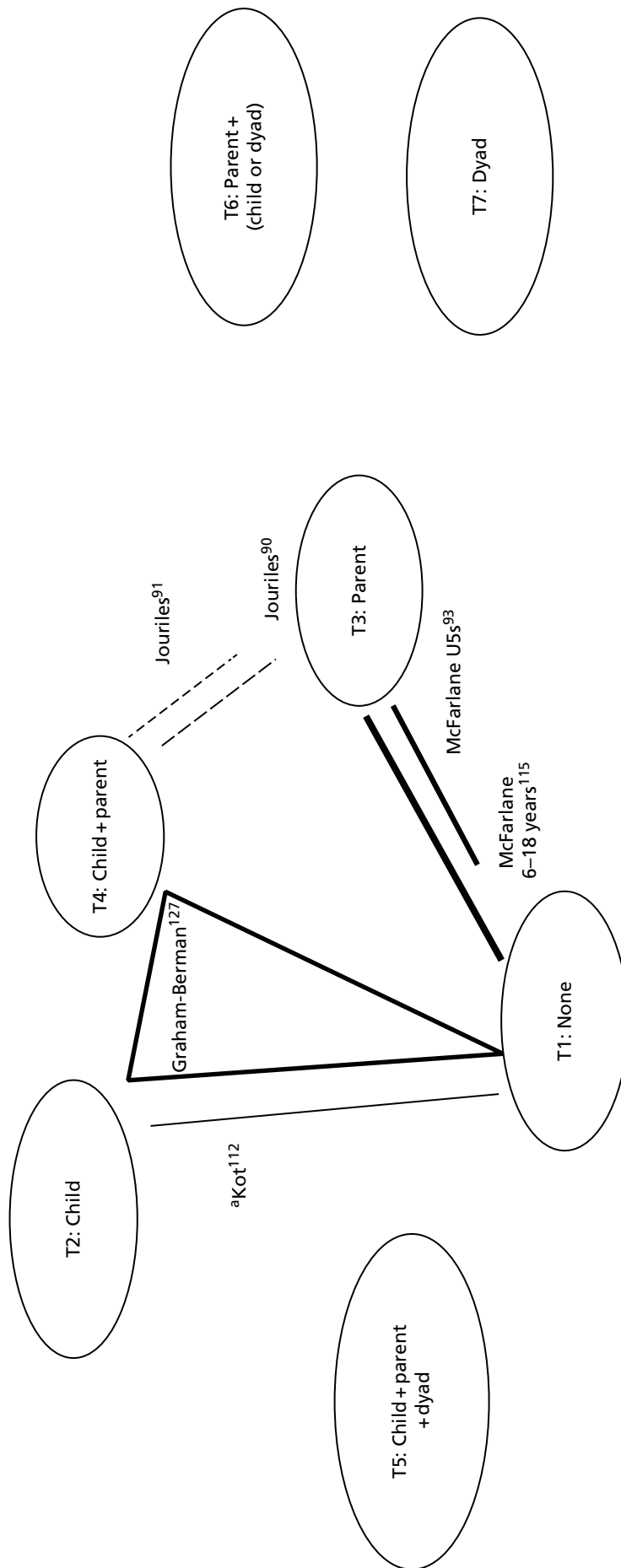
The key assumption of consistency, integral to NMA, is that the populations included in the studies are similar in their intervention effect estimates, allowing comparisons between more studies. If we restrict analysis to studies in which children have health/behaviour problems, we can make comparisons only between intervention types D–F, whereas if we restrict analysis to studies for which it is not stated whether or not children have health/behaviour problems, then we can make comparisons only between intervention types A–D and, if CCTs are included, type I. If possible, the consistency assumption is tested with sensitivity analyses with subpopulations, checking to see if the effect sizes are comparable. Because there is no overlap in the intervention types studied in these different populations, we did not perform sensitivity analysis by population type. When interpreting the results from the analyses, this needs to be with the knowledge that particular intervention types have been tested on only one of the two subpopulations, and, therefore, it is possible that results from a study based on an indicated sample may not extend to an unselected population, and vice versa.

### Network diagrams for target of intervention

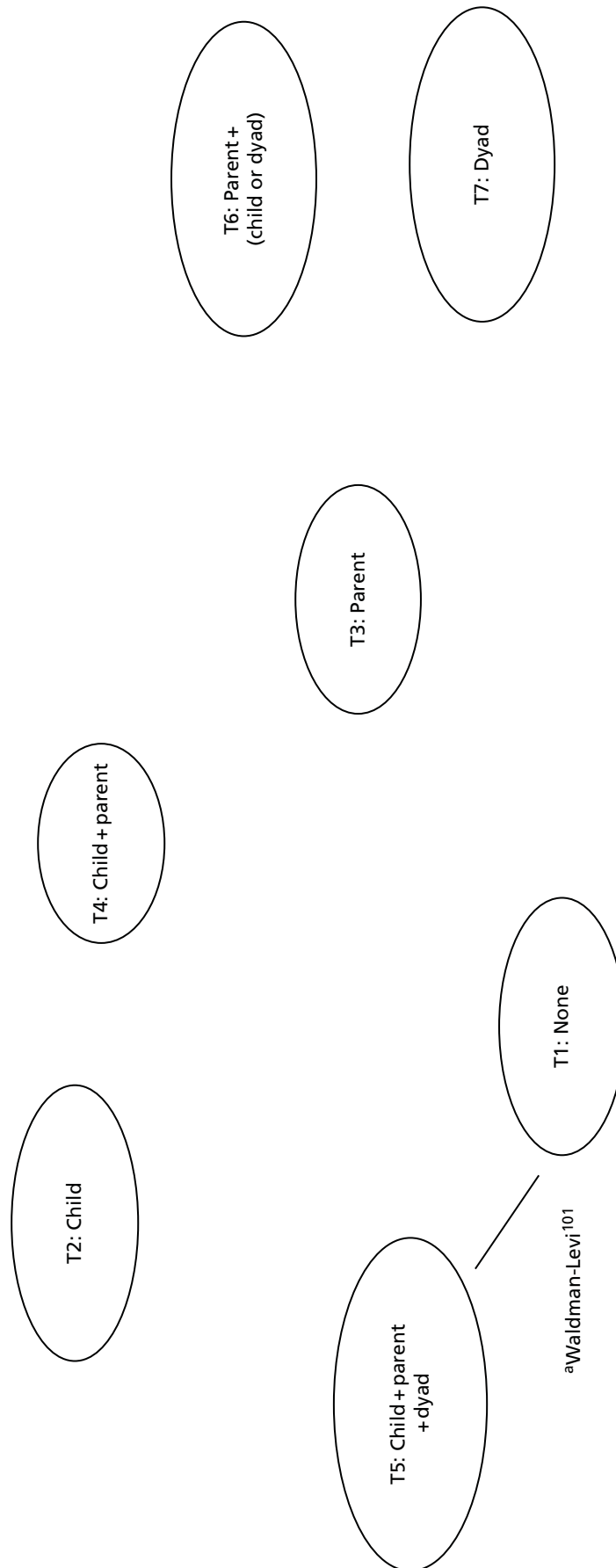
*Figures 8–10* show the network of comparisons across the targets of interventions for all primary studies included in the systematic review of controlled studies (RCTs and CCTs) with usable mental health, behavioural, and social competency and esteem outcomes, respectively. The networks for mental health and behavioural outcomes are connected for intervention targets T1–T4, but not for targets T5–T7. It is, therefore, possible only to estimate the relative effects of targets T1–T4 compared with each other and not with any of the other targets for these outcomes. Restricting the analysis to RCTs only excludes the Kot<sup>112</sup> study; however, the networks remain connected for intervention targets T1–T4. Neither Cohen *et al.*'s<sup>61</sup> nor Lieberman *et al.*'s studies<sup>92,114</sup> are included in the connected networks, so it is not necessary to include the CBCL-Total outcome.



**FIGURE 8** Intervention target: mental health outcomes. Network plot showing all comparisons made across target of intervention in the RCTs and CCTs included in the quantitative review with usable data on mental health outcomes. Each connective line represents interventions that have been compared, and the study in which it has been made is indicated. The triangle represents a three-arm trial. Asterisk indicates non-randomised studies (CCTs). Dashed lines indicate studies on children with known health or behavioural problems, and solid lines indicate studies that do not state whether or not there are health or behavioural problems. The width of the connecting lines is proportional to the average number of subjects per arm (see Table 17 for key to interventions).



**FIGURE 9** Intervention target: behavioural outcomes. Network plot showing all comparisons across target of intervention made in the RCTs and CCTs included in the quantitative review with usable data on behavioural outcomes. Each connective line represents interventions that have been compared, and the study in which it has been made is indicated. The triangle represents a three-arm trial. Dashed lines indicate studies on children with known health or behavioural problems, and solid lines indicate studies that do not state whether or not there are health or behavioural problems. The width of the connecting lines is proportional to the average number of subjects per arm (see Table 17 for key to interventions). a, Non-randomised studies (CCTs).



**FIGURE 10** Intervention target: social competency and esteem outcomes. Network plot showing all comparisons across target of intervention made in the RCTs and CCTs included in the quantitative review with usable data on Social Competency and Esteem Outcomes. Each connective line represents interventions that have been compared, and the study in which it has been made is indicated. Dashed lines indicate studies on children with known health or behavioural problems, and solid lines indicate studies that do not state whether or not there were health or behavioural problems. The width of the connecting lines is proportional to the average number of subjects per arm (see Table 17 for key to interventions). a. Non-randomised studies (CCTs).



The network across targets of intervention for social competency and esteem outcomes was not connected, (see *Figure 10*) and so no evidence synthesis was possible. (See *Table 7* for the results from the one study reporting a social competency and esteem outcome.)

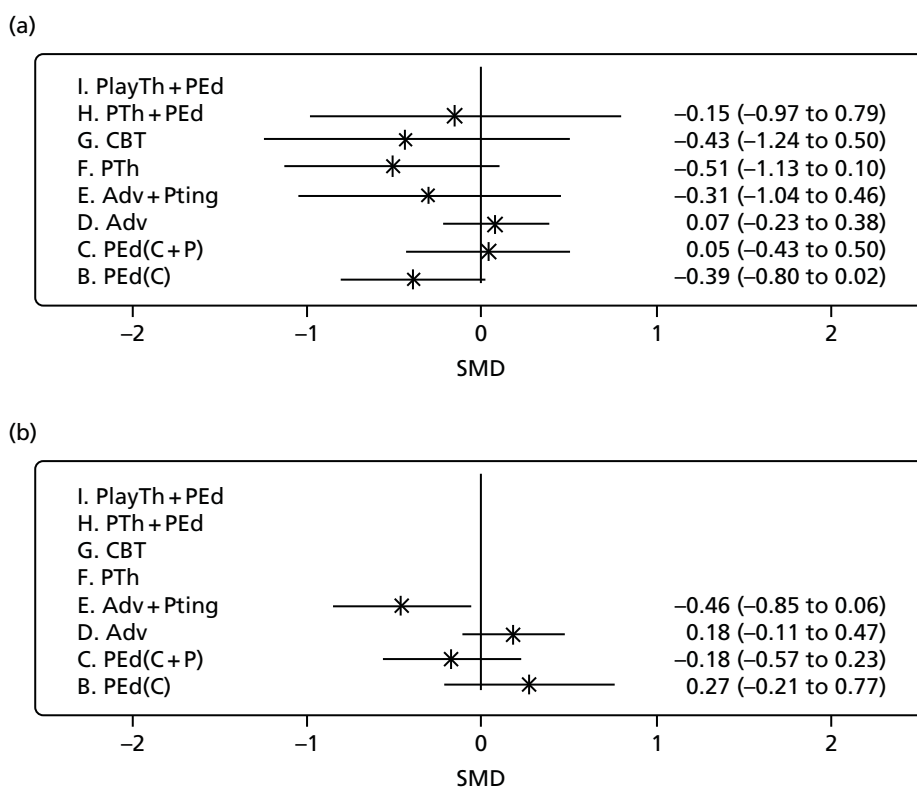
### Network meta-analysis results

#### Types of intervention

In all analyses the posterior mean of the residual deviance was lower than the number of data points, representing a good fit to the data. In the primary analysis (RCTs only, no CBCL-Total outcomes), the between-outcomes (within-study) SD is estimated at 0.06, with a 95% credible interval (CrI) of 0.004 to 0.200. This was robust in all sensitivity analyses, suggesting relatively low between-outcome heterogeneity on a SMD scale.

*Figure 11* shows the posterior mean (95% CrI) of the SMD for mental health and behavioural outcomes for RCTs only, where no CBCL-Total outcomes are included. The SMD can be interpreted as the change in mean outcome (measured in SD units) for each intervention type relative to type A = none, where we defined none as treatment as usual, WLC, minimum control, or the receipt of no intervention (see *Table 4*). Negative SMDs are consistent with benefit of the intervention.

For mental health outcomes, all intervention types have CrIs that cross 0 (no effect). However, types B (psychoeducational intervention delivered to the child) and F (psychotherapy) have CrIs that are nearly all negative. Note that many of the CrIs are very wide, reflecting the small numbers included in the primary studies. For behavioural outcomes, all intervention types have CrIs that cross 0 (no effect), although type E (advocacy + parenting skills training) has a CrI that is nearly all negative.

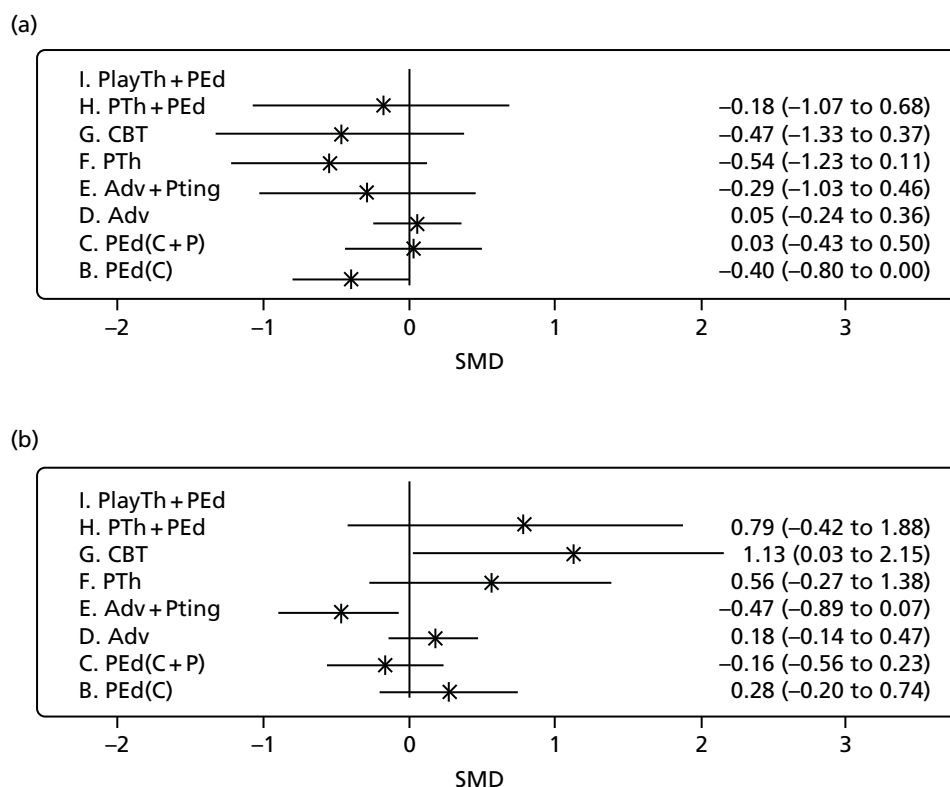


**FIGURE 11** Randomised controlled trials only. Posterior mean SMD and 95% CrIs for each of intervention types B-I relative to intervention type A = none. Results are shown for (a) mental health outcomes and (b) behavioural outcomes. Only RCTs are included in the analysis. Negative SMDs indicate a better outcome (see *Table 17* for key to interventions). Adv, advocacy; PEd, psychoeducation; PlayTh, play therapy; PTh, psychotherapy; Pting, parenting skills training.

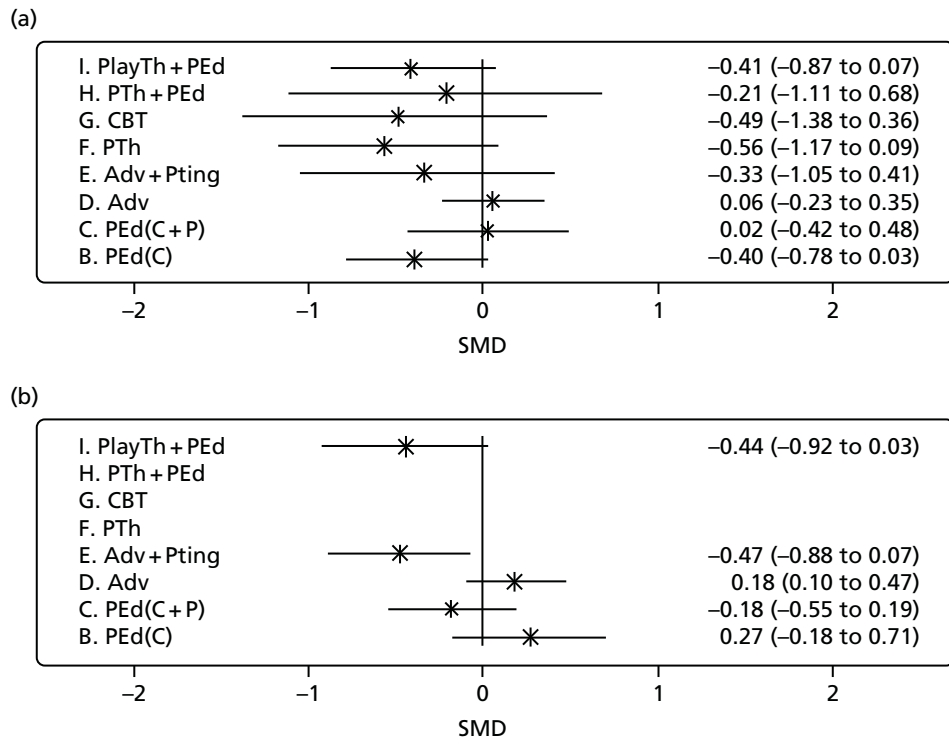
Figure 12 shows results for a sensitivity analysis where we continued to restrict studies to RCTs only, but allowed the CBCL-Total outcome to be used to connect the network for the behavioural outcomes. Comparing Figures 11 and 12, the results for mental health outcomes are seen to be robust to including the CBCL-Total outcome (i.e. they are similar for those trials that were in the main analysis). For behavioural outcomes, however, we now have additional results for intervention types F–H. Intervention type E (advocacy + parent skills training) is still the only type with a CrI that is mostly negative, whereas type G (CBT) is significantly worse than A = none for behavioural outcomes [although we need to treat this conclusion with caution, as there is no direct evidence on behavioural outcomes for intervention G (CBT)].

Figure 13 shows results for a sensitivity analysis in which we included both RCTs and CCTs (but did not include the CBCL-Total outcome). Comparing Figures 11 and 13, results are seen to be robust to including the CCTs for mental health outcomes; however, we now have additional results for intervention type I = (play therapy + psychoeducation), which has similar efficacy to type B (psychoeducation delivered to the child). Results are also seen to be robust to including the CCTs for behavioural outcomes; however, we now have results for intervention type I (play therapy + psychoeducation) which has similar efficacy to type E (advocacy + parenting skills training).

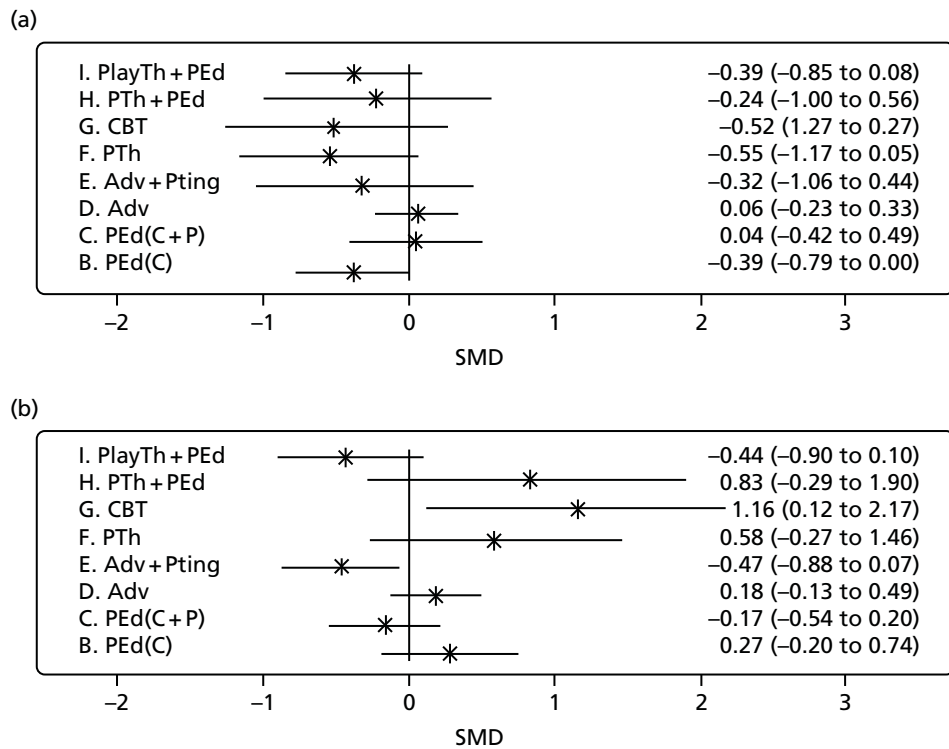
Figure 14 shows results for a sensitivity analysis in which we include both RCTs and CCTs and allow the CBCL-Total outcome to be used to connect the network for the behavioural outcomes. For Figures 13 and 14, results are seen to be robust to including the CBCL-Total outcome. For behavioural outcomes, we now have additional results for intervention types F–H. Intervention types E (advocacy + parenting skills training) and I (play therapy + psychoeducation) are still the only types with CrIs that are mostly negative.



**FIGURE 12** Randomised controlled trials CBCL-Total included. Posterior mean SMD and 95% CrIs for each of intervention types B–I relative to intervention type A = none. Results are shown for (a) mental health outcomes and (b) behavioural outcomes. Only RCTs are included in the analysis. In addition, the CBCL-Total outcome is included under the additivity assumption. Negative SMDs indicate a better outcome (see Table 17 for key to interventions). Adv, advocacy; PEd, psychoeducation; PlayTh, play therapy; PTh, psychotherapy; Pting, parenting skills training.



**FIGURE 13** Randomised controlled trials and CCTs. Posterior mean SMD and 95% CIs for each of intervention types B–I relative to intervention type A = none. Results are shown for (a) mental health outcomes and (b) behavioural outcomes. Both RCTs and CCTs are included in the analysis. Negative SMDs indicate a better outcome (see Table 17 for key to interventions). Adv, advocacy; PEd, psychoeducation; PlayTh, play therapy; PTh, psychotherapy; Pting, parenting skills training.



**FIGURE 14** Randomised controlled trials and CCTs, CBCL-Total included. Posterior mean SMD and 95% CIs for each of intervention types B–I relative to intervention type A. Results are shown for (a) mental health outcomes and (b) behavioural outcomes. Both RCTs and CCTs are included in the analysis. In addition, the CBCL-Total outcome is included under the additivity assumption. Negative SMDs indicate a better outcome (see Table 17 for key to interventions). Adv, advocacy; PEd, psychoeducation; PlayTh, play therapy; PTh, psychotherapy; Pting, parenting skills training.

## Targets of interventions

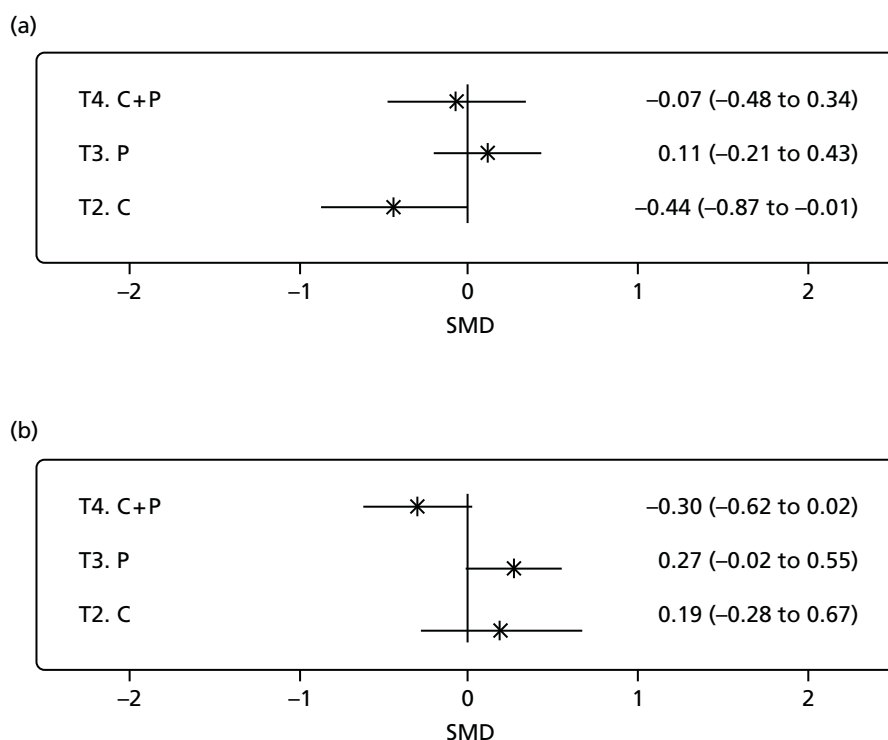
In all analyses the posterior mean of the residual deviance was lower than the number of data points, representing a good fit to the data. In the primary analysis (RCTs only), the between-outcomes (within-study) SD is estimated at 0.09 with 95% CrI of 0.003 to 0.277, and this was robust in all sensitivity analyses, suggesting relatively low between-outcome heterogeneity on a SMD scale.

Figure 15 shows the posterior mean (95% CrI) of the SMD for mental health and behavioural outcomes for RCTs only. For mental health outcomes, all intervention targets have CrIs that cross 0 (no effect), with the exception of target T2 = child, for which outcomes are significantly improved compared with T1 = none (at 5% level). For behavioural outcomes, all intervention targets have CrIs that cross 0 (no effect), with the exception of target T3 = child + Parent, for which outcomes are significantly improved compared with T1 = none (at 5% level).

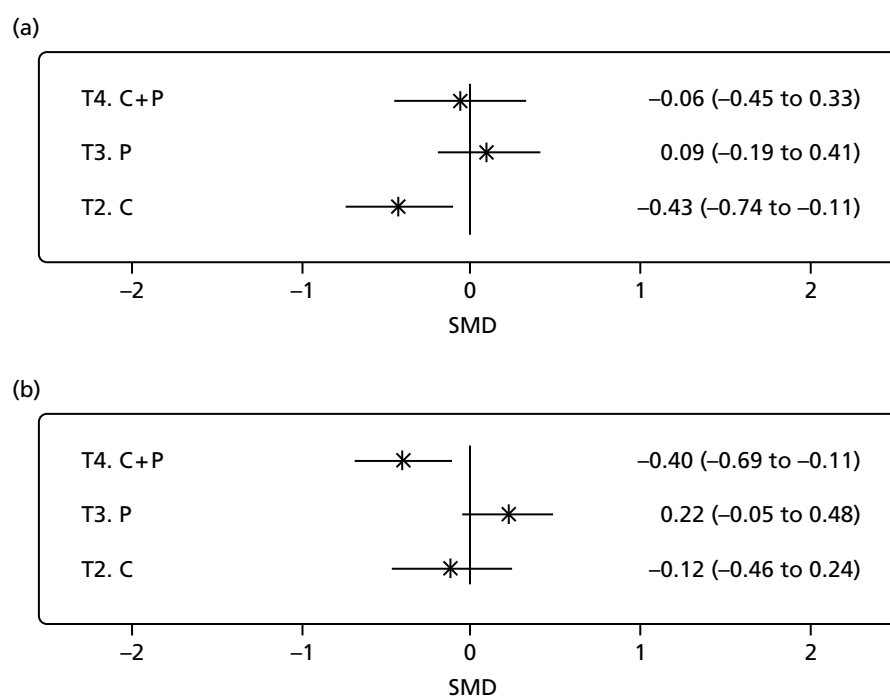
Neither Cohen *et al.*'s<sup>51</sup> nor Lieberman *et al.*'s<sup>92,114</sup> studies are included in the connected networks (see Figures 8 and 9), and so results are unchanged by including the CBCL-Total outcome.

Figure 16 shows results from a sensitivity analysis where we include both RCTs and CCTs (but do not include the CBCL-Total outcome). Comparing Figures 14 and 15, results are seen to be robust to including the CCTs for both mental health and behavioural outcomes.

Neither Cohen *et al.*'s<sup>51</sup> nor Lieberman *et al.*'s<sup>92,114</sup> are included in the connected networks (see Figures 11 and 12), and so results are unchanged by including the CBCL-Total outcome.



**FIGURE 15** Randomised controlled trials only. Posterior mean SMD and 95% CrIs for each of intervention target T2–T4 relative to intervention target T1 = none. Results are shown for (a) mental health outcomes and (b) behavioural outcomes. Only RCTs are included in the analysis. Negative SMDs indicate a better outcome. C, child; C + P, child plus parent; P, parent (see Table 17 for key to interventions).



**FIGURE 16** Randomised controlled trials and CCTs. Posterior mean SMD and 95% CrIs for each of intervention target T2–T4 relative to intervention target T1 = none. Results are shown for (a) mental health outcomes and (b) behavioural outcomes. Both RCTs and CCTs are included in the analysis. Negative SMDs indicate a better outcome. C, child; C + P, child plus parent; P, parent (see *Table 17* for key to interventions).

## Discussion: short-term modelling

The aim of the short-term modelling was to obtain pooled estimates of the relative effectiveness that take account of the heterogeneity in interventions and outcomes in the included studies to give an indication of what intervention types and format of delivery may be effective for mental health, behavioural, and social competency and esteem outcomes. We were unable to perform a conventional pairwise meta-analysis in *Chapter 3* owing to the highly heterogeneous nature of the study designs, interventions, settings, targets and formats of the intervention, and outcome measures in the studies that we identified. It is clear that more evidence is needed to understand what interventions may work in different settings and populations. Moreover, in practice, although there is no strong evidence of what works, interventions continue to be commissioned and delivered to children with little evidence for whether any one approach works better than another for a particular group of children, or for what approach works best to help tackle a particular problem. Often, interventions are delivered on the basis of exposure rather than in response to the presence of symptoms or disorders. In this chapter we have pooled the limited amount of evidence that was available, by categorising interventions and outcomes and using NMA methods, so that we can make some tentative recommendations about the relative effectiveness of interventions for children exposed to DVA, and to highlight what new research would be helpful to better understand what works. Below we summarise our key findings; however, it is important to note that these are hypothesis-generating, rather than robust estimates of efficacy. For reasons articulated below (see *Assumptions and limitations*), these findings should be treated with caution and interpreted in the context of the findings derived from other sources of evidence described throughout this report.

### Key findings

#### Type of intervention

Advocacy plus parenting skills training was found to be the most effective intervention type for improving child behavioural outcomes, although there is uncertainty in this (nearly significant at 5% level compared

with no intervention). There is also some evidence that play therapy plus psychoeducational intervention types may be effective if we are prepared to accept the results from the non-randomised evidence. Well-conducted randomised trial evidence would be valuable to test whether these effects are replicated or whether they are an artefact of the non-randomised design.

There was a high degree of uncertainty as regards the relative effectiveness of the different intervention types on child mental health outcomes. Psychoeducation was the only intervention type to come close to statistical significance for improving mental health outcomes; however, there is also some evidence that play therapy delivered in combination with psychoeducational interventions may be effective if we are prepared to accept the results from the non-randomised studies.

Taken together, our results seem to suggest that the interventions included in this review tend to act on either internalising or externalising behaviour, but not on both. This is a potentially important finding given the point we make above and in *Chapter 4* that interventions tend to be offered on the basis of a child's exposure to DVA as opposed to the presence of particular difficulties. Nevertheless, the results on relative effectiveness of the different intervention types should be interpreted together with information on other characteristics of the interventions of that type that have been included in the trials (see *Table 18*). We cannot infer how well the interventions may perform in other contexts than those in which they have been trialled. As described in *Chapter 3* (see also *Table 4*), the advocacy and parenting skills training model was delivered primarily to parents (individually) but involved children (individually) in the parenting skills component. It has been tested on children aged 4–9 years who are presenting with behavioural problems, and, although we assumed for the purpose of this study that selected and non-selected samples were equivalent, this model has not yet been trialled with children exposed to DVA who display more minor behaviour difficulties or as a preventative measure. Play therapy with psychoeducation was delivered to children aged between 5–7 years, both individually and in groups. The trials that included psychoeducational interventions were delivered either to the child (in groups) or to the child and parent in parallel groups.

### Targets of interventions

When collapsing across type of intervention to examine whether or not effectiveness differed depending on to whom the intervention was delivered, we found evidence that interventions aimed at the child were most effective for improving child mental health outcomes, whereas interventions delivered to both parent and child in parallel were found to be most effective for improving child behaviour outcomes. These findings were statistically significant at the 5% level and were robust to inclusion of non-randomised studies.

It should be noted that all of the interventions aimed exclusively at the child were delivered in groups and contained some psychoeducational component. It is, therefore, not possible to ascertain if the impact on child mental health outcomes was attributable to the psychoeducational component or to the fact that the child was the target of the intervention. We can say, however, that the most effective interventions for improving mental health outcomes seem to be those with a psychoeducational component, delivered to children in groups.

The interventions aimed at the child and parent were psychoeducational interventions delivered in parallel groups, and advocacy and parenting skills training delivered to parents (individually) with input to the child (individually). The commonality between these interventions is that they are delivered to both the child and parent in parallel, which suggests that this dual approach may be more effective for child behavioural outcomes.

The results from this second part of our analyses also point towards the possibility that interventions should be tailored according to the types of problems that children are experiencing, rather than using the same approach with all children irrespective of their individual symptom profiles. However, this proposition requires further investigation in well-conducted multiarm trials that can compare the effectiveness of the same intervention delivered to different targets.

### Assumptions and limitations

In order to perform the short-term modelling, we have had to make major assumptions (*Box 1*), and these must be borne in mind when interpreting the results.

Different outcomes were reported in different studies, with the only common outcome being the CBCL scale/subscales. Furthermore, the absolute values of the CBCL varied greatly across studies. We therefore pooled across outcome measures using the SMD for each trial measure, grouping the outcomes according to whether they measured aspects of behaviour or mental health. For studies that did not report the internalising and externalising subscales of the CBCL, we had only the CBCL-Total outcome. We excluded the CBCL-Total outcome in our primary analyses and included it in a sensitivity analysis by assuming that intervention effects on the CBCL-Total can be considered a sum of the relative effects on mental health and behavioural components of the scale. There are, however, other dimensions that make up the CBCL-Total, which may also add to the relative effectiveness as assessed on the CBCL-Total scale. We found that our results and conclusions did not change with inclusion of the CBCL-Total outcome. However, the relative effectiveness of intervention types F–H on behavioural outcomes must be interpreted with caution, as they depend on the validity of this assumption owing to a lack of direct evidence. It was not possible to obtain relative effect estimates for social competency and esteem outcomes owing to a lack of evidence.

Relative effects for different outcomes within an outcome category (e.g. mental health) are unlikely to be identical, and, therefore, we have used a hierarchical model in which the relative effects for outcomes within a category (mental health or behaviour) are assumed to be ‘similar’, using a common pooled mean effect across outcomes. This approach is less restrictive than pooling the outcomes by assuming that they are all identical and reflects the additional heterogeneity between outcomes in the estimated pooled mean effect. We have summarised this hierarchical model using the pooled mean across outcomes within outcome category in *Figures 11–16*.

We have assumed that the populations in the included studies are comparable; in fact, they differ by age of children and also by whether or not the study restricted inclusion to children with health or behavioural problems. Owing to insufficient studies, we were unable to perform sensitivity analysis of results for these

#### BOX 1 Assumptions made in short-term modelling

- Relative intervention effects are similar for all mental health outcomes, as categorised in *Table 17*.
- Relative intervention effects are similar for all behavioural outcomes, as categorised in *Table 18*.
- Interventions of the same type, as categorised in *Table 18*, have similar effectiveness.
- Interventions with the same target, as categorised in *Table 18*, have similar effectiveness.
- Relative intervention effect on the CBCL-Total is approximately the sum of the relative intervention effect on mental health and behavioural outcomes (applied in sensitivity analysis).
- Relative effects are additive on SMD scale.
- Populations are comparable across the trials in terms of the relative effectiveness of intervention type and target.
- Relative intervention effects do not depend on setting (so intervention effectiveness must be interpreted together with the settings in which they have been trialled).
- Relative intervention effects do not depend on whether they are delivered individually or in groups (so intervention effectiveness must be interpreted together with the format of delivery in which they have been trialled).
- Relative intervention effects do not depend on age group (so intervention effectiveness must be interpreted together with the age groupings in which they have been trialled).

different subgroups. We are, therefore, assuming that the relative effectiveness of the intervention types and targets do not depend on age or existing health/behavioural problems. Of course, interventions should be targeted to age and level of impairment, and the interventions that were actually delivered in each trial were tailored to the population and setting in which they were delivered. However, there is simply not enough evidence for us to be able to draw conclusions according to age group, level of impairment and setting, and there is a clear need for further research to fill this evidence gap. We were, however, able to draw some general conclusions that appeared to hold across these important subgroups. Because the interventions delivered in each of our included trials were tailored to the trial populations and settings, our relative effectiveness estimates must be interpreted together with the inclusion criteria and setting of the trials grouped by type of intervention (see *Chapter 3*). Furthermore, because there were only one or two studies making each comparison in the network, the results are driven by these studies, and we may expect that different results will be obtained in other settings/populations.

In order to 'connect' the networks of evidence, we assume that interventions of the same type that are tested in different studies are comparable, although owing to the sparse nature of the evidence, this was necessary only for advocacy, psychotherapy and CBT interventions. In reality, the interventions will be different even within type, so, for example, an advocacy intervention in one study may differ considerably from an advocacy intervention in another study. We have assumed that, although these interventions may differ, their true relative effectiveness on the SMD scale can be considered 'similar' for mental health and behavioural outcomes.

We have considered intervention type and target in two separate analyses; however, these two aspects of interventions may be expected to interact. For example, CBT may be more effective if delivered to a parent and child together than to a child alone. To explore this fully we need more studies with different combinations of intervention types and targets. The studies included in this review were not sufficiently diverse or numerous to do this; the study by Graham-Bermann *et al.*<sup>98</sup> was the only one that compared an intervention (psychoeducational) with different targets in two of the trial arms (child only vs. mother and child) as well as a WLC.

We have not distinguished between interventions delivered to individuals and to groups. This is a key question for commissioners and has cost implications. As can be seen in *Table 18* there is no evidence comparing individual and group-based interventions, and so it was not possible to explore the relative effectiveness of these two different formats. Our relative effectiveness estimates must, therefore, be interpreted together with the format in which these interventions have been delivered in the trials in which those intervention types were included (see *Chapter 3* and *Table 4*).

There was one non-randomised study<sup>112</sup> that reported useable data on outcomes of interest for this review. We included this study in a sensitivity analysis. The main impact of this inclusion was that we could obtain a relative effect for the play therapy plus psychoeducation model, and this was seen to be effective for both mental health and behavioural outcomes. There was substantial imbalance at baseline across arms of this study, especially for the CBCL outcomes, which could have biased the study results. Furthermore, this study was found to be at high risk of bias across all domains (see *Chapter 3*). We are, therefore, cautious in drawing any conclusions about play therapy plus psychoeducation.

## Methods: cost-effectiveness analysis

We took a health- and social-care perspective for the cost-effectiveness analysis. For each of the RCTs included in the review, and for each intervention arm, we extracted the number of sessions and estimated the time required per health- and social-care professional, and summed over these to obtain an estimated mean cost in terms of staff time. Insufficient information was reported in the trial publications to identify



costs for any other resources used. In particular, no costs were included for a venue for the intervention, which, where reported, included women's shelters and homes. Hourly costs for each health- and social-care professional were obtained from the 2013 Personal Social Services Research Unit (PSSRU)<sup>188</sup> (see [www.pssru.ac.uk/project-pages/unit-costs/2013/](http://www.pssru.ac.uk/project-pages/unit-costs/2013/)), given in *Appendix 20*.

We restricted the cost-effectiveness analysis to effectiveness information from RCTs only and without using the CBCL-Total information (*Figures 10 and 14*). We obtained mean costs for the intervention types by averaging over studies that include that type, but reflect between-study heterogeneity in costs by using a normal distribution centred on the mean cost across studies and variance equal to the square of its SE. We did not attempt a cost-effectiveness analysis by target of intervention because the costs are more readily attributable to intervention type; however, we can interpret our results in the context of the target used in the included RCTs of that intervention type.

We report a fully incremental cost-effectiveness analysis,<sup>189</sup> where interventions are ordered in terms of mean cost and mean effect, and compute incremental cost-effectiveness ratios (ICERs) defined as:

$$ICER = \frac{\text{Difference in mean cost}}{\text{Difference in mean benefit}} \quad (1)$$

Interventions that are more costly and less effective than another intervention are dominated, and not considered further in the analysis. Interventions that give an ICER higher than a subsequent ordered intervention are extendedly dominated because the subsequent intervention represents better value for money.

Because our benefit is measured in two dimensions (SMD in mental health and behavioural outcomes), we repeat the analysis for a range of different relative weightings,  $p_{MH}$ , given to mental health outcomes relative to behavioural outcomes, where  $p_{MH} = 1$  puts all weight on mental health outcomes,  $p_{MH} = 0$  puts all weight on behavioural outcomes,  $p_{MH} = 0.5$  puts equal weight on the two outcomes, and so on. We also report the expected net benefit,<sup>189</sup> where the net benefit function is defined as:

$$\text{Net Benefit} = \lambda(p_{MH}) \times SMD_{MH} + (1 - p_{MH}) \times SMD_{BEH} - \text{cost}, \quad (2)$$

for a range of willingness to pay,  $\lambda$ , per unit benefit for a given weighting across the two outcome dimensions,  $p_{MH}$ .  $SMD_{MH}$  is the SMD for the mental health outcome dimension and  $SMD_{BEH}$  is the SMD for the behavioural outcome dimension. The willingness to pay threshold,  $\lambda$ , allows health benefits to be measured on a monetary scale for direct comparison with intervention costs to assess cost-effectiveness. We report results for a range of values for  $\lambda$ .

We explored uncertainty using a probabilistic sensitivity analysis<sup>189</sup> by presenting a cost-effectiveness acceptability curve (CEAC),<sup>189</sup> which plots the probability that each intervention type is the most cost-effective intervention against willingness to pay,  $\lambda$ , per unit benefit and for a given weighting across the two outcome dimensions,  $p_{MH}$ .

## Results: cost-effectiveness analysis

### Intervention costs

*Appendix 20* describes how the intervention costs are estimated for each arm of the studies included in the systematic review that inform the economic analysis. These are summarised in *Table 19* grouped by intervention type, together with the pooled intervention cost (and uncertainty) assumed for each intervention type in our model.

**TABLE 19** Estimated intervention costs and probability distributions representing uncertainty, where there is more than one study

Intervention type	Estimated cost by study	Pooled cost and uncertainty
A. None	£0 (McFarlane <i>et al.</i> <sup>115</sup> ); £0 (Graham-Bermann <i>et al.</i> <sup>98</sup> )	£0
B. PEd (C)	£335 (Graham-Bermann <i>et al.</i> <sup>98</sup> )	£335
C. PEd (C + P)	£670 (Graham-Bermann <i>et al.</i> <sup>98</sup> )	£670
D. Adv	£249 (Lieberman <i>et al.</i> <sup>92,114</sup> ); £490 (Jouriles <i>et al.</i> <sup>90</sup> ); £490 (Jouriles <i>et al.</i> <sup>91</sup> ); £112 (McFarlane <i>et al.</i> <sup>115</sup> )	~N(335, 93.6 <sup>2</sup> ) constrained to be positive
E. Adv + Pting	£4020 (Jouriles <i>et al.</i> <sup>90</sup> ); £1809 (Jouriles <i>et al.</i> <sup>91</sup> )	~N(2915, 1106 <sup>2</sup> ) constrained to be positive
F. PTh	£6700 (Lieberman <i>et al.</i> <sup>92,114</sup> ); £603 (McWhirter <sup>94</sup> )	~N(4286, 2414 <sup>2</sup> ) constrained to be positive
G. CBT	£1872 (Cohen <i>et al.</i> <sup>61</sup> ); £603 (McWhirter <sup>94</sup> )	~N(1238, 635 <sup>2</sup> ) constrained to be positive
H. PTh + PEd	£1872 (Cohen <i>et al.</i> <sup>61</sup> )	£1872

~, distributed; Adv, advocacy; C, child only; P, parent only; PEd, psychoeducation; PTh, psychotherapy; Pting, parenting skills training.

### Cost-effectiveness analysis

Table 20 shows the ICERs for intervention types for different relative weights,  $p_{MH}$ , given to mental health outcomes compared with behavioural outcomes, and Figures 17–21 show the corresponding CEACs.

If we put all weight on behavioural outcomes ( $p_{MH} = 0$ ), then a psychoeducational intervention provided to parents and children in parallel [type C: psychoeducation (PEd) (C + P)] is cost-effective (among the interventions we compared) if willingness to pay per SMD in behavioural outcome is greater than the ICER of £3722 (see Table 19). If willingness to pay is > £8017, then advocacy plus parenting skills training [type E: advocacy (Adv) + parenting skills training (Pting)] is cost-effective (among the interventions we compared) (see Table 20). Uncertainty in the most cost-effective intervention is greatest around a willingness to pay of £5000 (see Figure 17). As willingness to pay per SMD in behavioural outcome increases, the probability that advocacy plus parenting skills training is the most cost-effective intervention (among the interventions that we compared) increases (see Figure 17).

If we put all weight on mental health outcomes ( $p_{MH} = 1$ ), then a psychoeducational intervention delivered to the child [type B: PEd (C)] is cost-effective (among the interventions we compared) if willingness to pay per SMD in mental health outcome is greater than the ICER of £858 (see Table 20). Among the interventions that we compared, if willingness to pay is > £22,575 then CBT (type G) is cost-effective, and if we are willing to pay > £38,100 then psychotherapy is cost-effective (see Table 19). When willingness to pay is low, there is a high probability that (among the interventions that we compared) a psychoeducational intervention delivered to the child is most cost-effective, but as willingness to pay increases, then it becomes equally as likely to be cost-effective as CBT (see Figure 20).

Among the interventions that we compared, as the weight given to mental health outcomes,  $p_{MH}$ , increases from 0 to 1 (see Table 19 and Figures 17–21), advocacy plus parenting skills training (type E: Adv + Pting) has a lower probability of being cost-effective, whereas psychoeducational intervention for the child [type B: PEd(C)] increases in the probability of being cost-effective. A psychoeducational intervention delivered to both parent and child separately [type C: PEd (C + P)] is cost-effective (among the interventions we compared) only if we give a high weight to behavioural outcomes. We have evidence only on CBT for mental health outcomes, so we can comment only on the cost-effectiveness of this intervention when we give all weight to mental health outcomes, where it is seen that CBT may be cost-effective for high willingness to pay per SMD in mental health outcomes.

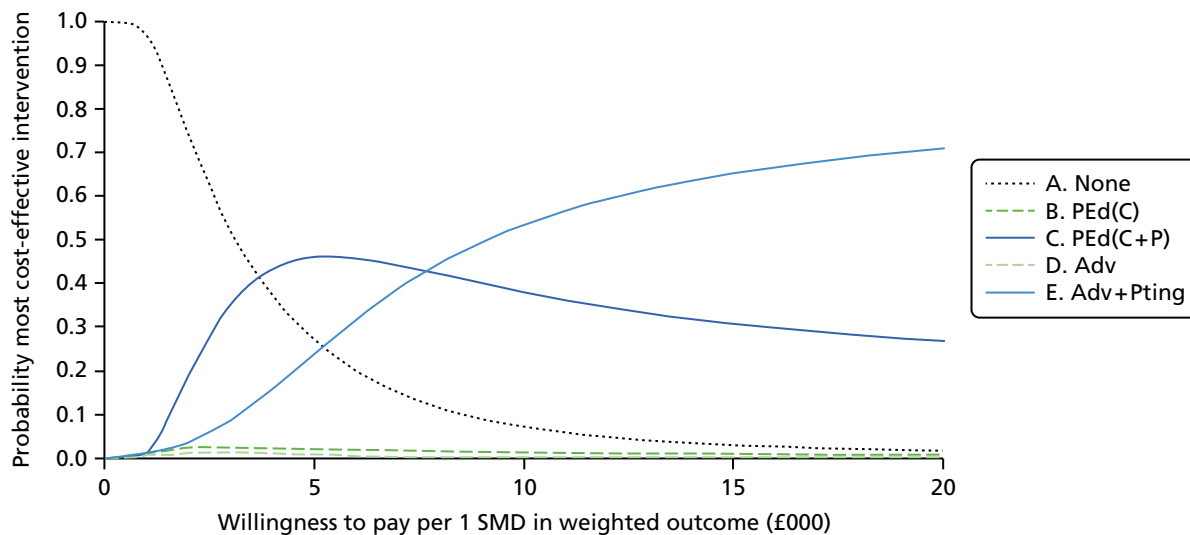
**TABLE 20** Incremental cost-effectiveness ratios for intervention types for different relative weights,  $p_{MH}$ , given to mental health outcomes compared with behavioural outcomes

Intervention	Mean cost (£)	Mean MH outcomes	Mean BEH outcomes	Mean weighted outcomes	ICER (£)
<b><math>p_{MH} = 0</math></b>					
A: None	0	0	0	0	Reference
B: PEd (C)	335	-0.39	0.27	0.27	Dominated
D: Adv	335	0.07	0.18	0.18	Dominated
C: PEd (C + P)	670	0.05	-0.18	-0.18	3722.22
E: Adv + Pting	2915	-0.31	-0.46	-0.46	8017.86
<b><math>p_{MH} = 0.25</math></b>					
A: None	0	0	0	0	Reference
B: PEd(C)	335	-0.39	0.27	0.105	Dominated
D: Adv	335	0.07	0.18	0.1525	Dominated
C: PEd(C + P)	670	0.05	-0.18	-0.1225	5469.39
E: Adv + Pting	2915	-0.31	-0.46	-0.4225	9716.67
<b><math>p_{MH} = 0.5</math></b>					
A: None	0	0	0	0	Reference
B: PEd(C)	335	-0.39	0.27	-0.06	5583.33
D: Adv	335	0.07	0.18	0.125	Dominated
C: PEd(C + P)	670	0.05	-0.18	-0.065	67,000 (extendedly dominated)
E: Adv + Pting	2915	-0.31	-0.46	-0.385	EvC: 7015.63 EvB: 7938.46
<b><math>p_{MH} = 0.75</math></b>					
A: None	0	0	0	0	Reference
B: PEd (C)	335	-0.39	0.27	-0.225	1488.89
D: Adv	335	0.07	0.18	0.0975	Dominated
C: PEd (C + P)	670	0.05	-0.18	-0.0075	Dominated
E: Adv + Pting	2915	-0.31	-0.46	-0.3475	21,061.22
<b><math>p_{MH} = 1</math></b>					
A: None	0	0	0	0	Reference
B: PEd (C)	335	-0.39	0.27	-0.39	858.974359
D: Adv	335	0.07	0.18	0.07	Dominated
C: PEd (C + P)	670	0.05	-0.18	0.05	Dominated
G: CBT	1238	-0.43		-0.43	22,575
H: PTh + PEd	1872	-0.15		-0.15	Dominated
E: Adv + Pting	2915	-0.31	-0.46	-0.31	Dominated
F: PTh	4286	-0.51		-0.51	38,100

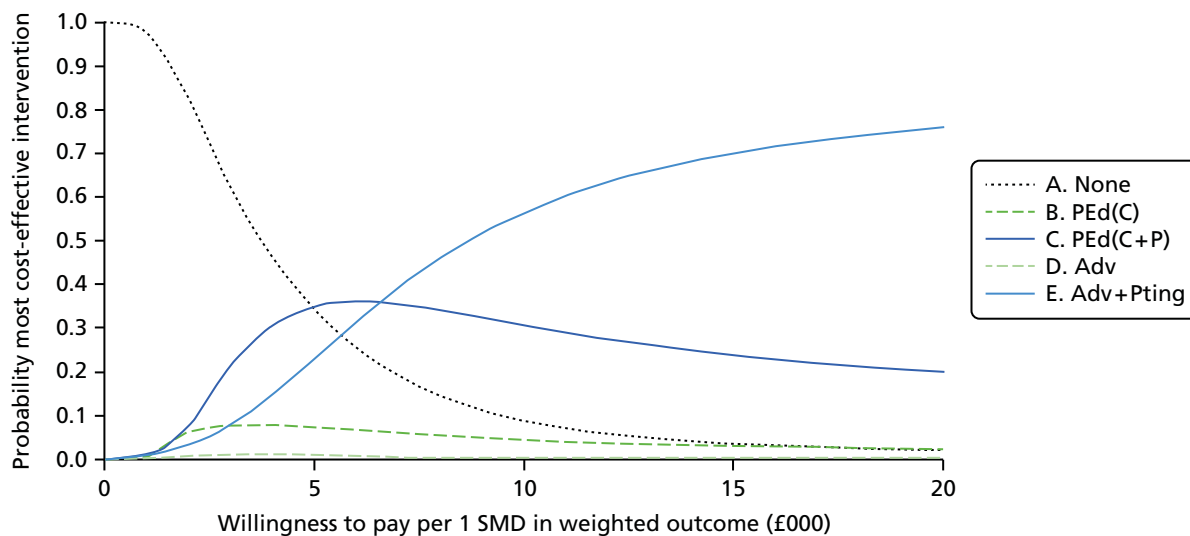
BEH, behavioural; EvB, Adv + Pting vs. PEd (C); EvC, Adv + Pting vs. PEd (C + P); MH, mental health; PEd, psychoeducation; PTh, psychotherapy; Pting, parenting skills training.

**Notes**

$p_{MH} = 0$  puts all weight on behavioural outcomes, whereas  $p_{MH} = 1$  puts all weight on mental health outcomes. ICERs are computed as incremental mean cost divided by incremental SMD on weighted outcome scale. Intervention types are ordered by costs and effects. ICERs are computed for each intervention type relative to the previous (non-dominated) intervention, unless otherwise indicated. Interventions are dominated if they have greater (or equal) mean costs but a more positive SMD on the weighted outcome scale (negative SMDs represent an improvement in outcome).



**FIGURE 17** Cost-effectiveness acceptability curve,  $p_{MH} = 0$ . The probability that each intervention is most cost-effective for a given willingness to pay per weighted outcome relative to A: none, where the proportion weight to SMD mental health. Mental health outcomes is  $p_{MH} = 0$ , and the proportion weight to SMD behavioural outcomes is  $(1 - p_{MH}) = 1$ . Relative efficacies are taken from the NMA results using RCTs only, and not including CBCL-Total (RCTs only; see *Figure 10*), and so only interventions A–E can be compared. Adv, advocacy; PEd, psychoeducation; Pting, parenting skills training.

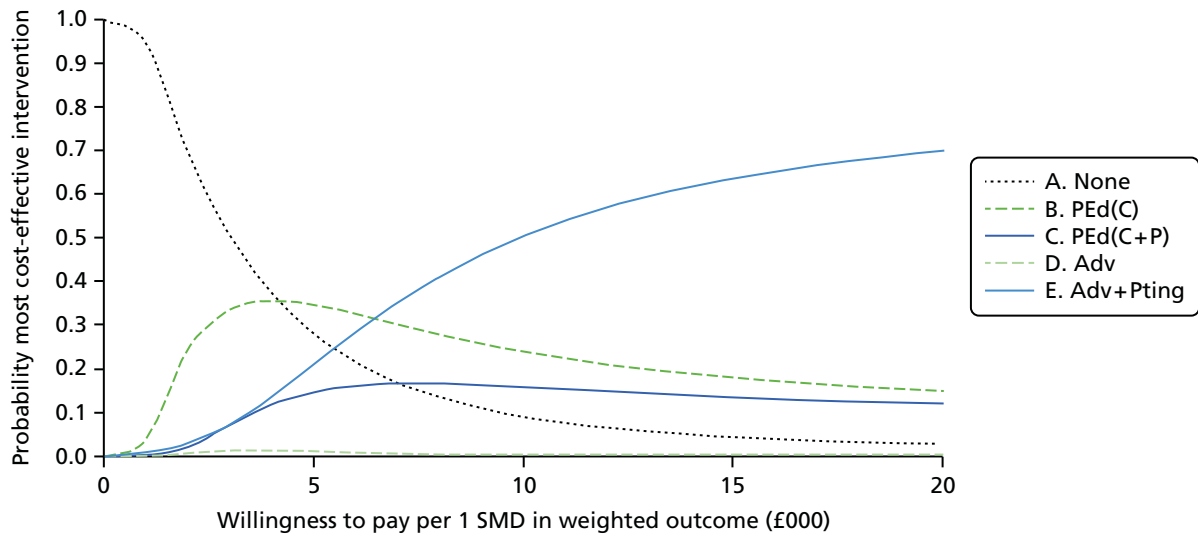


**FIGURE 18** Cost-effectiveness acceptability curve,  $p_{MH} = 0.25$ . The probability that each intervention is most cost-effective for a given willingness to pay per weighted outcome relative to A: none, where the proportion weight to SMD mental health. Mental health outcomes is  $p_{MH} = 0.25$ , and the proportion weight to SMD behavioural outcomes is  $(1 - p_{MH}) = 0.75$ . Relative efficacies are taken from the NMA results using RCTs only, and not including CBCL-Total (RCTs only; see *Figure 14*), and so only interventions A–E can be compared. Adv, advocacy; PEd, psychoeducation; Pting, parenting skills training.

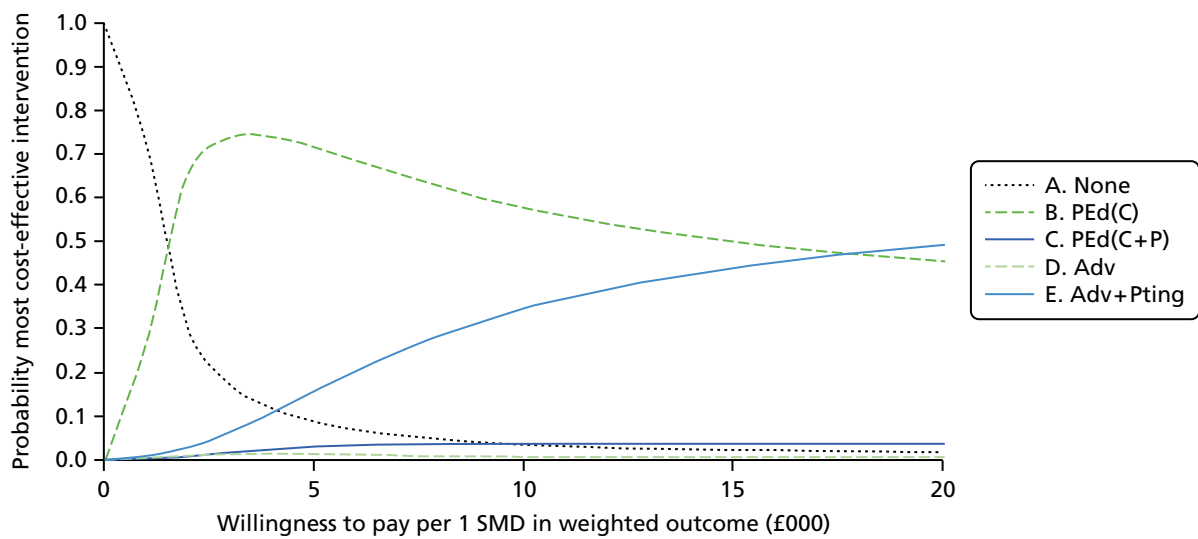
## Discussion: cost-effectiveness analysis

### Key findings

For behavioural outcomes, a psychoeducational intervention delivered to parent and child in parallel [type C: PEd(C + P)] is likely to be cost-effective among the interventions that we compared (ICER = 3722 per SMD). Health benefits are translated onto a monetary scale for direct comparison with intervention costs.



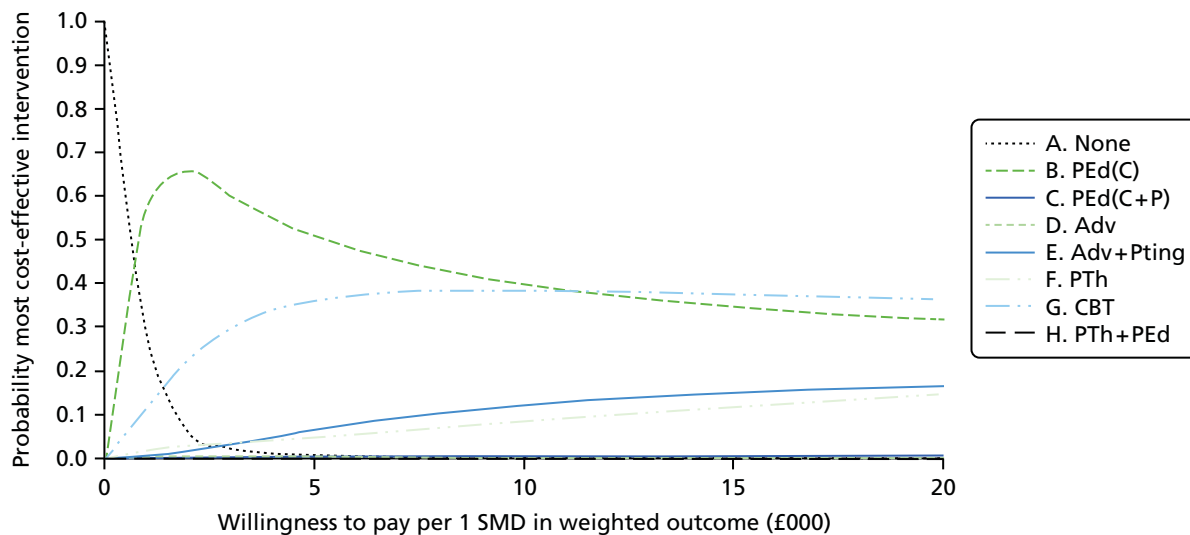
**FIGURE 19** Cost-effectiveness acceptability curve,  $p_{MH} = 0.5$ . The probability that each intervention is most cost-effective for a given willingness to pay per weighted outcome relative to A: none, where the proportion weight to SMD mental health. Mental health outcomes is  $p_{MH} = 0.5$ , and the proportion weight to SMD behavioural outcomes is  $(1 - p_{MH}) = 0.5$ . Relative efficacies are taken from the NMA results using RCTs only, and not including CBCL-Total (RCTs only; see Figure 10), and so only interventions A–E can be compared. Adv, advocacy; PEd, psychoeducation; Pting, parenting skills training.



**FIGURE 20** Cost-effectiveness acceptability curve,  $p_{MH} = 0.75$ . The probability that each intervention is most cost-effective for a given willingness to pay per weighted outcome relative to A: none, where the proportion weight to SMD mental health. Mental health outcomes is  $p_{MH} = 0.75$ , and the proportion weight to SMD behavioural outcomes is  $(1 - p_{MH}) = 0.25$ . Relative efficacies are taken from the NMA results using RCTs only, and not including CBCL-Total (RCTs only; see Figure 10), and so only interventions A–E can be compared. Adv, advocacy; PEd, psychoeducation; Pting, parenting skills training.

If willingness to pay per SMD in behavioural outcome is greater than approximately £8000, then advocacy plus parenting skills training (E: Adv + Pting), also delivered to parent and child, is likely to be cost-effective (among the interventions that we compared).

For mental health outcomes, it is very likely that, among the interventions that we compared, a psychoeducational intervention delivered to the child [B: PEd (C)] is cost-effective. If willingness to pay per SMD in mental health outcomes is high, then CBT (delivered to Parent, Child and Dyad) may be cost-effective.



**FIGURE 21** Cost-effectiveness acceptability curve,  $p_{MH} = 1$ . The probability that each intervention is most cost-effective for a given willingness to pay per weighted outcome relative to A: none, where the proportion weight to SMD mental health. Mental health outcomes is  $p_{MH} = 1.0$ , and the proportion weight to SMD behavioural outcomes is  $(1-p_{MH}) = 0$ . Relative efficacies are taken from the NMA results using RCTs only, and not including CBCL-Total (RCTs only; see *Figure 10*), and so only interventions A–H can be compared. Adv, advocacy; PEd, psychoeducation; PTh, psychotherapy; Pting, parenting skills training.

## Assumptions and limitations

Costs were estimated based on the reported description of the interventions in the study publications. We found these to be heterogeneous across studies evaluating similar interventions, even when reported by the same study authors. This heterogeneity reflects the complex nature of these interventions. Where possible, we endeavoured to reflect uncertainty in the costs; however, this was not always possible given the information reported. It is therefore likely that we have not fully represented the uncertainty. An important judgement that we had to make in the intervention costings was the additional cost that is incurred as a result of the intervention itself, and what costs would be incurred as part of standard care. For example, in the advocacy interventions, service users were given the opportunity to access therapy if deemed appropriate during the telephone sessions, but we assumed that this represented standard care, and costed only the scheduled contact times for the advocacy. Some of the studies provided information on the training required per therapist. Because this one-off training cost would need to be incurred only once, we did not include these costs; however, it should be noted that in rolling out these interventions there may be some start-up training costs, as well as ongoing supervision costs. Similarly, we do not cost for a venue in which the intervention took place, although we assume that such space would be available; many of the interventions took place in existing shelters, or in the participants' homes.

We determined intervention effectiveness from the NMA (see *Figure 11*), and so make all of the assumptions already outlined in *Box 1*. In addition, we assumed that the impacts of the interventions on mental health and behavioural outcomes are not correlated. We assessed this assumption by allowing for correlated intervention effects, but found no evidence to support a correlation.

Our outcomes are estimated as SMDs, which are difficult to conceptualise, and it is difficult to judge whether they represent important clinical differences. Cohen<sup>190</sup> has suggested interpreting a SMD = 0.2 as a small difference, SMD = 0.5 as a medium difference, and SMD = 0.8 as a large difference, in the social sciences. Attributing a monetary 'willingness to pay' value for a unit change in SMD, necessary to inform policy or commissioning is even more challenging. Instead, we were able to compare the relative cost-effectiveness of the different types of intervention. Furthermore, we were able to consider a cost-effectiveness analysis only by intervention type; however, this needs to be interpreted with consideration for the participants to

whom interventions were delivered in the included studies, and also the settings in which interventions were delivered.

## Chapter summary

In this chapter we explored the relative effectiveness and cost-effectiveness of interventions by intervention type and by the recipient of the intervention. These analyses are intended to be 'hypothesis-generating' to inform the future design of research studies, rather than robust estimates of effectiveness and cost-effectiveness. Our findings suggested that interventions aimed at the child may be effective for improving child mental health outcomes, whereas interventions delivered to both parent and child in parallel may be effective for improving child behaviour outcomes.

For behavioural outcomes, advocacy plus parenting skills training was potentially most clinically effective, and also cost-effective if commissioners were prepared to pay more than approximately £8000 per SMD change in outcome. If willingness to pay is not above this threshold, then a psychoeducational intervention delivered to the parent and child (in parallel) is more likely to be cost-effective. For mental health outcomes, a psychoeducational intervention delivered to the child was found to have the highest chance of being clinically effective and cost-effective, although there was a large degree of uncertainty in this.

In deriving these findings we made a wide range of assumptions in order to combine the evidence from the studies identified in this review in a NMA and cost-effectiveness analysis, and these assumptions, along with the particular populations and settings of the trials, must be kept in mind when interpreting these results and our tentative conclusions concerning which interventions to pursue in future research studies.

# Chapter 6 Extrapolating childhood outcomes into adult outcomes: analysis of longitudinal studies

## Aim

The aim of this chapter is to summarise evidence from longitudinal studies linking mental health and behavioural measures in childhood with adult outcomes, in particular perpetrating or becoming a victim of DVA, criminality, substance abuse and mental health problems.

## Introduction

The RCT evidence identified in our systematic review provides only short-term relative effects. However, as detailed in *Chapter 3*, the maximum follow-up period of the trials identified in our review was 2 years. Although short-term effects (if observed) are undoubtedly positive, a key question is whether or not such effects persist into the medium or even long term, and whether or not they are associated with adult outcomes. In particular, we were interested in the potential impact on the child becoming a victim or perpetrator of domestic violence in adulthood, and engaging in antisocial behaviours, such as criminality and substance abuse, and developing other mental health problems in adulthood. The gold-standard approach to assess this would be to follow up children enrolled in trials into adulthood; however, this would be very costly and liable to substantial attrition. The modelling presented in *Chapter 5* provides estimates of the relative effects of the different types of interventions on short-term behavioural and mental health outcomes. A first step towards learning how these might affect outcomes in the longer term is to understand the longitudinal relationships between the measures reported in the trials and adult functioning. In this chapter, we review evidence from some of the longitudinal studies that report information on using child functioning to predict adult functioning.

## Methods

We performed a search of several databases including Science Citation Index Expanded and Social Sciences Index Expanded databases (via Web of Science) and MEDLINE (via PubMed) for longitudinal or cohort studies. We searched for studies that measured internalising or externalising symptoms as potential predictors of longer term outcomes or that measured childhood predictors of the adult states in which we were interested. The searches were undertaken in 2014. It is important to note that this was not a systematic review and was not intended to be such. Rather, we prioritised the identification of studies that contained the predictors and outcomes of interest on relevant populations with long follow-up. It is, therefore, possible that we have missed some studies.

To be included in our analysis, a study needed to report at least one childhood measure of mental health and/or behavioural adjustment as a predictor of at least one adult outcome of interest (victimisation or perpetration of domestic violence, criminality, substance abuse, mental health). Furthermore, to allow us to estimate the relationship between a predictor and the outcome, the study needed to report regression coefficients with SEs.

Our initial intention was to map the outcomes measured in trials onto the baseline adjustment scores measured in longitudinal studies as predictors of long-term outcomes. However, we found no overlap in the measures used as outcomes in the primary trials that we reviewed in *Chapter 5* and measures at baseline in the longitudinal studies. Instead, we identified predictors from the longitudinal studies that



could be broadly categorised as behavioural or mental health to match the outcomes trials included in our review.

We first describe the quantitative evidence extracted from longitudinal studies and then take each long-term outcome of interest in turn and obtain an estimate of the prediction from short- to long-term outcomes. Where possible, this was achieved by pooling the results from multiple studies reporting predictions to a specific long-term outcome.

## Results: predictors of long-term outcomes reported in the longitudinal studies

We identified 17 potentially useful cohort studies. A summary of each study and the decision to include or exclude it in our analysis is reported in *Appendix 21*, together with a summary of the useable data available from each study. Overall, 10 of the 17 studies (some of which reported more than one outcome) reported outcomes of interest (mental health 1, antisocial behaviour 1, criminality 5 including one systematic review, substance use 3, victim of DVA 2, perpetrator of DVA 2).

The estimated regression coefficients linking childhood behavioural and mental health scores to adult outcomes for each study are described below for each outcome and summarised in *Table 21*. Our estimated prediction for each outcome, given all the studies, is described and summarised in *Table 22*.

**TABLE 21** Estimated standardised regression coefficients predicting adult outcomes from childhood behavioural or mental health outcomes, based on the longitudinal studies described in *Appendix 21*

Adult outcome	Predictor	
	Childhood behaviour (externalising) score	Childhood mental health (internalising) score
Domestic violence victimisation	Fergusson <i>et al.</i> : <sup>191</sup> $\beta = 0.13$ ; SE = 0.026; 95% CI 0.08 to 0.18	
	Lohman <i>et al.</i> : <sup>192</sup> $\beta = 0.082$ ; SE = 0.064; 95% CI -0.05 to 0.21	Lohman <i>et al.</i> : <sup>192</sup> $\beta = 0.099$ ; SE = 0.034; 95% CI 0.03 to 0.17
	Pooled (fixed-effect model): $\beta = 0.12$ ; SE = 0.024; 95% CI 0.08 to 0.17	
Perpetration of domestic violence	Fergusson <i>et al.</i> : <sup>191</sup> $\beta = 0.09$ ; SE = 0.030; 95% CI 0.03 to 0.15	Lohman <i>et al.</i> : <sup>192</sup> $\beta = 0.114$ ; SE = 0.039; 95% CI 0.04 to 0.19
	Lohman <i>et al.</i> : <sup>192</sup> $\beta = 0.094$ ; SE = 0.073; 95% CI -0.05 to 0.24	
	Pooled (fixed-effect model): $\beta = 0.09$ ; SE = 0.027; 95% CI 0.036 to 0.15	
Criminality	Leschied <i>et al.</i> : <sup>193</sup>	Leschied <i>et al.</i> : <sup>193</sup>
	<ul style="list-style-type: none"> <li>• Early childhood: <math>\beta = 0.20</math>; 95% CI 0.10 to 0.30; <math>\tau = 1.1</math></li> <li>• Mid-childhood: <math>\beta = 0.31</math>; 95% CI 0.03 to 0.59; <math>\tau = 7.0</math></li> <li>• Adolescence: <math>\beta = 0.52</math>; 95% CI 0.14 to 0.90; <math>\tau = 13.4</math></li> <li>• Pooled across age groups: <math>\beta = 0.39</math>; 95% CI 0.16 to 0.62; <math>\tau = 18.8</math></li> </ul>	<ul style="list-style-type: none"> <li>• Early childhood: no data</li> <li>• Mid-childhood: <math>\beta = 0.10</math>; 95% CI -0.24 to 0.43; <math>\tau = 4.6</math></li> <li>• adolescence: <math>\beta = 0.29</math>; 95% CI -0.11 to 0.69; <math>\tau = 7.5</math></li> <li>• Pooled across age groups: <math>\beta = 0.22</math>; 95% CI 0.01 to 0.43; <math>\tau = 8.8</math></li> </ul>
	Capaldi and Stoolmiller: <sup>194</sup> Log-rate ratio 0.94; 95% CI 0.76 to 1.12	Capaldi and Stoolmiller: <sup>194</sup> Log-rate ratio -0.03; 95% CI -0.28 to 0.22

**TABLE 21** Estimated standardised regression coefficients predicting adult outcomes from childhood behavioural or mental health outcomes, based on the longitudinal studies described in *Appendix 21 (continued)*

Adult outcome	Predictor	
	Childhood behaviour (externalising) score	Childhood mental health (internalising) score
Illicit drug-use/abuse	Capaldi and Stoolmiller <sup>194</sup>	Capaldi and Stoolmiller <sup>194</sup>
	<ul style="list-style-type: none"> <li>Marijuana mean difference 0.32; 95% CI -0.09 to 0.73</li> <li>Other drugs log OR 0.74; 95% CI 0.19 to 1.29</li> </ul>	<ul style="list-style-type: none"> <li>Marijuana mean difference 0.04; 95% CI -0.37 to 0.45</li> <li>Other drugs log OR: 0.10; 95% CI -0.45 to 0.67</li> </ul>
	Fergusson <i>et al.</i> <sup>191</sup>	
	Use: log OR 0.06; 95% CI 0.04 to 0.08	
	Abuse: log OR 0.11; 95% CI 0.09 to 0.13	
Alcohol use	Capaldi and Stoolmiller: <sup>194</sup> alcohol use mean difference 0.42; 95% CI 0.20 to 0.64	Capaldi and Stoolmiller: <sup>194</sup> alcohol mean difference -0.04; 95% CI -0.26 to 0.18
	Maggs <i>et al.</i> <sup>195</sup>	Maggs <i>et al.</i> <sup>195</sup>
	<ul style="list-style-type: none"> <li>Males weekly alcohol at 23 years <ul style="list-style-type: none"> <li>Early-childhood <math>\beta = 0.01</math>; 95% CI -0.03 to 0.05</li> <li>Mid-childhood <math>\beta = 0.04</math>; 95% CI 0.01 to 0.07</li> </ul> </li> <li>Females weekly alcohol at 23 years <ul style="list-style-type: none"> <li>Early childhood <math>\beta = 0.01</math>; 95% CI -0.02 to 0.04</li> <li>Mid-childhood <math>\beta = 0.00</math>; 95% CI 0.00 to 0.00</li> </ul> </li> <li>Males weekly alcohol at 33 years <ul style="list-style-type: none"> <li>Early childhood <math>\beta = 0.02</math>; 95% CI -0.01 to 0.05</li> <li>Mid-childhood <math>\beta = 0.01</math>; 95% CI -0.01 to 0.03</li> </ul> </li> <li>Females weekly alcohol at 33 years <ul style="list-style-type: none"> <li>Early childhood <math>\beta = 0.03</math>; 95% CI -0.00 to 0.06</li> <li>Mid-childhood <math>\beta = -0.01</math>; 95% CI -0.04 to 0.02</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Males weekly alcohol at 23 years <ul style="list-style-type: none"> <li>Early-childhood <math>\beta = -0.04</math>; 95% CI -0.06 to 0.02</li> <li>Mid-childhood <math>\beta = -0.03</math>; 95% CI -0.06 to 0.00</li> </ul> </li> <li>Females weekly alcohol at 23 years <ul style="list-style-type: none"> <li>Early childhood <math>\beta = -0.03</math>; 95% CI -0.06 to 0.00</li> <li>Mid-childhood <math>\beta = 0.00</math>; 95% CI 0.00 to 0.00</li> </ul> </li> <li>Males weekly alcohol at 33 years <ul style="list-style-type: none"> <li>Early childhood <math>\beta = -0.02</math>; 95% CI -0.04 to 0.00</li> <li>Mid-childhood <math>\beta = -0.04</math>; 95% CI -0.07 to 0.01</li> </ul> </li> <li>Females weekly alcohol at 33 years <ul style="list-style-type: none"> <li>Early childhood <math>\beta = -0.02</math>; 95% CI -0.05 to 0.01</li> <li>Mid-childhood <math>\beta = -0.04</math>; 95% CI -0.07 to 0.01</li> </ul> </li> </ul>
Depressive symptoms	Capaldi and Stoolmiller: <sup>194</sup>	Capaldi and Stoolmiller: <sup>194</sup>
	<ul style="list-style-type: none"> <li>Square-root scale: <math>\beta = 0.02</math>; 95% CI -0.02 to 0.06</li> </ul>	<ul style="list-style-type: none"> <li>Square-root scale <ul style="list-style-type: none"> <li>Depression (age 11–12 years): <math>\beta = 0.11</math>; 95% CI 0.07 to 0.15</li> <li>Depressive symptoms (age 11–12 years) squared: <math>\beta = -0.03</math>; 95% CI -0.05 to 0.01</li> </ul> </li> </ul>

$\beta$ , estimated regression coefficient; CI, confidence interval;  $\tau$ , between-study SD.

### Victimisation and perpetration of domestic violence

We identified one study by Lohman *et al.*<sup>192</sup> that reported useable data on the relationship between childhood mental health problems and intimate-partner psychological violence (including verbal assaults, criticism of personal characteristics and anger upon disagreement) in adulthood. This study reported results

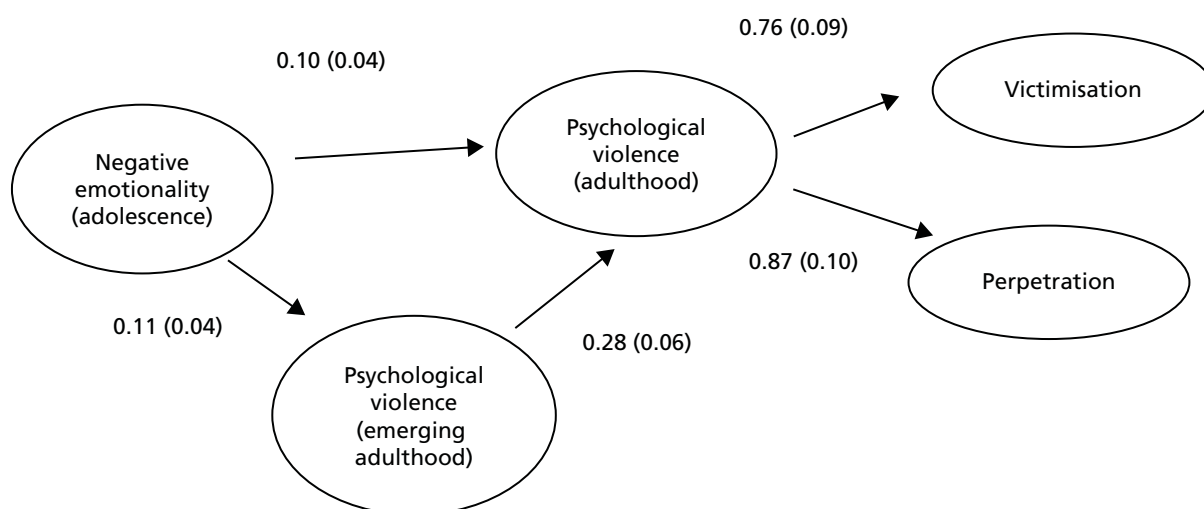
**TABLE 22** Summary estimate of standardised regression coefficients predicting adult outcomes from childhood behavioural or mental health outcomes for use in predictions from short-term outcomes

Adult outcome	Predictor	
	Childhood behaviour (externalising) score	Childhood mental health (internalising) score
Domestic violence victimisation standardised score (mid to late twenties)	$\beta = 0.12$ ; SE = 0.024; 95% CI 0.08 to 0.17	$\beta = 0.099$ ; SE = 0.034; 95% CI 0.03 to 0.17
Perpetration of domestic violence standardised score (mid to late twenties)	$\beta = 0.09$ ; SE = 0.027; 95% CI 0.036 to 0.15	$\beta = 0.114$ ; SE = 0.039; 95% CI 0.04 to 0.19
Criminality standardised score, predictive distribution (all age groups)	$\beta = 0.39$ ; 95% CI -36 to 37	$\beta = 0.22$ ; 95% CI -17 to 17
Illicit drug use	Log OR 0.06; 95% CI 0.04 to 0.08	No evidence of a predictive relationship
Illicit drug abuse	Log OR 0.11; 95% CI 0.09 to 0.13	No evidence of a predictive relationship
Alcohol consumption (weekly units)	$\beta = 0.01$ ; 95% CI -0.04 to 0.06	$\beta = -0.035$ ; 95% CI -0.07 to 0.00
Depressive symptoms (square-root of standardised scale)	$\beta = 0.02$ ; 95% CI -0.02 to 0.06	<ul style="list-style-type: none"> <li>• <math>\beta_1 \times \text{score} + \beta_2 \times \text{score}^2</math></li> <li>• <math>\beta_1 = 0.11</math>; 95% CI 0.07 to 0.15</li> <li>• <math>\beta_2 = -0.03</math>; 95% CI -0.05 to 0.01</li> </ul>

$\beta$ , estimated regression coefficient; CI, confidence interval.

from a structural equation model, which included two measures of adolescent mental health, namely negative emotionality and low self-esteem. Of these, only negative emotionality was found to be statistically significant in their combined model, and we thus used the parameter estimates for negative emotionality as a measure of adolescent mental health. There were two paths from negative emotionality in adolescence to psychological violence during adulthood, either directly or via psychological violence during emerging adulthood, as illustrated in *Figure 22*.

To obtain the overall association between negative emotionality in adolescence and victimisation or perpetration of psychological violence in adulthood, we multiplied estimates along paths and added estimates between paths.<sup>196</sup> However, in order to obtain the SE for the overall association, we required



**FIGURE 22** Structural equation model estimates linking negative emotionality in adolescence to psychological violence during adulthood, as reported in Lohman *et al.*<sup>192</sup> Parameter estimates are given with SEs in parentheses.

detailed estimates of the correlations between the parameter estimates. In the absence of these, we assumed independence between the parameter estimates reported in *Figure 22*. We acknowledge that this assumption is unlikely to hold, although in the (likely) case that the parameter estimates are negatively correlated, this would produce an overestimate of the SE and can, therefore, be viewed as conservative.

Using standard formulae for the variance of sums of products of independent random variables, we estimated the overall regression coefficient for negative emotionality to be 0.099 [SE 0.034, 95% confidence interval (CI) 0.03 to 0.17] for victimisation, and 0.114 (SE 0.039, 95% CI 0.04 to 0.19) for perpetration of intimate partner psychological violence, respectively. All reported coefficients were standardised, and so these can be interpreted as the expected SD increase in victimisation (or perpetration) score in adulthood for a unit SD increase in negative emotionality in adolescence. As there is only a single study reporting this relationship, these estimates are also our summary estimates for use in predicting adult outcomes (see *Table 22*).

Two studies<sup>191,192</sup> reported useable data on the relationship between childhood behavioural problems and the victimisation and perpetration of domestic violence. Fergusson *et al.*<sup>191</sup> estimated unstandardised regression coefficients of 0.05 (SE 0.01) and 0.03 (SE 0.01) for the association between conduct problems (age 7–13 years) and victimisation and perpetration, respectively, of intimate partner violence at 25 years of age. The measures of behaviour from our primary trial outcomes were standardised and, therefore, we required the standardised coefficients, which were 0.13 and 0.09, respectively, for victimisation and perpetration of domestic violence. SEs were not given for the standardised coefficients; however, we derived these using the relationship:

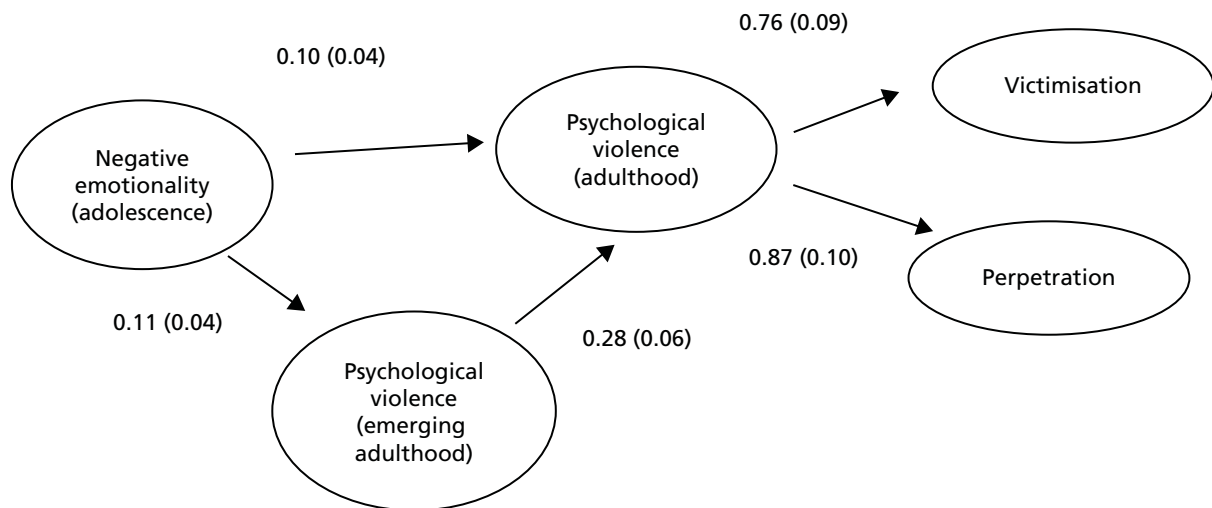
$$se(\beta) = \frac{\beta}{B} se(B), \quad (3)$$

where  $B$  is the unstandardised coefficient and  $\beta$  is the standardised coefficient. This gave standardised regression coefficients of 0.13 (SE 0.026, 95% CI 0.08 to 0.18) for victimisation and 0.09 (SE 0.030, 95% CI 0.03 to 0.15) for perpetration of intimate partner violence. These can be interpreted as the expected SDs increase in victimisation (or perpetration) score at 25 years of age for a unit SD increase in conduct problems at 7–13 years of age.

Lohman *et al.*<sup>192</sup> provided estimates from a structural equation model, which included antisocial behaviour in adolescence as a predictor of intimate partner psychological violence in early and later adulthood. Although the parameter estimates for antisocial behaviour in adolescence were not statistically significant, parameter estimates were reported and are given here. The path diagram is given in *Figure 23*.

As for negative emotionality, in the absence of reported correlations between parameter estimates, we were obliged to assume independence between the parameter estimates reported in *Figure 23*. Using standard formulae for the variance of sums of products of independent random variables, we obtained overall regression coefficients for antisocial behaviour of 0.082 (SE 0.064, 95% CI –0.05 to 0.21) for victimisation, and of 0.094 (SE 0.073, 95% CI –0.05 to 0.24) for perpetration of intimate partner psychological violence. All reported coefficients are standardised and, therefore, these can be interpreted as the expected SD increase in victimisation (or perpetration) score in adulthood for a unit SD increase in antisocial behaviour in adolescence.

Pooling the results from Fergusson *et al.*<sup>191</sup> and Lohman *et al.*,<sup>192</sup> we obtained an estimate of the standardised regression coefficient for childhood behavioural score as a predictor for victimisation of domestic violence of  $\beta = 0.12$  (95% CI 0.08 to 0.17), and as a predictor for perpetration of domestic violence of  $\beta = 0.09$  (95% CI 0.036 to 0.15). As we were pooling across only two studies, we were obliged to use a fixed-effects model. However, the results from the two studies were similar and model fit



**FIGURE 23** Structural equation model estimates linking antisocial behaviour in adolescence to psychological violence during adulthood, as reported in Lohman *et al.*<sup>192</sup> Parameter estimates are given with SEs in parentheses.

was good for both studies, suggesting that the fixed-effects model was appropriate here. Note that Fergusson *et al.*<sup>191</sup> used a predictor in mid-childhood (7–13 years), whereas Lohman *et al.*<sup>192</sup> used a predictor in adolescence. However, the estimates were consistent across these two age groups. We used these pooled estimates as our summary estimates for prediction (see *Table 22*).

### Criminality

We identified a meta-analysis by Leschied *et al.*<sup>193</sup> that provided estimates of the effect size on adult criminality for internalising and externalising concerns in (1) early childhood; (2) mid-childhood; and (3) adolescence. The results are given in *Table 21*, including those from pooling across age groups. It can be seen that all associations with adult criminality became stronger as the age at which the predictor variable was measured increased, with the strongest relationship using adolescent measures as predictors. Internalising symptoms showed some association with adult criminality; however, these relationships were not statistically significant (except when pooling across all age groups). Externalising problems were significantly related to adult criminality for all age groups. Assuming that each study included in the meta-analysis carried equal weight, we were able to estimate the between-study SD in effect size,  $\tau$ , using the reported *Q*-statistic, as described in *Appendix 21*. As can be seen in *Appendix 10*,  $\tau$  was substantial for all predictors and outcomes.

All other studies that we identified were already included in the meta-analysis,<sup>193</sup> with the exception of Capaldi and Stoolmiller's,<sup>194</sup> which provided estimates from a log-linear model (with an overdispersion parameter) for grade 6 (age 11–12 years) measures. These estimates are given in *Table 21*. It is not possible to combine the log-linear parameter estimates with the effect sizes presented by Leschied *et al.*;<sup>193</sup> however, the associations found were consistent with those from Leschied *et al.*,<sup>193</sup> showing a strong relationship between mid-childhood externalising concerns and arrests (aged 17–19 years), and no evidence of a relationship between internalising concerns and arrests (aged 17–19 years). In extrapolations from short-term to long-term outcomes, we used the estimates from Leschied *et al.*,<sup>193</sup> as these represented a meta-analysis of the majority of the studies which reported these associations and included studies with longer follow-up than that of Capaldi and Stoolmiller<sup>194</sup> (reported arrests aged 17–19 years).

Because we did not have short-term outcomes broken down by age, we used the estimates from Leschied *et al.*<sup>193</sup> pooled across age groups, but summarised these using predictive distribution that reflected the uncertainty introduced by the high levels of heterogeneity (see *Table 21*). The resulting predictive intervals are given in *Table 22* but, owing to the extreme levels of heterogeneity, these estimates were too uncertain to be used as a basis for any predictions of adult criminality.

### Illicit drug use/abuse

Two studies<sup>191,194</sup> explored the impact of childhood internalising and externalising problems on adult illicit drug use. Capaldi and Stoolmiller<sup>194</sup> reported the association of conduct (externalising) problems and depressive (internalising) symptoms at grade 6 (age 11–12 years) with marijuana (unstandardised mean differences) and other illicit drug use (log ORs) at ages 17–19 years. They found no effect of childhood depressive symptoms on adult illicit drug use, but found that childhood conduct problems were associated with higher marijuana use, and also increased odds of using other illicit drugs (see *Table 21*).

Fergusson *et al.*<sup>191</sup> reported log ORs for the association between conduct problems at 7–13 years of age and (1) illicit drug use and (2) illicit drug abuse/dependence at 16–25 years of age. Both studies showed that there was a positive association between externalising problems in mid-childhood and illicit drug use in early adulthood (see *Table 21*). This association was also seen when predicting illicit drug dependence/abuse.

As each of the outcomes in these two studies was defined differently and measured on different scales, no attempt was made to pool these results. Furthermore, the predictor variable was defined differently. Capaldi and Stoolmiller<sup>194</sup> used a diagnostic binary indicator of conduct problems and depressive symptoms to predict outcomes, whereas Fergusson *et al.*<sup>191</sup> presented results per unit increase in a standardised score for conduct problems. We had derived short-term outcomes on a standardised score and, therefore, we could use only the results from Fergusson *et al.*<sup>191</sup> for modelling long-term outcomes (see *Table 21*). Fergusson *et al.*<sup>191</sup> did not report results for internalising problems as a predictor; however, Capaldi and Stoolmiller<sup>194</sup> found no relationship between internalising problems and illicit drug use/abuse in early adulthood.

### Alcohol use

Two studies<sup>194,195</sup> reported on the association between internalising and externalising problems and adult alcohol use. Capaldi and Stoolmiller<sup>194</sup> reported on the association between conduct (externalising) problems and depressive (internalising) symptoms in boys at grade 6 (age 11–12 years) and alcohol use (unstandardised mean differences) at 17–19 years of age. They found no effect of childhood depressive symptoms on adult alcohol use, but childhood conduct problems were found to be associated with a higher alcohol use score (see *Table 21*).

Maggs *et al.*<sup>195</sup> reported internalising and externalising behaviour in (1) early childhood; (2) mid-childhood; and (3) adolescence as predictors of the quantity of alcohol consumed per week at 23 and 33 years of age. Results were given separately for females and males. Unstandardised coefficients and SEs were given together with standardised coefficients. We used equation (1) to obtain the SE for the standardised coefficients, which are reported in *Table 21*. In general, measures of internalising problems in early and mid-childhood, for both females and males, led to a reduction in alcohol use at 23 and 33 years of age. The four-item measure of internalising symptoms was created for this study without external validation. There was some evidence that externalising problems in mid-childhood in males was linked with an increase in alcohol consumption at 23 years of age, but there were no other clear associations with childhood externalising problems and alcohol use in later life.

As the outcomes in these two studies were defined differently, at different ages and measured on different scales, no attempt was made to pool these results. Capaldi and Stoolmiller<sup>194</sup> used a diagnostic binary indicator of conduct problems and depressive symptoms to predict outcomes, whereas Maggs *et al.*<sup>195</sup> present results per unit increase in standardised scores of the predictors. Given that the short-term outcomes presented in *Chapter 5* were measured using a standardised score, we were able to use only the results from Maggs *et al.*<sup>195</sup> for long-term predictions (see *Table 22*). Maggs *et al.*<sup>195</sup> break down results by age for the predictor and outcome, and also for sex. We used results at the longest follow-up point (33 years of age), where results were similar across sex and age for the predictor. We took the lowest confidence limit and the highest confidence limit across sex and age for the predictor to fully reflect uncertainty in the predicted outcome, and assumed a normal distribution for the predicted regression coefficient (see *Table 22*).

### Depression

One study<sup>194</sup> fitted a model to predict depressive symptoms at 17–19 years of age from conduct problems and depressive symptoms at grade 6 (11–12 years of age). A quadratic model was fitted using a square-root transformation. The model, with parameter estimates, is given in *Table 22*. Depressive symptoms at 17–19 years of age increased with conduct problems and depressive symptoms at 11–12 years of age; however, the relationship with depressive symptoms at 11–12 years of age was attenuated at higher scores. As there was only a single study reporting this relationship, these estimates served as our summary estimates for use in prediction (see *Table 22*).

## Discussion

### Key findings

Using the identified longitudinal studies summarised above, we were able to estimate regression coefficients linking child internalising symptoms and externalising problems with outcomes in adulthood, namely perpetration and victimisation of domestic violence, criminality, substance abuse and mental health problems. However, the estimates for criminality in adulthood were too uncertain to be useful for prediction.

Childhood internalising symptoms were associated with a higher risk of perpetration and victimisation of domestic violence, with lower alcohol use and with higher depressive symptom scores in adulthood. The link with lower alcohol use derives from a study with an unvalidated measure of internalising symptoms with only four items,<sup>195</sup> and so this perhaps surprising result should be interpreted with caution.

Childhood externalising problems were associated with higher perpetration and victimisation of domestic violence scores and increased odds of illicit drug use as well as of medical drug abuse.

### Assumptions and limitations

We have made a number of assumptions in our analysis of the longitudinal studies, which are summarised in *Box 2*.

We did not conduct a systematic review of longitudinal studies to inform the long-term predictions, because searching in this way is very resource-intensive, and we would not expect to identify many more studies than were identified through the less comprehensive searches that we conducted. However, we may have missed relevant studies that could inform our models. We therefore assumed that the longitudinal studies that we identified were representative of all those that we could have identified in a systematic review. Given that many of the studies drew on data from cohorts assembled in the USA and New Zealand (with the exception of two UK studies), we also assumed that the populations and settings included in the longitudinal studies generalised to a UK setting.

#### BOX 2 Assumptions in estimation of predictors of long-term outcomes

- We did not conduct a systematic review of longitudinal studies to inform the long-term predictions and so may have missed relevant studies.
- The longitudinal studies that we identified were representative of all those that we could have identified in a systematic review.
- The regression estimates from the longitudinal studies generalise to the UK setting.
- The longitudinal studies that we identified are representative of all such studies.
- The age ranges included as predictors in the longitudinal studies are similar to those included in the primary trials systematically reviewed in *Chapter 2*.
- Adult outcomes need to be interpreted at the age at which they were measured in the longitudinal studies.

In *Chapter 3* we highlighted the heterogeneity in the age ranges of the children included in the primary trials. The age ranges included as predictors in the longitudinal studies were also heterogeneous, and, furthermore, the age at which adult outcomes was measured varied between studies. The predictions presented in this chapter must therefore be interpreted together with the ages from which they were estimated. Sex is expected to be an important factor in predicting long-term outcomes; however, results were not broken down by sex in most of the longitudinal studies, although some were conducted exclusively in males.<sup>197,198</sup>

An anomalous finding in the longitudinal study review was the reduced risk of alcohol abuse in children with internalising behaviour reported by Maggs *et al.*<sup>195</sup> This is in line with several other studies that indicate that particular anxiety disorders (e.g. separation anxiety and social anxiety) may be negatively associated with alcohol outcomes both cross-sectionally and over time,<sup>199,200</sup> although the picture is mixed, with other studies indicating a positive prospective association.<sup>201</sup>

Given that the measure of internalising behaviour in the Maggs *et al.*<sup>195</sup> study was a newly created and unvalidated four-item scale, this finding is uncertain, although this uncertainty is also reflected in the other associations with childhood internalising behaviour.

The longitudinal studies all reported results adjusting for other predictors, assuming additivity, and interaction effects were not usually explored or reported.

It was not considered possible to extrapolate short-term effects of delivering an intervention in childhood for children exposed to DVA to subsequent functioning in adulthood (as a result of interventions), owing to the very large number of assumptions that would be required in addition those already detailed in *Boxes 1* and *2*. We would have had to assume that the effect of interventions on short-term outcomes would be maintained beyond the follow-up period reported in the primary trials. We would also have had to assume that children whose short-term outcomes had been improved as the result of an intervention (as in the primary trials) would translate into long-term differences in the same way as children who differed at baseline for any reason (as in the cohort studies). We would have had to assume that the long-term projections in the populations included in the longitudinal studies would be similar to those for the populations included in the primary trials. It should be kept in mind that the longitudinal samples were not limited only to children who had been exposed to DVA, whereas this was the case for the trials. The primary trials and the longitudinal studies used different outcome and baseline measures for internalising and externalising behaviours, respectively. We would, therefore, have had to assume that the internalising and externalising outcomes measured in the trials had a similar effect over time to those measured in the longitudinal studies. As all outcomes and predictors included were measured on a standardised scale, this assumption is not unreasonable. However, the interpretation of results is complicated by using a standardised scale and does not readily translate into clinically important differences.

## Chapter summary

In summary, we found that childhood internalising symptoms were associated with higher DVA perpetration and victimisation, and with higher depressive symptom scores in adulthood, although there is a large degree of uncertainty in these effect estimates. There was also evidence that childhood internalising symptoms were associated with lower alcohol use, but this surprising finding derived from a study with an unvalidated measure of internalising symptoms. Childhood externalising problems were associated with higher DVA perpetration and victimisation and increased odds of illicit drug use and drug abuse. We have made some strong assumptions in this chapter, and all results must be interpreted with caution.





# Chapter 7 Understanding findings in the UK context: scoping review of current UK provision of interventions for children exposed to domestic violence and abuse

## Aim

One of the aims of this study was to identify interventions that merit further investigation in the UK context. The previous chapters have drawn on international evidence to determine whether or not there is sufficient evidence to identify interventions that are clinically effective and cost-effective and, importantly, acceptable to parents and children as well as to service providers and commissioners. However, in order to make recommendations about promising approaches, it is necessary to view these findings from a UK perspective. This chapter describes the types of targeted interventions that are delivered to children in the UK, with a view to contextualising the findings presented in the preceding chapters.

## Method

In order to identify the types of targeted interventions that are delivered in the UK, we undertook a review of grey literature. Grey literature is broadly defined to include everything, except peer-reviewed books and journals accepted by MEDLINE, that has not been published in a conventional way. Grey literature can be difficult to identify and obtain through the usual routes.<sup>202</sup>

## Search strategy

We used a number of methods to identify relevant material for this review. First, an effectiveness review of interventions for children who are exposed to DVA prepared for NICE<sup>43</sup> was used to locate relevant reference lists, keywords and websites. The authors of this review also provided us with nine documents for the current report. Second, we consulted the IMPROVE expert stakeholder group about potentially relevant documents; we twice distributed a request for the relevant documentation through the stakeholder group and via other contacts with experts in the field. Finally, we conducted a web-based grey literature search and contacted key organisations through their websites.

A list of websites and electronic databases that might include grey literature was created based on previous work<sup>43</sup> and advice from experts in the field (see *Appendix 22*). Each website was searched manually for relevant information for this review. Depending on how the website was designed, the researcher (NL) used key words within the site's database or search facility, hand searched relevant materials, or contacted sources directly to obtain potentially relevant documentation. Search terms included 'Domestic violence and abuse (DVA)' (domestic violence/abuse, spouse abuse, battered women, marital violence, marital abuse, intimate partner violence, intimate partner abuse, inter-parental violence, interparental abuse, parental violence, parental abuse), 'intervention' (intervention, treatment, counselling, service, support) and 'population type' (children, adolescents, young people). Potentially relevant documents were screened online and those found to be relevant were downloaded. Members of the IMPROVE stakeholder group and leads of children's and young people's services in DVA charities/organisations were e-mailed with a request for assistance in locating grey literature on interventions for children.

### Study selection

Documents were screened using the following inclusion criteria:

1. Does the document fall into one of three categories?
  - i. official publication (reports from government departments, charities and official bodies)
  - ii. dissertations and theses
  - iii. conference paper
2. Is the intervention targeted at children and young people (age group 0–18 years) who are experiencing or have experienced DVA, or the parents of exposed children and young people?
3. Does the intervention aim or in part aim to improve child health outcomes (e.g. behaviour as a measure of psychological health or mental health)?
4. Was the intervention delivered in 2004 or later?
5. Was the intervention delivered in the UK?
6. Is the document in English?

For the second criterion, interventions aimed at children, or children and their parents, were included. Interventions delivered to parents were only included if they had a child focus and if child outcomes were reported. Interventions targeted at parents without a related focus on child outcomes were excluded. DVA had to be a primary focus of the intervention or had to be equally represented alongside other problems (e.g. alcohol abuse, mental health or child maltreatment). Therefore, interventions targeted at a population with < 50% or an unclear proportion of participants experiencing or having experienced DVA were excluded. For this inclusion criterion, the parameters of the search were slightly broader than those used for the systematic review of trials as studies with mixed samples (i.e. for the purpose of the systematic review, studies reporting samples with multiple presenting problems were excluded if outcomes were not reported separately for the subgroup experiencing DVA). We also used a date limit for this search so as to reflect current or recent UK practice.

### Data extraction and quality assessment

Data on all obtained documents were organised in a table to maintain a record of inclusion decisions. All duplicates were removed. Information from all documents that met the eligibility criteria was extracted and entered into a Microsoft Access® (Microsoft Corporation, Redmond, WA, USA) database. Where there were multiple documents on the same intervention, data were extracted from the most recent and complete version. If the linked documents reported additional data on the same intervention, these data were also extracted. Data extraction used a pre-specified pro forma. This included document data, namely source, author, year of publication, title, document type (intervention, description, evaluation). Data on interventions included name, status (ongoing, completed), region, type of intervention, aim, target population, referral pathway, inclusion/exclusion criteria, setting, professionals involved, format and content. If there was an evaluation report, data on evaluation design and methods, sampling and sample characteristics, outputs and outcomes were also extracted.

As our aim was to give an overview of the current UK provision of interventions, we did not exclude any relevant papers based on quality of evaluation.

## Results

We retrieved 76 papers, of which 14 were duplicates; 36 papers were excluded based on full-text review, resulting in 26 items of grey literature reporting on 19 intervention programmes (*Figure 24*).

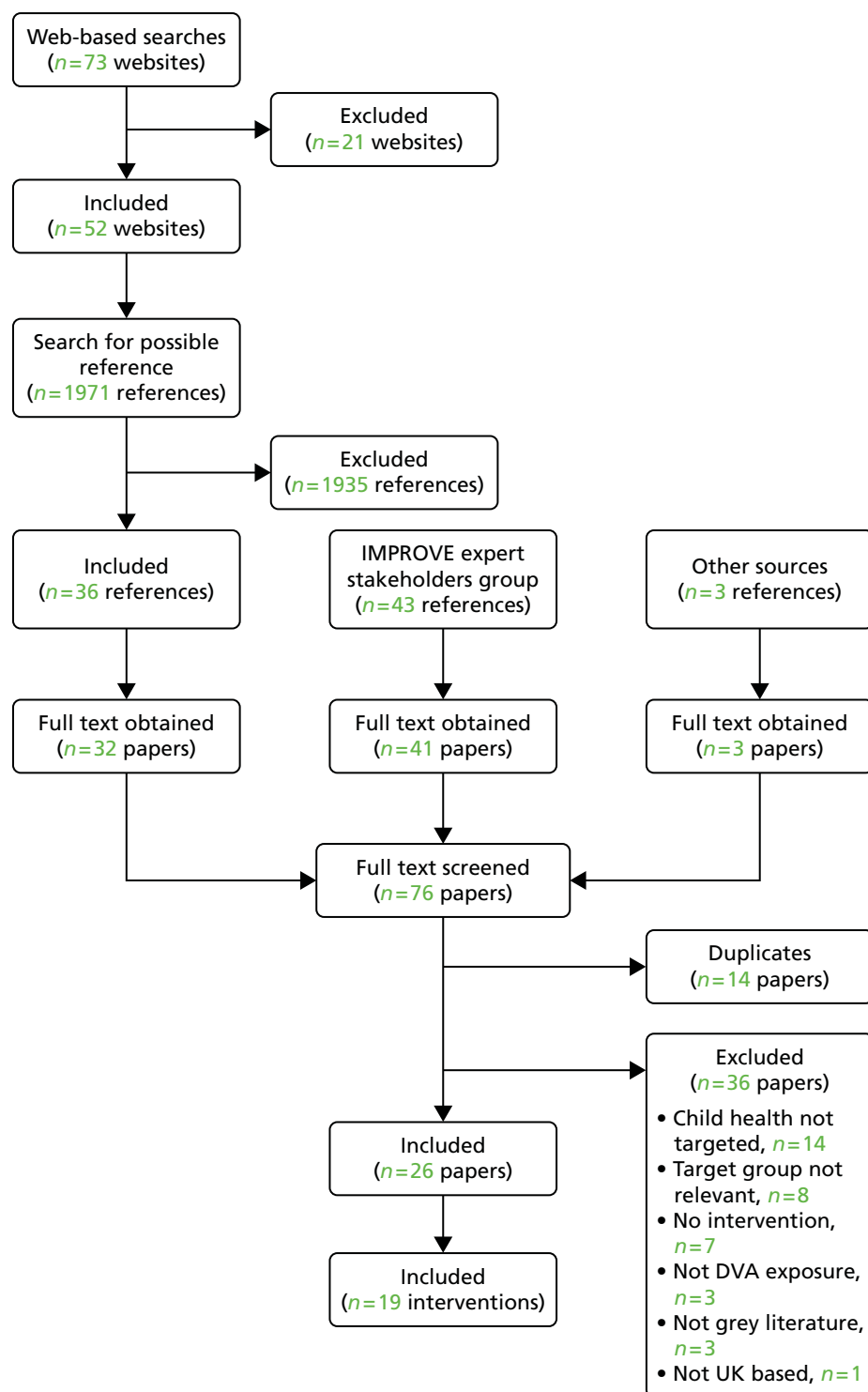


FIGURE 24 Flow chart of grey literature search.

### Programme characteristics

The selected papers described 19 UK interventions for children exposed to DVA (see *Appendices 23 and 24*). Of the 19 interventions, 16 targeted children with past exposure to DVA<sup>203-218</sup> and three programmes targeted children with behavioural problems who had been exposed to DVA.<sup>219-221</sup>

Interventions differed in terms of the people to whom they were delivered. An equal number of interventions were delivered to children<sup>205,207,214,215,218-221</sup> and their non-abusing mothers.<sup>204,208,210-213,216,217</sup>

Two programmes were delivered to the whole family (perpetrator, victim and their children),<sup>203,206</sup> one, with a focus on the parent–child relationship, was delivered to the mother alone;<sup>222</sup> and one was delivered to the abusing father only, with information support and monitoring risk provided to mothers and children.<sup>209</sup>

Multiagency referral to interventions was the most common referral type, although programmes differed in the extent to which they accepted self-referrals. Of 19 interventions, 15 were delivered in community settings,<sup>203,205–215,218,219,221</sup> one was delivered in a refuge;<sup>204</sup> and three were delivered in either the community or a refuge.<sup>216,220,222</sup> DVA service specialists delivered seven out of 19 interventions,<sup>205,206,210,211,213,215,216</sup> seven interventions were delivered by trained facilitators from a variety of professional backgrounds located in the statutory and voluntary sectors,<sup>212–214,218,219,221,222</sup> four were delivered by mental health professionals,<sup>204,207,208,220</sup> and two were delivered by social service professionals.<sup>203,210</sup> Most programmes lasted up to 12 weeks and were delivered predominantly in a group format.<sup>205,208,210–215,217,218,222</sup> In contrast, programmes aimed at perpetrators lasted up to 42 weeks.<sup>203,209</sup> Interventions were aimed at children of varying ages, with a fairly even distribution of those aimed at preteens<sup>210,214,215,217</sup> and adolescents.<sup>205,213,219,221</sup> Only one intervention was specifically targeted towards children under 5 years of age,<sup>204</sup> although a number of interventions were delivered to a broad range of children including children aged 3 years and older.<sup>203,206,208,212,216,218</sup>

We categorised interventions into six types using the same taxonomy outlined in *Chapter 3*. Of the 19 interventions, nine were psychoeducation programmes with the aims of improving knowledge and attitudes regarding DVA, safety planning, self-esteem and parent–child or peer relationships. Of these nine psychoeducation interventions, five were aimed at children alone (Back on Track, Feeling Safe, LINX, Our Time Group, Transformers),<sup>205,208,215,218,221</sup> three were aimed at mothers and children [community group programme (CGP), Link, Domestic Abuse, Recovering Together (DART)],<sup>210–212</sup> and one was aimed at abusing fathers alone (Caring Dads: Safer Children).<sup>209</sup> Three interventions were categorised as psychotherapy, with two delivered to children alone (Art Start, Changing Places)<sup>219,220</sup> and one delivered to children and mothers (Refuge children’s psychology programme).<sup>204</sup> Applying a combination of art therapy and cognitive and behavioural psychology, the programmes aimed to improve child behaviour, confidence, self-esteem, safety and the quality of the parent–child relationship. Two programmes combined psychoeducation and psychotherapy, with one delivered to children alone (Kaleidoscope)<sup>214</sup> and one delivered to non-abusing parents and children (Recovery Toolkit for Children and Young People).<sup>213</sup> Three programmes offered advocacy and psychoeducation, with two delivered to a whole family (community perpetrator programme REPAIR, early intervention model victims/survivors and their children)<sup>203,206</sup> and one delivered to mothers alone (You and Me, Mum).<sup>222</sup> Stephen’s Place delivered psychotherapy to the child and advocacy support to the parent.<sup>207</sup> Finally, the ‘Talking to My Mum’ workbook (which is also included as part of the qualitative systematic review reported in *Chapter 4*) represented a guided self-help programme aimed at mothers and children.<sup>216</sup>

Of the 19 UK interventions identified, 15 reported sources of funding. Most programmes were funded through several sources (mainly charities such as Women’s Aid, the NSPCC, BBC Children in Need, Comic Relief and Big Lottery). Local authorities partly funded the CGP, LINX and Back on Track programmes. Four interventions reported using manuals;<sup>209,210,212,213</sup> and seven reported providing training for personnel.<sup>205,209,212–214,221,222</sup>

### Programme evaluation

Of the 19 interventions identified, 17 had undergone some level of evaluation in 21 studies. Details of the evaluation studies are presented in *Table 23*.

Of 21 identified studies, 10 were carried out internally,<sup>204,205,209,210,214,216,217,220,223,224</sup> eight were conducted by external researchers;<sup>206,211,212,219,221,222,225,226</sup> and the rest did not state the evaluators’ positions. With respect to study design, we did not identify any trials of interventions being delivered in a UK context. Only one evaluation study of the DART programme included a comparison group;<sup>210</sup> all other studies were based on one intervention group and used a before-and-after design<sup>203–206,209,214,219,223,224,227</sup> or collected data after participating in the programme.<sup>211,216,222,225,226</sup> The sample sizes reported were small; only five studies included samples of between

TABLE 23 Overview of evaluation studies of UK interventions for children exposed to DVA

Programme name	Programme type	Study	Evaluator	Design, method	Sample size	Process measures	Child outcomes
Art Start	Psychotherapy (art therapy)	Home-Start Westminster <sup>220</sup>	Internal	Case study	One child		Behaviour, confidence
Back on Track	Psychoeducation	Chignell <sup>205</sup>	Internal	Before-and-after, questionnaire survey	49 children	Uptake; programme experience	Knowledge and attitudes about abuse, confidence, self-esteem, safety, parent-child relationship
Caring Dads: Safer Children	Psychoeducation	McConnell <i>et al.</i> <sup>209</sup>	Internal	Before-and-after, questionnaire survey with standardised measures	100 fathers, 72 mothers, 22 children	Uptake, retention	Behaviour, mental health, safety, parent-child relationship
CGP: Cedar	Psychoeducation	Sharp <i>et al.</i> <sup>225</sup>	External	After, mixed (qualitative interviews, questionnaire survey, cost analysis)	27 children, 25 parents, 43 group facilitators	Uptake, retention, programme experience, barriers and facilitators, cost	Knowledge and attitudes about abuse, parent-child relationship
Changing Places	Psychotherapy (CBT)	Curtis <sup>219</sup>	External	Before-and-after, mixed (qualitative interviews, questionnaire survey with standardised measure)	Nine children, three group facilitators	Programme experience	Attitudes about abuse, behaviour, confidence, self-esteem, safety
CGP	Psychoeducation	Nolas <i>et al.</i> <sup>212</sup>	External	Before-and-after, mixed (qualitative interviews, questionnaire survey with standardised measures, cost analysis)	36 children, 33 parents, 34 group facilitators	Programme experience, cost	Knowledge and attitudes about abuse, safety
Community perpetrator programme: REPAIR	Advocacy and psychoeducation	ADVA <sup>203</sup>	Not stated	Before-and-after, mixed (questionnaire survey with standardised measures, cost analysis)	20 children, 27 abusive parents, 13 non-abusive parents	Uptake, retention, cost	Mental health, behaviour, family relationships
DART	Psychoeducation	McManus <i>et al.</i> <sup>210</sup>	Internal	Before-and-after/comparison group, mixed (qualitative interviews, questionnaire survey with standardised measures)	32 children, 32 parents, <i>n</i> of group facilitators not stated	Programme experience	Behaviour

continued

**TABLE 23** Overview of evaluation studies of UK interventions for children exposed to DVA (continued)

Programme name	Programme type	Study	Evaluator	Design, method	Sample size	Process measures	Child outcomes
CGP: DVIC	Psychoeducation	Enright <sup>227</sup>	Not stated	Before-and-after, questionnaire survey	Seven children, five parents	Uptake, retention, programme experience	Knowledge and attitudes about abuse, parent-child relationship
Early intervention model for victim/survivors and their children	Advocacy and psychoeducation	Donovan et al. <sup>206</sup>	External	Before-and-after, mixed (qualitative interviews, analysis of routinely collected data)	56 parents	Uptake, programme experience	Health and well-being
Kaleidoscope	Psychotherapy (play therapy) and psychoeducation	Walker <sup>214</sup>	Internal	Before-and-after, questionnaire survey with standardised measure	Five children, five mothers	Uptake, programme experience	Behaviour
CGP: Let's Talk Group	Psychoeducation	London Borough of Hounslow <sup>223</sup>	Internal	Before-and-after, questionnaire survey	11 children, <i>n</i> of parents, not stated, <i>n</i> of group facilitators not stated	Uptake, retention, programme experience	Knowledge and attitudes about abuse, confidence, self-esteem, safety
Link	Psychoeducation	McNamee <sup>211</sup>	External	After, qualitative (focus groups and case studies)	10 parents	Programme experience	Knowledge and attitudes about abuse, behaviour, self-esteem
LINX	Psychoeducation	Ley <sup>221</sup>	External	Before-mid-after, mixed (qualitative interviews, questionnaire survey with standardised measure)	Seven children, two parents, four groups facilitators	Programme experience, barriers and facilitators	Behaviour, empathy
Our time group	Psychoeducation	Levell <sup>217</sup>	Internal	Before-and-after, questionnaire survey with standardised measures	21 children, 18 parents	Uptake, retention	Knowledge and attitudes about abuse, safety, parent-child relationship
Recovery Toolkit CYP	Psychotherapy (trauma-focused CBT) and psychoeducation	Sue Penna Associates <sup>224</sup>	Internal	Before-and-after, questionnaire survey with standardised measures	Four children, four parents	Programme experience	Wellbeing, behaviour, parent-child relationship

Programme name	Programme type	Study	Evaluator	Design, method	Sample size	Process measures	Child outcomes
Refuge intervention for children exposed to DVA	Psychotherapy (play therapy, feminist brief solution-focused therapy)	Barracough <sup>204</sup>	Internal	Before-and-after/qualitative (observations)	38 children, 33 parents	Programme experience	Behaviour
Specialist therapeutic services for children and young people affected by DVA	Advocacy and psychotherapy (play therapy)	Level <sup>217</sup>	Internal	Qualitative (case studies)	Three children, three parents		Mental health, behaviour, development; parent-child relationship
Talking to My Mum	Guided self-help	Thiara <sup>216</sup>	Internal	Mixed (qualitative interviews, questionnaire survey)	52 children, 45 parents	Uptake, programme experience	Self-esteem, parent-child relationship
CGP: The Sutton Stronger Families group programme for children exposed to DVA	Psychoeducation	Debbonaire <sup>226</sup>	External	After, qualitative interviews	14 children, 16 parents, nine group facilitators	Uptake, retention, programme experience, barriers and facilitators	
You and Me, Mum	Advocacy and psychoeducation	McNamee Consulting <sup>222</sup>	External	After, mixed (qualitative interviews, focus groups, questionnaire survey)	22 parents, nine group facilitators, eight stakeholders	Uptake, programme experience, barriers and facilitators	Health, parent-child relationship

ADVA, Against Domestic Violence and Abuse in Devon; CYP, children and young people; DVIC, Domestic Violence Intervention for Children.

**Note**

Two interventions (our time group and specialist therapeutic services for children and young people affected by DVA) are evaluated in one paper, that by Level.<sup>217</sup>



26 and 50 children,<sup>205,210,212,216,225</sup> and eight studies included samples of 10 or fewer children.<sup>204,207,214,219–221,224,227</sup> None of the studies followed up the children after they had completed the programme.

Of 21 studies, 11 used a mixed-methods design, drawing on a combination of evaluation approaches. Of 11 mixed-methods studies, five employed a combination of qualitative methods (e.g. interview, focus group, case study, observation) and a questionnaire survey.<sup>210,216,219,221,222</sup> Two studies combined qualitative interviews, a questionnaire survey and an economic analysis,<sup>212,225</sup> one study employed a questionnaire survey and an economic analysis<sup>203</sup> and one evaluation combined qualitative interviews and an analysis of routinely collected data.<sup>206</sup> Another six studies used questionnaire surveys.<sup>205,214,217,223,224,227</sup> Finally, four evaluation studies used qualitative methods: case studies, focus groups and interviews.<sup>211,217,220,226</sup>

Of the 21 selected reports, 19 (one exclusively) examined the process of intervention delivery reporting on parameters such as uptake and retention, as well as experiences of receiving an intervention and barriers and facilitators of uptake and participation.<sup>203–206,209–212,214,216,217,219,221–227</sup> In total, 20 of the evaluation studies reported some child and/or parent outcomes.<sup>203–206,209–212,214,216,217,219–225,227</sup> Of these, 15 studies used non-standardised questionnaires to assess child and/or parent perception of the impact of the programme on the outcomes of interest.<sup>203,205,209,210,212,214,216,217,219,221–225,227</sup> 9 out of 16 studies also used one or more standardised measures.<sup>203,209,210,212,214,217,219,221,224</sup> Child-focused measures included Goodman's Strengths and Difficulties Questionnaire, Adolescent Wellbeing Scale, Rosenberg Self-Esteem Scale, KIDSCREEN-52 and CBCL. Parent standardised measures included The Parental Acceptance-Rejection Questionnaire, Parenting Stress Index and Parenting Daily Hassles Scale. The remaining five studies employed qualitative methodology to assess child and/or parent perception of the impact of the programme.<sup>204,211,217,219,225</sup>

Eleven separate studies reported child behaviour outcomes, as measured through child or parent perception<sup>204,211,217,220,221</sup> and/or by standardised measures.<sup>203,209,210,214,219,221,224</sup> In line with the review of trials (see *Chapter 3*), there was greater emphasis on the measurement of behavioural outcomes than on mental health outcomes such as anxiety and depression. In addition, a number of studies reported an impact on broader indicators of children's well-being such as self-esteem and emotional well-being. A number of evaluations examined the impact on DVA-specific indicators such as knowledge and attitudes about DVA and safety planning, and half reported impacts on the quality of the parent-child relationship, as assessed through parent and child perception. Three reports included economic evaluation results.<sup>203,212,225</sup>

At least one evaluation had been undertaken for each of the six types of programmes that we identified. Psychoeducation interventions were most frequently evaluated ( $n = 11$ ), with the CGP assessed in five separate studies carried out in different geographical areas of the UK.<sup>212,223,225–227</sup> In total, three psychotherapeutic interventions were evaluated in three studies.<sup>204,219,220</sup> We identified two small evaluations of psychoeducation plus psychotherapy groups for children.<sup>214,224</sup> There were three evaluation studies of advocacy plus psychoeducation, two interventions delivered to the whole family<sup>203,206</sup> and one delivered to mothers alone.<sup>222</sup> The combination of advocacy for mothers and psychotherapy for children was evaluated in two case studies.<sup>207,217</sup> One study assessed the 'Talking to my Mum' workbook for mothers and children.<sup>216</sup> Further evaluations of two interventions identified in this review have been published in the peer-reviewed literature, namely the 'Talking to my Mum' workbook<sup>49</sup> and the DART programme,<sup>228</sup> with the former included in *Chapter 4* of this report.

### Process evaluation

In total, six studies reported process evaluation of psychoeducation programmes, and three of these evaluated the CGP. The bulk of referrals to concurrent psychoeducation groups for mothers and children come from statutory agencies.<sup>212,225,226</sup> Four studies reported disruptions in recruitment as a result of planning delays and problems with multiagency collaboration. Other challenges identified were a high attrition rate at the point of enrolment owing to inadequate assessment protocols, as well as a high attrition rate from mothers' groups. There were several barriers to children's engagement with the groups, including relocation, safety issues, DVA escalation, logistical difficulties and mothers' inability to commit to weekly sessions. However, up to 76% of the enrolled children completed the groups.<sup>217,223,225,226</sup> In contrast

to the high retention of children in psychoeducation programmes, only 50% of fathers completed psychoeducation groups for abusive parents.<sup>209</sup> In addition, there were problems with recruitment of the fathers' families, with 65% of partners declining to attend or unable to be contacted.

With respect to the CGP, Nolas *et al.*<sup>212</sup> found that sex balance in the children's groups was important to children and they valued attending separate groups from their siblings. For a minority of children the timings of the groups had been inconvenient, as their participation meant missing out on school curricular and extracurricular activities that they deemed meaningful.

Feedback forms and interviews with children and mothers following participation in psychoeducation groups indicated that they liked most or all of the activities and found the groups acceptable. The findings suggested that children and mothers would recommend the programme to others.<sup>210,212,223,225,227</sup>

In contrast to the evaluation of psychoeducation groups, process evaluation of psychotherapeutic interventions was minimal. Interviews with nine adolescents who completed the Changing Places group indicated a preference for fewer discussion-based activities and shorter sessions.<sup>219</sup>

Two studies reported process evaluation of a combined psychotherapy and psychoeducation programme. Child and parent feedback indicated that children enjoyed the Kaleidoscope group and the Recovery Toolkit groups.<sup>214,224</sup>

Process evaluation of programmes combining advocacy and psychoeducation identified multiple problems. Limited numbers were reported to have signed up for voluntary perpetrator programmes in the Early Intervention Model.<sup>206</sup> Several perpetrator partners reported long waiting lists for children's services. The programme had problems with multiagency working, with agency partners' involvement dropping away, leaving at the end a core collaboration of criminal justice, housing and children's services. A low retention rate of perpetrators was also reported at the REPAIR programme. The programme was not able to reach high numbers of children.<sup>203</sup> Evaluation also highlighted inadequate funding and limited capacity of the service providers in the Early Intervention Model and 'You and Me, Mum' programme.<sup>206,222</sup>

Acceptability of the guided self-help intervention was found to be high. Women and children found the process of working together on the 'Talking to my Mum' workbook fun and enjoyable. However, not all women were ready to engage in the process. The workbook raised difficult issues for mothers and children, such as feelings and recollections that were hard for mothers to hear, feelings of guilt and conflicted feelings about the perpetrator (see also *Chapter 4*). Therefore, a need for support from a DVA specialist alongside the workbook was highlighted.<sup>216</sup>

### Outcome evaluation

The effect of psychoeducation groups on child outcomes was positive. In total, three evaluation studies assessed outcomes with standardised measures.<sup>210,212,221</sup> McManus *et al.*<sup>210</sup> measured child behaviour with the Goodman's Strengths and Difficulties Questionnaire, and self-esteem with the Rosenberg Self-Esteem Scale before and after joint DART groups for children and mothers. The authors reported a significant reduction in total difficulties score, conduct problems, hyperactivity, emotional symptoms and peer problems in the DART mothers ( $n = 44$ ) and children (sample size not reported). Comparison between the DART group and a play therapy group at a women's refuge ( $n = 19$ ) showed that children in the DART group had a significantly greater reduction in 'total difficulties' than children in the play therapy group. Following the LINX group for adolescents, the total difficulties score measured with the Goodman's Strengths and Difficulties Questionnaire was reduced ( $n = 7$ ).<sup>221</sup> As assessed by qualitative methods and feedback forms, mothers and children noticed improvements in child behaviour, mental health and self-esteem as a result of engagement with the Link and Back on Track groups.<sup>205,211</sup> All evaluations of psychoeducation programmes reported post-intervention improvements in parent-child relationships, knowledge and attitudes about DVA and safety planning.<sup>205,211,212,223,225,227</sup> In contrast, the evaluation of the

effect of psychoeducation groups delivered to abusing fathers on child outcomes showed that measures of child adjustment before and after the programme did not differ significantly ( $n = 22$ ).<sup>209</sup>

The effect of three psychotherapeutic interventions on child outcomes was rather mixed. Curtis<sup>219</sup> distributed the Student Emotional Literacy Checklist among nine adolescents before and after the Changing Places group. Results indicated that there was no significant difference in the degree of targeted behaviours between baseline and follow-up.<sup>219</sup> However, qualitative interviews identified a number of positive effects of the groups. These include a better understanding of one's role or contribution to situations, improved confidence and self-esteem, greater awareness of identity, improved friendships, greater control over managing anger, improved experiences at school, and increased feelings of happiness. Despite measuring child mental health status, behaviour and development at baseline, the evaluation study of the Refuge intervention for pre-school children and their mothers did not report quantitative outcomes post intervention. However, a small number of qualitative observations indicated perceived improvements in child behaviour as a result of engagement with the programme. Finally, one case study of a 6-year-old girl reported increased confidence and interaction with others after completing the Art Start group.<sup>220</sup>

Two studies of the effect of psychotherapy plus psychoeducation delivered in a group format found improvements in children behaviour measures.<sup>214,224</sup> Following receipt of the Recovery Toolkit, all domains of the Goodman's Strengths and Difficulties Questionnaire and the self-esteem scores showed improvements; at the end of the Kaleidoscope group, children showed fewer stress, behavioural and attention difficulties alongside more kind and helpful behaviour.<sup>214</sup> In line with child-reported data, feedback from the parents in both studies showed that the group was perceived as helpful for improving children's behaviour and emotional well-being.

Evaluation studies of advocacy plus psychoeducation showed positive effects on child outcomes, as reported by parents. In the voluntary perpetrator programme, those victims/survivors whose children had received parallel services talked about the positive impact that these had had on their children's health and well-being.<sup>206</sup> Data were collected on 20 children of fathers involved in the REPAIR perpetrator programme. The majority of children demonstrated decreased anxiety, stress and anger, and an improved relationship with mothers and peers as reported by mothers. Focus groups were used to evaluate mothers' perceptions of the impact of the 'You and Me, Mum' programme on child outcomes. Mothers reported that their children became happier, less stressed and isolated, and that relationships between mothers and children improved.<sup>222</sup>

The effect of advocacy for mothers plus psychotherapy for children was evaluated in three case studies, and indicated some improvement in children's mental health, behaviour and development, as reported by mothers. One child's scores on the Goodman's Strengths and Difficulties Questionnaire had shifted two bandings from 'abnormal' at the start of therapy to 'normal' by the end of 5 months of psychotherapy.<sup>207,217</sup>

With respect to guided self-help, families reported the positive impact of the materials, and improved relationships between mothers and children after completing the workbook.<sup>216</sup>

### **Economic evaluation**

Programme costs were calculated in three studies.<sup>203,212,225</sup> The cost of running the 12-week CGP for mothers and children was estimated at £1303.25 per beneficiary (a child that completed the group work programme) in four London boroughs, and at £2000–3400 per beneficiary in Scotland.<sup>212,225</sup> Interestingly, the costs per beneficiary in Scotland did not include the time donated by trained group facilitators from the statutory and voluntary sectors. The annual cost of the whole-family perpetrator programme REPAIR in three geographical areas was £186,390. The researchers estimated that the total cost to society to not work with these families was £345,280; therefore, the net benefit to society per annum was estimated at £158,890.<sup>203</sup>

## Discussion

This review of grey literature scopes the types of interventions currently being delivered (or that have previously been delivered) in the UK to children who have been exposed to DVA, with the aim of minimising adverse effects on health outcomes. The primary function of this review is to provide a context in which to appraise the findings of the previous chapters so as to provide insight into the feasibility of delivering different models in a UK setting.

Most of the interventions that we identified were in line with those identified from the peer-reviewed literature. The programmes were largely categorised as psycho-education. There was an absence of specialised parent training programmes, as well as an absence of programmes that were tailored to children's specific needs and clinical profile. There were also gaps in the provision of interventions for younger and older children and for children continuing to live with DVA. The distribution of programmes appears to be patchy and highly localised in areas that are served by voluntary-sector specialist DVA organisations that deliver these programmes. The funding for programmes is dependent on grants from charities and local service commissioners, which contributes to a lack of sustainability, especially in the current climate in which there are restrictions on local authority funding. We observed an investment in programme evaluation, indicating a shift towards increased accountability and outcomes-focused practice. As of yet, methodological problems preclude any strong conclusions about clinical effectiveness, although process evaluations indicate that group-based psychoeducation interventions in particular are well received by children and non-abusive mothers.

We found that the type of interventions being delivered in the UK were broadly similar to those identified in the peer-reviewed literature, with our findings suggesting that the most common model used in the UK is group-based psychoeducation. One of the programmes that has been widely implemented in the UK, the CGP, was based on the Canadian psychoeducation group work model for mothers and children who have experienced DVA,<sup>229</sup> although this was not one of the interventions identified by us as having been evaluated using a trial design. This finding suggests that some service providers are implementing the (limited) evidence base locally. However, several projects have been developed in-house by service providers themselves and are more likely to be based on practical experience than on evidence of effective practice.

Across the various models, nearly half of the programmes were delivered to children and parents (mostly non-abusive mothers) in parallel, although a nearly equal number were delivered to children only. This greater representation of child-only models (relative to that observed in peer-reviewed studies) is in line with the results of a UK consultation with professionals that highlighted the belief that children should be able to access therapies without the presence of parents and that the timing and pace of the intervention should be separate from that offered to parents.<sup>52</sup> Controlled studies largely evaluate approaches including parents and children, with little evidence to disaggregate the effects of delivering the same intervention to children and mothers or children only. Qualitative studies provide limited evidence for the effectiveness and acceptability of either approach (see *Chapter 4*).

In addition to the models evaluated in controlled studies, we identified three programmes that included abusive fathers. Two programmes delivered advocacy and psychoeducation to both parents and children,<sup>203,206</sup> and one programme was delivered to abusive fathers only with a specific focus on their role as parents.<sup>209</sup> In the UK and elsewhere, the provision of a response to abusive men has included both the criminal justice system and social services.<sup>159,230</sup> However, the qualitative literature we reviewed in *Chapter 4*, the UK evaluations considered in this chapter, and the views of UK professionals working with families<sup>52</sup> (see *Chapter 8*) suggest that these models of working must be delivered with caution, especially given the absence of evidence of effectiveness.

It was notable that we did not identify any UK programmes that combined parent skills training with advocacy as we did in our review of controlled studies (see *Chapter 3*). As discussed in *Chapter 5*, this

appears to be a promising strategy for improving outcomes for children with clinical and subclinical behavioural difficulties (see *Chapter 4*). Parent skills training is routinely offered through CAMHS for children aged 3–10 years who are experiencing behavioural difficulties (see [www.cypiapt.org/national-curriculum.php](http://www.cypiapt.org/national-curriculum.php)), and it may be that those providing services for children exposed to DVA are attempting to avoid duplication with existing services. Nevertheless, the threshold for entry to CAMHS is typically high,<sup>231</sup> meaning that children and parents may not be able to access this intervention in this setting until behaviour problems become severe. Indeed, mothers contributing to this study, and others, highlighted the difficulties in securing timely access to CAMHS.<sup>232,233</sup>

Furthermore, the parent skills training offered through CAMHS is not specially adapted for DVA populations, and there is little evidence that general parent skills training programmes are effective for improving outcomes for children who have been exposed to DVA. Evidence that the Nurse–Family partnership (in its standard form) was less effective for improving child outcomes when mothers experienced moderate to severe levels of DVA<sup>234</sup> cautions against assuming, without testing that assumption, that evidence-based programmes developed for ‘at risk’ populations will be effective (without adaptation) and acceptable for families experiencing DVA. The intervention that we have identified as promising for children exposed to DVA who exhibit behavioural problems incorporates practical support for parents and mentoring for children, and is longer than most general parent skills programmes. Therefore, it appears to be different from programmes such as Incredible Years and Triple P,<sup>235,236</sup> which are commonly offered by CAMHS. That said, it would be useful to evaluate the effectiveness and acceptability of generic parenting programmes for this group.

Reflecting the peer-reviewed literature, most programmes reviewed in this chapter were selective interventions delivered to children based on their past exposure to DVA, rather than on the presentation of any particular symptoms or problems. Reflecting the concerns expressed by professionals contributing to this study as well as to other mapping studies,<sup>232</sup> we found that all interventions were delivered to children and/or parents post abuse or separation. Inclusion criteria for the programmes suggest that children who were currently experiencing DVA and/or living with abusive parents were excluded from the provision owing to safety concerns. Professionals recognise this gap in service provision but feel impotent to offer targeted interventions beyond safety planning for fear of putting children at further risk.<sup>232</sup>

Most interventions were aimed at children aged between 6 and 18 years, with only the Refuge children’s psychology programme designed specifically for children < 5 years of age.<sup>204</sup> Furthermore, there were few programmes aimed specifically at teenagers. This gap in programmes for younger and older children is reflected throughout the peer-reviewed literature and represents missed opportunities to intervene at particularly sensitive and vulnerable periods in children’s lives (see *Chapter 3*).<sup>237</sup>

The most striking finding is that programmes were mostly delivered by DVA-related charities and voluntary organisations, and the majority of the programmes were funded by charities. Most were built on multiagency collaboration between DVA services and local voluntary and statutory organisations. Multiagency referrals and self-referrals were the main pathways into programmes. Interestingly, most referrals came from statutory services, whereas most programmes were delivered by DVA voluntary organisations and/or their partner organisations, often without funding from statutory services. This suggests that DVA organisations operating in the voluntary sector are pivotal to the delivery of a specialised response to children exposed to DVA, but also to the broader mental health response for children with mild to moderate mental health difficulties who would not otherwise be able to access interventions delivered by statutory services.

Each type of intervention delivered in the UK (psychoeducation, psychotherapy and combined programmes) has been subjected to some level of evaluation. Nevertheless, all evaluation studies were methodologically weak. Psychoeducation groups were the most commonly evaluated; however, evaluations paid more attention to the evaluation of process than to programme outcomes. Limited information on interventions’ effectiveness was based mostly on parent-reported child behaviour, assessed through feedback forms and

non-standardised questionnaires. Focus on process evaluation could be explained by limited resources and the expertise of evaluators, most of whom were based in third-sector organisations that also delivered the interventions. This finding suggests that future evaluation studies of UK interventions should be adequately planned, funded and staffed.

Although most psychoeducation groups reported difficulties with recruitment and high attrition rates, feedback and qualitative data from mothers and children who completed the groups suggested that they were acceptable. We found that both mothers and children also considered psychotherapy plus psychoeducation groups and guided self-help to be acceptable. With regard to the acceptability of psychotherapeutic groups, teenagers wanted less discussions and shorter sessions.

In the identified studies, child behaviour and the quality of the parent–child relationship were the most frequently assessed outcomes, followed by knowledge and attitudes about DVA, self-esteem, emotional well-being and mental health. All psychoeducation groups for children and/or mothers, psychotherapy plus psychoeducation groups for children, advocacy for mothers plus psychotherapy for children and guided self-help for mothers and children reported improved child behaviour post intervention. In contrast, participation in psychotherapeutic groups for adolescents was not associated with change in self-reported behaviour. Findings on the effect of psychoeducation groups for abusive fathers on children were equivocal. Studies did not follow up the participants after they had completed the programmes. Therefore, we could not conclude whether or not these programmes were effective for reducing the risk of long-term problems associated with childhood exposure to DVA.

We were pleased to find a concerted effort in the UK to evaluate the costs of delivering targeted interventions, with two studies calculating the cost of the CGP and one study estimating the net benefit to society of the Community Perpetrator Programme REPAIR.<sup>203,212,225</sup> The calculations were used both to demonstrate an intervention's value for money and to justify continued funding, although without good evidence to demonstrate the effectiveness of delivering a programme (vs. doing nothing or doing something different) the power of these data are curtailed.<sup>60</sup>

## Strengths and limitations

A key strength of this review of grey literature is that it was conducted in close collaboration with content experts and stakeholders. Another strength is that we searched a wide range of sources, such as online databases, Google (Google Inc., Mountain View, CA, USA), and web repositories focused specifically on grey literature (dissertations, official reports and conference proceedings). In addition to the online searches we carried out hand-searches and reference list searches, and consulted with stakeholders. One limitation is that our review was not an extensive mapping exercise and, therefore, produced a general picture of main approaches currently used in the UK, rather than a detailed picture of the distribution and density of services. Another potential limitation is that we did not exclude evaluation studies based on quality assessment. This decision was influenced by the weak overall methodology of the evaluation studies that we identified. We included the full range of evaluative studies that we identified to give a good sense of the appetite for and approaches to evaluation in the UK.

Overall, this component of the synthesis shows that, in the UK, there is an established practice of offering targeted interventions to children who have been exposed to DVA. The UK response is clearly rooted in the voluntary sector, but is accessed through a range of routes including statutory health and social care services. The most common type of programme to be delivered in the UK is group-based psychoeducation for children and their non-abusive parent or for children alone. There is a culture of evaluation; however, on the whole, evaluation studies are weak and do not adequately address questions of effectiveness.



## Chapter 8 Consultations with young people, mothers, service providers and commissioners

### Aim

This chapter reports on consultations with children, parents and experts over the course of this study. This component of the review aimed to gather the views of key stakeholders that, in combination with the scoping of UK service provision (see *Chapter 7*), could be used to contextualise the evidence from the other components of the studies<sup>75</sup> and to ensure that our recommendations for future research were informed by the experiences and priorities of those using, delivering and commissioning services. Specifically, we sought stakeholder views on (1) the current service delivery context in the UK; (2) gaps in service provision; (3) the acceptability of different types of interventions, service settings and the characteristics of those delivering services; (4) outcomes that are prioritised by stakeholders; and (5) priorities for future research.

### Method

Consultation groups were established through collaboration with key agencies in the field who, through their networks, were able to convene stakeholder groups and host consultation meetings. In this chapter, we report key themes to emerge from six meetings (two with each group) that took place during the course of the study.

#### *Consultations with young people exposed to domestic violence and abuse*

We worked with the Hyndburn and Ribble Valley Domestic Violence Team (HARV) in East Lancashire, which provides a range of support services for children and young people experiencing DVA, to recruit a group of young people. HARV used appropriately formatted information about the study to recruit young people aged  $\geq 12$  years, and we sought written consent from all young people and the parents of those  $< 16$  years of age.

Young people constituting the consultation group were a mix of HARV peer educators who advise the organisation and provide youth-led support to young people aged  $> 12$  years, and young people who had themselves received support from the service. None of the group members was currently living in a situation in which he or she was exposed to ongoing DVA, but some members continued to require support for behaviour and additional needs associated with their experiences.

The first meeting took place in June 2013 and was held at a local school. A total of 10 young people attended, ranging in age from 12 to 21 years. The second meeting was held in July 2014 and took place on HARV premises. A total of six young people aged from 13 to 22 years attended. Despite efforts to ensure continuity across the groups, the second meeting included only two of the young people who had attended the first meeting. On each occasion, young people received high-street shopping vouchers as a token of appreciation for contributing their time.

A range of fit-for-purpose materials and activities was used to stimulate discussion and to focus on key questions. At the second meeting, the young people were given appropriately formatted feedback on study findings. The group discussions were recorded and transcribed and the data were thematically analysed.



### ***Consultations with mothers of children exposed to domestic violence and abuse***

We contacted women through our existing public engagement network which was originally assembled in the context of a NIHR programme grant. The network is fed by several DVA service delivery partners including Cardiff Women's Aid, Bristol Next Link and SURVIVE.

The first meeting took place in February 2014, with four women attending. The second meeting was held in October 2014, which two women participated in. All women were mothers with experience of engaging with DVA services. Both meetings took place on University of Bristol premises. Despite efforts to ensure that the same women participated in both groups, some women could not be contacted, or were unavailable and, in the event, neither of the women contributing to the second meeting had contributed to the first.

At the outset of each meeting we discussed confidentiality and noted that disclosure of any current risks to their children's safety would be shared with either Cardiff Women's Aid or Bristol Next Link who would be responsible for reporting new information to the relevant agencies. We sought written consent to audio-record the second meeting. Women were reimbursed their travel expenses on the day and were offered a £20 high-street shopping voucher as a token of appreciation for their participation.

Group members were given information about the study, its aims and early findings, and a structured discussion schedule, designed to direct the group discussion to key topics, was employed; detailed notes were made from the first meeting, and the second meeting was recorded and transcribed.

### ***Consultations with professionals commissioning, delivering or researching domestic violence and abuse interventions for children***

The NSPCC used their network to assemble a diverse group of practitioners, commissioners, policy-makers and researchers. Consultation meetings were held on NSPCC premises in June 2013 and July 2014 (see *Appendix 25* for a list of participating individuals and their affiliations). Every effort was made to maintain the continuity of group membership across the two meetings, and, although this was successful to some degree, some individuals were not able to attend both meetings. In addition to attendance at the consultation meetings, the expert group worked with us to identify grey literature to feed into the scoping of UK service provision, and some group members read and provided comments on the scoping chapter (see *Chapter 7*).

Group members were provided with information about the study and its aims. Early findings were fed back at the second meeting. A discussion schedule was used to structure the discussion. Given the size of the group and length of the meeting (4 hours), we took detailed notes of discussions rather than recording proceedings.

## **Results**

### ***Service delivery landscape***

Experts made the point that understanding 'what works' is almost redundant if there are insufficient services to deliver interventions to children and families. They highlighted how recent spending cuts had reduced the capacity of the DVA sector to deliver early interventions, with resources directed towards the highest risk cases. Mothers perceived a general lack of support options for children, even those presenting with fairly severe adjustment difficulties, whereas professionals described a 'postcode lottery' with regard to whether or not services are available.

Professionals also highlighted the lack of sustainable funding, which they viewed in part as a product of economic austerity but also as a function of the established culture of short-term commissioning in the DVA sector. This was seen as creating a 'stop start' approach to service provision, a lack of continuity for service users, and a lack of knowledge of 'what was out there' among service providers and those attempting to refer on to specialist services.

In this challenging and competitive funding environment the group described significant pressure for programme providers to demonstrate impact, but also a lack of tools, skills and guidance to help monitor and evaluate services on a routine basis. This was amplified by piecemeal funding arrangements that resulted in services reporting different outputs and outcomes to their various funders.

Practitioners expressed a need for a practical outcome and monitoring tool or system that could be used across different types of programmes and service providers, with the acknowledgement that resource constraints required a pragmatic approach to outcome measurement. Furthermore, they suggested the development of a good practice guide that offered practical and accessible advice to those looking to evaluate their own service or to commission independent evaluation.

Those engaging in front-line work felt that they lacked the tools and procedures to enable them to accurately assess risks to children's well-being, and to profile their current level of functioning. Trends towards working in silos meant that there was a lack of multiagency risk assessment, with professionals rarely able to identify the full range of adversities to which children accessing interventions were exposed.

### **Acceptability of domestic violence and abuse interventions and service delivery contexts**

#### **Valued components of specialist domestic violence and abuse interventions**

The groups with which we consulted identified a number of intervention components (rather than specific types of programmes) that were seen as essential ingredients of effective and acceptable interventions.

#### **Safety planning**

Professionals viewed safety planning as a crucial component of any intervention. Mothers also talked about helping children living with abuse to cope with their current situation.

#### **Talking about and sharing experiences with professionals and peers**

All stakeholder groups highlighted the importance of providing children and young people with the opportunity to talk about their experiences in a context of emotional and physical safety. Parents and young people viewed being able to talk as one of the most helpful aspects of the support that they had received, with particular value attached to talking to other children with similar experiences.

In addition to accessing targeted support, young people wanted somewhere to go that was safe in order to get time away from home and to meet people who had similar experiences. In order to facilitate informal peer support, young people thought that it was important to offer fun activities, such as residential weekends, where young people were able to bond and share experiences.

#### **Addressing attitudes**

The expert group felt that interventions should target social cognitive processes that might mediate the link between exposure to DVA and outcomes. In particular, they highlighted the importance of targeting children's attitudes to DVA and equipping them with a repertoire of non-violent methods of conflict resolution.

#### **Navigating the relationship with the abusive parent**

Experts also perceived the need for children to be supported to address the tension that they experienced in trying to process what had happened in their families versus the desire to maintain a positive relationship with their fathers. However, mothers talked about the difficulties of trying to support children to continue a relationship with their father when fathers continued to engage in abusive or controlling behaviour:

*What he's doing and presently to this day 7 years down the line is he was using his son as a pawn to get at me, and that's what it's about. It's about control and using the children to control you.*

*Mothers' group 2*

**Practical support to access interventions**

Professionals and young people viewed the availability of transport and child care as part of the infrastructure needed to ensure that interventions were easily accessible. They argued that services should be local in order to maximise the chance that people would be able to access them.

**Acceptability of 'best bet' interventions**

In the second round of meetings we asked stakeholders to respond to the data relating to our findings on 'best bet' interventions.

**Psychoeducation**

Young people thought that group-based psychoeducational programmes would be valuable for children and young people of all ages. As noted above, young people were vocal about the particular benefits derived from attending a group with others who had had similar experiences. They also spoke of the need to understand what had happened in their families, and many had found group psychoeducation programmes useful in helping them to reappraise their experiences.

*... once I'd started doing the work and he explained controlling behaviour and abuse and different types and I'd hear other people's stories, things just started milling over and I'm thinking, 'That was like that, that was like that'. Then one day the penny just completely dropped and I realised.*

*Young people's group 2*

Young people were particularly positive about the mix of structured educational activities and unstructured play that characterised many psychoeducational programmes identified by the literature searches.

*I think you've got to be careful because if you do too much – that's why the fun and games is there, because if you do too much then it can be quite overpowering and you as a young person can walk out that day and think, 'God, that was hard work today. I don't really want to go back next week' because you hit too many nerves all at once. I think the fun and games element is really important.*

*Young people's group 2*

Further evaluation of group-based interventions that could be delivered to parents and children resonated with the research priorities of professional stakeholders who were keen to investigate further, interventions with a broader reach through delivery in groups and by non-clinical staff, and that targeted non-abusive parents and children.

**Advocacy and parent training skills**

Young people felt that the appropriateness of interventions focusing on parenting would depend on the extent to which the abusive parent used the child to undermine the non-abusive parent, a view echoed strongly by the mothers consulted.

*... because for all you know the perpetrator might be using the child and making the behaviour worse as a way to make the mother get agitated and crumble and using the child to perpetrate, basically. Sending them to classes to help with how to look after a child may work, but it may not work either. If the parent who's got most of the care most of the time did something like that, then at least for those 5 days a week you're planting that seed everyday of how they should behave.*

*Mothers' group 2*

Interestingly, although the parent training programmes that we identified were targeted at young children (up to the age of 9 years), one mother had found a parenting programme helpful for managing the behaviour of her teenage children, which she attributed to the programme being tailored to a DVA population.

*[it] was specifically designed around children who'd been through domestic abuse, because [if] you get told, the parents in group, to send your child to bed or sit on the naughty mat, this does not work because they're so insecure they just want to be next to you the whole time . . . That made a massive difference about understanding of their anxieties . . . It gave you some practical techniques as well . . . it was learning to show how to release that tension like I'd let him go gardening so he could chop up and do bushes and things like that.*

*Mothers' group 2*

### **The acceptability of involving parents**

The 'best bet' interventions were targeted at parents and children aged 4–9 years and 6–12 years. However, the fact that both interventions involved parents prompted discussion among young people regarding the appropriateness of this format for older children and adolescents.

They expressed a need to feel independent when seeking help and, therefore, they had mixed feelings about attending an intervention with their parent. For some young people, attendance at a group support programme offered time away from parents whose behaviour they found difficult to manage or understand.

It was felt that, after the age of about 12 years, seeking help in parent–child dyads would be inappropriate, although young people did highlight the role of parents in supporting their attendance at an intervention.

*Thirteen at the absolute most, is the highest that I'd have been going to a group that my mum was going to.*

*Young people's group 2*

*If she hadn't have made me then I wouldn't have come in the first place, and I was only 12, but I was still hitting that teenage age. No, I would say 12/13. If my mum hadn't have come to her group and told me that I needed to go to that one then I wouldn't have gone.*

*Young people's group 2*

One young person acknowledged that seeking help with a parent could be a useful way of improving the communication between adolescent child and parent, although in her experience it also had the potential to create a need for third party to be present for the safe expression of feelings.

Where parents and young people accessed support in parallel, young people felt that it would be important to attend a service on a different day from their parents so they felt as if it was 'their thing', and so as to offer reassurance that what they said in a therapeutic setting was not fed back to parents.

*If the groups said to each other, 'What you discuss won't go back that way' then I'd have been happy to engage.*

*Young people's group 2*

### **Length of interventions**

The two specific interventions that we discussed with young people varied in duration. The psychoeducational interventions were fairly short (9–10 weeks), whereas the parenting intervention had the potential to extend over more than 1 year. After reviewing the models, young people felt that interventions needed to be longer than 3 months, but shorter than 1 year. They argued that relationships of trust took time to establish and that such relationships were an essential pre-condition for successful interventions.

*People who have experienced domestic violence are going to be some of the most mistrusting young people that you have ever met in your life. They're not going to want to let anybody in and trust them, so how can you give them seven weeks to get to know somebody, tell them everything about*

*them that they need to get off their chest and then give that person the time to help them with what they need help with in such a small space of time . . . Life doesn't work like that, does it?*

*Young people's group 2*

In line with this, two of the mothers recounted how their children had experienced sexual and physical abuse at the hands of family members and acquaintances, and emphasised the need for ongoing services to support their children over a much longer period of time.

## The acceptability of different service delivery settings

### ***Community-based services***

Young people were clear that they would prefer to receive their support in a community-based venue such as a community centre. Mothers also described family centres as non-threatening environments in which to engage with therapeutic services. This point was echoed by professionals, although they highlighted that where interventions are delivered by voluntary sector agencies, they need to be linked to local statutory services to enhance credibility and sustainability.

### ***Domestic violence and abuse agencies***

The young people with whom we consulted had all received support from a DVA agency and, therefore, had much to say about the role of specialist services. In general, they were positive about the support that they had received. In line with their concerns about confidentiality, discussed in more detail below, young people valued an inconspicuous location and a building equipped with a number of security measures (e.g. bell, access code).

Within such a setting, they felt that it was important that older children had a space that was distinct from that for younger children or parents, although they felt that services could be offered on the same site. In their view, the young people's space needed to include a comfortable, communal space for relaxing and socialising with other young people and staff, as well as private rooms for talking.

### ***Primary care***

The mothers consulted described feeling comfortable in approaching their general practitioner (GP) to access support and advice for their children. They also felt that they would be more likely to take up support following referral by a GP because of the significance invested in the professional opinion of the family doctor.

Young people thought that it would feel 'really clinical' to receive support in a traditional health-based setting, although they saw the value of the GP as a first point of contact who could provide information and advice about specialist DVA services.

### ***Child and adolescent mental health services (CAMHS)***

Mothers had mixed views about the role of CAMHS. They felt that CAMHS often failed to recognise the contribution of DVA to the onset of their children's adjustment difficulties. One mother had received a referral, via CAMHS, to family therapy that had included the perpetrator of abuse. As she and her children were afraid of the perpetrator, the family quickly disengaged from the therapeutic process. However, a second mother recounted how being seen by a CAMHS professional as a family unit (in relation to one of her children), this time without the perpetrator present, had been a helpful experience that had resulted in her being able to secure support for her other child, although she also felt that it would have been useful to have some individual support in addition to the family support received.

*They only saw us together, I would have liked for them to see us separately as well because you sit there very frustrated when your kids start saying things that their mum's doing this.*

*Mothers' group 2*

## Schools

Mothers saw an opportunity for DVA to be identified by schools, with school counsellors or staff having a significant part to play in delivering interventions. Professionals echoed the appropriateness of school as a setting for interventions, although they also highlighted the need for schools to agree to release children for therapy or groups without marking them as absent.

Young people felt that school was key to raising awareness about DVA and identifying it as a problem in some children's lives, although they were clear that awareness-raising work had to go hand in hand with the provision of information for children and school staff about what to do next if someone disclosed DVA. Without this they felt that children and young people could be left in a worse position than before.

Resonating with the findings of a recent review on primary preventative strategies, young people highlighted the role of tutors, teachers, learning mentors and school counsellors in identifying the problem and helping them to access support.<sup>168</sup> They were more cautious about recommending school as an appropriate setting in which to receive an intervention, viewing this as a more appropriate venue to deliver services to younger children. Concerns about scrutiny from peers were cited as the primary barrier for young people.

*It's street cred, isn't it? If you're going to a group at dinnertime and you're meant to be chilling with all your mates, then they want to know where you're going. At primary school it wouldn't be as bad.*

*Young people's group 2*

## Children's social services

Mothers tended to see interventions offered through social services as punitive rather than supportive. This view was echoed by a number of young people who described social workers and social services as unresponsive and focused on the needs of younger children.

*[the most unhelpful thing that happened was] closing our case and saying there was nothing they could do to help. I don't even remember speaking to or meeting [the] social worker even though I know they made visits. [she] seemed more concerned with the younger children than me.*

*Young people's group 1*

## The value of a multiagency response

Professionals viewed co-ordination with other agencies and multiagency buy-in as essential for identifying DVA and delivering effective interventions, but noted that success was dependent on the commitment of partner agencies to release professionals for training and to protect time for individuals to deliver interventions.

Young people highlighted the role of non-specialist services in identifying abuse, but felt the appropriate response once DVA had been identified or disclosed was to help children and young people to access specialist DVA services.

*[it's important] that they know what they [non-specialist professional] can say and they have that information to pass on, instead of dealing with it themselves and everything.*

*Young people's group 2*

Young people also wanted DVA workers to help them to access other types of services (e.g. drugs and alcohol) when therapeutic work around experiences of DVA identified other issues that needed to be addressed.

## Service culture

A number of themes emerged from young people's narratives concerning the general culture of any service delivering interventions, particularly for young people. Their views were informed by the support that they had accessed through HARV.

They drew on this model to argue that the ethos of a service should be supportive, empathetic and non-judgemental and that a service should be delivered in an equitable and unbiased way. They also felt it was important that any service was culturally sensitive.

The themes of confidentiality and control were highly salient in young people's narratives about seeking help. Confidentiality included ensuring that their peers did not know that they were accessing a DVA service. It was also important to know that information shared in a supportive setting was not passed on to others.

*There was a rule – that what is said in HARV stays there.*

*Young people's group 1*

Young people wanted to know how their personal information was going to be used; being able to see any notes made about them helped them to feel more confident about what was being shared and, therefore, more in control of the pace of the therapeutic process. They accepted that there were limits to confidentiality but some young people considered that boundaries were too permeable and too much of their information was being passed to parents, which was a barrier to engagement with services.

*Sometimes I'd tell someone and they would tell other people or my family and the situation gets worse.*

*Young people's group 1*

In contrast, another young person recounted how, in her case, sharing information had been helpful in starting a dialogue with her parent.

*HARV told my mum things [self-harm] I didn't have the strength to tell myself.*

*Young people's group 1*

Young people described an ideal service as one that offered a range of support options for parents, children and young people including refuge, practical support and play schemes for younger children. Older children and young people wanted to be able to access a drop-in support group where topics were scheduled so they could pick what was relevant to them, although they also wanted access to one-to-one private support. They felt that having a choice over whether support was delivered in a group or individual format was crucial.

*I think choice as well is important. You might not do it in, 'Right, for this, we're doing this first and then in that order'. You might want to do counselling first and start off in a one to one because you might not be confident to go into a group, say. Then go onto going into groups and then going onto doing a bit of parenting skills and things like that.*

*Young people's group 2*

### **Characteristics of professionals delivering interventions**

Expert stakeholders felt that it was essential for workers delivering interventions to have an understanding of DVA and its impacts on children. Experience of engaging with children and young people was also seen as essential. They identified a pragmatic trade-off between delivery by clinicians and the number of children who could be reached by an intervention, noting that the costs of a clinical post reduced the number of workers who could be funded. They concluded that it was more feasible for youth-oriented workers with knowledge of DVA to deliver interventions.

Young people felt that, rather than having professional qualifications, it was important that the person offering support 'got you', noting that younger staff were more likely to have this natural empathy.

*It's about if they get it or not. You could have 1000 qualifications and you'd sit down with that person and that person would know straightaway that you don't have a clue what you're talking about, you've read it out of a book. You can tell them a mile off. The second they open their mouth you can tell . . . I know you said it costs a lot of money to train and stuff, but I don't think you need those massive qualifications to do a good job at it really.*

*Young people's group 2*

This was echoed by mothers who valued receiving support from people such as workers in community settings who felt more 'like them'.

### **Perceived gaps in current UK service delivery**

#### **Accessibility**

Mothers voiced frustration that they had been unable to access support for their children directly, but had had to wait to be referred by a professional, sometimes until problems had escalated sufficiently to trigger a statutory response. This was reiterated by young people, who felt that accessing support swiftly was imperative. They also valued being able to access support directly, without having to go through a third party.

*If you're really stressed about something you need to talk to someone about it. But if you wait for say a month you might end up doing something stupid or the situation might get worse.*

*Young people's group 1*

Mothers felt that unhappy children who were not causing problems at home or school were particularly likely to fall through the net. Similarly, professionals raised concerns that children who were 'just about' coping or who were experiencing less visible emotional problems would be missed.

#### **Support for boys delivered by positive male role models**

Mothers identified a lack of support for older boys with regard to how to deal with their aggressive behaviour. One woman recounted how she had resorted to calling the police as a means of obtaining protection for herself and access to more formal support for her son.

*I don't think there's enough support for teenage boys because they do get violent and they react in a different way to girls . . .*

*Mothers' group 2*

Both parents and professionals cited the importance of providing positive male role models through prevention and intervention work with boys, although service providers highlighted the lack of specialist male workers in the DVA field.

#### **Support for children and young people in situations in which there is ongoing abuse**

Professionals also identified a gap in service provision for children living in homes in which abuse was ongoing. They noted that a number of intervention programmes excluded these children from accessing services owing to the fear that a child could be put at more risk if an abusive parent discovered that a child was attending, or if a child challenged a parent's behaviour in the light of new knowledge that they had acquired from a programme.

Young people recognised that there might be risks associated with intervening at this point but felt that children and young people were in need of support during this vulnerable time.

*Why should you have to wait until you've done all the hard bit yourself to then go and get support after you've done it? I think you should be supported with that to do it at the same time.*

*Young people's group 2*



Young people appreciated that recovery work might not be appropriate if abuse was ongoing but felt that it would be safe to attend a group support programme that provided the opportunity to meet other children with similar experiences, without any therapeutic work.

*Just spending time together because it's strength in numbers, isn't it? . . . It's strength within each other. You might not actually be doing any group work, but being in that group would – just in the group alone and just spending time together with other like-minded people.*

*Young people's group 2*

Mothers expressed similar views, suggesting that children could be offered respite care or 'something nice' which focused on coping with the current situation, as well as offering fun experiences.

### **Support for children and young people when the non-abusing parent is not ready to engage**

Professionals perceived a lack of options for working with children when the non-abusing parent was not ready to engage with services. They felt that there was a place for short interventions focused on safety planning that could be delivered to children alone without needing to engage mothers.

### **Measuring success in ways that matter to young people, parents and professionals**

Experts identified a lack of clarity around the outcomes that interventions were aiming to affect. This stimulated discussion across all groups about what would constitute a good outcome for a child accessing an intervention. The specific outcome indicators mentioned by each stakeholder group are listed in *Appendix 26*. Variation in concepts of success across stakeholder groups is discussed further in *Chapter 9* (see also Howarth *et al.*<sup>133</sup>).

Young people were emphatic that the experience of DVA could have a lifelong impact, and that a child did not ever really 'get over' the experience of DVA, but simply learned to cope with it. They explained that exposure to DVA could have a profoundly negative effect on attitudes towards men and the extent to which trusting relationships could be formed. Young people talked of always fearing that something 'bad' was going to happen within the context of a close relationship. They recounted feeling less emotional and less stressed as they 'moved on' from their experiences; no longer needing to talk about what had happened and a sense that the experience no longer defined them were identified as indicators of having moved on.

Mothers involved in the consultation groups identified a relatively small number of outcomes that spanned different domains. These included their children's happiness, sense of empowerment, and knowledge of help seeking. Also identified was a reduction in children's fear and an increase in capacity for self-expression.

Professionals placed considerable emphasis on the type of symptom/disorder outcomes frequently measured in trials but also on specific aspects of mental health such as suicidal ideation, incidence of self-harm and rates of eating disorders. There was also an emphasis on functional/impairment outcomes, with a particular focus on those relating to school and employment, as well as on those that are indicators of children's ability to cope with challenge in their everyday lives. In line with mothers' perspectives, professionals highlighted children's happiness and a sense of empowerment, but also children's greater understanding of the abuse they had experienced. Finally, professionals highlighted parenting skills and the quality of the parent-child relationship, as well as outcomes such as the number of children in out-of-home care placements and homelessness.

### **Research priorities**

Experts were aware of the lack of good-quality evaluative studies carried out in the UK, and were supportive of the need to conduct UK trials of the most promising programmes. They noted the need for multisite studies, given that many interventions do not have a huge throughput of children and young

people and that there is, therefore, a potential difficulty in accruing significant numbers for an adequately powered study.

Multisite studies were also seen as an opportunity to examine the acceptability and effectiveness in different service delivery and community contexts, which experts considered had been poorly addressed in intervention studies to date. Aspects of context identified as particularly important were whether or not an intervention was embedded in a wider co-ordinated community response to DVA, community attitudes to DVA and whether an intervention was delivered in a rural or an urban setting.

They were keen to capture factors at the level of the individual and family which might impact on acceptability and effectiveness, such as the age of children, the readiness of parents and children to take up an intervention, and culture.

Despite the fact that a number of expert stakeholders had designed and were delivering various models of intervention, a discussion of research priorities did not reveal any 'brand loyalty', although the group identified several key principles that they hoped would guide the selection of programmes to be trialled in the future:

- inclusive of non-abusive parents and children
- targeted at younger children before they enter their own relationships
- group-based to maximise the number of children that can be reached
- include risk and needs assessment and safety planning as integral programme components
- appropriate for delivery by a range of professionals in different settings.

They were in favour of trialling existing programmes and cautioned against trialling any approach that included the abusive parent, given that little is known about how to offer this type of intervention safely and sensitively.

They also expressed a wish for any intervention trialled to be supported by a comprehensive training package that could upskill those delivering it.

## Summary

Consultation with young people, mothers, practitioners and commissioners of services revealed a number of themes that cut across groups, as well as the relatively different priorities and perspectives of each group.

The accessibility of services was an issue raised by each of the groups. Professionals focused on the availability of services, or lack thereof, highlighting that funding cuts had significantly reduced the number of services available to support children and young people exposed to DVA. In contrast, mothers and young people focused on routes to and timing of access, underscoring the need for directly accessible services that could be contacted for support at the first sign of difficulty.

Parents, young people and professionals agreed that clinical qualifications were not necessary to deliver effective interventions. In fact, young people and parents highlighted that receiving support from a worker who felt 'like them' promoted therapeutic alliance, although all groups emphasised the importance of professionals having the appropriate knowledge and skills to work with parents and children who had experienced DVA.

Each group highlighted the perceived therapeutic benefit of providing children and young people with the opportunity to talk about their experiences and to spend time with others who had been in the same situation. Parents and children were clear that this type of peer support brought benefits even if no specific therapeutic work was undertaken.

Concerns about children and young people's safety was a theme most salient in the narratives of mothers. They talked about having to manage the tension between keeping their children safe from harm and supporting them in maintaining a relationship with their father. Women were fearful of the risks to children's physical safety but also their emotional safety in the context of contact with abusive men, given their views that much of men's contact with their children was motivated by a continuing desire to exert control over their ex-partner. Women also highlighted that particular interventions, such as those directly involving the perpetrator or those that worked on parenting skills, would not be appropriate while families continued to feel unsafe, or the perpetrator continued to exert control. When asked to identify the outcomes that targeted interventions should look to affect, mothers cited children and young people's knowledge of how to seek help, increased safety and reduced fear as primary indicators of a programme's success.

A key theme to emerge from discussions with young people was the need for confidentiality when seeking help. Often, young people did not want their peers to know about their experiences of DVA, or their need for support, and this made school a difficult setting in which to receive specialist support. Although they were willing for parents to know about their attendance at a service or programme, they needed clear assurances that the information they shared would not be routinely passed on to parents. Having said that, they were aware of the limits of confidentiality and recognised that some concerns did need to be shared with parents or outside agencies, although in these instances they wanted to understand how their information would be used and what would happen next. This last point relates to a second theme expressed by young people: control over the therapeutic process. Not only did they want to know about how their information would be used, they also expressed a desire for the nature and pace of their support to be separate from that of their parents, thus increasing their control over the therapeutic process.

Practitioners and commissioners underscored the importance of understanding the context in which interventions are delivered and how this may influence outcomes achieved for children. They highlighted the need to take account of factors comprising the interpersonal contexts of children and parents (particularly age, exposure to other sources of trauma and adversity, ethnicity and religious beliefs) and to tailor delivery around these factors. They also highlighted the importance of organisational context, emphasising that it was difficult to deliver effective interventions in the absence of sustainable funding, and that they wanted guidance about how to demonstrate impact in order to secure future funding. They also raised the importance of understanding whether or not evidence-based interventions could be adapted to suit the needs of a local delivery setting. Finally, they cited the significance of the community context, particularly the extent to which targeted interventions were embedded in a broader co-ordinated community response to DVA.

Consultation with young people, parents and professionals yielded rich information that helps to contextualise the findings of other study components in the reality of service delivery and the lived experience of young people and parents seeking help from specialist DVA services. Nevertheless, it is worth noting some limitations to this process.

### **Limitations**

Owing to the ethical concerns associated with speaking with younger children about their experiences of abuse, we consulted only with young people who were at least 12 years of age. Therefore, the voices of younger children are missing from the consultation. We also recognise that all of the young people to whom we spoke had received support from a specialist domestic violence agency and, therefore, their views may not reflect those of other young people accessing different types of services, or no services at all.

With regard to the expert stakeholder groups, we acknowledge that there was a stronger representation from non-statutory organisations than statutory sectors such as health, CAMHS and criminal justice. Interventions in the UK are often delivered by a range of agencies and, therefore, active efforts should be made to engage these sectors in more focused consultation work about specific interventions.

## Chapter 9 Synthesis of study findings

### Aim

In this chapter we aim to synthesise findings from the different components of the IMPROVE study, reported in *Chapters 3–8*, to address the research questions set out in *Chapter 1*.

### Method

We identified the key findings from each of the study components and mapped these against the research questions set out in *Chapter 1*. With regard to each review question, we considered where findings converged and whether they were complementary, conflicted or did not exist. This underpins the narrative summary presented below. The overarching conclusions for each of the research questions form the basis of the recommendations set out in *Chapter 10*.

### What is the nature of the evidence base on targeted interventions to improve outcomes for children exposed to domestic violence and abuse?

Before considering the evidence relating to each of the research questions, we reflect briefly on the quantity, quality and coverage of the primary studies identified by our systematic reviews to give a sense of the breadth and depth of the evidence in the field, and to highlight issues that should be kept in mind when considering the evidence addressing each key question, as well as the conclusions and recommendations that we offer.

Our systematic searches identified a surprisingly small number of trials: 13 completed (published between 1995 and 2015) and one in progress.

- The experimental studies and all of the associated papers published in relation to the main trial accounted for approximately 40% of the full-text records that we screened. The primary reason for excluding studies from the review was use of an uncontrolled design.
- Eight of the trials were published in the past 10 years, five were published in the past 5 years, and one is ongoing.
- Most trials were conducted in the USA, and none were conducted in the UK. None were set in low- or middle-income countries.
- Trials evaluated five different classes of intervention. Three of the categories contained at least two studies, although there was significant heterogeneity in the characteristics of these interventions, and there was limited replication of specific programmes.
- The quality of the trials was generally low or unclear. Particular areas of concern were randomisation sequence generation and allocation concealment.
- Studies were small, with a range of 66–258 participants. Study samples were ethnically diverse, although, given that these studies were conducted mostly in the USA, these samples may not reflect the ethnicity profile of the UK population.
- Studies provided little detail about the practice and research contexts in which they were undertaken, or the causal mechanism(s) by which the specific intervention being tested was expected to effect change in outcomes.

- Trials measured a limited range of symptom/disorder-focused outcomes that were inconsistently measured. There was little evidence of systematic measurement of harm, beyond merely monitoring the differences in outcomes between groups.
- There was little evidence that trials had included any form of concurrent process evaluation.
- None of the trials included an economic analysis.

We identified five peer-reviewed qualitative studies reporting nine papers. Studies were published between 1992 and 2012.

- Most of the studies had been conducted in the USA, although one study (reported in two papers) was based in the UK.
- Five of the studies had been conducted in the past 10 years and three had been conducted in the past five years.
- The qualitative studies were free-standing, meaning that they were not linked to a trial or other quantitative study.
- Qualitative studies examined three different classes of intervention, with two studies focused on models (psychotherapy and psychoeducation) for which we also found (unrelated) trials.
- The quality of the qualitative studies was generally high.
- The individual studies focused on describing the experiences of receiving or delivering specialist interventions, along with the perceived benefits and harms associated with participation. There was a more limited focus on the processes through which the intervention might affect outcomes.

This summary highlights an underdeveloped evidence base that is characterised by some breadth but little depth, and serves as a reminder that our findings are founded on a fairly small body of work. There is a need for more research to address questions of effectiveness and acceptability of interventions for this population of children and families. The limited scientific evidence also reiterates the importance of drawing on a range of evidence sources to inform decisions about the types of research that are needed to strengthen the evidence base.

## What is the nature of interventions to improve outcomes for children exposed to domestic violence and abuse?

Our searches of the peer-reviewed and grey literature allowed us to map the evidence in the field, with a view to identifying research gaps.<sup>70,238</sup> However, as we note above, the studies that we identified represent only a proportion of the existing studies, and so this cannot be considered a full scoping study.

### Categorising interventions

In order to synthesise the results of studies within and across study components, we developed a taxonomy to categorise interventions according to their therapeutic approach (see *Chapter 3*).

We categorised programmes using the descriptions provided in the main study papers, as well as other studies in associated publications. In general, we found limited descriptive information about the content of programmes, particularly in trial papers, but also in some qualitative studies. Although many of the interventions we looked at were manualised and probably described extensively within that material, few of these manuals were freely available. Other sources that may have provided supplementary information such as websites and papers describing interventions were not referenced in the study papers.

Poor reporting of interventions in published trials is ubiquitous in the literature, and is in part explained by the word limits imposed on authors for papers published in peer-reviewed journals<sup>239,240</sup> We found more comprehensive descriptions in theses or longer papers. Nevertheless, without adequate description it is difficult, if not impossible, to repeat a trial, thus hampering efforts to replicate or build on research findings.<sup>241</sup>

There is a need for better descriptions of interventions to be made available within or alongside reports of studies, which could be achieved through the publication of study protocols and standalone descriptive papers (which occasionally happens for manualised psychological or social interventions), or simply through links to websites cited in papers.<sup>239</sup> Recent guidance is available to support the better description of trials and other types of evaluative studies.<sup>241</sup> Work is also under way to develop reporting guidelines that are specific to the reporting of complex social and psychological intervention trials and paediatric specific guidance that may also be useful to researchers in this field.<sup>242,243</sup>

## Peer-reviewed literature

### Types and targets of interventions

Across trials and qualitative studies, we identified six different classes of intervention: (1) psychotherapy; (2) psychoeducation; (3) advocacy; (4) guided self-help; (5) parenting skills training in combination with advocacy; and (6) advocacy in combination with psychoeducation.

Although we considered only a portion of the studies published in the field, when we compared our results against those of reviews with a wider scope, we found broad congruence in the types of interventions identified, although these other reviews identified a larger number of multicomponent studies that combined the core components, which we identified, in different ways.<sup>41</sup>

Trials most frequently evaluated psychotherapeutic and psychoeducational interventions delivered to the non-abusive parent (mostly mothers) and children, although the format in which an intervention was delivered (in groups, individual, dyads, combination) varied between programmes.

We did not identify any trials that evaluated lower intensity interventions such as self-help (non-facilitated or guided), or interventions delivered using computerised or mobile technologies. Furthermore, we did not identify randomised studies examining interventions in which the abusive parent was a recipient and child outcomes had been measured.

In contrast, qualitative evaluative studies mostly explored experiences of receiving and delivering psychoeducational interventions, some of which included both the abusive and non-abusive parent. Two papers also explored a guided self-help intervention designed to improve communication between parents and children.<sup>49</sup> None of the studies considered interventions that focused explicitly on parenting skills, and only one study considered a psychotherapeutic play-based intervention.<sup>162</sup>

Across both sets of primary studies we observed that interventions were most often delivered based on children's exposure to DVA, rather than on their level of clinical or broader social needs, although a number of studies excluded children with serious mental health problems,<sup>61,90,91,95</sup> perhaps on the premise that these interventions were designed for children with less severe problems. Only four programmes were explicitly targeted at children with specific types of symptoms.<sup>61,90-92</sup>

The majority of peer-reviewed studies evaluated interventions delivered to children aged 4–14 years, and we observed a paucity of studies evaluating interventions that were designed specifically to improve outcomes for infants (although one quasi-experimental study sampled children as young as 12 months<sup>119</sup>) and older adolescents.

### Setting and professionals delivering the intervention

On the whole, details of the settings in which interventions were delivered were scant or absent. From the limited information we were able to glean from the study reports, interventions were predominantly delivered in (unspecified) general community settings or on the premises of specialist DVA agencies. Three trials examined interventions delivered in the non-abusive parent's home,<sup>90,91,96</sup> one trial of an advocacy intervention (aimed solely at the non-abusive parent)<sup>115</sup> was delivered in a primary health-care setting, and one qualitative study evaluated a psychotherapeutic, play-based intervention delivered to children aged 6–7 years in a school setting.<sup>162</sup>

We found that in the context of trials, personnel delivering interventions were mostly graduates with expertise in disciplines allied to mental health, although in one study the intervention was delivered exclusively by social workers<sup>61</sup> and in another by undergraduate students.<sup>96</sup> The personnel delivering the interventions evaluated in the qualitative studies seemed to be a mixture of therapists, researchers and DVA workers, although this was not always clearly stated.

### Service provision in the UK

#### Types and targets of interventions

In comparing the profile of interventions evaluated in peer-reviewed studies with those being delivered in the UK, we found that the most common model used in the UK was group-based psychoeducation, delivered to parents and children in parallel, or to children or young people alone. We identified only a handful of programmes that could be classed as psychotherapeutic or that included a psychotherapeutic component, and we did not identify any parenting-focused programmes. We did, however, identify several programmes that included, or were solely targeted at, the abusive parent.<sup>203,209</sup>

Mirroring the peer-reviewed studies, the UK interventions that we identified were largely offered based on children's exposure to DVA rather than on their specific clinical or social needs. We found a broader spread than in the peer-reviewed literature in terms of the age groups of the children to whom interventions were delivered. We found a number of programmes aimed specifically at teenagers, perhaps explaining the higher proportion of interventions delivered to children only in the UK grey literature, and an equal number that purported to be suitable for any children and young people aged up to 18 years, although it is not clear if this was reflected in the profile of children taking up these programmes. In line with the peer-reviewed literature there were far fewer programmes aimed specifically at younger children.

#### Setting and who delivers the intervention

There was an equal split between programmes that were delivered in diverse community settings and those delivered in specialist DVA services, although, as far as we were able to tell, none of the interventions had been explicitly designed or piloted for delivery in schools, primary care or specialist mental health settings. Reflecting the strong ethos of multiagency collaboration in tackling DVA in the UK,<sup>244,245</sup> interventions were delivered by a broader range of professionals from both statutory and voluntary sector services than reported in the peer-reviewed literature.

### Evidence gaps

From this overview of the type of research that has been undertaken, and through consideration of the types of programme, populations and settings evaluated in the studies that we reviewed, we identified substantial research gaps.

- Limited research evaluating or comparing the acceptability or effectiveness of any class of programme by intended recipients (child vs. child and non-abusive parent vs. child, non-abusive parent and abusive parent) or by format of delivery (e.g. group vs. individual).
- Lack of outcome-focused studies relating to interventions involving or targeted at the abusive party with the aim of enhancing child safety and well-being. This model is a feature of UK service provision and, as we discuss later in this chapter (and in *Chapter 4*), there are questions regarding its suitability for use with couples whose relationships continue to be characterised by coercive control. The lack of evidence on 'whole family' approaches to DVA was also highlighted as a gap in the evidence in the 2014 NICE DVA guidelines.<sup>44</sup>
- With the exception of one study, there has been little evaluation of lower intensity interventions that could be offered to families who are not ready to engage fully with therapeutic services or who for practical reasons cannot attend an intervention in person. In particular, computer- or internet-based therapies are viewed as promising alternatives for treating child and adolescent mental health difficulties when evidence-based face-to-face treatment is not feasible.<sup>246</sup> This may warrant further exploration, particularly given the acceptability of guided self-help discussed below, and the potential for computerised therapy to offer a low-cost, resource-efficient way of accessing psychological services.<sup>247</sup>

- Studies generally did not often acknowledge the heterogeneous nature of DVA, or children's exposure to it,<sup>11,12</sup> and, therefore, there is a lack of evidence on the effectiveness of intervention for children exposed to different types of DVA, marked by a greater or lesser degree of coercive control or bidirectionality of abusive behaviour between adults.
- Limited research on the acceptability and effectiveness of interventions designed to ameliorate specific symptoms, or which have been adapted to be relevant to the needs of specific groups. This approach of delivering interventions in an untargeted manner to any child with experience of DVA is at odds with consensus opinion in the UK, and with the views of other trauma-focused researchers, who advocate for a needs-based approach to intervention.<sup>52,248–250</sup> However, scholars from the field of developmental psychopathology contend that treatments tailored to specific types of abuse, to populations, or to outcomes may be less effective than those aimed at mitigating early changes in the neurobiological and temperamental factors that dispose individuals towards psychopathologic disorders. Whether and how to tailor interventions for this population requires further exploration.<sup>251</sup>
- Little evidence on the acceptability and effectiveness of interventions for infants and older adolescents, although in the UK many programmes are targeted at young people exposed to DVA. However, we are aware that several evaluations of home visitation programmes that have been adapted for use with parents of infants experiencing DVA are under way, with preliminary results suggesting that the adapted intervention is acceptable to both those delivering and those receiving it.<sup>252,253</sup> The outcome of a trial is expected shortly.<sup>253</sup>
- Limited investigation of interventions delivered in specific settings such as community-based mental health clinics, schools, and primary care.
- Few psychotherapeutic and no parenting interventions that were specifically tailored to the needs of children and parents who have experienced DVA being delivered in the UK. Given that both types of generic intervention are routinely offered through community-based CAMHS there is a need to determine the extent to which children and families affected by DVA are accessing these interventions through mental health referral routes, to review whether or not these therapies are suitable for this group of children, and to determine if and how therapies are tailored to their needs. This resonates with a recent review of children's and young people's mental health services in the UK which highlighted the need to improve access to services for 'at risk' groups to effective evidence-based treatments.<sup>58</sup>
- The current evidence base is based on evaluation of interventions that have largely been delivered by qualified mental health professionals and social workers, although interventions delivered in the UK (and probably in practice settings elsewhere) are delivered by a broader range of professionals, many of whom do not have expertise in child mental health. There is a need to consider the extent to which the interventions evaluated in trials are suitable for delivery by non-mental health specialists, and whether or not the qualifications and skills of those who deliver interventions has an impact on acceptability and effectiveness.

## What is the evidence that interventions are clinically effective?

### Short-term clinical effectiveness

Interventions for children who have been exposed to DVA have been tested in a small number of controlled trials (measuring mental health or behavioural outcomes), and, as discussed in *Chapter 3*, a conventional pairwise meta-analysis was not conducted, given the highly heterogeneous nature of the study designs, interventions, settings and outcome measures in the primary studies. Technically, this precludes any conclusion about the relative effectiveness of the interventions and highlights the need for more research.

However, the call for more research is not particularly informative without an idea of what types of research are needed, and which specific questions take priority. Moreover, as we have observed, the accumulation of evidence takes time and may not address identified knowledge gaps.<sup>70</sup>



Therefore, we conducted a NMA with a view to maximising the value of the evidence on effectiveness that we *do* have, with the intention of drawing tentative conclusions about the interventions that appear to be promising in terms of clinical effectiveness and cost-effectiveness, so as to inform the design and focus of future studies. NMA is the most robust method for making comparisons between interventions that have not been directly compared within trials. As we stress in *Chapter 5*, these analyses are intended to be ‘hypothesis-generating’ rather than robust estimates of clinical effectiveness and cost-effectiveness, especially given the high degree of uncertainty that surrounds our findings. It is likely that, as new studies become available, the results of this analysis will change, as would the findings of a conventional meta-analysis when there are few studies.

Our findings suggest that advocacy plus parenting skills training may be the most effective intervention type for improving child behavioural outcomes, with psychoeducation the only intervention type to come close to statistical significance for improving child mental health outcomes.

When analysing across all interventions to examine whether or not effectiveness depended on to whom the intervention was delivered, we found evidence that interventions aimed at children were most effective for improving child mental health outcomes. However, this finding is confounded by intervention type, given that all of the interventions aimed exclusively at the child were delivered in groups and contained a psychoeducational component. A more accurate interpretation may be that the most effective interventions for improving mental health outcomes are those with a psychoeducational component, delivered to children in a group format.

Interventions delivered to both parent and child in parallel were found to be most effective for improving child behaviour outcomes.

Taken together, these results seem to suggest that the interventions included in this review tend to act on either internalising or externalising behaviour, but not both. In addition, the direct involvement of parents may be a necessary feature of interventions to reduce behaviour problems, but perhaps not for interventions that seek to reduce children’s internalising symptoms. This is a potentially important finding given that interventions tend to be offered solely on a child’s exposure to DVA, and given the popularity of delivering interventions in parallel to parents and children.

These results diverge somewhat from an evidence review undertaken to inform the development of NICE DVA guidance,<sup>43</sup> which concluded that evidence was strongest for psychotherapeutic interventions delivered to mothers and children, with the evidence relating to parenting-focused programmes and psychoeducation delivered to children alone deemed to be moderate, and evidence relating to psychoeducation delivered to mothers and children deemed to be mixed. The guidelines also recommended that interventions that strengthen the relationship between the child and non-abusive caregiver should be provided.<sup>44</sup> Our results raise the possibility of a more nuanced picture, where different interventions may be needed to respond to different types of problems, although in reality many children experience both internalising symptoms (e.g. anxiety, depression) and externalising problems.<sup>35,254</sup>

These findings are consistent, however, with the broader mental health treatment literature in which different therapies are recommended to ameliorate different clusters of symptoms,<sup>255</sup> as well as with process-orientated work that considers how the effects of hostile and violent family environments are linked to children’s adjustment, and that finds that different mechanisms may underpin the development of children’s internalising symptoms and externalising problems.<sup>256,257</sup>

The commonality between interventions aimed at both the child and parent was a focus on enhancing parenting, either by helping parents to understand the impact of abuse on their parenting or by enhancing parents’ repertoires of behaviour management techniques. Therefore, it seems feasible that these different programmes activated change in children’s behavioural problems through a common causal pathway. In contrast, some of the processes that underpin children’s recovery from trauma such as disclosure and

retribution of responsibility may not require the direct involvement of a parent, with the possibility that child-only groups create a greater sense of confidentiality for children and, therefore, a greater willingness to share experiences.<sup>105,249</sup> However, without a clear understanding of the underlying mechanisms by which particular interventions effect change, these remain hypotheses that require further exploration. This raises the more general point that, although the studies all had plausible theoretical underpinnings discussed in relation to existing theoretical frameworks or other programmes, only some studies explicitly articulated the process through which change was anticipated to be brought about by the intervention, with few stating the role of each intervention component in the change process. This was noted in an earlier review that found that half of the included studies did not discuss the proposed mechanism by which the intervention was thought to impact on outcomes.<sup>41</sup>

As a whole, our findings suggest that intervention type and target population should be tailored according to the types of problems that children are experiencing, rather than be simply offered on the basis of exposure to DVA, as is common practice. By this logic, we also need to consider whether or not every child requires a specialised intervention following exposure to DVA, given findings that indicate that some children demonstrate resilient outcomes in the face of significant adversity.<sup>35,36,258</sup>

This accords with the views of practitioners we consulted, as well as with the opinions of other researchers and practitioners (in the UK and elsewhere) calling for a more needs-based approach to intervention.<sup>44,52,248,249</sup> This proposition requires further investigation in well-conducted trials to determine whether one intervention is more effective than another for reducing particular problems, and whether or not the effectiveness of an intervention differs depending on who receives it. Only a few studies looked at the moderators of treatment effects,<sup>103,113,116</sup> therefore there is also a need to explore other factors such as age and sex, culture and ethnicity of children and parents, children's exposure to other forms of trauma and adversity, and readiness to engage in the therapeutic process as factors that may moderate treatment outcomes.

These gaps in our knowledge about what works and for whom require studies that are adequately powered to investigate the effectiveness of interventions for different subgroups of children. In order to permit subgroup comparisons, samples should be large enough and comparisons should be specified a priori in a published protocol. Even if subgroup analysis remains underpowered in individual trials, comparability of interventions and outcome measures would allow meta-analysis of subgroup effects. As we discuss in *How are outcomes defined and measured in evaluations of interventions*, pooling of results across trials would be facilitated by greater consistency in outcome measurement, which requires consensus in the field about a core outcome set and reporting standards.

As is the case with many complex interventions,<sup>259</sup> attention needs to be given to the setting and wider context in which interventions are implemented, given that we observed a lack of replication across particular settings and poor attention to broader contextual factors that may influence implementation and outcomes.<sup>260-262</sup> Studies that explore the role of context at multiple levels are needed if we are to determine which conditions are necessary or sufficient for interventions to be implemented, successful, sustainable and replicable.

### **Long-term clinical effectiveness**

When judging the clinical effectiveness of interventions, short-term outcomes – particularly with regard to interventions for children – are of limited use to policy-makers and commissioners of services. Trials of interventions should follow up participants for at least 1 year from the start of the intervention, and ideally several years beyond the duration of the treatment, although this is a challenging proposition, given the resources required. The majority of trials that we reviewed did not measure outcomes beyond the end of the intervention, with a maximum of 2 years' follow-up.

Longer-term follow-up precludes the use of WLC groups; however, randomisation to a treatment-as-usual or an attention-control arm can be a barrier to participation for both parents and those delivering services.<sup>263</sup> This is particularly salient in trials recruiting vulnerable children and families, where the intervention being trialled has been implemented in other areas, and where treatment as usual may be

perceived as inadequate.<sup>263</sup> Given the absence of randomised studies conducted in the UK, this requires debate among researchers, service providers and service recipients, and a consensus on trial designs that are acceptable to all involved in delivering and participating in experimental studies.

Although less common and more resource-intensive, parents and service providers may be more amenable to involvement in head-to-head trials in which all trial arms are active treatments.<sup>264</sup> Alternatively, it may be possible to make use of the patient preference RCT paradigm whereby individuals with treatment preferences are allowed their desired treatment without randomisation and those who do not have particular preferences are individually randomised in the usual way.<sup>265</sup> This type of design may be particularly useful given the lack of knowledge about the preferences of children and parents at different stages in the help-seeking trajectory. Irrespective of the design chosen, there is need for careful feasibility and pilot testing in the early stages of study and intervention to ensure the engagement of all involved, as well as process evaluation running alongside a trial that explores the experience and conduct of this type of research.<sup>266</sup>

To estimate longer-term effectiveness of interventions, we planned to draw on longitudinal studies to extrapolate into adulthood the effects reported in the primary studies. We aimed to map the outcomes measured in trials on to the baseline adjustment scores measured in longitudinal studies as predictors of long-term outcomes. However, we found no overlap in the measures used as outcomes in the primary studies (see *Chapter 5*) and measures at baseline in the longitudinal studies (see *Chapter 6*). Instead, we identified predictors from the longitudinal studies that could be broadly categorised as behavioural or mental health to match the outcomes measured by the trials.

We planned to use the effect estimates from the NMA to predict the change we might expect of an intervention on behavioural and mental health predictors included in the longitudinal studies, and then to use the results from the longitudinal studies to extrapolate the effects of the various interventions in to the long term. However, given the uncertainty in the findings derived from the NMA and the further assumptions that would have been required to model long-term change, it would have been misleading to model the longer-term impact of interventions offered in childhood on longer-term outcomes. Understanding the long-term outcomes associated with participation in a specialist intervention following exposure to DVA remains a significant evidence gap.

## What is the evidence that interventions are cost-effective?

Trials of interventions for children exposed to DVA and for adult survivors have ignored an important consideration for health-care policy-makers and commissioners of health services, namely cost-effectiveness.<sup>134</sup> With finite health-care budgets and global austerity eroding public services, it is not sufficient to measure the relative effectiveness of a treatment or intervention compared with no (or alternative) treatment, particularly in the field of gender violence, in which health-care-based programmes are relatively new.<sup>267</sup> Our initial consultation with commissioners and practitioners highlighted evidence about cost-effectiveness as one of their key priorities for this piece of work.

Gold *et al.*<sup>134</sup> described two strategies for evaluating cost-effectiveness of interventions to reduce DVA: (1) economic evaluation alongside RCTs or (2) economic modelling studies. None of the trials that we reviewed in this evidence synthesis provided an economic analysis.

We therefore conducted our own cost-effectiveness analysis (CEA) by ascribing costs to the interventions from their descriptions in the papers reporting the primary studies, and relating these to the SMDs between interventions generated from the NMA. Our analysis was based on the same assumptions used in the NMA with additional assumptions about costs. Given the differential effectiveness of interventions for behavioural and mental health outcomes, we also plotted cost-effectiveness using different weightings for

the two broad-band dimensions of child adjustment that we considered throughout this review (mental health and behaviour).

For behavioural outcomes, psychoeducational intervention provided to parents and children in parallel is likely to be the most cost-effective at a lower willingness-to-pay threshold, with advocacy plus parenting becoming relatively more cost-effective at a higher willingness-to-pay threshold. For mental health outcomes, a psychoeducational intervention delivered to the child is likely to be most cost-effective.

Given the assumptions that we made, these findings cannot be the basis for choosing between types of intervention, but, as with the effectiveness analysis, the cost-effectiveness ranking of interventions in relation to outcomes can inform the next phase of research on interventions for children exposed to DVA.

Going forwards, trials need to include a cost-effectiveness analysis, which requires the prospective measurement of intervention costs, as well as the inclusion of outcome measures that capture utilities that are needed to directly compare costs with benefits.

## How are outcomes defined and measured in evaluations of interventions?

As we highlighted in *Chapter 1*, the emphasis of health-care provision has shifted towards providing person- or patient-centred care that reflects the priorities of those using services and that is delivered in ways that service users find acceptable, accessible and useful.<sup>58</sup> In a move towards this ideal, there is increasing focus on outcomes-based commissioning, whereby services are commissioned and incentivised based on the extent to which care providers deliver outcomes that are important to people using particular services.<sup>268</sup>

In bringing together different sources of evidence and knowledge, this study gave us the opportunity to consider outcome measurement in efficacy and effectiveness trials, and to reflect on whether or not what is measured represents what is important to those using, delivering and commissioning specialist DVA interventions.

Although we extracted only a selected range of outcomes for the purpose of our systematic review of trials reported here, in an extended analysis published elsewhere,<sup>133</sup> we examined the range of outcomes reported in studies which, along with the results reported in *Chapters 3, 4* and *8*, informs our overview of outcome appropriateness.

We found that, although trials measured outcomes spanning a range of domains, there was an emphasis on the measurement of children's symptoms and disorders, although there was significant variation in what was assessed and how. This finding is consistent with other reviews examining outcomes measured in children's mental health research.<sup>269</sup>

By comparison, the benefits perceived by various stakeholder groups identified in the review of qualitative studies (see *Chapter 4*), along with consultation with young people, parents and professionals (see *Chapter 8*), suggest that, although those who commission, deliver and use specialist DVA interventions undoubtedly construe symptom reduction as an important benefit, perceptions of a good outcome extended beyond this to include functional outcomes such as school attainment, the ability to cope with challenge, self-expression, self-regulation, sense of well-being (including emotional well-being, self-esteem and sense of empowerment) and improvements to relationships. These findings resonate with other studies that have sought to identify what success looks like for children accessing different types of services<sup>270-272</sup> and suggest that the narrow set of health-oriented outcomes most frequently measured in trials only partly address the benefits that are sought by those who use and commission specialist child-focused DVA interventions.

It was, however, encouraging to observe that there was some effort among the trials we looked at to measure other types of outcomes, particularly those that are indicators of some of the well-understood processes by which DVA may affect children (e.g. parenting and maternal mental health). However, they did so infrequently and with little consistency.

Heterogeneity in outcomes measured across trials hampers the process of synthesising evidence across studies,<sup>273</sup> illustrated by the fact that we had to collapse trial outcomes into broad indices of adjustment in order to carry out the NMA detailed in *Chapter 5*. Authors of a number of DVA-related reviews have noted this problem, calling for efforts to seek consensus on what to measure in DVA trials and how to measure it.<sup>40,166,274</sup> They also call attention to the lack of systematic monitoring of harms in DVA trials. Only three studies included in our review explicitly reported the monitoring of adverse events,<sup>61,92,94</sup> despite the study cohort being a high-risk population and despite evidence from trials including adults indicating that serious adverse events do occur, albeit infrequently, during the course of research.<sup>166</sup>

We found little evidence that studies deliberately measured the negative effects of participating in an intervention or a trial, beyond monitoring the intervention group for reduced benefit compared with the control group.<sup>166</sup> However, our review of qualitative studies highlighted that participation in an intervention may lead to negative impacts, with particular tensions noted in respect of interventions involving the abusive party, the emotional risks of safety planning for children, the discomfort for some associated with work around sexual abuse prevention, and managing painful memories and negative emotions elicited by participating in an intervention.

We suggest that there is a clear rationale for broadening the outcomes captured in child-focused DVA intervention studies to reflect the perspectives of service users and providers and to capture potential harms. However, we must emphasise that this is a call for an expansion of what is measured, rather than a substitution of one measurement domain for another. There is also need for triallists to take steps to reduce the inconsistency in outcome selection and measurement across studies.

When designing intervention studies, researchers should undertake development work that includes theorising about the possible unintended consequences of an intervention and qualitative work with the intended recipients of the intervention to scope opinion on outcome measurement.<sup>275</sup> Trials can also include nested qualitative studies that seek to gather the perspectives of trial participants as regards their experiences of receiving an intervention, as well as any perceived benefits and harms that reach beyond what is measured by primary and secondary outcomes.<sup>266,276</sup>

In the longer term, we would encourage researchers in this field to come together to seek consensus on a core outcome set to be measured and reported as a minimum standard in all quantitative evaluative studies. Development of a standardised outcome set would offer the opportunity to systematically integrate the perspectives of all stakeholders into trial measurement, and also to enhance the methodological standard and utility of research in the field, by increasing consistency and reducing reporting bias (where many outcomes are measured and only favourable effects reported<sup>273</sup>). This type of international collaboration between researchers and patients has proved successful in other fields, such as rheumatology, which has achieved consensus on core outcome data sets for all major rheumatological conditions.<sup>277</sup>

### **What is the evidence that interventions are acceptable to stakeholders and feasible to deliver?**

In addition to being able to answer questions about clinical effectiveness and cost-effectiveness, commissioners and service providers need an answer to the acceptability question: 'if we offer it, will people come?'.<sup>278</sup>

This is a challenging question for trials to answer.<sup>278</sup> The primary studies in our review provided limited information about the acceptability of specific models in terms of initial uptake. Attrition rates varied from

5% to 52% across the 13 trials, although 10 studies reported fairly low dropout rates (< 16%). Most of these studies paid participants for initial and continued involvement, possibly trading off external for internal validity.<sup>279</sup> Three studies reported higher attrition rates, although two evaluations of play therapy involved parents and children living in refuges, that is, temporary settings. One of the studies evaluated the effectiveness of trauma-focused CBT against usual care, with greater attrition in the control arm (33% vs. 53%).

Poor reporting of attrition between study arms made it difficult to systematically determine whether dropout varied between conditions, and whether attrition was due to the burden of participating in research or difficulties with a particular type of intervention. Where reasons were reported these frequently related to the practical challenges faced by women and children following exposure to DVA, rather than to the intervention itself or the study design, although reasons for dropout were often not reported by trial arm, thus obscuring differences between conditions.

Although trials (at least in isolation) are not the most relevant research design by which to explore questions about acceptability, the value of the data they do yield could be maximised through better reporting in accordance with CONSORT guidance.<sup>136,137,280</sup>

The inclusion of qualitative studies nested in experimental designs would directly address issues of acceptability of a particular intervention, and would help to disentangle the acceptability of involvement in research from receipt of a particular type of intervention, so as to inform study design and decisions about intervention optimisation and adaptation going forwards.<sup>266</sup> In the section *Long-term clinical effectiveness*, we also raise above the possibility of using preference designs that could help to elicit data on patient preferences for particular types of intervention.<sup>265</sup>

### **Acceptability of specific interventions identified through the reviews**

#### **Psychoeducational programmes**

A number of UK evaluative studies did report uptake and completion of various types of programmes, although this mainly related to psychoeducational interventions. Several studies noted a large difference between the numbers of children referred to a programme and those who took it up.<sup>212,225</sup> However, this was attributed to a careful assessment process that identified inappropriate referrals, rather than to refusals to engage.<sup>212,225</sup> Practical issues and reticence to take part in a group intervention were also cited by mothers as reasons for non-participation.<sup>225</sup> One study noted the high attrition of mothers from a parallel group intervention, which increased the likelihood that children also would not complete the programme. However, on the whole, completion rates for children's groups reported in UK studies were high (75–87%; see *Chapter 7*).

Many of the young people with whom we consulted during the course of this study had participated in one of the psychoeducation programmes described in *Chapter 8*,<sup>213</sup> and they generally considered this type of intervention to be appropriate for teenagers. However, for this older group acceptability depended heavily on receiving support that was completely independent (or perceived as independent) to that offered to their parents. In practical terms this meant attending services on different days with strong assurances that information would not be routinely shared with their parents, or attendance at a programme that did not require parental involvement. The cut-off point beyond which the receipt of intervention alongside parents was no longer seen as acceptable was about 12 years of age.

The perceived benefits to children associated with this type of intervention emerging from the qualitative review included those derived from the group process (having fun and making friends, realising that they were not alone), and those that derived from the therapeutic content of the intervention (being able to talk about DVA, the correct attribution of responsibility for abuse, skills in managing difficult situations and emotions, and increased self-esteem). Mothers also reported benefiting from participation in groups with other parents who had experienced DVA, and reported reduced isolation and more sensitive parenting. These themes were echoed in the UK grey literature.

Although group-based psychoeducation seems to be well received on the whole, our synthesis of qualitative studies identified specific features that created tension for recipients. Work around sexual abuse prevention could be uncomfortable for children in a group setting; this was a theme also highlighted by one of the more comprehensive UK evaluations of a group psychoeducation programme.<sup>212</sup>

There were also emotional costs associated with safety planning, where this component of the intervention was seen to have a counterproductive effect for some children, by increasing their sense that violence would recur and thereby increasing their perceived level of threat. Safety planning is a common feature of different types of programme and, although it has become an accepted feature of work with children, to date there is little evidence that the provision of this type of information is of benefit to children with current or historic experience of DVA.<sup>7,108</sup> This finding raises the possibility that, for some children, safety planning may trigger long-standing patterns of vigilant responding, which warrants further investigation.<sup>281</sup>

The emphasis on confidentiality in the children's group led to tension for children with regard to what was permissible to share with friends and family, and a sense of parental frustration and exclusion at not knowing what was being discussed within the groups. Parents could also feel challenged by questions raised by their children following group discussion which they found upsetting and difficult to deal with, even when they were supportive of a child's involvement in a programme.

The engagement of parents in parallel group sessions is intended to mitigate these tensions by furnishing parents with an understanding of the therapeutic content delivered to children, and supporting them to respond to questions that children may raise as a result. The importance of parental engagement from the perspective of intervention acceptability is crucial, given the proposition discussed in *What is the evidence that interventions are clinically effective?* that psychoeducational interventions delivered to children alone may be clinically effective for reducing internalising symptoms. Our review of qualitative studies and UK grey literature highlights that the offering of this type of intervention to the children of parents who are not fully engaged partners in their child's therapeutic journey may run the risk of alienating parents from supportive services altogether.

The review of qualitative studies also raised some specific issues with regard to the inclusion of the abusive party in psychoeducational programmes. Although this type of intervention was desired and valued by some parents, it introduced overt and covert power struggles along gendered lines that were viewed as potential barriers to therapeutic work. Although mothers reported some benefits, they also voiced difficulties in creating the changes they felt the intervention required of them, because the dynamics of power and control in their relationship remained unchanged and were present within the group setting.

Of particular concern to some authors were the ways in which some male perpetrators appeared to use the insight they had gained through attending their programme to derail the efforts of the mothers to bring about change outside the intervention. This was echoed by several mothers with whom we consulted, who highlighted the inappropriateness of including the abusive party in an intervention for children when the relationship continued to be characterised by a climate of coercive control and direct attempts to undermine their parenting. This concurred with the views of professionals we consulted who were very uncertain about how to offer this type of intervention safely and sensitively or, indeed, whether to offer it at all.

Several UK service evaluations reported difficulty in maintaining the engagement of abusive fathers in either whole-family interventions or interventions aimed exclusively at abusive fathers,<sup>203,209</sup> although they also indicated some positive benefits for those who remained engaged. Small sample sizes and high dropout rates mean that these results need to be interpreted with caution.

### Guided self-help

The guided self-help intervention that we looked at as part of the qualitative synthesis appeared to be well received. This may be an example of a lower intensity intervention that may be suitable for those parents

or children who are not yet ready to engage with more intensive types of intervention, or whose participation may be hampered by practical barriers. However, as for other types of interventions, acceptability seemed to be moderated by parents' readiness to engage with the intervention and the provision of good-quality support by a DVA professional. Nevertheless, although qualitative evaluation points to positive benefits, as yet there is no assessment of the effectiveness of this type of intervention.

### Limited evidence of acceptability

We found limited evidence for the acceptability of parenting programmes, advocacy delivered to parents, or psychotherapeutic interventions, although this may have been attributable to the fact that we reviewed only trials rather than the pool of studies with other quantitative designs.

## Considerations for developing acceptable interventions

### Participant-related factors

#### Ongoing abuse

One of the salient themes to emerge from consultation with expert stakeholders was the need for evidence on interventions that are safe, appropriate and effective for children who live with ongoing abuse, particularly those children residing in the same household as an abusive parent. The uncertainty about how best to support this vulnerable group of children is highlighted by other UK studies,<sup>50,52</sup> and is a reasonable concern given that one of the tensions identified by the qualitative review was that children may more assertively challenge the behaviour of parents after an intervention that helped reframe their experiences, thereby potentially increasing their risk of harm.

Examination of the exclusion criteria for the trials showed that four explicitly excluded children living with the abusive party,<sup>90-92,97</sup> although others recruited samples of mothers and children living in or exiting from domestic violence shelters (refuges) where the risk of abuse may have been reduced. However, it is important to note that DVA often continues for months or even years after separation.<sup>282</sup> The UK programmes that we reviewed indicated that, although some specifically excluded children living with an abusive parent, most programmes did not.

A number of the trials recorded that abusive incidents occurred during the period of intervention. Two studies considered whether or not the severity and length of children's exposure to DVA moderated treatment effects, finding no effect, or bigger gains for children with relatively longer histories of exposure.<sup>103,116</sup> However, none of the studies analysed whether or not exposure to subsequent abuse (during the course of intervention) moderated treatment outcomes. Therefore, without direct evidence to the contrary, practitioners may continue to assume that the intervention is neither acceptable nor beneficial for this group of children.

Consultation with young people and mothers highlighted that some form of intervention is needed and, importantly, wanted, even when abuse continues to be a salient feature in their lives. Interventions that offered 'time out' of abusive households to have fun and make connections with other children with similar experiences, without undertaking any trauma-focused work, were highlighted as acceptable options, although parents and practitioners felt that safety planning should be a feature of any support offered to this group of children.

How best to support children experiencing ongoing DVA represents an evidence and practice gap that requires urgent attention, given the vulnerability of this group and the need expressed by young people and parents. Further work is needed to develop appropriate support options for these children, and to evaluate their acceptability and feasibility and, subsequently, their impact on children's well-being, safety and access to other community services.



## Readiness

From our review of qualitative studies, readiness was described as a prerequisite for engaging with an intervention. For children, readiness to take up an intervention was affected by three factors: (1) the extent to which they had assimilated changes in their circumstances; (2) their willingness to talk about their experiences of DVA; and (3) the extent to which they recognised or accepted that DVA had taken place. The review highlighted that for children at an earlier stage in the recovery process, the primary benefit of an intervention may be a shift in their willingness and ability to engage with therapeutic work (i.e. their level of readiness) around DVA, rather than gains in other domains of functioning (e.g. a reduction in symptoms).

Readiness for non-abusive mothers meant being over the initial crisis that prompted her to seek help, being able to see beyond her own practical and psychological needs to be able to focus on those of her children, and acknowledgement that her children could have been detrimentally affected by DVA.

Professionals highlighted a lack of options for children whose parents were not yet ready to engage in an intervention. Related to this theme, the review of qualitative studies foregrounded the important role that practitioners have in working with parents to move them to a position of readiness to engage (or to facilitate their child's engagement) in a specific child-focused intervention, through 'priming'.

This rapport-building was not identified as a component of any of the trials; however, one of the psychoeducational models delivered across the UK describes extensive engagement work that precedes delivery of the 12-week intervention.<sup>212</sup> Research indicates that this type of preparatory work may enhance rates of uptake and engagement in child mental health and child welfare interventions,<sup>283-286</sup> and it would be worth considering how these techniques can be extended to this field of work, especially as this already seems to be a feature of one widely implemented UK intervention. We note that an ongoing trial is examining the impact of a 6-week preparatory programme for parents as an adjunct to trauma-focused CBT,<sup>62</sup> which aims to increase parents' insightfulness and orient them to their children's needs before they take part in the full therapeutic programme. Nevertheless, readiness to engage with an intervention around exposure to DVA is a complex interactive process, not a linear one as implied in some models addressing readiness to change.<sup>287</sup> Moreover, child protection studies show equivocal results in respect to willingness to engage as a predictor of outcomes.<sup>288</sup>

Beyond highlighting the importance of readiness as a potential modifier of willingness to engage in an intervention, we were able to glean little information about children's and parents' preferences for different types of interventions at different stages of readiness. This may have been more salient in papers addressing stakeholder views about the 'in principle' acceptability of interventions, which we were not able to review as part of this study. This remains an important piece of work to be undertaken, which would help to understand which options are appropriate for children and parents at different points in the recovery process, and could inform decisions about the sequencing of different interventions.

## Age of children

As we note above, most studies sampled children aged 4–14 years, with little focus on the age appropriateness and potential impact of interventions for children of different age groups (see Graham-Bermann *et al.*<sup>103</sup> for an exception). However, consultation with young people highlighted age as an important determinant of the acceptability of interventions that require parental involvement, as well as the acceptability of different settings in which an intervention can be delivered. Professional stakeholders also highlighted the need to understand how to tailor interventions according to a child's developmental stage.

## Cultural appropriateness

Although young people and professionals with whom we consulted highlighted the importance of ensuring that interventions are culturally appropriate for particular groups, the studies that we examined reported little about the acceptability of interventions to minority ethnic groups.

Although trials recruited ethnically diverse samples of children and parents, uptake and attrition were not reported by ethnic group. Furthermore, given that the trials were conducted mostly in the USA, there is uncertainty about the extent to which their results can be extrapolated to UK populations with different ethnicity profiles.

Based on UK evaluations of the guided self-help intervention conducted by Humphreys *et al.*<sup>49</sup> stakeholders working with women from minority ethnic groups perceived the culture of the women and their families to have an important role in determining the acceptability of an intervention. Common concerns, for example about confidentiality, may be heightened for women from some cultural backgrounds. It was also noted that South Asian women who had lived with extended family may have had a more limited role in parenting and, therefore, may require more preparatory work before embarking on an intervention focused on improving the quality of the parent–child relationship. In acknowledgement of this, Humphreys *et al.*<sup>49</sup> noted the importance of cultural priming.

### *Intervention-related factors*

#### **Duration of intervention**

One of the subthemes emerging from our review of qualitative studies with regard to parent perspectives was the wish for longer courses of intervention and longer weekly sessions. Professionals also highlighted that, for some children, the primary benefit of engaging in a psychoeducational programme was simply readiness to engage with further therapeutic work, and, for these children, involvement in a single course of support or treatment was considered to be ‘one step in a long journey’.

Young people with whom we consulted felt that the optimum duration for an intervention should be longer than 3 months but shorter than 1 year. Resonating with themes identified in the review of qualitative studies, they posited that relationships of trust took time to establish and that such relationships were an essential pre-condition for a successful intervention. They felt that it was too much to expect that in a matter of months relationships could be built, that young people could share their experiences, and that workers could support them to ‘move on’; ‘*Life doesn’t work like that, does it?*’.

#### **Characteristics of those delivering interventions**

We found that, in the context of the trials, personnel were mostly graduates with expertise in disciplines allied to mental health, although, in the UK, interventions tended to be delivered by specialist DVA workers or by groups of professionals with more diverse backgrounds than reflected in the trials. Professionals highlighted that interventions requiring clinical expertise are more costly than those delivered by non-clinical staff and, therefore, less feasible to deliver, with a smaller reach.

The importance of skilful practitioners who are able to engage children and parents and successfully facilitate participation in interventions was a key theme to emerge from the synthesis of qualitative studies. Several of the studies that we identified emphasised the role of workers’ personal attributes in being able to develop this alliance, particularly with parents. Similarly, topic experts and young people viewed the qualifications of those delivering interventions as less important than their interpersonal skills, although both groups were clear that for a worker to be effective they needed to be experienced and knowledgeable about DVA. Mothers and young people felt that it was easier to form a (therapeutic) relationship with a worker who they perceived to be similar to themselves in terms of age and background.

Differences in who delivers an intervention can be one of the reasons for disappointing results when an intervention is implemented in a real-world practice context or replicated in a different setting, and requires an evaluation of processes and outcomes to determine if and how this may impact on an intervention’s effectiveness and acceptability.

### Practice setting

With regard to specific service settings, studies (trials and qualitative) largely evaluated interventions delivered in community settings (which, often, were not described more specifically) or on the premises of specialist DVA agencies, although detailed information on the type of setting was often poorly reported. The lack of replication and the absence of nested process studies preclude any inference about settings that seem more or less acceptable for intervention delivery.

Similarly, the qualitative studies yielded little information about children's or parents' thoughts on where they received an intervention. Furthermore, as we note in *What is the nature of interventions to improve outcomes for children exposed to domestic violence and abuse?*, few qualitative studies evaluated interventions that were delivered in community-based mental health settings, primary care or schools.

Based on the information available to us, there seemed to be broad congruence between the settings in which interventions were trialled and those in which UK programmes tend to be delivered, although there are likely to be differences between similar settings in different countries. We also observed the same absence of interventions delivered in schools, mental health clinics or primary care settings, within the UK grey literature.

In contrast, setting was a salient theme emerging from consultations with stakeholder groups. All three groups highlighted the potential of schools as places in which to receive an intervention. However, although young people felt that school would be an ideal setting for interventions aimed at younger children, they had strong reservations about the possibility of delivering interventions on the premises of secondary schools, feeling that young people would be reluctant to engage. Their concerns focused primarily on issues of confidentiality; receiving support on school premises meant that they lost control over who knew about the DVA in their lives and their need for support. In line with a recent scoping study on preventative interventions for DVA,<sup>168</sup> young people felt that schools had a significant part to play in awareness-raising and in the identification of young people affected by DVA, with the qualifier that clear care pathways for referral to specialist services needed to be in place if schools are to undertake this type of work.

Mothers and professionals highlighted primary health care as a potential setting, although, again, young people expressed reservations about receiving an intervention in a setting that was perceived as too clinical. Instead, they valued the relative anonymity of specialist DVA agencies, which were often more relaxed, and which provided space for socialising before and after group or one-to-one support.

### The role of community and organisational contexts

At the outset of this study, expert stakeholders emphasised the importance of understanding the broader contexts in which specialist DVA interventions are delivered, which they felt had been poorly addressed to date. Without this, they highlighted that even the most effective programme would fail to make a difference to the health and well-being of children exposed to DVA.

Of particular concern to practitioners was the fact that specialist DVA services, particularly those for children, have been eroded by funding cuts. Professionals described the funding environment as like being on 'quicksand'. Short-term and piecemeal funding meant that specific programmes and sometimes whole services were not available from one year to the next, dramatically reducing the amount and range of services on offer. Practitioners highlighted that this would have a knock-on effect on their ability to deliver needs-based interventions, instead leaving them to offer interventions based on the principle of 'something rather than nothing'. The constantly changing service delivery landscape also added to practitioners' sense of not knowing 'what is out there' to offer children and parents affected by DVA.

Work by Humphreys and Skamballis<sup>51</sup> included in the qualitative synthesis underscored the influence of organisational context in facilitating or inhibiting the implementation of a fairly low-intensity intervention. Organisations that were well resourced and had strong leadership were better able to implement the

intervention than organisations that were in crisis owing to staff shortages, chaotic working practices and inadequate funding.

Other aspects of context identified as particularly important were whether or not an intervention was embedded in a broader co-ordinated community response to DVA, which was seen as influencing the perceived credibility and sustainability of a specific intervention. A rural or urban setting was also seen as having important implications for the practical aspects of delivering an intervention; coverage of a large geographical area and limited transport are key barriers to uptake and adherence to interventions, and particularly affect interventions with a group format that are dependent on filling eight to 10 places before they are able to run.

As we highlight in *Short-term clinical effectiveness*, we found no exploration of contextual influences in the trials or qualitative studies we looked at. However, several UK evaluations explored these process issues in depth, highlighting that the extent to which an intervention is able to generate sufficient referrals (particularly for group-based interventions) is often dependent on the positioning of a specialist DVA intervention as part of a broader community response to DVA, and the strength of multiagency referral pathways.<sup>212,225</sup> In contrast, a lack of multiagency buy-in was seen as a key reason for implementation failure across several programmes in a number of evaluations.<sup>203,222</sup>

Acknowledging the different community and service contexts in which interventions may be delivered, professionals were keen to know if and how standardised models could be adapted without undermining the integrity and effectiveness of an intervention. Local-level adaptation was seen as important for maximising effects and encouraging ongoing sustainability.<sup>289,290</sup> There is, however, debate relating to the nature of standardisation and the extent to which complex interventions can legitimately be adapted to suit different contexts.<sup>262</sup>

There are those who argue that the ad hoc adaptation of a tried and tested model should be avoided at all costs given that it may undermine treatment effectiveness; therefore, the same programme should be delivered in the same way across all sites.<sup>291</sup> The current MRC guidelines<sup>261</sup> suggest a progression from this rigid approach by distinguishing between the components of an intervention to be provided in all sites and those components that are optional or allowed to be different, allowing a degree of planned variation.<sup>261</sup> In contrast, complexity theorists argue that the integrity of complex interventions is defined functionally, rather than compositionally, meaning that it is the mechanisms or processes of change, rather than the specific activities of the intervention, that are standardised. From this vantage point, fidelity is not compromised, provided that the intervention still adheres to its theory, even if the activities undertaken to activate that mechanism differ across contexts,<sup>167</sup> although, as we highlight above, the theories of change underpinning programmes are not always well specified.

In order to move the field forwards in terms of understanding if and how interventions can be flexibly implemented across settings, what is important is not that these adaptations occur but that they are 'known, understood, and reported'.<sup>292</sup> Well-planned process evaluations are needed alongside trials and implementation studies to be able to document how interventions are delivered in different settings,<sup>266</sup> and to capture adaptations and the reasons why they are made. At a more general level, closer attention to the contextual landscape into which DVA interventions are placed is needed in studies in order to understand how to optimise interventions for use in particular settings and, as we highlight in the previous section on effectiveness, to understand variation in implementation and outcomes.

## Summary

Before drawing any conclusions about the acceptability of different types of intervention or intervention components, it is important to re-emphasise that by limiting our systematic review to trials we may have missed a number of studies that addressed acceptability, which is often assessed in process evaluations

using quantitative measures of acceptability and satisfaction.<sup>262</sup> Nonetheless, it is disappointing that none of the trials incorporated process evaluations that directly addressed the acceptability of the interventions they evaluated.

Based on the qualitative studies and the UK grey literature, it seems that group-based psychoeducational interventions delivered to children and non-abusing parents in parallel is acceptable to children and parents. However, research on the acceptability and effectiveness of specific components of psychoeducational programmes is warranted. There is also a need to investigate the most acceptable format of delivery for older children and teenagers, as well as how acceptability may vary according to individual factors such as readiness and ethnicity.

Psychoeducational interventions also appear to be acceptable to those delivering services, as well as feasible to implement, although the success and sustainability of such interventions may be heavily dependent on the broader community response to DVA and the strength of multiagency partnerships in the local area. The stability and culture of the organisation hosting the intervention may also be important. Work to systematically examine acceptability and feasibility across different contexts and settings is required.

The picture in respect to psychoeducation involving the abusive party is less clear, however, and important questions remain regarding if and when it may be appropriate to offer this type of intervention. This issue warrants urgent attention given the increasing focus on whole-family interventions in the UK, particularly in the absence of evidence of effectiveness.

Guided self-help may be an acceptable, lower intensity, intervention to enhance the quality of parent–child communication, although this model has been evaluated for delivery only by DVA practitioners, and there is, as yet, no evidence of its effectiveness.

We found limited evidence relating to the acceptability of other types of interventions.

Overall, there is a need for systematic investigation of the acceptability of different types of interventions delivered in different settings to different recipients. This will require formative process evaluations of programmes that already exist, and the embedding of process evaluations within new effectiveness trials.<sup>261</sup> Given the findings of our review of qualitative studies, there is also a need to evaluate the acceptability and effectiveness of specific intervention components to identify those that are critical and those that may be redundant.

### **What is the nature of the UK evidence base?**

It is striking that there are no UK-based trials and a lack of qualitative research on interventions for children exposed to DVA.

Although the interventions trialled in the USA may well be generalisable to the UK, indeed some have crossed the Atlantic, adoption is not evidence of effectiveness. Furthermore, interventions are often trialled in optimal conditions rather than real-world settings and this, along with differences in child welfare, health and specialist DVA service systems, may affect the applicability of trial findings from elsewhere.<sup>248</sup>

We need good-quality evaluative studies conducted in the UK if we are to understand how specialist DVA interventions work in the UK context. There are structural, practical and cultural factors that may have hampered the development of the UK evidence base.

There is vigorous debate in the UK, as there is elsewhere,<sup>293</sup> about the applicability of experimental research to this field. A randomised design offers the least biased method for investigating effectiveness of interventions,<sup>261</sup> and, although there may be challenges associated with the conduct of a trial with this vulnerable group, it is possible to undertake well-designed, pragmatic and ethical experimental studies that generate usable evidence to inform policy and practice. Importantly, consultation throughout this study

underscored that specialist service providers in the UK are supportive of the need for evidence on effectiveness, and are willing to form research partnerships with researchers to facilitate this type of study,<sup>294</sup> although this is difficult where services are facing uncertainty as to their future.

Another barrier to conducting trials or any experimental studies in the UK is the funding of new interventions. If conducted in health-care settings and if funded by the NIHR, intervention costs are covered by the local commissioning group, with support from a Department of Health subvention. However, the majority of interventions for children exposed to DVA are funded by local authorities, the relevant budgets of which are being cut by up to 90% in some areas. It is therefore unsurprising that these local authorities are unable to fund these interventions, particularly if studies do not offer a definitive answer about effectiveness, as is the case for feasibility and pilot studies, which are essential precursors to full trials. Nevertheless, the recent focus on children's and young people's mental health,<sup>237</sup> with a particular spotlight on the needs of vulnerable groups, may offer an opportunity to use NHS funds. This is dependent on recognition of specialist DVA interventions as a critical part of the mental health response for a group of children who are at an elevated risk of experiencing mental health difficulties.

The implementation and evaluation of a number of the UK interventions included in our review of the grey literature was funded by large charities and philanthropic organisations with the aim of building capacity in the specialist DVA sector. We suggest that the focus of this funding move towards the commissioning of high-quality evaluation of existing interventions in order to help build the evidence base. We call for a pause in the development of new interventions unless they meet a well-defined gap in service delivery that cannot be addressed through the careful adaptation of existing models, and for a focus on the evaluation of existing models that are already being implemented or are supported by evidence to suggest that they represent promising approaches that could be delivered in the UK.

It was, nevertheless, heartening to see a culture of service evaluation emerging in the DVA sector; we found 21 evaluations of 19 different programmes. Studies were mostly characterised by small samples, and evaluative studies largely focused on the process of delivery and acceptability of specific models. Many of the studies used a mixed-methods research design; however, quantitative data were often collected from a smaller subgroup of children, and these results were frequently backgrounded against findings from qualitative enquiry. It was encouraging that nearly half of the studies had been carried out by independent evaluators, and it was also notable that several evaluations included information on the direct costs associated with a particular intervention.

Although there can be little doubt that more robust studies are needed, there is also a case for looking at ways to maximise the value of the information that is produced more routinely. For example, the UK grey literature was not particularly easy to access. Several of the larger studies that were commissioned by high-profile charities in the sector were more visible, but many of the smaller studies and programme descriptions were buried deep in websites or could only be obtained through members of the professional consultation group. For this reason, it is likely that we have overlooked some programme descriptions and studies.

However, the key point here is that with such a disparate spread of information it is difficult to build a picture of what is being delivered in practice and how it is working. This creates several problems. First, it hampers researchers who wish to identify instances of promising practice in real-world settings and to seek ways to transfer and test them further for wider use.<sup>167</sup> Second, it can lead to a continual 'reinventing of the wheel', whereby programme developers come up with seemingly new interventions when existing interventions may meet the identified need. Third, it undermines attempts by local commissioners and umbrella organisations that wish to make evidence-informed decisions about which programmes to commission or deliver. In our conversations with stakeholders for the purpose of this and other studies, we frequently encounter those who are attempting to scope out promising options, which takes significant resource.

A central repository of programme descriptions and practice-based evidence would create a picture of the service delivery landscape and create a way of archiving programmes that are not sustained owing to lack

of funding. It may also encourage a move away from perpetual innovation towards replication of tried and tested interventions, increasing the odds that researchers choose programmes to evaluate that already suit communities and organisations.

Programme providers felt that they lacked appropriate tools to monitor and report outcomes to funders on a routine basis and that this impacted on their ability to secure funding in today's competitive environment. They expressed the need for a routine outcome tool that could be used across different types of programmes and service providers, and that would aid services delivering evidence-based interventions to demonstrate their impact.

The collection of routine data relating to children's adjustment prior to an intervention (as part of an assessment of risk and need) would also provide a useful baseline against which to measure change in children's symptoms and well-being at the end of an intervention. Demonstrating impact was one of the challenges cited by professional stakeholders, and the collection of this type of data would be an important step towards being able to achieve this. These data could be aggregated and used to demonstrate, through audit or research, the added value of service intervention. The availability of this routine information has been shown to improve treatment outcomes in adult-focused clinical settings<sup>295</sup> and is increasingly being integrated into the practices of child and adolescent services.<sup>296,297</sup> Routine data can also be used to enhance the quality of service delivery.<sup>298-300</sup>

The integration of routine outcome measures is a feature of efforts to improve the quality of care delivered by CAMHS,<sup>296,299</sup> of which targeted interventions for children exposed to DVA should be viewed as an intrinsic part. It may be possible to extend the measures and training offered to mental health practitioners to professionals delivering supportive and therapeutic interventions to children exposed to DVA, particularly in areas in which the voluntary sector or other non-specialist mental health services are a well-integrated part of the mental health response to children.

This call for the collection and better use of routine data is in line with the recommendation by NICE<sup>44</sup> for research to consider the most appropriate ways to collect and manage data about DVA across the health- and social-care and criminal justice sectors.

The findings of our review of the UK grey literature and consultations with professionals indicate that the response to children who have been exposed to DVA is largely led by the specialist DVA sector in collaboration with other voluntary and statutory partners. The finding that the highest volume of referrals to interventions came from the statutory sector highlights that DVA organisations not only provide a response to children and families seeking specialist help but also play a pivotal part in responding to children identified by other services such as social services and CAMHS.

Despite their central role in delivering a response to children affected by DVA, the specialist voluntary sector faces unprecedented pressure, and, as professionals told us and as yearly surveys demonstrate, this has resulted in the closure of child-focused programmes.<sup>301</sup> Where programmes continue to run, they often do so without dedicated funds, which in itself undermines the sustainability of an intervention but also contributes to a broader organisational climate that is not conducive to successful implementation.

At a programme level, funding needs to be available over the long term to ensure that specialist programmes have the opportunity to 'bed in', to develop referral pathways to and from other organisations, and to become a recognised part of the community response to DVA. This in turn requires that adequate costs are built in beyond the purchase of an intervention manual and the provision of core staff, so as to support the implementation of the programme beyond its initial delivery phase.

However, programmes are often embedded in services, and with the best will in the world, even the most efficient and effective programme will be unable to deliver benefits if the services that host them in the UK are unable to sustain their activities.<sup>290</sup>

# Chapter 10 Conclusions and recommendations for strengthening the evidence base and directions for future research

## Aim

The aim of this chapter is to set out our main conclusions and recommendations for strengthening the evidence base on targeted interventions for children exposed to DVA.

## Summary of findings

The aim of this evidence synthesis was to produce recommendations for future research on interventions for children exposed to DVA. In order to formulate these recommendations, we identified what is known about the clinical effectiveness and cost-effectiveness of interventions, the acceptability of different types of programmes, and the service delivery landscape in the UK. To do this we synthesised evidence from trials and peer-reviewed qualitative studies, scoped the UK grey literature and consulted with young people and parents who had experienced DVA, as well as with professionals delivering or commissioning targeted programmes. Finally, we brought these diverse sources of evidence together to provide an overview of the effectiveness and acceptability of different types of intervention, and to identify research gaps.

Overall, we found that the evidence base is underdeveloped, with limited empirical evidence available to answer questions about which interventions are clinically effective and cost-effective, acceptable and for whom. From the small body of trial and qualitative evidence that we did identify, we found six types of intervention that have been evaluated in the peer-reviewed literature: (1) psychotherapy; (2) psychoeducation; (3) advocacy; (4) guided self-help; (5) parenting skills training in combination with advocacy; and (6) advocacy in combination with psychoeducation. However, other reviews find a greater variety of multicomponent programmes that comprise the core constituents identified here.

Based on current evidence, group-based psychoeducation and parent skills training in combination with advocacy may be the most effective interventions, although effectiveness may vary according to the type of outcome targeted and who receives the intervention, with more uncertainty about what works best to ameliorate children's mental health problems (as opposed to behaviour problems). Cost-effectiveness modelling suggests that psychoeducation may be most cost-effective for improving mental health behavioural outcomes at a lower willingness to pay; at a higher willingness to pay, parent skills training with advocacy may be most cost-effective for reducing behavioural problems. We found reasonable evidence for the acceptability of psychoeducational programmes from the perspective of those who receive and deliver them, but no evidence relating to the acceptability of tailored parenting programmes.

In the UK, the service response is oriented towards the delivery of group-based psychoeducation for children and parents, or children and young people alone, with little evidence that specialist parenting programmes form part of the targeted response to families affected by exposure to DVA. There was some indication that programmes aiming to improve child outcomes may be delivered to whole families or to the abusive party. As yet, there is no evidence of effectiveness and some questions over whether it is appropriate to offer this type of intervention.

From our synthesis, we identified important research gaps with regard to what is known about the effectiveness and acceptability of interventions for specific groups of children, young people and parents,



interventions delivered in specific settings and by different groups of workers, and the specialist mental health response to children exposed to DVA. We also have limited understanding of the contextual factors that may influence the implementation of DVA interventions, and that may account for variation in treatment outcomes and programme sustainability. These evidence gaps, combined with our tentative findings about 'best bet' programmes, form the basis of our recommendations for further research outlined below.

### **Comparison with other research**

Two other reviews<sup>41,43</sup> have been undertaken to synthesise the findings of mainly quantitative studies, although both had a broader methodological scope than our systematic review. Only one of these reviews gave an indication of the strength of the evidence regarding different types of intervention concluding that there was moderate to strong evidence that psychotherapeutic interventions delivered to mothers and children improved child outcomes; moderate evidence for psychoeducational interventions delivered to children; moderate evidence for parenting-focused interventions; and mixed evidence for psychoeducational interventions delivered to mothers and children. These findings endorsed a wider range of potentially effective interventions than the results of our NMA, which indicated that evidence was strongest for psychoeducational interventions and those with a parenting focus. The divergence in results highlights the potential importance of study quality when identifying best-bet interventions, although we must remind the reader of the assumptions underpinning the NMA. The second review highlighted the methodological shortcomings that characterise studies in the field and called for measures, as we do, to enhance study quality, including better descriptions of intervention strategies and components, better documentation and reporting of the intervention, specification of theories of change, and attention to the characteristics of service providers.

Our synthesis builds on previous work that sought to develop evidence-based priorities in respect to research into child maltreatment, including exposure to DVA. Three of the top five priorities identified by Wathen *et al.*<sup>305</sup> identified the need to (1) examine the elements underpinning promising or successful programmes so they can serve as building blocks for intervention pilot work; (2) develop and evaluate new interventions for preventing recurrence of, or impairment associated with, exposure to child maltreatment; and (3) adapt/apply existing evidence-based child maltreatment interventions (primary and secondary prevention, for children, families and offenders), including ongoing evaluation to understand which interventions work in which settings/contexts. Our recommendations regarding best-bet programmes and outstanding research gaps help to specify these fairly general research priorities further, providing important direction for researchers, particularly in the UK. They also speak to the priorities of service providers in the UK, who in a consensus study identified that choice of therapeutic intervention should be needs-led, with the option for the intervention to be taken up independently of parental involvement or therapeutic needs.<sup>52</sup>

### **Strengths and limitations**

Our synthesis has three key strengths. First, we are the first in this field to draw together diverse forms of evidence to derive conclusions about evidence gaps and promising approaches. This reflects the broader definition of evidence and methodological practices around the production of guidance used by bodies such as the HEN of the WHO and NICE.<sup>75</sup>

Second, although we have drawn on international peer-reviewed evidence in our systematic reviews, we have contextualised our findings in the landscape of UK service delivery and stakeholder opinion. As a result, the research priorities that we have identified are particularly relevant for building the UK evidence base, although we also expect that many of the recommendations will have relevance for those undertaking research in other high- and middle-income countries.

Third, this report is timely, given that research into mental disorder prevention, mental health promotion, and interventions in children, adolescents and young adults has been cited as a European priority,<sup>72</sup> and given that a recent review of mental health provision for children and young people<sup>58</sup> has highlighted the need to prioritise research on interventions for vulnerable groups of children and adolescents. The research

priorities we offer set out a pragmatic agenda for enhancing our knowledge of how best to limit the impact of exposure to DVA on children's mental health.

This synthesis has several limitations. First, there is little consensus on the best methods for synthesising diverse forms of quantitative and qualitative evidence. We chose to undertake a narrative synthesis which allowed for the juxtaposition of the findings from the different evidence sources within each of the research questions that we considered.<sup>144,302</sup> However, this is an informal approach that is sometimes criticised for subjectivity and a lack of transparency.<sup>302</sup>

Second, as we have highlighted at different points in this report, our conclusions on relative effectiveness derived from the NMA are based on contestable (but defensible) assumptions about the comparability of interventions and the uncertain validity of the primary studies (as judged by risk of bias). Moreover, our recommendations about the most promising interventions that should be prioritised for the next phase of trials are based on a relative paucity of studies and it is possible that, with new studies, other types of interventions may emerge as effective. Indeed, in updating our searches before submitting the revised version of this report, we identified one completed trial of a further psychoeducational programme for mothers and pre-school children,<sup>99</sup> and, although we were able to incorporate this into the systematic review, we did not have the resources to rerun the NMA. Inclusion of this study is unlikely to have changed our recommendations, given that the trial evaluated one of the programmes that we had already concluded to be relatively more effective, with the results favouring the intervention arm of the study. However, the ongoing trial of a trauma-focused CBT intervention may modify our conclusions in due course.<sup>62</sup> That is the way science works.

Third, it is possible that we may have missed promising practice because we limited the systematic review of interventions to controlled studies, although our systematic review of qualitative studies was a potential source of other types of interventions, as was our scoping of the UK grey literature. From comparing the models identified across these three evidence sources with the results of other reviews with broader scopes, we are reasonably confident that the interventions we identified reflect the range of different programmes that have been developed. However, the narrow focus on trials almost certainly meant that information relating to the acceptability of specific types of interventions was overlooked.

Fourth, the focus of this synthesis on interventions targeted specifically at children exposed to DVA means that we have not been able to reflect the impact of interventions that are delivered to other populations that will include children exposed to DVA. We know that exposure to DVA occurs in a constellation of risk, and children and families experiencing DVA may seek support from other types of services that may directly or indirectly address the impact of DVA.<sup>60</sup> In reviewing the literature, we found that evaluations of these services did not report outcomes separately for children exposed to DVA and, therefore, they were not included in our reviews.

Finally, we included only well-defined interventions in this synthesis, but much of the support offered to children through specialist DVA services is informal, unstructured support. Although we have not evaluated it, this type of support is nevertheless highly valued by children and parents accessing specialist services, and is likely to reach families who may never engage with a specific intervention.

## Conclusions

### *More and better-quality research is needed*

The call for more research is often met with scepticism, particularly when made by academic researchers.<sup>303</sup> However, in the context of an underdeveloped evidence base that is characterised by some breadth but little depth, there can be little doubt that this particular conclusion is fitting here.

Our findings highlight an urgent need for more high-quality studies with pragmatic, contextual and multilevel designs that include replication, mixed methods and economic analyses to produce actionable, generalisable findings that can be implemented in real-world settings, and inform decisions about which interventions to commission.<sup>278</sup>

We call for a pause in the development of new interventions unless they meet a well-defined gap in service delivery that cannot be addressed through the careful adaptation of existing interventions, and for the systematic evaluation of existing programmes.

There is a particular need for well-designed, well-conducted and well-reported RCTs to evaluate the clinical effectiveness and cost-effectiveness of targeted interventions for children exposed to DVA in the short, medium and longer term. Furthermore, efforts are required to ensure that trials measure outcomes that are meaningful to children, parents and commissioners, and that explicit attempts are made to capture the potential harms associated with participation in the intervention or the research, beyond the assessment in outcomes between groups.<sup>166</sup>

However, before embarking on a trial, care must be taken to describe and characterise an intervention in terms of what it entails, the causal mechanism by which the intervention might reasonably be expected to work and the role that intervention components have in the change process, the unintended as well as intended outcomes that may result, and the contextual influences that may impact implementation or interact with the intervention to co-produce these outcomes. The use of the MRC framework for evaluation of complex interventions can inform the process of intervention development and testing.<sup>261</sup>

In general, there is a need to determine whether or not one type of intervention is more effective than another for reducing particular problems. At the same time, there is a need to explore other factors that may moderate treatment outcomes, such as age, sex, culture and ethnicity of children and parents, children's exposure to other forms of trauma and adversity and readiness to engage in the therapeutic process. Attention should also be given to testing interventions in diverse settings and delivered by different groups of professionals. In thinking about how to extend access to specialist interventions, there is a need to consider the feasibility and effectiveness of interventions delivered by non-specialised workers.

As with mechanisms to speed up the translation of basic science into effective treatments, this is likely to require extensive collaboration between researchers across and within countries.<sup>304</sup> The recent Roadmap for Mental Health Research in Europe initiative, which was set up to develop the pan-European agenda for mental health research with immediate and long-term priorities, provides a good example of cross-country collaboration to systematically address gaps in research knowledge.<sup>72</sup>

In the DVA field, there has been significant ground broken by The Preventing Violence Across the Lifespan Research Network,<sup>305</sup> which was an international group of over 60 international researchers and knowledge-user partners in the field of child maltreatment and intimate partner violence (funded by the Canadian Institutes for Health Research's Institute for Gender and Health and Institute of Neurosciences, Mental Health and Addictions) brought together to develop evidence-based research priorities with regard to child maltreatment (including exposure to DVA) and intimate partner violence. The success of this collaboration is being built upon by the Violence, Evidence, Guidance, Action initiative funded by the Public Health Agency of Canada to develop national-level evidence-based public health guidance, protocols, curricula and tools for health and social service professionals. To this end, the Canadian collaborative is drawing on existing evidence syntheses, including this study, to build incrementally on what is already known.

With respect to the UK, we suggest that there is a need for key stakeholders in the field, including funders, researchers, commissioners and service providers, as well as service users, to come together to

explicitly identify and address the structural, practical and cultural barriers that may have hampered the development of the UK evidence base to date.

Furthermore, we would encourage the development of partnerships between service providers and researchers that may support the conduct of good-quality service evaluations, as well as high-quality pragmatic trials that are badly needed in this field. This would be aided by a central repository holding information on the interventions that are being delivered and associated evaluative work, as well as the collection of routine outcome and monitoring data by DVA services.

Interventions developed specifically to prevent or ameliorate the sequelae of exposure to DVA are most often delivered in the UK through the specialist DVA sector. It is our experience that the sector values evidence-based practice and is committed to undertaking collaborative research. However, such research is unlikely in the context of funding cuts of the magnitude that we have seen in the UK over the past 5 years. This is likely to represent the most significant barrier to date to developing the UK's evidence-based response to this vulnerable group of children.

## Recommendations for strengthening the quantity and quality of research

1. Well-designed, well-conducted and well-reported mixed-methods studies are needed to evaluate the clinical effectiveness and cost-effectiveness of targeted interventions for children exposed to DVA. In order to achieve this, we recommend:
  - i. qualitative studies in the feasibility and pilot stages of a trial to characterise the intervention and assess its acceptability and feasibility, as well as that of the research design
  - ii. articulation of the causal mechanism(s) by which an intervention is expected to affect outcomes, along with a cycle of theory testing and refinement to allow for evaluation of planned and unplanned adaptations and the role of specific intervention components
  - iii. publication of trial protocols with pre-specified primary and secondary outcomes, and analyses
  - iv. nested process evaluations running concurrently with trials, helping to explain positive or negative findings, identifying contextual influences and informing further development of the intervention and implementation
  - v. longer follow-up of trial participants, with a minimum follow-up duration of 1 year from start of the intervention
  - vi. inclusion of a cost-effectiveness analysis in trial designs to inform decisions about implementation and commissioning of programmes based on the intervention, requiring assiduous collection of costs and outcome measures that can be used to calculate utilities
  - vii. better descriptions of interventions to be made available within or alongside study reports
  - viii. use of CONSORT standards and appropriate extensions to ensure accurate, complete and transparent reporting with adequate methodological detail including the design, delivery, uptake and context of any given intervention, along with planned and spontaneous adaptations.
2. Develop consensus in the field about which outcomes to measure, and how, for quantitative evaluation of interventions. We specifically recommend:
  - i. an expansion of outcomes measured to include those that reflect changes in children's well-being and functioning, and what is important to children, parents, practitioners and commissioners
  - ii. the development of a core outcome set as a minimum standard for measurement and reporting in all trials
  - iii. measurement and reporting of adverse outcomes; we need a consensus on adverse outcome measures and their routine measurement in trials.

3. Exploration of the acceptability and effectiveness of interventions for specific groups of children and young people, including different ethnic groups, age groups, exposure to other types of trauma and clinical profile. This will require:
  - i. mixed-methods studies
  - ii. studies that are adequately powered to conduct pre-specified subgroup analyses
  - iii. studies that can contribute data to meta-analysis and metaregression (or other methods for exploring heterogeneous treatment effects that will be aided by consistency in outcome reporting).
4. Systematic investigation of the context in which interventions are delivered, including the type of setting and organisational context, along with the broader community context. This will require:
  - i. collaboration between research groups to test the same intervention delivered in different ways and in different contexts
  - ii. pre-planned meta-analyses and metaregression.
5. Evaluation of the qualities, qualifications and disciplines of personnel delivering interventions.
6. Consideration of the ways in which to enhance research output in the UK that may include:
  - i. identification and addressing of the structural, practical and cultural barriers that may have hampered the development of the UK evidence base to date
  - ii. development of a central repository of UK programmes and evaluative studies
  - iii. collection of routine monitoring and outcome data by DVA services and others who deliver specialist DVA interventions.

### Priorities for exploratory trials in the UK

We recognise, however, that the call for more research is not particularly informative without prioritising questions. Moreover, as we observe above, the accumulation of evidence takes time and does not always fill identified knowledge gaps.<sup>70</sup>

We suggest that, based on the limited current evidence that is available, there is a case for prioritising psychoeducational interventions and parent skills training delivered in combination with advocacy for the next phase of trials. However, we fully acknowledge that, with more studies, other models may emerge as promising.

We also call for exploratory trials of interventions that actively involve both the abusive and the non-abusive parent with the explicit aim of enhancing child outcomes. This is based on the finding that these interventions are a feature of the UK service delivery landscape, that there may be adverse consequences associated with this model and uncertainty among practitioners about its safety, and an absence of high-quality outcomes-focused evaluation.

### Research gaps

In addition to the identification of specific types of programme that we suggest should be prioritised for further research, in this synthesis we have also identified evidence gaps that warrant further consideration. We list these below as research questions:

- Do all children require specialist interventions or support following exposure to DVA?
- Can some children be supported by low-intensity, low-resource interventions?

- How do children's, young people's and parents' preferences for interventions change according to their readiness to engage in the therapeutic process?
- What models of support or intervention are acceptable, effective and, most importantly, safe for children exposed to ongoing DVA?
- Which interventions are acceptable and effective to improve outcomes for infants and for older adolescents exposed to DVA?
- Is safety planning effective as a standalone intervention or as a component part of an intervention?
- What is the incidence of DVA among children accessing CAMHS?
- Are children routinely identified as having experienced DVA in CAMHS and how are standardised interventions adapted for use with the group?
- Are general parenting interventions suitable for use with a DVA population, and does the presence of DVA moderate treatment outcomes?

The interventions that we have suggested as priorities for the next phase of trials, and the questions that we have posed above should not be taken as a call to halt absolutely other types or areas of enquiry. Rather, our recommendations are an attempt to align future studies with the existing body of evidence, current service delivery, and the views of important stakeholder groups. Better prioritisation of future research is necessary to increase research value and minimise waste in a context of limited human and monetary resources.<sup>70</sup>



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### Contributions of authors

**Dr Emma Howarth** was involved in the conception and design of the evidence synthesis. She managed the project on a day-to-day basis and gave it a conceptual coherence. She was involved in the conduct of the systematic reviews, developing and undertaking stakeholder consultation, commenting on all individual study chapters, drafting the full report and editing the final report.

**Ms Theresa HM Moore** led the systematic reviews, undertook all parts of the review process and drafted the chapters. She was also involved in stakeholder consultation and commenting on the full report.

**Dr Nicky J Welton** was involved in the conception and design of the evidence synthesis. She designed and undertook the NMA and cost-effectiveness analysis and long-term modelling of clinical effectiveness components of the study, and authored both relevant chapters. She commented on the full report.

**Dr Natalia Lewis** undertook scoping of the grey literature on UK programmes and drafted *Chapter 7*. She was involved in the stakeholder consultation and commented on the full report.

**Professor Nicky Stanley** was involved in the conception and design of the evidence synthesis, developing and undertaking the stakeholder consultation, drafting the consultation chapter and commenting on all individual chapters as well as on the full report.

**Professor Harriet MacMillan** was involved in the conception and design of the evidence synthesis, commenting on the systematic review of controlled studies and both modelling chapters, and editing the full report.

**Dr Alison Shaw** was involved in the design and conduct of the systematic review of qualitative studies and the drafting of the study chapter.

**Professor Marianne Hester** was involved in the conception and design of the evidence synthesis, and commented on the review of grey literature.

**Mr Peter Bryden** was involved in the extraction of cost information and undertook the cost-effectiveness modelling.



**Professor Gene Feder** was the principal investigator and led the conception, design, conduct and reporting of the evidence synthesis.

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### Data sharing statement

All data derived as part of this study are available from the corresponding author on request.

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# Appendix 1 Search strategy

## MEDLINE

Date range of search: 1946 to present.

Date of search: 8 April 2013.

1. Child Welfare/ or Child, Preschool/ or Mother-Child Relations/ or Father-Child Relations/ or Child Behavior/ or "Child of Impaired Parents"/ or Child/ or Parent-Child Relations/ or Child Psychology/ or Child Reactive Disorders/ or Child Psychiatry/ or Adolescent Psychiatry/ or Adolescent Behavior/ or Adolescent/ or Adolescent Health Services/ or Adolescent Psychology/ or Adolescent Development/ (2,312,091)
2. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatric\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading
3. word, protocol supplementary concept, rare disease supplementary concept, unique identifier] (3,478,462)
4. 1 or 2 (3,478,462)
5. Domestic Violence/ or Spouse Abuse/ or Battered Women/ (10,226)
6. (abuse\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (4405)
7. (battered adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (650)
8. (violen\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (5174)
9. (marital adj3 (violen\* or abuse\*)).tw. (251)
10. (famil\* adj3 (violen\* or abuse\*)).tw. (2397)
11. domestic violen\*.tw. (3558)
12. (intimate adj3 partner adj3 (violen\* or abuse\*)).tw. (2536)
13. (interparental adj3 (violen\* or abuse\*)).tw. (71)
14. (violen\* adj2 (home\*1 or household\*)).tw. (163)
15. (parent\* adj3 (violen\* or abuse\*)).tw. (1516)
16. or/4-14 (17,425)
17. (expose\* or exposure).mp. (725,218)
18. witnes\*.mp. (13,168)
19. growing up.tw. (1265)
20. ((child\* or adolesc\*) adj3 "living with").tw. (903)
21. ((child\* or adolesc\*) adj5 (violen\* adj2 (home\*1 or household\*))).tw. (32)
22. ((child\* or adolesc\*) adj5 (domestic\* adj2 violen\*)).tw. (375)
23. or/16-21 (739,605)
24. 3 and 15 and 22 (1892)

## PsycINFO

Date range of search: 1806 to 2 April 2013.

Date of search: 16 April 2013.

1. exp Child Guidance/ or exp Child Guidance Clinics/ or exp Child Psychopathology/ or exp Child Neglect/ or exp Child Psychiatry/ or exp Child Welfare/ or exp Child Psychotherapy/ or exp Child Self Care/ or exp Child Psychology/ (25,353)



2. exp Preschool Students/ or exp Preschool Education/ or exp Preschool Teachers/ (10,456)
3. exp Mother Child Communication/ or exp Parent Child Communication/ or exp Child Attitudes/ or exp Parent Child Relations/ or exp Father Child Relations/ or exp Father Child Communication/ or exp Mother Child Relations/ (61,515)
4. exp Adolescent Psychotherapy/ or exp Adolescent Psychology/ or exp Adolescent Development/ or exp Adolescent Attitudes/ or exp Adolescent Mothers/ or exp Adolescent Psychopathology/ or exp Adolescent Fathers/ or exp Adolescent Psychiatry/ (51,760)
5. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatric\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*).mp. (1,227,738)
6. 1 or 5 (1,228,013)
7. exp Partner Abuse/ or exp Intimate Partner Violence/ or exp Domestic Violence/ or exp Battered Females/ (14,248)
8. (abuse\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (7311)
9. (battered adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (2003)
10. (violen\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (8886)
11. (marital adj3 (violen\* or abuse\*)).tw. (816)
12. (famil\* adj3 (violen\* or abuse\*)).tw. (6379)
13. domestic violen\*.tw. (7036)
14. (intimate adj3 partner adj3 (violen\* or abuse\*)).tw. (3742)
15. (interparental adj3 (violen\* or abuse\*)).tw. (180)
16. (violen\* adj2 (home\*1 or household\*)).tw. (289)
17. (parent\* adj3 (violen\* or abuse\*)).tw. (3299)
18. or/7-17 (28,706)
19. (expose\* or exposure).mp. (107,860)
20. witnes\*.mp. (14,058)
21. growing up.tw. (2997)
22. ((child\* or adolesc\*) adj3 "living with").tw. (1031)
23. ((child\* or adolesc\*) adj5 (violen\* adj2 (home\*1 or household\*))).tw. (98)
24. ((child\* or adolesc\*) adj5 (domestic\* adj2 violen\*)).tw. (1232)
25. or/19-24 (124,854)
26. 6 and 18 and 25 (3806)

## Web of Science Social Sciences Citation Index

Date range of search: all years.

Date of search: 9 April 2013.

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# 21	3123	#19 AND #12 AND #1
		Databases = SSCI Timespan = All Years
# 20	12,442	#12 AND #1
		Databases = SSCI Timespan = All Years
# 19	94,785	#18 OR #17 OR #16 OR #15 OR #14 OR #13
		Databases = SSCI Timespan = All Years
# 18	1072	TS = ((child* or adolesc*) NEAR/5 (domestic* NEAR/2 violen*))
		Databases = SSCI Timespan = All Years

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# 17	19	TS=((child* or adolesc*) NEAR/5 (violen* NEAR/2 (home\$1 or household*))) Databases = SSCI Timespan = All Years
# 16	7781	TS = (growing up) Databases = SSCI Timespan=All Years
# 15	2293	TS = "growing up" Databases = SSCI Timespan = All Years
# 14	10,532	TS = witnes* Databases = SSCI Timespan=All Years
# 13	77,179	TS = (expose* or exposure) Databases = SSCI Timespan = All Years
# 12	25,044	#11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 Databases = SSCI Timespan = All Years
# 11	2339	TS = (parent* NEAR/3 (violen* or abuse*)) Databases = SSCI Timespan = All Years
# 10	453	TS=(violen* NEAR/2 (home\$ or household*)) Databases = SSCI Timespan = All Years
# 9	156	TS=(interparental NEAR/3 (violen* or abuse*)) Databases = SSCI Timespan = All Years
# 8	4545	TS = (intimate NEAR/3 partner NEAR/3 (violen* or abuse*)) Databases = SSCI Timespan = All Years
# 7	8362	TS = (domestic violen*) Databases = SSCI Timespan = All Years
# 6	5388	TS = (famil* NEAR/3 (violen* or abuse*)) Databases = SSCI Timespan = All Years
# 5	877	TS = (marital NEAR/3 (violen* or abuse*)) Databases = SSCI Timespan = All Years
# 4	10,513	TS = (violen* NEAR/3 (wom*n or partner or spous* or m*n or wife or wives or husband*)) Databases = SSCI Timespan = All Years
# 3	2362	TS = (battered NEAR/3 (wom*n or partner or spous* or m*n or wife or wives or husband*)) Databases = SSCI Timespan = All Years
# 2	7795	TS = (abuse* NEAR/3 (wom*n or partner or spous* or m*n or wife or wives or husband*)) Databases = SSCI Timespan = All Years
# 1	891,777	TS=(adolesc* or preadolesc* or pre-adolesc* or boy* or girl* or child* or infant* or preschool* or juvenil* or minors or school* or pediatri* or paediatric* or pubescen* or pre-pubescen* or puberty or student* or teen* or young or youth* or school* or high-school or "high school" or college or undergrad* or campus* or classroom*) Databases = SSCI Timespan = All Years

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## Web of Science Conference Proceedings Citation Index: Social Sciences and Humanities

Date range of search: all years.

Date of search: 9 April 2013.

Set	Results	
# 21	147	#19 AND #12 AND #1 Databases = CPCI-SSH Timespan = All Years
# 20	579	#12 AND #1 Databases = CPCI-SSH Timespan = All Years
# 19	7347	#18 OR #17 OR #16 OR #15 OR #14 OR #13 Databases = CPCI-SSH Timespan = All Years
# 18	55	TS=((child* or adolesc*) NEAR/5 (domestic* NEAR/2 violen*)) Databases = CPCI-SSH Timespan = All Years
# 17	0	TS=((child* or adolesc*) NEAR/5 (violet* NEAR/2 (home\$1 or household*))) Databases = CPCI-SSH Timespan = All Years
# 16	1029	TS = (growing up) Databases = CPCI-SSH Timespan = All Years
# 15	133	TS = "growing up" Databases = CPCI-SSH Timespan = All Years
# 14	1219	TS=witnes* Databases = CPCI-SSH Timespan = All Years
# 13	5146	TS = (expose* or exposure) Databases = CPCI-SSH Timespan = All Years
# 12	1289	#11 OR #10 OR #9 OR #8 OR #7 OR #6 OR #5 OR #4 OR #3 OR #2 Databases = CPCI-SSH Timespan = All Years
# 11	106	TS=(parent* NEAR/3 (violet* or abuse*)) Databases = CPCI-SSH Timespan = All Years
# 10	20	TS=(violet* NEAR/2 (home\$ or household*)) Databases = CPCI-SSH Timespan = All Years
# 9	10	TS = (interparental NEAR/3 (violet* or abuse*)) Databases = CPCI-SSH Timespan = All Years
# 8	104	TS = (intimate NEAR/3 partner NEAR/3 (violet* or abuse*)) Databases = CPCI-SSH Timespan = All Years
# 7	453	TS = (domestic violet*) Databases = CPCI-SSH Timespan = All Years
# 6	265	TS = (famil* NEAR/3 (violet* or abuse*)) Databases = CPCI-SSH Timespan = All Years

Set	Results
# 5	59 TS = (marital NEAR/3 (violen* or abuse*)) Databases = CPCI-SSH Timespan = All Years
# 4	500 TS = (violen* NEAR/3 (wom*n or partner or spous* or m*n or wife or wives or husband*)) Databases = CPCI-SSH Timespan = All Years
# 3	129 TS = (battered NEAR/3 (wom*n or partner or spous* or m*n or wife or wives or husband*)) Databases = CPCI-SSH Timespan = All Years
# 2	347 TS = (abuse* NEAR/3 (wom*n or partner or spous* or m*n or wife or wives or husband*)) Databases = CPCI-SSH Timespan = All Years
# 1	68,649 TS=(adolesc* or preadolesc* or pre-adolesc* or boy* or girl* or child* or infant* or preschool* or juvenil* or minors or school* or pediatri* or paediatric* or pubescen* or pre-pubescen* or puberty or student* or teen* or young or youth* or school* or high-school or "high school" or college or undergrad* or campus* or classroom*) Databases = CPCI-SSH Timespan = All Years

## Social Care Online

Date range of search: 1980 to present.

Date of search: 17 April 2013.

topic = "domestic violence" and (freetext = "child\* expose\*" or freetext = "child\* witness\*") (N = 82 hits)

## The Cochrane Library (all databases)

Date range searched: 1890 to 17 April 2015.

1. [Child Welfare] explode all trees (739)
2. [Child, Preschool] explode all trees (34)
3. [Mother-Child Relations] explode all trees (484)
4. [Father-Child Relations] explode all trees (37)
5. [Child Behavior] explode all trees (926)
6. [Child of Impaired Parents] explode all trees (103)
7. [Child] explode all trees (63)
8. [Parent-Child Relations] explode all trees (1062)
9. [Child Psychology] explode all trees (225)
10. [Child Reactive Disorders] explode all trees (10)
11. [Child Psychiatry] explode all trees (15)
12. [Adolescent Psychiatry] explode all trees (21)
13. [Adolescent Behavior] explode all trees (708)
14. [Adolescent] explode all trees (69,585)
15. [Adolescent Health Services] explode all trees (128)
16. [Adolescent Psychology] explode all trees (205)
17. [Adolescent Development] explode all trees (34)
18. {or 1 - 17} (71,775)

19. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatric\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*) 238,563
20. {or 19 - 20} (238,563)
21. [Spouse Abuse] explode all trees (132)
22. [Battered Women] explode all trees (47)
23. [Domestic Violence] explode all trees (567)
24. (abuse\* near/3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)) (1081)
25. (battered near/3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)) (87)
26. (violen\* near/3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)) (358)
27. (marital near/3 (violen\* or abuse\*)) (9)
28. (famil\* near/3 (violen\* or abuse\*)) (130)
29. domestic next violen\* (219)
30. (intimate near/3 partner) near/3 (violen\* or abuse\*) (138)
31. ((interparental) near/3 (violen\* or abuse\*)) (1)
32. (violen\* near/2 (home? or household\*)) (7)
33. ((parent\*) near/3 (violen\* or abuse\*)) (93)
34. (1752)
35. (expose\* or exposure) (20,938)
36. witnes\* (391)
37. growing next up (44)
38. ((child\* or adolesc\*) near/3 ("living with")) (55)
39. ((child\* or adolesc\*) near/5 (domestic\* near/2 violen\*)) (45)
40. (21,350)
41. 20 and 34 (1279)
42. 40 and 41 (279)

## Cumulative Index to Nursing and Allied Health Literature (CINAHL)

Date range of search: inception to April 2013.

Date of search: 17 April 2013.

#	Query	Results
S26	(S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24) AND (S3 AND S17 AND S25)	1649
S25	S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24	65,601
S24	TX ((child* or adolesc*) N5 (domestic* N2 violen*))	491
S23	TX ((child* or adolesc*) N5 (violen* N2 (home or homes or household*)))	48
S22	TX ((child* or adolesc*) N3 "living with")	2548
S21	TX "growing up"	612
S20	TX witnes*	6044
S19	TX exposed or exposure or expose	54,471
S18	(MH "Environmental Exposure+")	20,823
S17	S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16	19,787
S16	(parent* N3 (violen* or abuse*))	658
S15	(violen* N2 (home or homes or household*))	197

#	Query	Results
S14	(interparental N3 (violen* or abuse*))	29
S13	(intimate N3 partner N3 (violen* or abuse*))	4753
S12	domestic violen*	5607
S11	(famil* N3 (violen* or abuse*))	1633
S10	(marital N3 (violen* or abuse*))	118
S9	(violen* N3 (wom*n or partner or spous* or m*n or wife or wives or husband*))	5965
S8	(battered N3 (wom*n or partner or spous* or m*n or wife or wives or husband*))	2525
S7	(abuse* N3 (wom*n or partner or spous* or m*n or wife or wives or husband*))	2591
S6	(MM "Battered Women") OR (MM "Battered Men")	1876
S5	(MM "Intimate Partner Violence")	3499
S4	(MM "Domestic Violence+")	14,717
S3	S1 OR S2	915,185
S2	TX (adolesc* or preadolesc* or pre-adolesc* or boy* or girl* or child* or infant* or preschool* or juvenil* or minors or school* or pediatri* or paediatric* or pubescen* or pre-pubescen* or puberty or student* or teen* or young or youth* or school* or high-school or "high school" or college or undergrad* or campus* or classroom*)	915,185
S1	(MH "Child") OR (MH "Child Behavior Disorders") OR (MH "Child Behavior") OR (MH "Adult-Child Relations") OR (MH "Child Psychiatry") OR (MH "Child Psychology") OR (MH "Child, Preschool") OR (MH "Mother-Child Relations") OR (MH "Parent-Child Relations") OR (MH "Child Welfare") OR (MH "Father-Child Relations") OR (MH "Maternal-Child Care") OR (MH "Maternal-Child Health") OR (MH "Maternal-Child Welfare") OR (MH "Children of Impaired Parents")	221,555



## Appendix 2 Search strategy: supplementary updated search for randomised controlled trials

### Ovid MEDLINE(R)

Date range of search: 1946 to present.

Date of search: 23 September 2015.

1. Child Welfare/ or Child, Preschool/ or Mother-Child Relations/ or Father-Child Relations/ or Child Behavior/ or "Child of Impaired Parents"/ or Child/ or Parent-Child Relations/ or Child Psychology/ or Child Reactive Disorders/ or Child Psychiatry/ or Adolescent Psychiatry/ or Adolescent Behavior/ or Adolescent/ or Adolescent Health Services/ or Adolescent Psychology/ or Adolescent Development/ (2,576,293)
2. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatric\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier] (4,119,752)
3. 1 or 2 (4,119,752)
4. Domestic Violence/ or Spouse Abuse/ or Battered Women/ (11,981)
5. (abuse\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (5431)
6. (battered adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (693)
7. (violen\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (7476)
8. (marital adj3 (violen\* or abuse\*)).tw. (294)
9. (famil\* adj3 (violen\* or abuse\*)).tw. (2882)
10. domestic violen\*.tw. (4384)
11. (intimate adj3 partner adj3 (violen\* or abuse\*)).tw. (4122)
12. (interparental adj3 (violen\* or abuse\*)).tw. (100)
13. (violen\* adj2 (home\*1 or household\*)).tw. (196)
14. (parent\* adj3 (violen\* or abuse\*)).tw. (1827)
15. or/4-14 (21,945)
16. (expose\* or exposure).mp. (911,531)
17. witness\*.mp. (17,871)
18. growing up.tw. (1733)
19. ((child\* or adolesc\*) adj3 "living with").tw. (1317)
20. 16 or 17 or 18 or 19 (930,834)
21. 3 and 15 and 20 (2306)
22. randomized controlled trial.pt. (411,595)
23. controlled clinical trial.pt. (91,675)
24. randomized.ab. (335,344)
25. placebo.ab. (168,773)
26. clinical trials as topic.sh. (178,654)
27. randomly.ab. (241,411)
28. trial.ti. (148,204)
29. 22 or 23 or 24 or 25 or 26 or 27 or 28 (1,001,258)
30. exp animals/ not humans.sh. (4,119,210)
31. 29 not 30 (923,888)
32. 21 and 31 (172)
33. limit 32 to ed = 20130301-20150923 (36)



## PsycINFO

Date range of search: 1806 to week 3 September 2015.

Date of search: 23 September 2015.

1. exp Child Guidance/ or exp Child Guidance Clinics/ or exp Child Psychopathology/ or exp Child Neglect/ or exp Child Psychiatry/ or exp Child Welfare/ or exp Child Psychotherapy/ or exp Child Self Care/ or exp Child Psychology/ (29,358)
2. exp Preschool Students/ or exp Preschool Education/ or exp Preschool Teachers/ (12,440)
3. exp Mother Child Communication/ or exp Parent Child Communication/ or exp Child Attitudes/ or exp Parent Child Relations/ or exp Father Child Relations/ or exp Father Child Communication/ or exp Mother Child Relations/ (68,476)
4. exp Adolescent Psychotherapy/ or exp Adolescent Psychology/ or exp Adolescent Development/ or exp Adolescent Attitudes/ or exp Adolescent Mothers/ or exp Adolescent Psychopathology/ or exp Adolescent Fathers/ or exp Adolescent Psychiatry/ (65,260)
5. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatric\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures] (1,406,598)
6. 1 or 5 (1,406,923)
7. exp Partner Abuse/ or exp Intimate Partner Violence/ or exp Domestic Violence/ or exp Battered Females/ (16,891)
8. (abuse\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (8127)
9. (battered adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (2108)
10. (violen\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (11,436)
11. (marital adj3 (violen\* or abuse\*)).tw. (874)
12. (famil\* adj3 (violen\* or abuse\*)).tw. (7139)
13. domestic violen\*.tw. (8309)
14. (intimate adj3 partner adj3 (violen\* or abuse\*)).tw. (5465)
15. (interparental adj3 (violen\* or abuse\*)).tw. (221)
16. (violen\* adj2 (home\*1 or household\*)).tw. (341)
17. (parent\* adj3 (violen\* or abuse\*)).tw. (3742)
18. or/7-17 (33,566)
19. (expose\* or exposure).mp. (131,993)
20. witnes\*.mp. (16,851)
21. growing up.tw. (3667)
22. ((child\* or adolesc\*) adj3 "living with").tw. (1278)
23. ((child\* or adolesc\*) adj5 (violen\* adj2 (home\*1 or household\*))).tw. (111)
24. ((child\* or adolesc\*) adj5 (domestic\* adj2 violen\*)).tw. (1428)
25. or/19-24 (152,391)
26. 6 and 18 and 25 (4626)
27. control\*.tw. (537,472)
28. random\*.tw. (146,999)
29. exp treatment/ (629,953)
30. double-blind.tw. (19,233)
31. assigned.tw. (55,938)
32. 27 or 28 or 29 or 30 or 31 (1,157,598)
33. 26 and 32 (1409)
34. limit 33 to up = 20130301-20150923 (252)

## The Cochrane Library (all databases)

Date range of search: inception to September 2015.

Date of search: 23 September 2015.

ID Search (Hits)

1. MeSH descriptor: [Child Welfare] explode all trees (506)
2. MeSH descriptor: [Child, Preschool] explode all trees (75)
3. MeSH descriptor: [Mother-Child Relations] explode all trees (587)
4. MeSH descriptor: [Father-Child Relations] explode all trees (44)
5. MeSH descriptor: [Child Behavior] explode all trees (1152)
6. MeSH descriptor: [Child of Impaired Parents] explode all trees (122)
7. MeSH descriptor: [Child] explode all trees (204)
8. MeSH descriptor: [Parent-Child Relations] explode all trees (1331)
9. MeSH descriptor: [Child Psychology] explode all trees (237)
10. MeSH descriptor: [Child Reactive Disorders] explode all trees (10)
11. MeSH descriptor: [Child Psychiatry] explode all trees (17)
12. MeSH descriptor: [Adolescent Psychiatry] explode all trees (24)
13. MeSH descriptor: [Adolescent Behavior] explode all trees (890)
14. MeSH descriptor: [Adolescent] explode all trees (77,754)
15. MeSH descriptor: [Adolescent Health Services] explode all trees (154)
16. MeSH descriptor: [Adolescent Psychology] explode all trees (223)
17. MeSH descriptor: [Adolescent Development] explode all trees (59)
18. {or 1 - 17} (80,320)
19. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatric\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*) (302,095)
20. {or 18-19} (302,099)
21. MeSH descriptor: [Spouse Abuse] explode all trees (175)
22. MeSH descriptor: [Battered Women] explode all trees (62)
23. MeSH descriptor: [Domestic Violence] explode all trees (716)
24. (abuse\* near/3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)) (1411)
25. (battered near/3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)) (96)
26. (violen\* near/3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)) (538)
27. (marital near/3 (violen\* or abuse\*)) (13)
28. (famil\* near/3 (violen\* or abuse\*)) (179)
29. domestic next violen\* (292)
30. (intimate near/3 partner) near/3 (violen\* or abuse\*) (246)
31. ((interparental) near/3 (violen\* or abuse\*)) (4)
32. (violen\* near/2 (home? or household\*)) (10)
33. ((parent\*) near/3 (violen\* or abuse\*)) (113)
34. {or 21-33} (2327)
35. (expose\* or exposure) (29,063)
36. witness\* (568)
37. growing next up (25)
38. ((child\* or adolesc\*) near/3 ("living with")) (78)
39. ((child\* or adolesc\*) near/5 (domestic\* near/2 violen\*)) (57)
40. {or 35-39} (29,624)
41. 20 and 34 (1696)
42. 40 and 41 (385)

## EMBASE

Date range of search: 1974 to 22 September 2015.

Date of search: 22 September 2015.

1. exp child welfare/ (16,352)
2. exp child health care/ (70,012)
3. exp mother child relation/ (20,208)
4. exp father child relation/ (3288)
5. exp child parent relation/ (70,794)
6. exp behaviour disorder/ (337,036)
7. exp child psychiatry/ (18,683)
8. exp child psychology/ (18,095)
9. exp adolescent development/ (2564)
10. exp child development/ (39,973)
11. exp preschool child/ (511,715)
12. exp adolescent behavior/ (4820)
13. exp child/ (2,243,178)
14. exp battered child/ (1058)
15. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 (2,577,111)
16. (adolesc\* or preadolesc\* or pre-adolesc\* or boy\* or girl\* or child\* or infant\* or preschool\* or juvenil\* or minors or school\* or pediatri\* or paediatri\* or pubescen\* or pre-pubescen\* or puberty or student\* or teen\* or young or youth\* or school\* or high-school or "high school" or college or undergrad\* or campus\* or classroom\*).mp. (4,195,064)
17. 15 or 16 (4,618,375)
18. exp Domestic Violence/ (45,639)
19. exp Partner violence/ (7472)
20. exp battered woman/ (2890)
21. 18 or 19 or 20 (45,639)
22. (abuse\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (6522)
23. (battered adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (831)
24. (violen\* adj3 (wom\*n or partner or spous\* or m\*n or wife or wives or husband\*)).tw. (8125)
25. (marital adj3 (violen\* or abuse\*)).tw. (365)
26. (famil\* adj3 (violen\* or abuse\*)).tw. (3617)
27. domestic violen\*.tw. (5177)
28. (intimate adj3 partner adj3 (violen\* or abuse\*)).tw. (4313)
29. (interparental adj3 (violen\* or abuse\*)).tw. (116)
30. (violen\* adj2 (home\*1 or household\*)).tw. (248)
31. (parent\* adj3 (violen\* or abuse\*)).tw. (2187)
32. 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 (21,968)
33. (expose\* or exposure).mp. (1,193,582)
34. witnes\*.mp. (32,058)
35. growing up.tw. (2242)
36. ((child\* or adolesc\*) adj3 "living with").tw. (1571)
37. 33 or 34 or 35 or 36 (1,227,079)
38. (random\* or factorial\* or crossover\* or cross over\* or cross-over\* or placebo\* or (doubl\* adj blind\*) or (singl\* adj blind\*) or assign\* or allocate\* or volunteer\*).mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword] (1,787,715)
39. crossover procedure/ (44,464)
40. double-blind procedure/ (125,970)
41. randomized controlled trial/ (386,085)
42. single blind procedure/ (20,986)

43. 39 or 40 or 41 or 42 (437,358)  
 44. 38 or 43 (1,787,715)  
 45. 21 or 32 (53,970)  
 46. 17 and 37 and 44 and 45 (454)

## Cumulative Index to Nursing and Allied Health Literature (CINAHL)

Date range of search: January 2013 to September 2015.

Date of search: 23 September 2015.

Number	Query	Results
S28	(S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24) AND (S3 AND S17 AND S25)	262
S27	(S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24) AND (S3 AND S17 AND S25)	795
S26	(S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24) AND (S3 AND S17 AND S25)	2459
S25	S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24	75,652
S24	TX ((child* or adolesc*) N5 (domestic* N2 violen*))	542
S23	TX ((child* or adolesc*) N5 (violen* N2 (home or homes or household*)))	55
S22	TX ((child* or adolesc*) N3 "living with")	3017
S21	TX "growing up"	708
S20	TX witnes*	6227
S19	TX exposed or exposure or expose	63,379
S18	(MH "Environmental Exposure+")	23,762
S17	S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15 OR S16	32,115
S16	(parent* N3 (violen* or abuse*))	763
S15	(violen* N2 (home or homes or household*))	217
S14	(interparental N3 (violen* or abuse*))	32
S13	(intimate N3 partner N3 (violen* or abuse*))	5875
S12	domestic violen*	6442
S11	(famil* N3 (violen* or abuse*))	1819
S10	(marital N3 (violen* or abuse*))	137
S9	(violen* N3 (wom*n or partner or spous* or m*n or wife or wives or husband*))	10,941
S8	(battered N3 (wom*n or partner or spous* or m*n or wife or wives or husband*))	2852
S7	(abuse* N3 (wom*n or partner or spous* or m*n or wife or wives or husband*))	11,696
S6	(MM "Battered Women") OR (MM "Battered Men")	2109
S5	(MM "Intimate Partner Violence")	4375
S4	(MM "Domestic Violence+")	17,339
S3	S1 OR S2	1,107,057
S2	TX (adolesc* or preadolesc* or pre-adolesc* or boy* or girl* or child* or infant* or preschool* or juvenil* or minors or school* or pediatri* or paediatric* or pubescen* or pre-pubescen* or puberty or student* or teen* or young or youth* or school* or high-school or "high school" or college or undergrad* or campus* or classroom*)	1,107,057
S1	(MH "Child") OR (MH "Child Behavior Disorders") OR (MH "Child Behavior") OR (MH "Adult-Child Relations") OR (MH "Child Psychiatry") OR (MH "Child Psychology") OR (MH "Child, Preschool") OR (MH "Mother-Child Relations") OR (MH "Parent-Child Relations") OR (MH "Child Welfare") OR (MH "Father-Child Relations") OR (MH "Maternal-Child Care") OR (MH "Maternal-Child Health") OR (MH "Maternal-Child Welfare") OR (MH "Children of Impaired Parents")	



## Appendix 3 Study identifier used, references to completed and included studies and references to ongoing studies

TABLE 24 References to completed and ongoing studies

Study ID (first author, year)	References to papers relevant to the study
<b>Included studies</b>	
Cohen 2011 <sup>61</sup>	Cohen JA, Mannario AP, Iyengar S. Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomised controlled trial. <i>Arch Pediatr Adolesc Med</i> 2011; <b>165</b> :16–21 <sup>a</sup>
Graham-Bermann 2007 <sup>98</sup>	Graham-Bermann SA, Howell KH, Lily M, DeVoe E. Mediators and moderators of change in adjustment following intervention for children exposed to intimate partner violence. 2011. <i>J Interpers Violence</i> 2011; <b>26</b> :1815–33 Graham-Bermann SA, Kulkarni MR, Kanukollu S. Is disclosure therapeutic for children following exposure to traumatic violence? <i>J Interpers Violence</i> 2011; <b>26</b> :1056–76 Graham-Bermann SA, Lynch S, Banyard V, DeVoe ER, Halabu H. Community-based intervention for children exposed to intimate partner violence: an efficacy trial. <i>J ConsultClin Psychol</i> 2007; <b>75</b> :199–209 <sup>a</sup> Hiltz-Hymes CE. <i>The Role of Emotional Contagion and Flooding in the Group Process of Children Exposed to Domestic Violence</i> . PhD thesis. Santa Barbara, CA: Fielding Graduate University; 2011 Graham-Bermann SA, Miller-Graff L. Community-based intervention for women exposed to intimate partner violence: a randomized control trial. <i>J Family Psychol</i> 2015; <b>29</b> :537–47 Graham-Bermann, SA and Miller, LE. Intervention to reduce traumatic stress following intimate partner violence: an efficacy trial of the Moms' Empowerment Program (MEP). <i>Psychodyn Psychiatry</i> 2013; <b>41</b> :329–49
Graham-Bermann 2015 <sup>99</sup>	Miller LE, Howell KH, Hunter EC, Graham-Bermann SA. Enhancing safety-planning through evidence-based interventions with preschoolers exposed to intimate partner violence. <i>Child Care Pract</i> 2012; <b>18</b> :67–82 Miller LE, VanZomeren-Dohm A, Howell KH, Hunter EC, Graham-Bermann SA. In-home social networks and positive adjustment in children witnessing intimate partner violence. <i>J Fam Issues</i> 2014; <b>35</b> :462–80 Graham-Bermann SA, Miller-Graff LE, Howell KH, Grogan-Kaylor A. An efficacy trial of an intervention program for children exposed to intimate partner violence. <i>Child Psychiatry Hum Dev</i> 2015; <b>46</b> :928–39 <sup>a</sup> Galano MM, Miller LE, Graham-Bermann SA. Avoidance symptom presentation of preschoolers exposed to Intimate Partner Violence in a group therapy setting. <i>Child Care Pract</i> 2014; <b>20</b> :399–414 Howell KH, Miller LE, Lilly MM, Graham-Bermann SA. Fostering social competence in preschool children exposed to intimate partner violence: evaluating the Preschool Kids' Club Intervention. <i>J Aggression Maltreat Trauma</i> 2013; <b>22</b> :425–45
Jouriles 2001 <sup>91</sup>	Jouriles EN, McDonald R, Spiller L, Norwood D, Swank PR, Stephens N, <i>et al</i> . Reducing conduct problems among children of battered women. <i>J Consult Clin Psychol</i> 2001; <b>69</b> :774–85 <sup>b</sup> McDonald R, Jouriles EN, Skopp NA. Reducing conduct problems among children brought to women's shelters: intervention effects 24 months following termination of services. <i>J Fam Psychol</i> 2006; <b>20</b> :127–36

continued

TABLE 24 References to completed and ongoing studies (continued)

Study ID (first author, year)	References to papers relevant to the study
Jouriles 2009 <sup>90</sup>	<p>Jouriles EN, McDonald R, Rosenfield D, Stephens N, Corbitt-Shindler D, Miller PC. Reducing conduct problems among children exposed to intimate partner violence: a randomised clinical trial examining effects of project support. <i>J Consult Clin Psychol</i> 2009;<b>77</b>:705–17<sup>a</sup></p> <p>McDonald R, Dodson MC, Rosenfield D, Jouriles EN. Effects of a parenting intervention on features of psychopathy in children. <i>J Abnorm Child Psychol</i> 2011;<b>39</b>:1013–23</p>
Kot 1996 <sup>112</sup>	<p>Kot S, Landreth GL, Giordano M. Intensive child-centered play therapy with child witnesses of domestic violence. <i>Int J Play Ther</i> 1998;<b>7</b>:17–36<sup>a</sup></p> <p>Kot SY-L. <i>Intensive Play Therapy with Child Witnesses of Domestic Violence</i>. PhD thesis. Denton, TX: University of North Texas; 1996</p>
Lieberman 2005 <sup>92</sup>	<p>Lieberman AF, Van Horn P, Ghosh Ippen C. <i>Preschool Witnesses of Domestic Violence: Pathways to Recovery</i>. 155th Annual Meeting of the American Psychiatric Association; Philadelphia, PA, 18–23 May 2002</p> <p>Lieberman AF, Van Horn P, Ghosh Ippen C. Toward evidence-based treatment: child-parent psychotherapy with preschoolers exposed to marital violence. <i>J Am Acad Child Adolesc Psychiatry</i> 2005;<b>44</b>:1241–8<sup>a</sup></p> <p>Lieberman AF, Ghosh Ippen C, Van Horn P. Child-parent psychotherapy: 6-month follow-up of a randomised controlled trial. <i>J Am Acad Child Adolesc Psychiatry</i> 2006;<b>45</b>:913–18</p> <p>Ghosh Ippen C, Harris WW, Van Horn P, Lieberman AF. Traumatic and stressful events in early childhood: can treatment help those at highest risk? <i>Child Abuse Neglect</i> 2011;<b>35</b>:504–13</p>
McFarlane 2005 <sup>93</sup>	<p>McFarlane JM, Groff JY, O'Brien JA, Watson K. Behaviors of children following a randomised controlled treatment program for their abused mothers. <i>Issues Compr Pediatr Nurs</i> 2005;<b>28</b>:195–211<sup>a</sup></p> <p>McFarlane JM, Groff JY, O'Brien JA, Watson K. Behaviors of children exposed to intimate partner violence before and 1 year after a treatment program for their mother. <i>Applied Nurs Res</i> 2005;<b>18</b></p>
McWhirter 2011 <sup>94</sup>	<p>McWhirter PT. Differential therapeutic outcomes of community-based group interventions for women and children exposed to intimate partner violence. <i>J Interpers Violence</i> 2011;<b>26</b>:2457–82<sup>a</sup></p>
Overbeek 2012 <sup>117</sup>	<p>Overbeek MM, de Schipper JC, Lamers-Winkelmann F, Schuengel C. The effectiveness of a trauma-focused psycho-educational secondary prevention program for children exposed to interparental violence: study protocol for a randomised controlled trial. <i>Trials</i> 2012;<b>13</b>:12</p> <p>Overbeek MM, de Schipper JC, Lamers-Winkelmann F, Schuengel C. Effectiveness of specific factors in community-based intervention for child-witnesses of interparental violence: a randomised trial. <i>Child Abuse Neglect</i> 2013;<b>37</b>:1202–14<sup>a</sup></p> <p>Overbeek MM, de Schipper JC, Lamers-Winkelmann F, Schuengel C. Risk factors as moderators of recovery during and after interventions for children exposed to interparental violence. <i>Am J Orthopsychiatry</i> 2014;<b>84</b>:295–306</p> <p>Overbeek MM, de Schipper JC, Willems AM, Lamers-Winkelmann F, Schuengel C. Mediators and treatment factors for children exposed to interparental violence [published online ahead of print 9 March 2015]. <i>J Clin Child Adolesc Psychol</i> 2015</p>
Sullivan 2002 <sup>96</sup>	<p>Sullivan CM, Bybee DI, Allen NE. Findings from a community-based program for battered women and their children. <i>J Interpers Violence</i> 2002;<b>17</b>:915–36<sup>a</sup></p>
Wagar 1995 <sup>97</sup>	<p>Wagar JM, Rodway MR. An evaluation of a group treatment approach for children who have witnessed wife abuse. <i>J Family Violence</i> 1995;<b>10</b>:295–306</p>
Waldman-Levi 2011 <sup>118</sup>	<p>Waldman-Levi A, Weintraub N. Occupational therapy intervention for mothers and their children who were victims of domestic violence. <i>Israel J Occupational Ther</i> 2009;<b>18</b>:E36</p> <p>Waldman-Levi A. <i>The efficacy of an intervention program for mothers and their children who reside in shelters for battered women, on mother's parental functioning, mother-child interaction and child's play function</i>. PhD thesis. Jerusalem: Hebrew University; 2011</p> <p>Waldman-Levi A, Weintraub N. Efficacy of a crisis intervention in improving mother-child interaction and children's play functioning. <i>Am J Occupational Ther</i> 2015;<b>69</b>:1–11<sup>a</sup></p>

TABLE 24 References to completed and ongoing studies (continued)

Study ID (first author, year)	References to papers relevant to the study
<b>Ongoing studies</b>	
Visser 2015 <sup>62</sup>	Visser MM, Telman MD, de Schipper JC, Lamers-Winkelmann F, Schuengel C, Finkenauer C. The effects of parental components in a trauma-focused cognitive behavioral based therapy for children exposed to interparental violence: Study protocol for a randomized controlled trial. <i>BMC Psychiatry</i> 2015; <b>15</b> :131 <sup>a</sup>
a Main study paper.	





## Appendix 4 List of excluded papers and reasons for exclusion

### Not a randomised controlled trial, controlled clinical trial or controlled before-and-after study

Alaggia, R. Protecting children from domestic violence: strategies for community intervention. *Children Youth Serv Rev* 2006;**28**:109–11.

Arteaga S, Lamb Y. Expert review of key findings on children exposed to violence and their families from the Safe Start Demonstration Project. *Best Pract Mental Health* 2008;**4**:99–107.

Aoun C. Strengthening attachment: a multifamily group for mother child dyads following domestic violence. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 2014;**74**.

Becker KD, Mathis G, Mueller CW, Issari K, Atta SS. Community-based Treatment Outcomes for Parents and Children Exposed to Domestic Violence. In Geffner R, Griffin D, Lewis J, III, editors. *Children Exposed to Violence: Current Issues, Interventions and Research*. New York, NY: Routledge/Taylor & Francis Group. pp. 179–95.

Becker KD, Mathis G, Mueller CW, Issari K, Atta SS. Community-based treatment outcomes for parents and children exposed to domestic violence. *J Emotional Abuse* 2008;**8**:187–204.

Bennett LR, Shiner SK, Ryan S. Using Theraplay in shelter settings with mothers & children who have experienced violence in the home. *J Psychosocial Nurs Mental Health Serv* 2006;**44**:38–48.

Berkowitz SJ, Marans SM. The Child Development-Community Policing Program: a partnership to address the impact of violence. *Israel J Psychiatry Related Sci* 2000;**37**:103–14.

Billings B. Protecting children from domestic violence: Strategies for community intervention. *J Interpers Violence* 2005;**20**:1151–2.

Blodgett C, Behan K, Erp M, Harrington R, Souers K. Crisis intervention for children and caregivers exposed to intimate partner violence. *Best Pract Mental Health* 2008;**4**:74–91.

Brager PR, Graybill D. Solutions for Challenges in Conducting Parenting Groups for Mothers of Children Exposed to Domestic Violence. In Jaffe PG, Russell M, Smith MJ, editors, *Creating a Legacy of Hope: Proceedings of an International Conference on Children Exposed to Domestic Violence*, Vancouver, BC: BC/Yukon Society of Transition Houses; 2000. pp. 54–6.

Carter L, Kay SJ, George JL, King P. Treating children exposed to domestic violence. *J Emotional Abuse* 2003;**3**:183–202.

Coffee J, Coffee AW. An intervention model for child witnesses of domestic violence. *Hawaii Med J* 1996;**55**:174–6.

Cohen, JA; Mannarino, AP. Trauma-focused cognitive behavioural therapy for children and parents. *Child Adolesc Mental Health* 2008;**13**:158–62.

Crockford M, Kent GS, Stewart N. Play Friendly and Safe: a therapeutic group model for young children (5–8 years old) who have witnessed wife assault. *J Child Youth Care* 1993;**8**:77–86.

Crusto C, Lowell A, Darcy I, Paulicin B, Reynolds J, Feinn R, *et al.* Evaluation of a wraparound process for children exposed to family violence. *Best Pract Mental Health* 2008;**4**:1.

Davies D. Intervention with male toddlers who have witnessed parental violence. *Fam Soc* 1991;**72**:515–24.

Drotar D, Flannery D, Day E, Friedman S, Creeden R, Gartland H, *et al.* Identifying and responding to the mental health service needs of children who have experienced violence: a community-based approach. *Clin Child Psychol Psychiatry* 2003;**8**:187–203.

Ducharme JM, Atkinson L, Poulton L. Success-based, noncoercive treatment of oppositional behavior in children from violent homes. *J Am Acad Child Adolesc Psychiatry* 2000;**39**:995–1004.

Ernst AA, Weiss SJ, Enright-Smith S, Hansen JP. Positive outcomes from an immediate and ongoing intervention for child witnesses of intimate partner violence. *Am J Emerg Med* 2008;**26**:389–94.

Genrich A, Steinkamp S, Horton CB. Treating Children Exposed to Domestic Violence: Lessons Learned from Five Years of Experience. In Jaffe PG, Russell M, Smith MJ, editors, *Creating a Legacy of Hope: Proceedings of an International Conference on Children Exposed to Domestic Violence*, Vancouver, BC: BC/Yukon Society of Transition Houses; 2000. pp. 50–3.

Goncalves HS, Ferreira AL, Marques MJ. [Evaluating a support program for children victim of domestic violence.] *Revista de Saude Publica* 1999;**33**:547–53.

Grip K, Almqvist K, Broberg AG. Maternal report on child outcome after a community-based program following intimate partner violence. *Nordic J Psychiatry* 2012;**66**:239–47.

Horton CB, Cruise TK, Graybill D, Cornett J. For Children's Sake: training students in the treatment of child witnesses of domestic violence. *Prof Psychol* 1999;**30**:88–91.

Huth-Bocks A, Schettini A, Shebroe V. Group play therapy for preschoolers exposed to domestic violence. *J Child Adolesc Group Therapy* 2001;**11**:19–34.

Hyde MM, Lamb Y, Arteaga S, Chavis D. National evaluation of the Safe Start Demonstration Project: Implications for mental health practice. *Best Pract Mental Health* 2008;**4**:108–22.

Jaffe PG, Poisson SE. Children Exposed to Domestic Violence: Challenges for the Next Century. In Jaffe PG, Russell M, Smith MJ, editors, *Creating a Legacy of Hope: Proceedings of an International Conference on Children Exposed to Domestic Violence*, Vancouver, BC: BC/Yukon Society of Transition Houses; 2000. pp. 1–6.

Landmann K, Garner D. Breaking the Cycle of Violence: An Intervention Strategy for Child Victim-Witnesses of Domestic Violence. In Jaffe PG, Russell M, Smith MJ, editors, *Creating a Legacy of Hope: Proceedings of an International Conference on Children Exposed to Domestic Violence*, Vancouver, BC: BC/Yukon Society of Transition Houses; 2000. pp. 39–47.

Lee J, Kolomer S, Thomsen D. Evaluating the effectiveness of an intervention for children exposed to domestic violence: A preliminary program evaluation. *Child Adolesc Soc Work J* 2012;**29**:357–72.

Levitan JR. *Children Exposed to Domestic Violence: Examining the Role of Group Cohesion in a Group Intervention*. PhD thesis. Santa Barbara, CA: University of California, Santa Barbara; 2013.

- McWhirter, PT. An Empirical Evaluation of a Collaborative Child and Family Violence Prevention and Intervention Program. In Walz GR, Bleuer JC, Yep RK, editors. *Compelling Counseling Interventions: Celebrating VISTAS' Fifth Anniversary*. Ann Arbor, MI: Counselling Outfitters; 2008. pp. 221–7.
- Munoz Cobos F, Martin Carretero ML, Vivancos ED, Blanca Barba F, Rodriguez Carrion T, Ruiz Ramos M. [Improving care for victims of domestic violence. Impact of a priority intervention.] *Atencion Primaria* 2001;**28**:241–8.
- Murray LK, Cohen JA, Mannarino AP. Trauma-focused cognitive behavioral therapy for youth who experience continuous traumatic exposure. *Peace Conflict* 2013;**19**:180–95.
- Myers JEB. Protecting children from domestic violence: strategies for community intervention. *Child Abuse Negl* 2004;**28**:1341.
- Pereira PC, D’Affonseca SM, Williams LCA. A feasibility pilot intervention program to teach parenting skills to mothers of poly-victimized children. *J Fam Violence* 2013;**28**:5–15.
- Polites A, Kucher K, Bigelow S. Hope and Healing for Children Affected by Domestic Violence. *Exchange* 2010;**191**:76–9.
- Raghunandan S, Leschied A. The effectiveness of kinship services with children exposed to partner violence: exploring a dual victim treatment approach. *Fam Soc* 2010;**91**:52–9.
- Schewe PA, Risser R, Russel H, Messinger AM. Safe From the Start: evaluating interventions for children exposed to violence. *J Aggression Maltreat Trauma* 2013;**22**:67–86.
- Schultz D, Jaycox LH, Hickman LJ, Chandra A, Barnes-Proby D, Acosta J, et al. *National Evaluation of Safe Start Promising Approaches: Assessing Program Implementation. Technical Report*. Santa Monica, CA: RAND Corporation; 2010. p. 290.
- Schultz PN, Remick-Barlow GA, Robbins L. Equine-assisted psychotherapy: a mental health promotion/intervention modality for children who have experienced intra-family violence. *Health Soc Care Commun* 2007;**15**:265–71.
- Scott KL, Lishak V. Intervention for maltreating fathers: statistically and clinically significant change. *Child Abuse Neglect* 2012;**36**:680–4.
- Smith N, Landreth G. Intensive filial therapy with child witnesses of domestic violence: a comparison with individual and sibling group play therapy. *Int J Play Ther* 2003;**12**:67–88.
- Smith NR. A comparative analysis of intensive filial therapy with intensive individual play therapy and intensive sibling group play therapy with child witnesses of domestic violence. *Dissertation Abstracts International Section A: Humanities and Social Sciences* 2002;**62**:2353.
- Tyndall-Lind, A. Intensive Sibling Group Play Therapy with Child Witnesses of Domestic Violence. In Baggerly JN, Ray DC, Bratton SC, editors. *Child-Centered Play Therapy Research: The Evidence Base for Effective Practice*. Hoboken, NJ: John Wiley & Sons; 2010. pp. 69–83.
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Tyndall-Lind MA. A comparative analysis of intensive individual play therapy and intensive sibling group play therapy with child witnesses of domestic violence. *Dissertation Abstracts International Section A: Humanities and Social Sciences* 1999;**60**:1465.

Wilson SK, Cameron S, Jaffe P, Wolfe D. Children exposed to wife abuse – an intervention model. *J Contemp Soc Work* 1989;**70**:180–4.

### **Intervention is not for children or young people exposed to domestic violence or abuse or their parents**

Salazar LF, Cook SL. Preliminary findings from an outcome evaluation of an intimate partner violence prevention program for adjudicated, African American, adolescent males. *Youth Violence Juvenile Justice* 2006;**4**:368–85.

### **Abstract or conference proceeding only**

Hobbs F, Vandieten M. An evaluation of a community-based intervention program for adolescent witnesses to violence in the family. *Can Psychol* 1994;**35**:99.

Samuelson KW. Trauma-focused CBT reduces anxiety and post-traumatic stress disorder in children exposed to intimate partner violence. *Evidence Based Mental Health* 2011;**14**:56.

### **Exposure is to a broader construct of violence, for example community violence**

van Rosmalen-Nooijens KA, Prins JB, Vergeer M, Wong SH, Lagro-Janssen AL. ‘Young people, adult worries’: RCT of an internet-based self-support method ‘Feel the ViBe’ for children, adolescents and young adults exposed to family violence, a study protocol. *BMC Public Health* 2013;**13**:226.

Whiteside-Mansell L, Bradley R, McKelvey L, Lopez M. Center-based early head start and children exposed to family conflict. *Early Educ Dev* 2009;**20**:942–957.

Whitworth JD. Effects of cognitive versus cognitive-behavioral divorce-parenting programs on parental conflict, intimate violence, parental communication, divorce-related parental behaviors and children’s behavioral problems. *Dissertation Abstracts International Section A: Humanities and Social Sciences* 2000;**61**:2043.

## Appendix 5 Study details

TABLE 25 Details of studies included in the systematic review of trials

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Cohen 2011, <sup>61</sup> USA; RCT; two arms; n = 124; 43% dropout; risk of bias: ✓OXXX	<b>Inclusion:</b> children aged 7–14 years; at least five DVA-related PTSD symptoms including at least one in each of three PTSD symptom clusters on the K-SADS-PL <b>Exclusion:</b> (1) Developmental disorder or IQ < 80; (2) serious psychotic symptoms in parent or child; (3) living in a DVA shelter <b>Source:</b> women referred to the Women's Centre and Shelter (2004–9) with children with some mental health symptoms <b>Setting:</b> specialist DVA service; The Women's Centre and Shelter	7–14 years; mean 9.64 years (SD 2.46 years) 49% male, 51% female 69 white, 41 black, 14 mixed race	<b>Trauma-focused CBT</b> <b>Delivered to:</b> parent and child (separately) except for part of two sessions in which they were seen together <b>Setting:</b> The Women's Centre and Shelter <b>Intensity; duration/frequency of intervention:</b> nine group sessions of 90 minutes each for child and nine parallel group sessions of 90 minutes for parent. Intervention given weekly. Groups contain a maximum of eight children and parents <b>Delivered by:</b> three master's-level social workers who provided child therapy at the Women's Centre and Shelter <b>Training:</b> trained by JA Cohen in the applied TF-CBT model and in differences between CT and TF-CBT and received supervision until proficiency was reached <b>Therapy manualised?</b> Yes: both manualised or documented <b>Treatment fidelity:</b> blinded ratings of 25% of randomly selected audiotaped sessions using study treatment adherence checklists. They met > 90% adherence for the assigned model <b>Supervision:</b> yes, throughout project <b>Were participants paid?</b> No	<b>Child-centred therapy</b> <b>Delivered to:</b> parent and child (separately) except for part of two sessions in which they were seen together <b>Intensity; duration/frequency of intervention:</b> nine group sessions of 90 minutes each for child and nine parallel group sessions of 90 minutes for parent. Intervention given weekly. Groups contain a maximum of eight children and parents <b>Delivered by:</b> three master's-level social workers who provided child therapy at the Women's Centre and Shelter <b>Training:</b> trained by JA Cohen in the applied TF-CBT model and in differences between CT and TF-CBT and received supervision until proficiency was reached <b>Therapy manualised?</b> Yes: CT manual available	Eight sessions delivered over 8 weeks <b>Number of sessions for parent:</b> 8 <b>Number of sessions of child:</b> 8 <b>Intensity; duration/frequency:</b> 45 minutes. One session per week for 8 weeks

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Intervention description:</b></p> <p><b>Psychotherapy:</b> TF-CBT components included psychoeducation about trauma, developing individualised relaxation skills to manage stress, expressing and modulating upsetting feelings, and cognitive coping skills, developing a narrative about the child's IPV experiences and correcting maladaptive cognitions expressed during this narrative, in vivo mastery of trauma reminders, joint child–parent sessions during which the child is encouraged to share IPV experiences directly with the mother, and enhancing safety. Over time children were encouraged to confront increasingly detailed, distressing and personal IPV-related reminders and events. Developmentally appropriate strategies were used across a range of ages and clinical presentations. TF-CBT was specialised for domestic violence by implementing the safety component at the beginning instead of at the end of treatment; focus of the trauma narrative on sharing the child's IPV experiences and awareness with the mother and addressing maladaptive cognitions (e.g. self- or mother-blame) rather than on mastering past trauma memories and optimise the child's ability to discriminate between real danger and generalised fears instead of mastering reminders of previous IPV episodes</p>	<p><b>Treatment fidelity:</b> blinded ratings of 25% of randomly selected audiotaped sessions using study treatment adherence checklists. They met &gt; 90% adherence for the assigned model</p> <p><b>Supervision:</b> Yes, throughout project</p> <p><b>Control description:</b> brief CT based on the premise that traumatised children and adults develop difficulties owing to a violation of interpersonal trust and disempowerment. CT reverses these problems by establishing an empowering and trusting relationship between therapist and client and by encouraging the child and parent to direct the content of their own treatment. Therapists provide active listening, reflection, accurate empathy, encouragement to talk about feelings and belief in the child's and parent's respective abilities to develop positive coping strategies</p>	

continued



TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Graham-Bermann 2007, <sup>38</sup> USA; CCT; three arms; <i>n</i> = 221; <i>n</i> = 181 completers; 18% dropout; risk of bias: <b>XXXXX</b>	<b>Inclusion:</b> children aged 6–12 years whose mothers were exposed to DVA in the past year <b>Exclusion:</b> none explicitly stated <b>Source:</b> from the community and local DVA shelters, community centres, grocery stores, religious institutions <b>Setting:</b> community, as available (e.g. as existing mental health clinics, education centres and shelter outreach programmes)	Mean 8.34 years (SD 2.05 years) 47% male, 53% female 52% white, 33% African American, 11% biracial, 2% Latino, 2% native American	<b>Intervention description included description of a theoretical framework?</b> No. Reference is made to other literature in which the theoretical framework may be described  <b>Causal mechanism by which the intervention was expected to impact on outcomes is set out?</b> No: specific means of how the intervention would effect change in the outcomes was explicitly stated  Parenting programme and child therapy: <b>Kids' Club</b> and <b>MEP</b> . <b>N = 61</b>  Parenting intervention for mothers; group therapy for children  <b>Setting:</b> community, such as existing mental health clinics, education centres, and shelter outreach programmes  <b>Format (group/individual):</b> child therapy – group 6–8 years and 9–12 years with five to seven children per group. Adult parenting: group, mothers of children attending Kids' Club  <b>Intensity (duration/frequency of intervention):</b> five weekly sessions; one per week for 5 weeks  Women's sessions 60 minutes; children's sessions 45 minutes. Then women's and children's sessions together	<b>Control:</b> <b>N = 58</b> Waitlist comparison group offered intervention after 10 weeks  <b>Second comparative arm:</b> child-only therapy. Kids' Club. Group therapy for children. <b>N = 62</b>  <b>Setting:</b> not stated  <b>Format (group/individual):</b> child therapy – group 6–8 years and 9–12 years with five to seven children per group  <b>Intensity (duration/frequency of intervention):</b> five weekly sessions; one per week for 5 weeks	10 weeks Kids' Club plus MEP  <b>Number of sessions for parent:</b> 10  <b>Number of sessions for child:</b> 10 (5–10 (mean 7.35, SD 1.5)  <b>Intensity, frequency of intervention:</b> weekly  <b>Follow-up:</b> 8 months  <b>Intervention 2:</b> child only  <b>Number of sessions for non-abusive parent:</b> 0

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
	<p><b>Delivered to:</b> mothers and children separately</p> <p><b>Intervention delivered by:</b> graduate students in clinical psychology and social work paired with therapists from local mental health clinics</p> <p><b>Qualifications:</b> graduate students in clinical psychology</p> <p><b>Training:</b> therapists received intensive training in clinical work with children and women exposed to IPV as well as ethical issues in working with at-risk populations</p> <p><b>Therapy manualised?</b> Manuals for both programmes are available from author</p> <p><b>Treatment fidelity:</b> treatment adherence discussed weekly at supervision meeting</p> <p><b>Supervision:</b> weekly with Dr Graham-Bermann</p> <p><b>Were participants paid?</b> Yes: mothers US\$20 per interview (pre and post intervention)</p> <p><b>Intensity: duration/frequency of intervention:</b> five weekly sessions; one per week for 5 weeks</p> <p>Women's sessions 60 minutes. Children's sessions 45 minutes. Then women's and children's sessions together</p>	<p><b>Delivered to:</b> mothers and children</p> <p><b>Intervention delivered by:</b> graduate students in clinical psychology and social work paired with therapists from local mental health clinics</p> <p><b>Qualifications:</b> graduate students in clinical psychology</p> <p><b>Training:</b> therapists received intensive training in clinical work with children and women exposed to IPV as well as ethical issues in working with at-risk populations</p> <p><b>Therapy manualised?</b> Manuals for both programmes are available from author</p> <p><b>Treatment fidelity:</b> treatment adherence discussed weekly at supervision meeting</p> <p><b>Supervision:</b> weekly with Dr Graham-Bermann</p> <p><b>Were participants paid?</b> Yes: mothers US\$20 per interview (pre and post intervention)</p> <p><b>Intensity: duration/frequency of intervention:</b> five weekly sessions; one per week for 5 weeks</p> <p>Women's sessions 60 minutes. Children's sessions 45 minutes. Then women's and children's sessions together</p>	<p><b>Delivered to:</b> mothers and children</p> <p><b>Intervention delivered by:</b> graduate students in clinical psychology and social work paired with therapists from local mental health clinics</p> <p><b>Qualifications:</b> graduate students in clinical psychology</p> <p><b>Training:</b> therapists received intensive training in clinical work with children and women exposed to IPV as well as ethical issues in working with at-risk populations</p> <p><b>Therapy manualised?</b> Manuals for both programmes are available from author</p> <p><b>Treatment fidelity:</b> treatment adherence discussed weekly at supervision meeting</p> <p><b>Supervision:</b> weekly with Dr Graham-Bermann</p> <p><b>Were participants paid?</b> Yes: mothers US\$20 per interview (pre and post intervention)</p> <p><b>Intensity: duration/frequency of intervention:</b> five weekly sessions; one per week for 5 weeks</p> <p>Women's sessions 60 minutes. Children's sessions 45 minutes. Then women's and children's sessions together</p>	<p>Women's sessions 60 minutes. Children's sessions 45 minutes. Then women's and children's sessions together</p> <p><b>Delivered to:</b> children</p> <p><b>Intervention delivered by:</b> graduate students in clinical psychology and social work paired with therapists from local mental health clinics</p> <p><b>Qualifications:</b> graduate students in clinical psychology</p> <p><b>Training:</b> therapists received intensive training in clinical work with children and women exposed to IPV as well as ethical issues in working with at-risk populations</p> <p><b>Therapy manualised?</b> Manuals for both programmes are available from author</p> <p><b>Treatment fidelity:</b> treatment adherence discussed weekly at supervision meeting</p> <p><b>Supervision:</b> weekly with Dr Graham-Bermann</p> <p><b>Were participants paid?</b> Yes: mothers US\$20 per interview (pre and post intervention)</p> <p><b>Intensity: duration/frequency of intervention:</b> five weekly sessions; one per week for 5 weeks</p> <p>Women's sessions 60 minutes. Children's sessions 45 minutes. Then women's and children's sessions together</p>	<p><b>Number of sessions for child:</b> 10 (5–10 Mean 7.35 SD 1.5)</p> <p><b>Intensity, frequency of intervention:</b> weekly</p> <p><b>Follow-up:</b> 8 months</p>

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Intervention 1: child and parent</b></p> <p><b>Child psychoeducation: Kids' Club programme</b> – targeted children's knowledge about family violence, their attitudes and beliefs about families and family violence, their emotional adjustment, and their social behaviour in the small group. Early sessions were designed to enhance the child's sense of safety, to develop the therapeutic alliance, and to create a common vocabulary of emotions for making sense of violent experiences. Later sessions addressed responsibility for violence, managing emotions, conflict and its resolution, and family relationship paradigms. No new children were added to the group after the second session. Trained therapists provided support and to serve as models for managing emotions and interpersonal conflict that the child's family may not have provided. Group lessons were reviewed and repeated each week</p>	<p><b>Were participants paid?</b> Yes: mothers US\$20 per interview (Pre and post intervention)</p> <p><b>Intervention 2: child-only</b></p> <p>Child psychoeducation: targeted children's knowledge about family violence, their attitudes and beliefs about families and family violence, their emotional adjustment, and their social behaviour in the small group. Early sessions were designed to enhance the child's sense of safety, to develop the therapeutic alliance, and to create a common vocabulary of emotions for making sense of violence experiences. Later sessions addressed responsibility for violence, managing emotions, conflict and its resolution, and family relationship paradigms. No new children were added to the group after the second session. Trained therapists provided support and to serve as models for managing emotions and interpersonal conflict that the child's family may not have provided. Group lessons were reviewed and repeated each week</p>	
			<p><b>Parent psychoeducation: MEP</b> – aimed to empower mothers, enhance their social and emotional adjustment through discussion of the impact of the violence on their child's development, build parenting competence, provide a safe place to discuss parenting fears and worries, build parenting and disciplinary skills and build connections for the mother in the context of a supportive group</p>		

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Graham-Bermann 2015; <sup>39</sup> USA; CCT; two arms; <i>n</i> = 120; <i>n</i> = 71 completers; 17% dropout; risk of bias: <b>XXXXX</b>	<b>Inclusion:</b> children aged 4–6 years whose mothers were exposed to DVA in the past 2 years <b>Exclusion:</b> none explicitly stated <b>Source:</b> from the community and local DVA shelters, community centres, grocery stores, religious institutions <b>Setting:</b> community; as available (e.g. as existing mental health clinics, education centres and shelter outreach programmes)	Children: 55 male; 55 female Children ranged in age from 4 to 6 years (mean 4.93 years, SD 0.87 years) 40% European American, 36% African American, 17% biracial, 5% Hispanic, 1% native American 52% of women lived in shelters 7% lived with perpetrator	<b>Intervention description included description of a theoretical framework?</b> Yes. A strong theoretical rationale is provided <b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> Yes. The authors describe a theory for how each component of their intervention is to effect a change in outcome Pre Kids' Club and MEP. <i>N</i> = 58, <i>n</i> = 51 received the allocated intervention (seven did not receive allocation) <b>Setting:</b> community such as mental health clinics, education centres, and shelter outreach programme <b>Format (group): child therapy</b> – group 4–6 years Adult MEP: <b>Intensity: duration/frequency of intervention:</b> 10 sessions; two per week. 5 weeks Women's sessions 90 minutes. Children's sessions 30–45 minutes <b>Delivered to:</b> mothers and children in groups, separately	<b>Comparison condition.</b> No intervention Participants were interviewed at 5 weeks after enrolment in the study. They did not receive an intervention	5 weeks Pre-Kids Club plus MEP <b>Number of sessions for parent:</b> 10 <b>Number of sessions for child:</b> 10

continued

TABLE 25 Details of studies included in the systematic review of trials (*continued*)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<b>Intervention delivered by:</b> master's-level social workers and graduate students in clinical psychology paired with local therapists or service providers from local mental health clinics		
			<b>Qualifications:</b> graduate students in clinical psychology. Master's-level social workers		
			<b>Training:</b> training in Pre Kids' Club and MEP was provided from the developer of the programme. Therapists received intensive training in clinical work with children and women exposed to IPV as well as ethical issues in working with at-risk populations		
			<b>Therapy manualised?</b> Manuals for both programmes were used		
			<b>Treatment fidelity:</b> training provided until trainers were proficient. Treatment adherence discussed weekly at supervision meeting from detailed process notes		
			<b>Supervision:</b> weekly with Dr Graham-Bermann		
			<b>Were participants paid?</b> Yes. Mothers paid US\$25 per interview (pre and post intervention)		
			<b>Intensity: duration/frequency of intervention</b> – Five weekly sessions; two per week for 5 weeks		

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b><u>Intervention 1: Pre Kids' Club</u></b></p> <p>Child psychoeducation: sessions focus on children's attitudes and beliefs about violence, and are developed to have age-appropriate content. The first five sessions were identifying and expressing emotions in general as well as those associated with family violence. The sixth includes safety planning and the remaining sessions address issues such as gender roles, and what the children want to be when they grow up. Sessions also include managing emotions, fears, worries, and conflict resolution tactics, coping strategies and relaxation techniques, and present opportunities to be exposed to and model prosocial behaviours. A manual was used</p> <p><b><u>MEP</u></b></p> <p>Parent psychoeducation: (see above for Graham-Bermann <i>et al.</i><sup>96</sup>) Aim was to empower women as they discuss the impact of IPV on themselves and their children. To build parenting competence, share fears and worries in safety, to build connections within the group and in the community, to share community resources, social support and to enhance safety planning. Six to eight women per group. See also description of MEP in Graham-Bermann <i>et al.</i><sup>98</sup></p> <p><b>Intervention description included description of a theoretical framework?</b></p> <p>Not in these papers, although it is described well in the papers pertaining to the Kids' Club for children aged 6–12 years and MEP for the CCT Graham-Bermann <i>et al.</i><sup>98</sup></p>		

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Jouriles 2001; <sup>81</sup> USA; RCT; two arms; 36 participants; <i>n</i> = 31 completers; 8% dropout; risk of bias: OOOXO	<b>Inclusion:</b> (1) women reporting at least one incident of physical abuse from a male partner in past 12 months; (2) at least 1 child between the ages of 4 years and 9 years with DSM-IV criteria for ODD or CD. If more than one child the youngest was chosen. After shelter departure eligibility criteria: (1) mother and target child in same household; (2) not living with abusive partner, residence within 50 miles of shelter, residence sufficiently safe for project staff to visit <b>Exclusion:</b> either mother or child has severe mental health issues (e.g. psychosis, autism) <b>Source:</b> recruited in a shelter with subsequent move to life independently in a safe home	4–9 years (mean 5.8 years) 28% male, 72% female 10 Caucasian, 12 Hispanic, 1 Asian American, 11 African American, 2 other	<b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> Not in these papers, although it is described well in the papers pertaining to the Kids' Club for children aged 6–12 and MIEP for the CCT Graham-Bermann <i>et al.</i> <sup>88</sup> Instrumental and emotional support plus teaching child management skills to mothers Multicomponent, family instrumental and emotional support and parenting for mothers and adult mentor for children. Trained therapist plus undergraduate students. Intervention initiated on leaving shelter. During parental session children were looked after by students who acted as mentors (e.g. providing positive support and serving as prosocial models) <b>Intensity:</b> weekly or near weekly meetings with mothers for up to 8 months <b>Setting:</b> in the family home after leaving the shelter <b>Format (group/individual):</b> individual <b>Intervention delivered by:</b> six clinical psychology graduate students as therapists for families <b>Qualifications:</b> six clinical psychology graduate students	Families in the comparison group were contacted monthly either in person or by telephone. Families were encouraged to use existing community or shelter <b>Setting:</b> at home <b>Format:</b> individual <b>Delivered to:</b> mothers only <b>Intensity: number of sessions for parent</b> – one per month either via telephone call or in person Not stated <b>Were participants paid?</b> Yes. Mothers were compensated financially for the time spent participating in the assessments, and families were provided with donated tangible goods <b>Control:</b>	Up to 8 months <b>Number of sessions for parent:</b> 23 (mean number of sessions attended) <b>Number of sessions for child:</b> 23 <b>Intensity: duration/frequency of intervention:</b> 1 to 1.5 hours per week (flexible) for up to 8 months <b>Follow-up:</b> 24 months

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
	<p><b>Setting:</b> community. In the family home after leaving a shelter</p>		<p><b>Manualised:</b> yes</p> <p><b>Training:</b> extensive training in the content and techniques of the intervention (graduate coursework) Each therapist-in-training acted as a cotherapist with a more experienced therapist for at least one case before being assigned a client family</p> <p><b>Were participants paid?</b> Yes. Mothers were compensated financially for the time spent participating in the assessments, and families were provided with donated tangible goods</p>		
			<p><b>Supervision:</b> Yes, weekly</p>		
			<p><b>Intervention:</b></p> <p><b>Advocacy (social and instrumental support):</b> therapists and mentors provided emotional support to the women during their transition from the shelter and helped them obtain physical resources and social supports central to their efforts to become self-supporting (e.g. household items such as sheets, pots and pans, school supplies, Thanksgiving dinners, and birthday and Christmas presents). Advocacy was supplemented with training in decision-making and problem-solving skills</p>		

continued



TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Parenting skills training:</b> mothers were taught (instruction, practice, feedback) child management skills to optimise child behaviour, communicate better with, and facilitate a more positive and warm relationship with their children.</p> <p>Management skills were adapted to account for IPV. The intervention was manualised and could be tailored and personalised.</p> <p>Child management skills included contingent praise and positive attention, giving appropriate instructions and commands, and contingent negative consequences for noncompliance and aggressive behaviour</p>		
			<p><b>Intervention description included description of a theoretical framework?</b></p> <p>Yes. A strong theoretical rationale is provided</p>		
			<p><b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b></p> <p>No. The process by which the intervention was to create a change in outcomes was not described, although it is in their later study reporting the same intervention (Jouriles <i>et al.</i><sup>95</sup>)</p>		

Study ID; country; design; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Jouriles 2009; <sup>30</sup> USA; RCT; two arms; N = 66 participants; 15% dropout; risk of bias: ✓OXXC	<b>Inclusion:</b> (1) women reporting at least one incident of physical abuse from a male partner in past 12 months; (2) at least one child between the ages of 4 and 9 years with DSM-IV criteria for ODD or CD. If more than one child, the oldest was chosen. (It was the younger child in the pilot Jouriles study.) After shelter departure eligibility criteria not living with abusive partner, residence within 50 miles of project centre <b>Exclusion:</b> either mother or child has significant psychiatric or drug abuse problems. Receiving services for ODD or CD. Living with abusive partner <b>Source:</b> living in the refuge then moving to safe alternative homes <b>Setting:</b> community. In the family home after leaving a shelter	4–9 years (mean 6.16 years, SD 1.66 years); sex not specified <b>Children experimental:</b> Caucasian, 41.2%; Hispanic, 20.6%; African American, 38.2%; Asian or Pacific Islander, 0% <b>Control:</b> Caucasian, 37.5%; Hispanic, 18.8%; African American, 40.6%; Asian or Pacific Islander, 3.1%	Instrumental and emotional support plus teaching child management skills to mothers An intervention team consisting of a trained therapist and one or more advanced undergraduate or post-baccalaureate students. Weekly or near weekly meetings with mothers for to 8 months. Intervention started as soon as they left shelter to live on their own. While the non-abusing parents were receiving parenting skills training and advocacy the children were looked after by students who served as mentors (e.g. providing positive support and serving as prosocial models) <b>Setting:</b> in the family home after leaving the shelter <b>Format (group/individual):</b> individual <b>Intervention delivered by:</b> six clinical psychology graduate students as therapists for families <b>Manualised:</b> Yes <b>Qualifications:</b> six clinical psychology graduate students <b>Training:</b> extensive training in the content and techniques of the intervention (graduate coursework) Each therapist-in-training acted as a co-therapist with a more experienced therapist for at least one case before being assigned a client family <b>Supervision?</b> Yes, weekly	Families in the comparison group were contacted monthly either in person or by telephone. Families were encouraged to use existing community or shelter <b>Setting:</b> at home <b>Format:</b> individual <b>Delivered to:</b> mothers only <b>Number of sessions for parent:</b> one per month: telephone call or in person Not stated <b>Were participants paid?</b> Yes, reimbursed for their time but amount not reported	8 months. Follow-up every 4 months up to 20 months Comparator: 1 session per month either via telephone call or in person. Mean of 3.7 contacts (SD = 2.66 range 0–9) with project staff <b>Follow-up:</b> 20 months

continued

TABLE 25 Details of studies included in the systematic review of trials (*continued*)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Were participants paid?</b> Yes, reimbursed for their time but amount not reported</p> <p><b>Advocacy:</b> (social and instrumental support). Therapists and mentors provided emotional support to the women during their transition from the shelter and helped them obtain physical resources and social supports central to their efforts to become self-supporting (e.g. household items such as sheets, pots and pans, school supplies, Thanksgiving dinners, and birthday and Christmas presents). Advocacy was supplemented with training in decision-making and problem-solving skills</p> <p><b>Parenting skills training:</b> to directly target child conduct mothers were taught, using instruction, practice and feedback a set of child management skills to increase desirable and decrease undesirable child behaviour, communicate more effectively with their children, and facilitate a more positive and warm relationship with their children. These management skills were adapted to encompass the fact that children were growing up with interparental violence. Although manualised, the intervention allowed for personalisation and was tailored to the needs of each family. Specific child management skills taught included contingent praise and positive attention, giving appropriate instructions and commands, and contingent negative consequences for noncompliance and aggressive behaviour. The intervention was structured so that it could be delivered in a</p>		

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Kot 1996; <sup>11,2</sup> USA; CCT; two arms; N = 40 completers; N = 22 arms; two arms; 45% dropout; risk of bias: <b>XXXX</b>	<b>Inclusion:</b> (1) resident of specific domestic violence shelter; (2) age of 4 years and 10 years; and (3) must have consent from the mother to participate in this study <b>Exclusion:</b> none stated	<b>Experimental:</b> 4–10 years (mean 5.67 years, SD 1.88 years); Control: 4–9 years (mean 5.9 years) <b>Sex:</b> experimental – 10 boys; 26 girls <b>Ethnicity:</b> Experimental: 10 Caucasian, 12 Hispanic, 1 Asian American, 11 African American; 2 other	flexible manner and was not limited to follow a rigid schedule, but rather could be adapted to the family's needs <b>Intervention description included description of a theoretical framework?</b> Yes. A strong theoretical rationale is provided <b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> Yes. The authors describe a theory for how their intervention is to effect a change in outcome Individual play therapy plus group psychoeducation <b>N = 11</b> <b>Setting:</b> play room at a family resource centre Individual play therapy and group psychoeducation <b>Delivered to:</b> children only <b>Number of sessions for child:</b> 12 <b>Intervention delivered by:</b> three counsellors	WLC N = 11	2–3 weeks Daily play sessions. 2–3 weeks. 45 minutes. Plus play therapy sessions 2
continued					

TABLE 25 Details of studies included in the systematic review of trials (*continued*)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Description of therapists or practitioners:</b></p> <p><b>Qualifications:</b> two master's degree level and one with a doctoral degree and registered play therapist. DVA training</p> <p><b>Training:</b> Each play therapist had completed an introductory course in play therapy, an advanced course in play therapy, and a practicum in play therapy. In addition, the doctoral level counsellor had participated in an advanced doctoral practicum, an internship in play therapy, and held credentials as a Registered Play Therapist-Supervisor</p>		
			<p><b>Number of therapists, etc. required in total?</b> 3</p>		
			<p><b>Therapy manualised?</b> Not stated</p>		
			<p><b>Treatment fidelity:</b> not stated</p>		
			<p><b>Supervision:</b> not stated</p>		
			<p><b>Were participants paid?</b> No</p>		
			<p><b>Intervention description included description of a theoretical framework?</b></p>		
			<p>Yes. Extensive description based on the work of Landreth<sup>306</sup></p>		

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Lieberman 2002; <sup>123</sup> USA; RCT; two arms; 75 participants; 13% dropout; risk of bias: OOOXO	<b>Inclusion:</b> children 3–5 years old. Exposed to DVA as confirmed by mother and perpetrator not cohabiting  Referred because of clinical concerns about child's behaviour or mother's parenting after child exposure to IPV. Referral from family court, DVA services, medical providers, pre schools, other agencies, child protective services, former clients, self-referral services  <b>Exclusion:</b> documented maternal abuse of the target child, current substance abuse, homelessness, 'mental retardation', psychosis. Children: 'mental retardation', autistic spectrum disorder	3–5 years (mean 4.06 years, SD 0.82 years)  48% male, 52% female  38.7% mixed ethnicity (Latino white), 28% Latino, 14.7% African American, 9.3% white, 6.7% Asian, 2.6% other	<b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> Yes. Explicit rationale and theory of how play therapy would create change is given  <b>Child–parent psychotherapy N = 42</b>  Weekly CPP child–mother sessions lasted approximately 60 minutes and were conducted over the course of 50 weeks  <b>Setting:</b> not stated  <b>Format:</b> individual dyads  <b>Delivered to:</b> combination of parent and child (dyads)  <b>Intervention delivered by:</b> master's degree- and PhD-level training in clinical psychology  <b>Training:</b> not reported  <b>Therapy manualised?</b> Yes <sup>307</sup>  <b>Treatment fidelity:</b>  Monitored through intensive weekly supervision that included review of process notes and through weekly case conferences  <b>Supervision:</b>  <b>Intensity:</b> 60-minute sessions, 1 per week for 50 weeks	<b>Case management plus individual psychotherapy, N = 33</b>  <b>Intervention delivered by:</b> PhD-level clinician but type of clinician not stated  Case management by telephone call from a PhD-level clinician. Mothers were alerted to and introduced to other mental health clinics for psychotherapy. From results 55% ( <i>n</i> = 17) children had individual treatment and 45% ( <i>n</i> = 14%) received separate individual psychotherapy for both mother and child  <b>Intervention type:</b> Monthly support telephone calls from case manager (Clinician) and option to call as needed. Clinician assisted in securing services, intervened during crises and asked how mother and child were doing  <b>Intensity:</b> Calls lasted 30 minutes	50 weeks' duration  CPP  Mean number of sessions for parent – 32.09 (SD 15.20)  <b>Number of sessions for child:</b> as above

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
	<p><b>Source:</b> referral from family court, DVA services, medical providers, pre schools, other agencies, child protective services, former clients, self-referral services</p> <p><b>Setting:</b> not stated</p>		<p><b>Were participants paid?</b> Yes; mothers received US\$30 at intake and US\$40 for the outcome assessment</p> <p><b>Intervention:</b></p> <p><b>Child–parent psychotherapy:</b> Individual sessions with the mother for communication and feedback, agree treatments and plan how to communicate with the child about treatment. Sessions were guided by the unfolding child–parent interactions and by the child’s free play with developmentally appropriate toys selected to elicit trauma play and foster social interaction. Weekly joint child–parent sessions were interspersed with individual sessions with the mother as needed. The interventions aimed to change maladaptive behaviours, support appropriate interactions, and guide the child and the mother in creating a joint narrative of the traumatic events while working towards their resolution. The treatment manual includes clinical strategies and clinical illustrations to address the following domains of functioning: play; sensorimotor disorganisation and disruption of biological rhythms; fearfulness; reckless, self-endangering and accident-prone behaviour; aggression; punitive and critical parenting; and the relationship with the perpetrator of the violence and/or absent father</p>	<p><b>Frequency:</b> Not stated</p> <p><b>Were participants paid?</b> Yes; mothers received \$30 at intake and \$40 for the outcome assessment</p> <p><b>Control:</b> Case management plus individual psychotherapy. Case management by a PhD-level clinician for information about mental health clinics and expedited referral or connection to the clinics of their choice. Telephone calls at least monthly from the case manager with the option to initiate contact with the case manager as needed. Clinicians inquired about how mother and child were doing, asked about life changes, and intervened during crises. Calls lasted approximately 30 minutes with face-to-face meetings when indicated</p>	

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
McFarlane 2005; <sup>115</sup> USA; RCT; two arms; N = 258 participants; N = 206 completers; 10% dropout; risk of bias ✓OXXX	<b>Inclusion:</b> women with physical or sexual IPV occurring in past 12 months with at least one child aged 18 months to 18 years <b>Exclusion:</b> none stated <b>Source:</b> primary care clinics, and Women, Infants, and Children clinics in a large urban area <b>Setting:</b> clinical; primary care public health clinics and Women, Infants and Children clinics	18 months to 18 years 47% male, 53% female Asian 1%, Black 26.7%, Hispanic 67%, white 11%	<b>Intervention description included description of a theoretical framework?</b> Yes <b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> No, although the authors purportedly describe the underpinning theory in the treatment manual. <sup>307</sup> In addition, although many theories are listed in the papers, the authors have not articulated the particular theory for change linking their intervention activities to the desired outcome Nurse case management (advocacy) Screening and wallet size information card from local women's centre and nurse case management. Brochure with 15-item safety plan. Then nurse visits at 6, 12 and 18 months for case management – which included (a) supportive care empathic listening, (b) anticipatory guidance about access to DVA services, and (c) guided referrals to services such as job training, housing, etc. <b>Setting:</b> Women, Infants and Children clinics in urban area <b>Manual:</b> march of dimes protocol <b>Were participants paid?</b> Yes. US\$20 stipend for initial interview and US\$30 for 1-year interview	Referral card Screening and wallet size information card from local women's centre <b>Setting:</b> where was the Intervention provided? Two Women, Infants and Children clinics <b>Were participants paid?</b> Yes US\$20 stipend for initial interview and US\$30 for 1-year interview	18 months. Nurse case management was delivered four times: baseline, 6, 12 and 18 months

continued



TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Intervention:</b> women were screened for DVA and given a wallet-sized information card from local women's centre that lists a safety plan and sources for intimate partner violence services including shelter, legal counselling, and the police</p> <p>Women were also offered nurse case management which included (a) supportive care, in which the nurse served as an available, interested, and empathic listener; (b) anticipatory guidance, in which the women were told what to expect if they decided to access abuse intervention services, as well as the risks associated with leaving the abuser, having the abuser arrested, or applying for a protection order, and (c) guided referrals, in which the nurse offered referrals tailored to the woman's needs, for example, job training and housing</p>	<p><b>Control:</b> women were screened for DVA and given a wallet-sized information card from local women's centre that lists a safety plan and sources for intimate partner violence services including shelter, legal counselling, and the police</p>	

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
McWhirter 2011, <sup>34</sup> USA; RCT; two arms; N = 50 participants; 16% dropout; risk of bias: ✓✓XX✓	<p><b>Inclusion:</b> women residing in family homeless shelters, with a reported history of IPV and with a child witness aged between 6–12 years at the time of the study. A history of exposure to violence by an intimate partner within the year of study – with a value of 15 or higher on the HITS tool of IPV</p> <p><b>Exclusion:</b> none stated</p> <p><b>Source:</b> women and children residing in temporary family homelessness shelters</p> <p><b>Setting:</b> not stated</p>	<p>6–12 years; sex not specified; ethnicity not reported</p>	<p>Goal-oriented psychotherapy: group psychotherapy, CBT with goals. Each session comprised – to run concurrently – women's group for 1 hour and children's group 45 minutes. Then both women and children together followed by a related family-based activity</p> <p><b>Setting:</b> not stated</p> <p><b>Format:</b> group</p> <p><b>Delivered to:</b> combination of parent, children and dyads:</p> <p><b>Intervention delivered by:</b> four female therapists</p> <p><b>Description of therapists or practitioners:</b></p> <p><b>Qualifications:</b> two therapists with master's-level licences for counselling. Two trainee therapists</p> <p><b>Training:</b> training done over a period of 6 weeks, 2.6 hours weekly for a total of 15 training hours. Training provided by counselling psychologist and licensed counsellor professional specialising on work with women and children</p> <p><b>Therapy manualised?</b> Yes, the authors describe 'Treatment protocols'</p> <p><b>Treatment fidelity:</b> not technically (see <i>Supervision</i>)</p>	<p>Emotion-focused psychotherapy</p> <p><b>Intervention type:</b> group psychotherapy (behavioural and gestalt therapies). Each session comprised – to run concurrently – women's group for 1 hour and children's group for 45 minutes. Then both women and children together followed by a related family-based activity</p> <p><b>Format:</b> group</p> <p><b>Delivered to:</b> combination of parent, children and dyads:</p> <p><b>Intervention delivered by:</b> four female therapists</p> <p><b>Description of therapists or practitioners:</b></p> <p><b>Qualifications:</b> two therapists with master's-level licences for counselling. Two trainee therapists</p> <p><b>Training:</b> Training done over a period of 6 weeks, 2.5 hours weekly for a total of 15 training hours. Training provided by counselling psychologist and licensed counsellor professional specialising on work with women and children</p>	<p>5 weeks</p> <p><b>Number of sessions for parent:</b> five weekly sessions; one per week for 5 weeks</p> <p><b>Number of sessions for child:</b> five weekly sessions; one per week for 5 weeks</p> <p>Women's sessions 60 minutes. Children's sessions 45 minutes. Then women's and children's sessions together</p>

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Supervision:</b> weekly supervision provided to promote adherence to treatment protocols</p> <p><b>Were Participants paid?</b> Not reported</p> <p><b>Goal-oriented: women's group</b></p> <p>Working in groups facilitators helped women to identify behaviours to reduce (e.g. maladaptive coping) or increase (e.g. beneficial adaptive coping mechanisms). Goals were individual and chosen by the mothers (e.g. creating better relationships with their children and other family members, developing awareness of their own emotions and emotion-related behaviours, their likes and interest, reducing self-isolation and reducing reliance on others' opinions). Sessions included identifying practical steps, predicting and decreasing potential barriers, and developing specific strategies for change. Facilitators focused on specific, individual goals for each group member and emphasised the ability to rely on the group for support. The group used a cognitive-behavioural approach integrated with components from motivational interviewing and the transtheoretical model</p> <p><b>Goal-oriented: children's group</b></p> <p>This followed the same approach as the women's group. Children chose meaningful goals for change in their life; many chose behaviours they knew to upset adults</p>	<p><b>Therapy manualised?</b> Yes, the authors describe 'Treatment protocols'</p> <p><b>Intervention:</b></p> <p><b>Emotion-focused: women's group</b></p> <p>The emotion-focused group was 'initiated with a cognitive-behavioural psychoeducational segment that presented information that was then processed via a gestalt approach'. This included a focus on healthy and unhealthy relationships, adaptive and maladaptive coping mechanisms relating to DVA, an attention to immediacy or 'here and now' interactions and development of social support. The group was convened with a sensitive atmosphere in which to discuss and disclose personal experiences. Psychoeducation aspects included (1) examination of personal belief systems, especially concerning difficult experiences; (2) understanding the various forms of abuse; (3) understanding and expressing feelings; (4) recognising healthy relationships; and (5) finding healthy ways to cope with stress</p>	

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p>(e.g. arguing complaining, finishing homework, and sibling fighting). Children signed a contract verifying acceptance of their specific change goals. Discussion in the group emphasised those aspects of life the children might be able to change and those that they are not responsible for changing or that were beyond their means</p> <p><b>Joint family group for goal-oriented treatment and joint family group for emotion focused treatment</b></p> <p>Joint family group of parents and children continued with the session themes from the group parent and group child sessions. The session included presentations of information that were age-appropriate and family-based, followed by a related family-based activity and discussion</p> <p><b>Intervention description included description of a theoretical framework?</b></p> <p>No description of a theoretical framework</p> <p><b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b></p> <p>No specific means of how the intervention would effect change in the outcomes was explicitly stated</p>	<p><b>Emotion-focused: children</b></p> <p>This therapy was based on emotional awareness and expression with activities and discussion aimed at managing the stress and strong emotions, family and peer pressure plus identifying and making good friends, and handling interpersonal and familial conflict. Following the women's intervention this used a cognitive-behavioural psychoeducational segment that presented information that was then processed via a gestalt approach using age-appropriate strategies. The intervention covered techniques for</p> <ol style="list-style-type: none"> <li>(1) identification of upset feelings, concerns, worries, and fears associated with family transitions;</li> <li>(2) understanding, expressing, and integrating these feelings;</li> <li>(3) understanding behaviours of self and others as they relate to wants, needs, and feelings; and</li> <li>(4) learning about abuse, recognise verbal and physical forms of abuse, and exploring strategies for keeping safe in abusive situations</li> </ol>	

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Overbeek 2012, <sup>117</sup> the Netherlands; RCT; two arms; N = 164; 8%; risk of bias: ✓✓XX✓	<b>Inclusion:</b> children 6–12 years who had experienced IPV, the violence has stopped at the time parent and child start with the programme, and parental consent. Child did not have to exhibit clinical problems <b>Exclusion:</b> child/parent has intellectual, psychiatric or behavioural problems such that behaviour will impede functioning within the group and/or will create an unsafe environment in the group for all participants	6–12 years (mean 9.22, SD 1.51 years) 55% male, 45% female Dutch 43.2%, Turkish/Moroccan 18.7%, Antilles/Surinam 20%, other countries 18.1%	Specific factors intervention programme – ‘En nu ik...!’ It’s my turn now! Psychoeducational secondary prevention programme 9 weeks; nine sessions of 90 minutes each with a 15-minute break to have fun <b>Delivered to:</b> parent and child in groups (separately) <b>Delivered by:</b> social worker and mental health-care professional to delivering group activities for children and parents <b>Training:</b> 1 day’s training in the programme <b>Therapy manualised?</b> Yes for every session	<b>Joint family group for goal-oriented treatment and joint family group for emotion focused treatment</b>  Joint family group of parents and children continued with the session themes from the group parent and group child sessions. The session included presentations of information that were age-appropriate and family-based, followed by a related family-based activity and discussion  Non-specific factors control programme ‘Jij hoort erbij’ (‘You belong’) 9 weeks; nine sessions of 90 minutes each with a 15-minute break to have fun <b>Delivered to:</b> parent and child (separately) <b>Delivered by:</b> social worker and mental health-care professional <b>Training:</b> 1 day’s training in the programme <b>Therapy manualised?</b> Yes for every session	9 weeks <b>Follow-up:</b> within 6 months

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Treatment fidelity:</b> Yes for every session. Videotaped and tapes chosen at random for assessment by coders blinded to purpose of coding. There were very few treatment deviations</p> <p><b>Supervision:</b> At least three peer supervision workshops</p> <p><b>Were participants paid?</b> Yes, parents €15 for first assessment, €25 for participating and second assessment, and €40 for the follow-up assessment. Children received a gift after each assessment</p> <p><b>Intervention description:</b></p> <p><b>Psychoeducation children:</b> learn to cope with feelings and problems without violence, differentiate and express emotion, process the IPV experiences</p> <p><b>Psychoeducation parents:</b> Discussion about the impact of family violence, parenting role vs. the role of the child, and contact with the other parent, improving parenting and disciplinary skills to increase positive behaviour and decrease negative behaviour (e.g. by giving compliments and setting boundaries), assisting the parent with accurate interpretation of and dealing with the child's feelings and actions, providing emotional support to parents, and focus on enhancing the social network, and enhancing parents' own emotional adjustment (e.g. feelings of anger, guilt, and shame), all aimed at improving parenting quality and reducing children's adjustment</p>	<p><b>Treatment fidelity:</b> Yes for every session. Videotaped and tapes chosen at random for assessment by coders blinded to purpose of coding. There were very few treatment deviations</p> <p><b>Supervision:</b> at least three peer supervision workshops</p> <p><b>Control description:</b> only non-specific factors of interventions were used in this programme, such as attention, amount of treatment contact, a structured environment, positive attention from the therapist, positive expectations, distraction and social support and interaction among group participants. Therapists were instructed not to focus on traumatic experiences, emotions, parenting, or coping</p>	

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Sullivan 2002; <sup>96</sup> USA, Illinois; RCT; two arms; N = 80 participants; N = 78 completers; 5% dropout; risk of bias: OOOX✓	<b>Inclusion:</b> at least one child aged 7–11 years. Plan to live in area for 8 months. Physical violence as IPV in past 4 months <b>Exclusion:</b> none stated <b>Source:</b> recruited either after they had exited a domestic violence shelter programme or when they obtained services from a community-based family	7 to 11 years 45% male; 55% female 44% African American, 40% non-Hispanic white, 10% multiracial; 1% Asian, 5% Hispanic	problems. Methods used included discussion, role play and home work assignments The intervention was based on the MIEP (Graham-Bermann <i>et al.</i> , <sup>98</sup> elements specific to the context of child and family welfare in the Netherlands were added  <b>Intervention description included description of a theoretical framework?</b> Yes. A comprehensive grounding theory was described. Also this intervention was based on that by Graham-Bermann <i>et al.</i> <sup>98</sup>  <b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> Yes. The means by which each component of the intervention was to effect the outcome was described Strengths- and community-based support and advocacy intervention. Advocacy for mothers plus advocacy for children plus psychoeducation for children 'The Learning Club' for children <b>N = 45</b> <b>Setting:</b> family home in a separate room for privacy <b>Format:</b> individual	Not described – no intervention <b>N = 33 (number randomised not stated – this is the number analysed)</b> <b>Intervention delivered by</b> <b>Qualifications:</b> not stated <b>Training:</b> not stated <b>Therapy manualised?</b> Not stated	16 weeks advocacy for parent; 10 weeks child At least twice per week. p. 918 Staff spent on average 5.16 hours with children and 2.66 hours with parents

Study ID; country; design; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
	service organisation or a state social services department		<p><b>Delivered to:</b> parent (advocacy) and child (advocacy) and child (support and education group) separately</p> <p><b>Intervention:</b> advocacy was delivered by 'paraprofessionals' – highly trained female undergraduates. Child psychoeducation and advocacy were delivered by five group leaders, two of whom were male and three female (two African American, one Latina and two white)</p> <p><b>Treatment fidelity: within supervision:</b> Yes, see supervision below</p> <p><b>Supervision:</b> weekly focus on intervention fidelity plus guidance from instructors and classmates</p> <p><b>Were participants paid?</b> Women were paid US\$15 for first interview, US\$50 for second and US\$75 for third (at 4 months); children were also paid in cash or toys (US\$5, US\$10 and US\$20)</p> <p><b>Intervention:</b></p> <p><b>Advocacy parent:</b> facilitators provided emotional support and assessed parents needs and goals, and actively assisted mothers to access community resources (e.g. legal services, housing services, employment, education, child care and helped mothers in obtaining material goods)</p>	<p><b>Treatment fidelity:</b> not stated</p> <p><b>Supervision:</b> not stated</p> <p><b>Control:</b> not described</p>	

continued



TABLE 25 Details of studies included in the systematic review of trials (*continued*)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Advocacy child:</b> facilitators provided emotional support for children, assessed each child's needs and goals, and took practical steps together to reach the goals through accessing information and services in the community. For the children this was recreational, joining sporting or peer groups, and help with school</p>		
			<p><b>Psychoeducation child (The Learning Club):</b> elements of The Learning Club included educating children about safety, feelings, and respect for themselves and others. The club included varied activities that were designed to be fun and included mixing physical activity with learning objectives</p>		
			<p><b>Intervention description included description of a theoretical framework?</b> Partly. It is implied with social learning theory and discussion of ecological approach to social problems for improvement of maternal psychological health through advocacy. But not for all three components</p>		
			<p><b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b> No specific means of how the intervention would effect change in the child outcomes were explicitly stated</p>		

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Wagar 1995, <sup>97</sup> Canada; RCT; two arms; N=42 participants; N=38 completers; 9.5% dropout; risk of bias: <b>OOXX</b>	<b>Inclusion:</b> (1) referred by a social agency; (2) between the age of 8–13 years; (3) no known psychopathology; (4) witnessed or seen wife abuse; (5) no individual treatment during the programme; (6) a 3-month violence free period prior to the beginning of the study <b>Exclusion:</b> none stated <b>Source:</b> referred by agencies in the community <b>Setting:</b> not reported	8–13 years 69% male, 31% female Ethnicity not stated	Group treatment programme developed by Jaffe <i>et al.</i> <sup>308</sup> N=16 <b>Setting:</b> not stated <b>Format (group/individual):</b> group <b>Delivered to:</b> children only <b>Intervention delivered by:</b> 'group leaders' but not described <b>Description of therapists or practitioners:</b> not described <b>Qualifications:</b> not described <b>Training:</b> not described <b>Therapy manualised?</b> Based on Jaffe <i>et al.</i> <sup>308</sup> but varied from manual <b>Treatment fidelity:</b> not described <b>Supervision:</b> not described <b>Were participants paid?</b> No <b>Intervention:</b> <b>Psychoeducation:</b> in didactic sessions participants were given information about identification of emotions and alternatives to using violence to express anger or for conflict resolution; correct attribution of responsibility for the violence; and safety planning and use of community support resources available for children	WLC N=22	10 weeks <b>Number of sessions for child:</b> 10

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
Waldman-Levi 2011, <sup>118</sup> Israel; CCT; two arms; N = 71 participants; N = 37 52% dropout; risk of bias: <b>XXXXX</b>	<b>Inclusion:</b> (1) the mother spoke Hebrew and; (2) the child did not have any known neurological and/or sensory dysfunctions such as: cerebral palsy, mental retardation, spina bifida, traumatic head injuries, autism, blindness or deafness <b>Exclusion:</b> none stated <b>Source:</b> shelters in Israel for DV <b>Setting:</b> DVA services; play room in DVA shelter	Children aged 1.1 to 5.11 years (mean 32 months, SD 13.94 months) 60% female, 40% male <b>Ethnicity:</b> Asia: 35% experimental, 58.8% control; Europe: 30% experimental, 23.5% control; Africa: 30% experimental, 17.7% control; America 5% experimental, 0% control	<b>Intervention description included description of a theoretical framework?</b>  No. It was implied in the introduction but nothing explicitly stated either in this paper or the Jaffe <i>et al.</i> <sup>308</sup> paper on which the study was based  <b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b>  No specific means of how the intervention would effect change in the outcomes were explicitly stated  Fi-OP (play therapy)  <b>N = 20</b>  Designed to improve mother-child interaction and child play functions  <b>Setting:</b> three domestic violence shelters  <b>Format (group/individual):</b> dyads  <b>Delivered to:</b> mothers and children	<b>N = 17</b>  <b>Control:</b> mothers and children attended play room and were given opportunity to play together in quiet environment. No active intervention (e.g. supervision or modelling) was provided  Eight sessions: mother and child dyad  <b>Delivered by:</b> a research assistant whose level of training was either as an occupational therapist or occupational therapy student	8 weeks  <b>Number of sessions for parent:</b> 8  <b>Number of sessions of child:</b> 8  <b>Intensity: duration/frequency of intervention:</b> 8 x 30-minute sessions with an interval of 4 days to 1 week

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Intervention delivered by:</b> delivered by occupational therapists: the researcher and a certified occupational therapist research assistant (who had been trained in delivering the Fi-Op). Both therapists had at least 10 years' experience of practising paediatric occupational therapy and had a minimum of 2 years' experience working with abused mothers and their children in shelters</p> <p><b>Description of therapists or practitioners:</b> occupational therapists with 10 years' experience, 2 years with families affected by IPV</p> <p><b>Qualifications:</b></p> <p><b>Training:</b> Training in delivering Fi-Op given</p> <p><b>Number of therapists, etc. required in total?</b> Two</p> <p><b>Therapy manualised?</b></p> <p><b>Treatment fidelity:</b> Yes – assessed by video monitoring, and analyses by two therapists trained in Fi-Op</p> <p><b>Supervision:</b> not described</p> <p><b>Were participants paid?</b> No</p>		

continued

TABLE 25 Details of studies included in the systematic review of trials (continued)

Study ID; country; design; number of arms; number of participants; risk of bias (five domains) <sup>a</sup>	Inclusion and exclusion criteria; source of participants	Child population age, sex and ethnicity	Intervention	Comparator	Duration
			<p><b>Intervention:</b></p> <p>Play therapy: mothers and children were invited to a play room for free play sessions. Initial sessions to record baseline measures of interaction were followed by play sessions with an occupational therapist. The intervention is dynamic to suit needs of mother and child and play skills of child. Intervention themes were addressed, reciprocity, playfulness, play skills, and this was done using theory driven methods of: mediation, modelling – serving as a playful mother, consultation (importance of play) organising the play space environment, reframing – and modifying mothers' negative views of play, enabling and promoting play and reflection</p>		
			<p><b>Intervention is located within theoretical frameworks?</b></p> <p>Yes; a strong theoretical rationale is provided</p>		
			<p><b>Causal mechanism by which the intervention is expected to impact on outcomes is set out?</b></p> <p>Yes. The authors describe how a theory for how their intervention is to effect a change in outcome</p>		

CT, child-centred therapy; DV, domestic violence; IQ, intelligence quotient; K-SADS-PL, Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version; TF-CBT, trauma-focused cognitive-behavioural therapy.

<sup>a</sup> Risk of bias was measured over five domains based on the Cochrane risk-of-bias tool. The symbols O, unclear risk; ✓, low risk; ✗, high risk refer to the following domains: random sequence generation; allocation concealment; blinding of participants; blinding of outcome assessors; incomplete outcome data (see Appendix 7).

## Appendix 6 Details of ongoing study

**TABLE 26** Details of ongoing study described in the systematic review of trials

Study ID, country, design, number of arms	Inclusion and exclusion criteria; source of participants	Intervention	Outcome measures
<p>Visser 2015;<sup>62</sup> Netherlands; RCT; 2 × 2 factorial design; group randomisation</p> <p>Assignment by lottery</p> <p>Presence or absence of preparatory phase</p> <p>No control</p> <p>Aimed sample size <i>n</i> = 100 children and their parents</p>	<p><b>Inclusion:</b> child aged 4–12 years, currently not living with an abusive parent. Child has behavioural problems or trauma symptoms, the child can control their sexual impulses, the child is not dangerous to other children, one parent is able to attend, both parents give consent</p> <p><b>Exclusion:</b> none stated</p> <p><b>Source:</b> mental health clinics</p> <p><b>Setting:</b> none stated</p>	<p>Factorial design to assess the effects of a 6-week preparatory programme prior to embarking on the TF-CBT programme</p> <p>21 sessions group TF-CBT. The HORIZON programme includes parental interventions to enable parents to support their children through the TF-CBT process<sup>62</sup></p> <p>Three aspects</p> <p>There is a preparatory phase, which aims to increase parental availability and insight into children's needs, and help them to learn how to adequately respond. Allocation to this by randomisation</p> <p>TF-CBT includes a book for both parents and children, including homework. Parallel group sessions for parents and children. Psychotherapy, psychoeducation</p> <p>Parent child interaction sessions: conjoint group sessions where parent and children's groups meet. It is a forum for parents to practise more praise, less harsh parenting, more involvement and more supportive behaviour. In addition, therapists act as observers and intervene when necessary, and provide feedback to both children and parents</p> <p><b>Fidelity:</b> sessions will be audio- or video-recorded, random selection will be coded for treatment adherence</p>	<p><b>Trauma symptoms:</b></p> <p>Trauma symptom checklist for children</p> <p>CBCL, parent report, teacher report</p> <p><b>Depression:</b> CDI</p> <p><b>Child adjustment:</b> Coping, the cognitive emotion regulation questionnaire</p> <p>Emotional Awareness Questionnaire</p> <p><b>Self-control:</b> self-control scale</p> <p>Behaviour Rating Scale Executive inventory</p> <p><b>Fundamental needs:</b> sense of belonging, self-esteem, sense of meaningful existence, sense of control and agency</p> <p><b>Self-esteem:</b> global self-worth subscale of the Self-Perception Profile for Children</p> <p>Emotional and cognitive response to IPV</p> <p>Children's beliefs about violence; Normative Beliefs about Aggression Scale</p> <p><b>Measures of mediators:</b></p> <p>Parental availability, Security in the Family System scale</p> <p>The Cognitive Emotional Regulation Questionnaire. The Emotional Awareness Questionnaire. Daily Psychological Availability Scale</p>

continued

**TABLE 26** Details of ongoing study described in the systematic review of trials (*continued*)

Study ID, country, design, number of arms	Inclusion and exclusion criteria; source of participants	Intervention	Outcome measures
			<p><b>Violence:</b></p> <p>Severity and Intensity of IPV Conflict Tactics Scale</p> <p>Number of new IPV incidents or stressful events will be asked for</p> <p><b>Time spent together:</b></p> <p>Parents and children will be asked about how much time they spent together</p> <p><b>Parental psychopathology:</b></p> <p>Impact of Events Scale</p> <p>Insightfulness Assessment. Autobiographical Emotional Events Dialogue</p>
CDI, child depression inventory; TF-CBT, trauma-focused cognitive-behavioural therapy.			

## Appendix 7 Risk of bias as assessed using the Cochrane risk-of-bias tool

Five domains were assessed and are reported below. A sixth domain, blinding of outcome assessment (objective outcomes), was assessed; however, no objective outcomes were assessed in any of the studies.

Study ID: Cohen 2011 <sup>61</sup>		
Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Low risk	'Computer-generated random number series'
Allocation concealment	Low risk	'Randomisation lists were locked in therapists' offices; the project co-ordinator had no access to randomisation information and remained blinded to random assignment throughout the study'
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	The parent-reported outcomes and child-reported outcomes assessed are subjective, and in an unblinded study are at risk of bias. 'Two project coordinators were blinded to treatment assignment'
Incomplete outcome data	High risk	<p>CBCL was parent reported. One outcome (non-PTSD anxiety) was child self-report. Therefore, these are at high risk of bias</p> <p>Number of dropouts different between groups and no reasons for people dropping out were stated. Figure 1 CONSORT statement 32/60 (53%) dropped out of child-centred therapy group and 21 out of the 64 (33%) trauma-focused CBT group. Overall 43% dropout</p> <p>An ITT and a completer's analysis were done. The analyses results differed. Risk of bias was scored as 'High' because of high and differential number who dropped out without reasons provided</p>

Study ID: Graham-Bermann 2007 <sup>98</sup>		
Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	High risk	The participants were allocated sequentially
Allocation concealment	High risk	Participants were block randomised sequentially and there was no concealment of allocation
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	The outcomes assessed are subjective, either self- or parent-reported in an unblinded study, thus are at risk of bias
Incomplete outcome data	High risk	221 people randomised and 40 people (18%) dropped out before the intervention was complete. The numbers dropping out and reason for leaving for each group were not mentioned. Description of baseline imbalance did not match figures provided in table



Study ID: Graham-Bermann 2015<sup>99</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	High risk	There was no random sequence, participants were randomised in alternating blocks to experimental and control. 'The participants were allocated using modified random assignment procedure. Where first 5 families were assigned to the experimental condition and the next five to the waitlist control'. Participants in groups at baseline were similar except the intervention group had more children with borderline or problem level internalising symptoms (N.B. accounted for in the analysis model)
Allocation concealment	High risk	There was no concealment of allocation, participants were randomised in alternating blocks to experimental and control. 'The participants were allocated using modified random assignment procedure. Where first five families were assigned to the experimental condition and the next five to the waitlist control'
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment Subjective	High risk	The outcomes assessed are subjective, either self- or parent-reported in an unblinded study, thus are at risk of bias
Incomplete outcome data	High risk	120 people randomised and 7 people dropped out from the intervention group before the intervention started. At 5 weeks 8/58 (14%) dropped out of the intervention group and 13/62 (21%) did not complete questionnaires for the no intervention at end of treatment rising to 37% at 8 months from the intervention group and 43% from the control group. Overall 17% dropout. The reasons for leaving for each group were described only for the seven who left the intervention group before the intervention started. The reasons were NOT related to the intervention. Analysis revealed there were no differences between those who dropped out and those who stayed in 'on any relevant variables'. The authors do present an 'intention to treat' analysis and used a imputation method where missing values were substituted with mean values of non-missing data. Data for CBCL Behavioural outcomes not published

Study ID: Jouriles 2001<sup>91</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation (selection bias)	Unclear risk	The generation of the randomisation sequence was not described
Allocation concealment	Unclear risk	The concealment of allocation was not described. 'Families were assigned to either the intervention or the comparison condition'
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment Subjective	High risk	Self-report of subjective outcome measures
Incomplete outcome data (attrition bias)	Unclear risk	<p>The authors describe the number of families who were randomised to each group (18). Thirty one families completed all five assessments (McDonald <i>et al.</i><sup>110</sup>). But the number who completed each intervention arm is not presented (in either paper). 33/36 families completed at least three assessments and these were used as the basis for analysis in Jouriles <i>et al.</i><sup>91</sup> paper. However, sample numbers were not provided for table 1 (group means and SDs of the outcome variables at each assessment)</p> <p>In the 24-month follow-up assessments presented in McDonald <i>et al.</i><sup>110</sup> paper data from 30 out of 36 families are presented with 13 receiving intervention and 17 in the comparison group. Overall 3/36 (8%) dropout. Mean and SD data for 24 months were not provided</p> <p>It is not clear why families did not complete or the reasons for them being missing from the outcome data; therefore, we have reported them as being at unclear risk of bias</p>

Study ID: Jouriles 2009<sup>90</sup>

Bias	Judgement	Support for judgement (reason attributed this risk)
Random sequence generation	Low risk	'Random numbers table'
Allocation concealment	Unclear risk	Not stated
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	Self-report of subjective outcome measures (mother-reported CBCL)
Incomplete outcome data	Unclear risk	Number of people who dropped out of the study are accounted for [27/33 (18%) intervention and 29/33 (12%) control] and they are similar for both arms. Overall 15% dropout. The authors used an intention-to-treat analysis with regard their to modelling of outcome data. Numbers in each arm and SDs are not provided for the data in table 2. Reasons for families not completing were not presented. We therefore rate this study as being at unclear risk of bias

Study ID: Kot 1996<sup>112</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	High risk	Participants were assigned to the experimental and control groups depending on the time they resided at the shelter (September 1994 to February 1995 experimental group, and March–April 1995 control group (once all participants in the treatment group had left the shelter)
Allocation concealment	High risk	Allocation was not concealed as allocation was time dependent (see above)
Blinding of participants and personnel	High risk	It is not possible to blind participants in this study
Blinding of outcome assessment subjective	Low risk for CPSBRS; high risk for other outcomes	The outcome assessors rated video tapes of the participants and were blinded to the allocation of the participants for the CPSBRS. Therefore, low risk of bias for CPSBRS  Other rating scales were self-report by the mother and so were at high risk of bias as the mothers knew the rating scale (i.e. high risk of bias for the child self-concept scale JPPSST and for the CBCL)
Incomplete outcome data	High risk	18/40 (45%) people dropped out of the study. The time point at which they left the study, and how many was not discussed. A completer's analysis was used. No strategy to deal with missing data is described

CPSBRS, Children's Play Sessions Behavior Rating Scale; JPPSST, Joseph Pre-School and Primary Self-Concept Screening Test.

Study ID: Lieberman 2005<sup>92</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Unclear risk	Generation of randomisation sequence not described
Allocation concealment	Unclear risk	Allocation concealment not described: 'Participants were randomly assigned to CPP or case management'
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	The parent-reported outcomes assessed are subjective, and in an unblinded study are at risk of bias as parents were aware of their treatment allocation
Incomplete outcome data	Unclear risk	Ghosh Ippen <i>et al.</i> <sup>113</sup> reported that 75 children were randomised. Lieberman <sup>92</sup> table 2.1 provides mean, SD and sample size for outcome data. They also discuss attrition with six dropping out of the treatment group and four out of the comparison group. We could infer then that there were 42 in treatment group and 31 in comparison group. They also provide reasons for dropout but do not specify which intervention group these reasons apply to. Overall 10/75 (13% dropout). Because the numbers provided are not clearly set out for numbers randomised per group and reasons for attrition are not ascribed to intervention group, we mark this as being at unclear risk of bias

Study ID: McFarlane 2005<sup>115</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Low risk	'Randomised by a computer-generated process'
Allocation concealment	Unclear risk	Not described
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	The parent-reported outcomes assessed are subjective, and in an unblinded study are at risk of bias as parents were aware of their treatment allocation
Incomplete outcome data	Unclear risk	360 participants were randomised but the numbers randomised to each group were not reported. Two participants did not have children eligible (therefore there are no child related outcomes for these two) and we do not know to what intervention they were randomised $n = 258$ (29% dropout) from 306 enrolled). 233 completed 6-, 12-, 18- and 24-month follow-up. Therefore, 25 participants left the study (9.6% dropout). Authors report that attrition between the intervention groups was not statistically significant, but give no information on reason for attrition or the numbers from which groups these were from

Study ID: McWhirter 2011<sup>94</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Low risk	'A computer-generated randomisation list was drawn up by the author'
Allocation concealment	Low risk	'A computer-generated randomisation list was drawn up by the author and given to the project manager responsible for allocating women into one of the two treatment conditions based on the next available number'  Using an open list means this is at high risk of bias
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	All outcomes were subjective and most were self-report. Therefore, high risk of bias
Incomplete outcome data	Low risk	The authors state an ITT analysis, but it is clear that there were missing data from the 3/25 participant dyads who dropped out were not included. They do not provide sample numbers for each group in their tables of outcome data. A total of 50 women were randomised; 25 to each group. There were 22 in the emotion focused and 24 in the goal oriented groups. 1/25 dropped out of goal oriented. 3/25 from emotion oriented. Overall 4/24 (16%) dropped out. The author reports all dropouts for women and reasons for dropout and these are unrelated to treatment allocation

Study ID: Overbeek 2012<sup>117</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Low risk	'Computerised random number generator'
Allocation concealment	Low risk	'An independent researcher will make the allocation schedule'
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study. 'Parents children as well as researchers are blind to group allocation until two weeks before the start of the program. The condition is not disclosed earlier to avoid bias in the intake procedure'
Blinding of outcome assessment subjective	High risk	Patient reported outcomes; therefore, blinding not possible and the outcomes were all subjective patient scores. There was no assessor blinding to allocation
Blinding of outcome assessment objective	Not applicable	There were no objective measures
Incomplete outcome data	Low risk	All participants accounted for, ITT and completer's analysis

Study ID: Sullivan 2002<sup>96</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Low risk	Coin tossing (personal communication from author)
Allocation concealment	High risk	The author wrote down all the results of the coin toss on pieces of paper. The author wrote the participants' names on an envelope and indicated whether or not the person was living with an abuser (to ensure similar numbers living with an abuser were in control or intervention group). The author then put the paper slips with the result of the coin toss – intervention or control – into the envelope (Sullivan, Michigan State University, personal communication). High risk because envelopes were not sealed
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	Outcomes are subjective and participants cannot be blinded to allocation; therefore, high risk of bias
Incomplete outcome data (attrition bias)	Low risk	Authors report 95% retention rate

Study ID: Wagar 1995<sup>97</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	Unclear risk	Not described
Allocation concealment	Unclear risk	Not described
Blinding of participants and personnel	High risk	It was not possible to blind participants in this study
Blinding of outcome assessment subjective	High risk	Outcomes are subjective and participants cannot be blinded to allocation; therefore, high risk of bias
Incomplete outcome data	Low risk	Four children withdrew from the programme for various reasons such as moving to another city and to return to a violent home. A total of 38 completed 22 in control and 16 in treatment. 4/42 dropped out (9.5%). Authors do not describe a method of dealing with missing data. As relatively few dropouts and majority of reasons are related to moving house, this was scored as being at 'Low risk of bias'

Study ID: Waldman-Levi 2011<sup>118</sup>

Bias	Judgement	Support for judgement (reason attributed to this risk)
Random sequence generation	High risk	Not a RCT ('The study sample consisted of 37 mother-child dyads who resided in family crisis shelters in Israel and were divided into two groups')
Allocation concealment	High risk	Not an RCT (see above)
Blinding of participants and personnel	High risk	It was not possible to obscure treatment allocation for this intervention
Blinding of outcome assessment subjective	Unclear risk	Not described
Incomplete outcome data (attrition bias)	High risk	Nearly 50% attrition for both arms of the study. 'In the onset of the current study, there were 17 additional women in each of the study groups who dropped out because the women had decided to leave the shelter and return to their homes and/or to their partners. In total, 34/71 people dropped out (52%)

## Appendix 8 Outcome measures

**TABLE 27** Outcome measures used by studies included the systematic review of trials

Study ID	Child outcomes used in our review	Child outcomes not used for our review	Maternal outcomes
Cohen 2011 <sup>61</sup>	Anxiety: <ul style="list-style-type: none"> <li>• SCARED</li> </ul> PTSD symptoms: <ul style="list-style-type: none"> <li>• K-SADS-PL total (PTSD)</li> <li>• UCLA PTSD RI</li> </ul> PTSD diagnosis: <ul style="list-style-type: none"> <li>• Diagnosis K-SADS-PTSD</li> </ul> Behaviour: <ul style="list-style-type: none"> <li>• CBCL-Total</li> </ul>	Cognitive function: <ul style="list-style-type: none"> <li>• KBIT scale</li> </ul> PTSD symptoms: <ul style="list-style-type: none"> <li>• K-SADS-PL: hyperarousal</li> <li>• K-SADS-PL: avoidance</li> <li>• K-SADS-PL: re-experiencing</li> </ul>	None
Lieberman 2005 <sup>92</sup>	Depression: <ul style="list-style-type: none"> <li>• SSI-DC-03-Dep</li> </ul> PTSD symptoms: <ul style="list-style-type: none"> <li>• Trauma</li> <li>• DC-03-TSD</li> </ul> PTSD diagnosis: <ul style="list-style-type: none"> <li>• Diagnosis DC-03-TSD</li> </ul> Behaviour: <ul style="list-style-type: none"> <li>• CBCL-Total</li> </ul>	Exposure to violence	Maternal stress: <ul style="list-style-type: none"> <li>• Life Stressor Checklist-Revised</li> </ul> Maternal Psychiatric Symptoms: <ul style="list-style-type: none"> <li>• SCL-90-R</li> <li>• CAPS</li> </ul>
McWhirter 2011 <sup>94</sup>	Mood: <ul style="list-style-type: none"> <li>• Child well-being</li> <li>• Emotional barometer (a visual analogue scale child indicates well-being on a drawn barometer)</li> </ul> Behaviour: <ul style="list-style-type: none"> <li>• Children's peer conflict, single-item scale based on 5-point Likert-type format</li> </ul> Self-esteem: <ul style="list-style-type: none"> <li>• Author's own single-item scale based on 5-point Likert-type format</li> </ul>	Family conflict	Readiness to change (mothers) Family conflict: <ul style="list-style-type: none"> <li>• Family attachment scale of the Student Survey of Risk and Protective Factors<sup>309</sup></li> </ul> Family bonding: <ul style="list-style-type: none"> <li>• Family attachment scale of the Student Survey of Risk and Protective Factors</li> <li>• Quality of social support:</li> <li>• Quality of Social Support Scale</li> </ul>

continued

TABLE 27 Outcome measures used by studies included the systematic review of trials (continued)

Study ID	Child outcomes used in our review	Child outcomes not used for our review	Maternal outcomes
Kot 1998 <sup>100</sup>	Behaviour: <ul style="list-style-type: none"> <li>● CBCL-Externalising behaviour</li> <li>● CPSBRS</li> </ul>	None	None
Waldman-Levi 2011 <sup>118</sup>	Behaviour: <ul style="list-style-type: none"> <li>● RKPPS</li> <li>● TOP</li> </ul> Self-esteem: <ul style="list-style-type: none"> <li>● JPPSST</li> </ul>	None	Maternal child interaction
Jouriles 2001 <sup>91</sup>	Mood, mental health well-being: <ul style="list-style-type: none"> <li>● CBCL-Internalising</li> <li>● Happiness/social relations</li> </ul> Child behaviour: <ul style="list-style-type: none"> <li>● CBCL-Externalising</li> <li>● CBCL-Externalising threshold – no scoring &gt; 60</li> <li>● DSM-IV ODD or CD</li> </ul>	None	Maternal behaviour: <ul style="list-style-type: none"> <li>● Direct observation maternal parenting skills</li> </ul> Maternal depression: <ul style="list-style-type: none"> <li>● SCL-90</li> <li>● Return to abusive partner</li> <li>● Recurrence of violence against mother</li> </ul>
Jouriles 2009 <sup>90</sup>	Child Behaviour: <ul style="list-style-type: none"> <li>● CBCL-Internalising</li> <li>● CBCL-Externalising</li> <li>● Problem behaviours ECBI</li> <li>● OCB (DSM-IV)</li> </ul>	None	Maternal parenting: <ul style="list-style-type: none"> <li>● Parenting dimensions inventory</li> </ul> Maternal psychiatric symptoms: <ul style="list-style-type: none"> <li>● SCL-90</li> </ul>
Graham-Bermann 2007 <sup>98</sup>	Depression: <ul style="list-style-type: none"> <li>● Child depression index</li> </ul> Child behaviour: <ul style="list-style-type: none"> <li>● CBCL-Internalising</li> <li>● CBCL-Externalising</li> </ul>	Family violence: <ul style="list-style-type: none"> <li>● Conflicts tactics scale</li> </ul>	Family violence: <ul style="list-style-type: none"> <li>● Conflicts tactics scale</li> <li>● SVAWS</li> <li>● Social desirability bias – re: violence exposure</li> <li>● Marlowe–Crowne Social Desirability Scale</li> </ul>
Graham-Bermann 2015 <sup>122</sup>	Child behaviour: <ul style="list-style-type: none"> <li>● CBCL-Internalising</li> </ul>	Family violence: <ul style="list-style-type: none"> <li>● CTS2</li> <li>● Symptoms of child avoidance behaviour</li> <li>● PTSD semistructured interview and observational record for infants and young children (preschool)</li> <li>● Safety planning</li> <li>● Two open-ended questions</li> </ul>	<ul style="list-style-type: none"> <li>● Maternal PTSD</li> <li>● PDS</li> <li>● Maternal depression</li> <li>● CES-D</li> <li>● Maternal parenting</li> <li>● Alabama Parenting Questionnaire</li> </ul>

TABLE 27 Outcome measures used by studies included the systematic review of trials (continued)

Study ID	Child outcomes used in our review	Child outcomes not used for our review	Maternal outcomes
Wagar 1995 <sup>97</sup>	None	<p>Attitudes and response to anger:</p> <ul style="list-style-type: none"> <li>Knowledge of safety and support</li> </ul> <p>Sense of responsibility for parents and for the violence:</p> <ul style="list-style-type: none"> <li>'Child witness to violence questionnaire' a self-report measure to gain impressions of the programme</li> </ul> <p>Family violence:</p> <ul style="list-style-type: none"> <li>Conflicts tactics scale</li> <li>Number of times witnessed abuse per week</li> </ul>	None
Sullivan 2002 <sup>96</sup>	<p>Self-esteem:</p> <ul style="list-style-type: none"> <li>HSP</li> </ul>	<p>Family violence:</p> <ul style="list-style-type: none"> <li>Assailant's emotional abuse of child (Likert scale)</li> <li>Assailant's physical abuse of child (Likert scale)</li> <li>Assailant's Injury of child (Likert scale)</li> <li>Assailant's overall abuse of child (a composite of the three scales above)</li> <li>Child's witnessing abuse (Likert scale)</li> <li>Child's contact with assailant (Likert scale)</li> </ul>	<p>Maternal depression:</p> <ul style="list-style-type: none"> <li>CES-D</li> </ul> <p>Self-esteem:</p> <ul style="list-style-type: none"> <li>Rosenberg Self Esteem Inventory</li> <li>Social support (Likert scale)</li> </ul> <p>Quality of life:</p> <ul style="list-style-type: none"> <li>Adapted scale from Andrews and Withey<sup>310</sup></li> </ul> <p>Family violence:</p> <ul style="list-style-type: none"> <li>Assailant's emotional abuse of mother (Likert scale)</li> <li>Assailant's physical abuse of mother (Likert scale)</li> <li>Assailant's injury of mother (Likert scale)</li> <li>Assailant's overall abuse of mother (a composite of the three scales above)</li> </ul>
McFarlane 2005 <sup>115</sup>	<p>Child behaviour:</p> <ul style="list-style-type: none"> <li>CBCL-Internalising</li> <li>CBCL-Externalising</li> <li>CBCL-Total</li> </ul>	<p>Child behaviour:</p> <ul style="list-style-type: none"> <li>Percentages of children with CBCL scores suitable for referral to a specialist. But not presented for different treatment groups</li> </ul>	None

continued



TABLE 27 Outcome measures used by studies included the systematic review of trials (continued)

Study ID	Child outcomes used in our review	Child outcomes not used for our review	Maternal outcomes
Overbeek 2012 <sup>117</sup>	<ul style="list-style-type: none"> <li>PTSS (TSCYC). Parent-rated. Eleven scales: eight clinical scales (anxiety; depression; anger/aggression; PTSS intrusion; PTSS avoidance; PTSS arousal; dissociation; and sexual concerns). Two scales – assess validity of parents answers. And a total PTSS scale</li> <li>PTSS TSCC child-rated. Eight scales. Two validity scales (under-response; hyper-response). Six clinical scales (anxiety; depression; anger; PTSS; dissociation; sexual concerns)</li> </ul> <p>Internalising and externalising behaviour:</p> <ul style="list-style-type: none"> <li>CBCL and teacher report form</li> <li>CBCL-Internalising</li> <li>CBCL-Externalising</li> </ul> <p>Depression:</p> <ul style="list-style-type: none"> <li>CDI</li> </ul>	<p>Control variables</p> <p>Intervening life event</p> <p>Treatment integrity</p>	<p>Measures of mediating variables:</p> <ul style="list-style-type: none"> <li>Parent-child interaction</li> <li>Family Interaction Task</li> <li>Autobiographical Emotional Events Dialogue</li> <li>Security in the Family System scales</li> </ul> <p>Coping strategies:</p> <ul style="list-style-type: none"> <li>How I coped under pressure scale (Hicups)</li> <li>Feelings of guilt</li> <li>Cognitive Emotion Regulation Questionnaire</li> <li>Emotion awareness questionnaire</li> </ul> <p>Mental health of parent:</p> <ul style="list-style-type: none"> <li>Impact of Events Scale Revised: parent</li> <li>Hospital Anxiety and Depression Scale: parent</li> <li>Parenting Stress Index</li> <li>Disturbances of attachment Parent</li> </ul> <p>Duration and severity of the domestic violence:</p> <ul style="list-style-type: none"> <li>CTS2</li> <li>Conflict tactics scales parent-Child</li> <li>Parent report of traumatic Impact</li> <li>Adverse childhood experiences questionnaire</li> </ul>

CAPS, Clinician-Administered PTSD Scale; CDI, child depression inventory; CES-D, Center for Epidemiological Studies Depression Scale; CPSBRS, Child Play Session Behavior Rating Scale; CTS2, Revised Conflicts Tactics Scale; DC-03-TSD, semistructured interview for diagnostic classification 0-3 of traumatic stress disorder for clinicians; HSP, Harter's self-perception scale; JPPSST, Joseph Pre-School and Primary Self-Concept Screening Test; KBIT, Kaufman Brief Intelligence Test; K-SADS-PL, Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version; K-SADS-PTSD, Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version post-traumatic stress disorder; OCB, oppositional child behaviour; PDS, Post-Traumatic Stress Diagnostic scale; PTSS, post-traumatic stress syndrome; RKPPS, Revised Knox Preschool Play Scale; SCARED, Screen for Child-Related Emotional Disorders; SCL-90, Symptom Checklist-90; SCL-90-R, Symptom Checklist-90 Revised; SSI-DC-03-Dep, semistructured interview for diagnostic classification DC-03 depression; SVAWS, Severity of Violence Against Women Scale; TOP, test of playfulness; TSCC, Trauma Symptom Checklist for Children; TSCYC, Trauma Symptom Checklist for Young Children; UCLA PTSD RI, University of California, Los Angeles Post-Traumatic Stress Disorder Reaction Index.

## Appendix 9 Characterisation of abuse

TABLE 28 Characterisation of abuse in studies included in the systematic review of trials

Study ID	Description of DVA	Duration of DVA	Co-occurring other abuse of child	Comorbidities	DVA ongoing/contact with perpetrator
Cohen 2011 <sup>61</sup>	17 (13.7%) reported ongoing DVA-related trauma during treatment	6 (4.8%) children exposed to DVA for 2 years, 23 (18.5%) children exposed for 2.5 years, 95 (76.6%) children exposed for > 5 years	Not described	Trauma during treatment measured with K-SADS: Yes 50 (40.3%); No 24 (19.4%); No information 50 (40.3%)	Any contact 67 (54%) children. < 24 hours per week 33 (26.6%); 24–168 hours/week 25 (20.2%); lives with perpetrator 9 (7.3%); no contact 18 (14.5%); no information 39 (31.5%)
Graham-Bermann 2007 <sup>38</sup>	1–252 events of DVA in year prior to study [psychological 69.33 (59.5)], physical violence 14.78 (23.71); children observed 89% of psychological abuse and 82% of physical violence	Mean length of abusive relationship 10 years (mean 125 months, SD 71 months)	12% of children sustained physical injury. 30% physically harmed in the year prior to study. Of these 33% harmed once per week, 6% twice per week, 9% harmed daily, three cases of suspected child abuse (reported to police)	Not reported	17% living with abusive partner. 68% had some contact with partner
Graham-Bermann 2015 <sup>122</sup>	<ul style="list-style-type: none"> <li>173 (SD 131.85) acts of violence or direct threats towards the mother in the past year</li> <li>89 (SD 52.70) psychological aggression to the mother in the past year</li> <li>48 (SD 55.39) incidents of physical violence against the mother in the past year</li> <li>23 (SD 36.14) incidents of sexual violence against the mother in the past year</li> </ul>	Not reported	Not reported	Not reported	Some mothers were living with the perpetrator but numbers were not presented
Jouriles 2001 <sup>91</sup>	At least one episode of physical abuse in the past year [mean 68.38 (SD = 53.65)]. 75% reported being beaten up by their partner, 36% reported that they had been threatened with or had had used on them a gun or knife in past year	Not reported	Not reported	Not reported	No contact with perpetrator

Study ID	Description of DVA	Duration of DVA	Co-occurring other abuse of child	Comorbidities	DVA ongoing/contact with perpetrator
Jouriles 2009 <sup>90</sup>	At least one episode of physical abuse in the past year. Experimental 46.6 (SD 36.2); control 45.8 (SD 6.0)	Not reported	Not reported	Not reported	No contact with perpetrator
Kot 1996 <sup>112</sup>	Not reported	Not reported	Not reported	Not reported	Not reported
Lieberman 2002 <sup>123</sup>	Not reported	Not reported	Physical abuse 18.7%, sexual abuse 14.7%, both 4%	Exposure to community violence 46.7%	0% cohabiting at enrolment; 17.3% returned to their partners or started a new DVA relationship
McFarlane 2005 <sup>115</sup>	Not reported	Not reported	Not reported	Not reported	Not reported
McWhirter 2011 <sup>94</sup>	All women reported exposure to violence by an intimate partner within the year of study – with a value of 15 or higher on the HITS tool of IPV	Not reported	Not reported	Not reported	Not reported
Overbeek 2012 <sup>117</sup>	Psychological aggression: <ul style="list-style-type: none"> <li>• Reporting parent: mean 27.20 (SD 30.41), range 0–133</li> <li>• Partner 64.0 (SD 2.03), range 0–200</li> <li>• Physical aggression:</li> <li>• Reporting parent: mean 7.33 (SD 21.48), range 0–226</li> <li>• 18 (parents reported only incidents of psychological aggression)</li> </ul>	10.87 years (SD 6.06)	<ul style="list-style-type: none"> <li>• Psychological maltreatment of child by reporting parent 6.19 (SD 11.57; range 1–104) times in the past year</li> <li>• Psychological maltreatment of child by partner 13.40 (SD 21.78; range 0–104) times in the past year</li> <li>• Physical maltreatment of child 0.45 (SD 1.69; range 0–15) by reporting parent in past year</li> <li>• Physical maltreatment of child by partner 3.62 (SD 13.79; range 0–104) times in past year</li> </ul>	Not reported	<p>No DVA at point of enrolment in the study</p> <p>71 families 46% reported the threat of violence during the study. The average time since the violence stopped was 9.7 months (SD 15.8 months)</p> <p>16.8% still with abusive parent (although abuse had to be ceased for people to be enrolled in the study)</p> <p>61.4% still in contact with abusive parents</p>

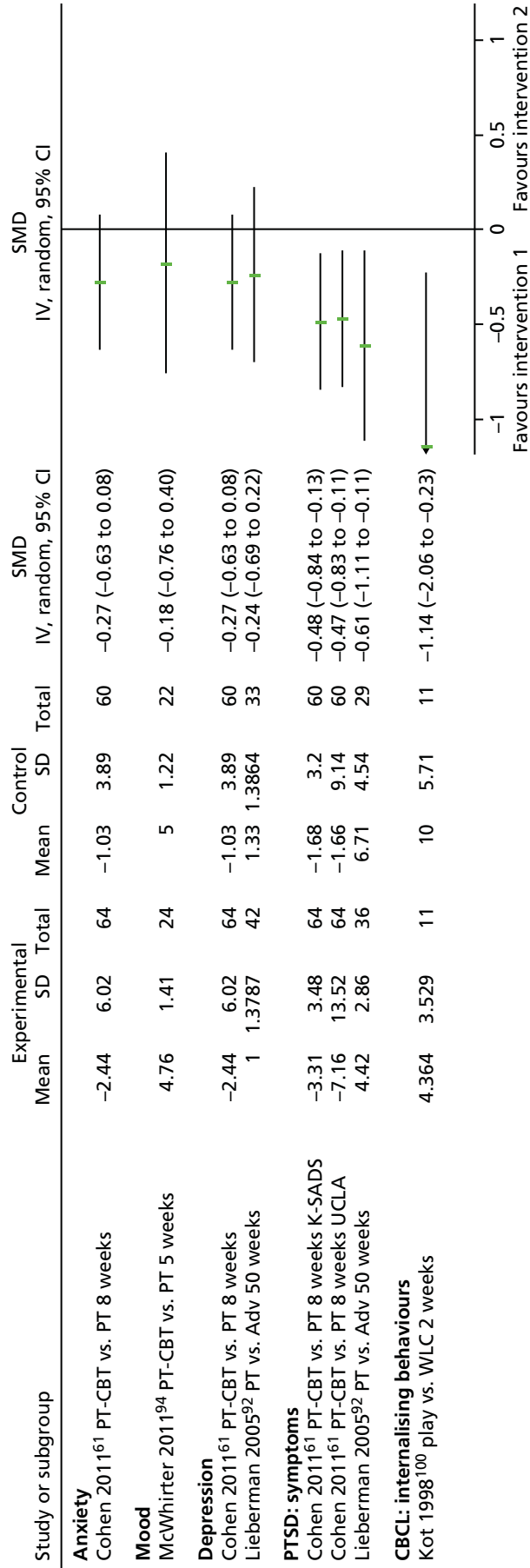
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TABLE 28 Characterisation of abuse in studies included in the systematic review of trials (continued)

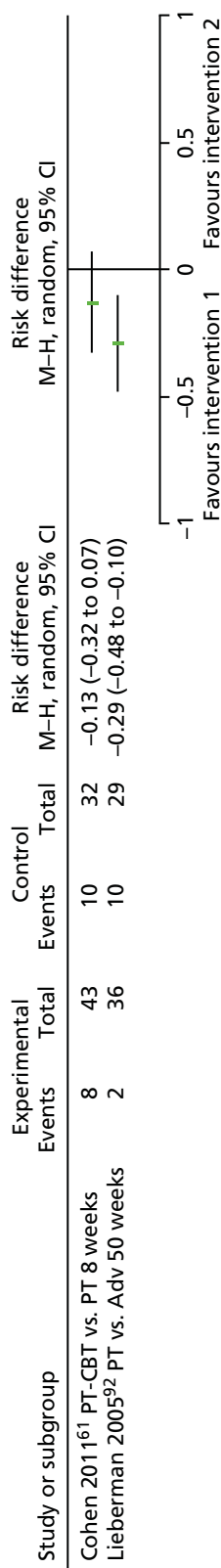
Study ID	Description of DVA	Duration of DVA	Co-occurring other abuse of child	Comorbidities	DVA ongoing/contact with perpetrator
Sullivan 2002 <sup>96</sup>	<p>Child witnessing abuse:</p> <ul style="list-style-type: none"> <li>● Frequency of exposure was measured for three constructs using Likert scales: ridicule control (one item, 4 points), witnessing threats of physical violence (6-point Likert scale) and witnessing physical violence (6-point Likert scale)</li> <li>● Mean score of all three was 1.51 (SD 0.85) pre intervention and 0.51 (SD 0.73) post intervention</li> </ul>	Not reported	Emotional, physical abuse of child and injury of child were scored using a LIKERT scale and a modified conflict tactics scale. A composite of all three was found, and the mean at baseline was 1.44 (SD 0.90)	Not reported	79% no contact; 14% living with perpetrator; 7% involved with DVA perpetrator but living separately
Wagar 1995 <sup>97</sup>	Children witnessed a mean 1.47 violent events per week against their mother	Not reported	Not reported	Not reported	'No contact in most cases'
Waldman-Levi 2011 <sup>118</sup>	All women reported violence from their partners. 80–100% reported social restriction, psychological, financial abuse. 50% reported abuse during pregnancy	Not reported	65% of children in experimental and 29.4% of children in control experienced physical punishment	Not reported	All residing in shelters so abuse was not ongoing

K-SADS, Kiddie Schedule for Affective Disorders and Schizophrenia.

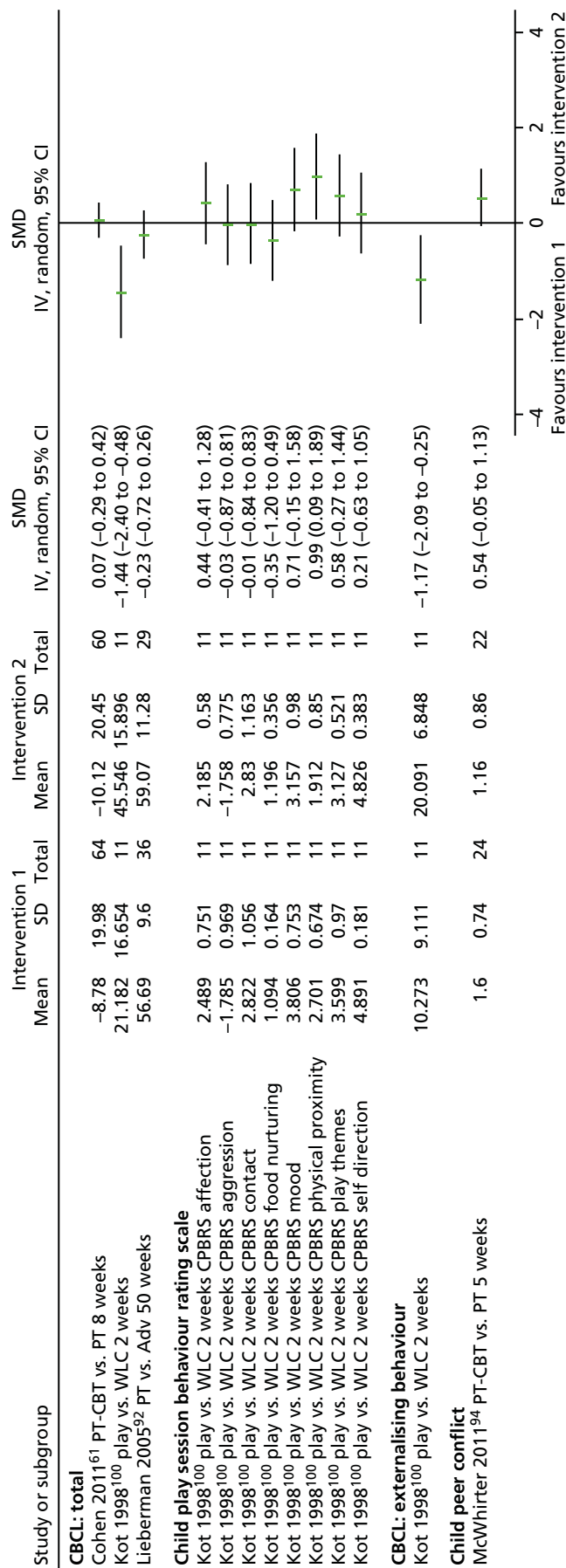
## Appendix 10 Forest plots



**FIGURE 25** Forest plot of psychotherapeutic interventions: mental health. Adv, advocacy; K-SADS, Kiddie Schedule for Affective Disorders and Schizophrenia; play, play therapy; UCLA, University of California, Los Angeles Post-Traumatic Stress Disorder Reaction Index; PT, psychotherapy.



**FIGURE 26** Forest plot of psychotherapeutic interventions: PTSD. Adv, advocacy; M-H, Mantel-Haenszel; PT, psychotherapy.



**FIGURE 27** Forest plot of psychotherapeutic interventions: behavioural outcomes. Adv, advocacy; CPBRS, Child Play Behaviour Rating Scale; play, play therapy; PT, psychotherapy.



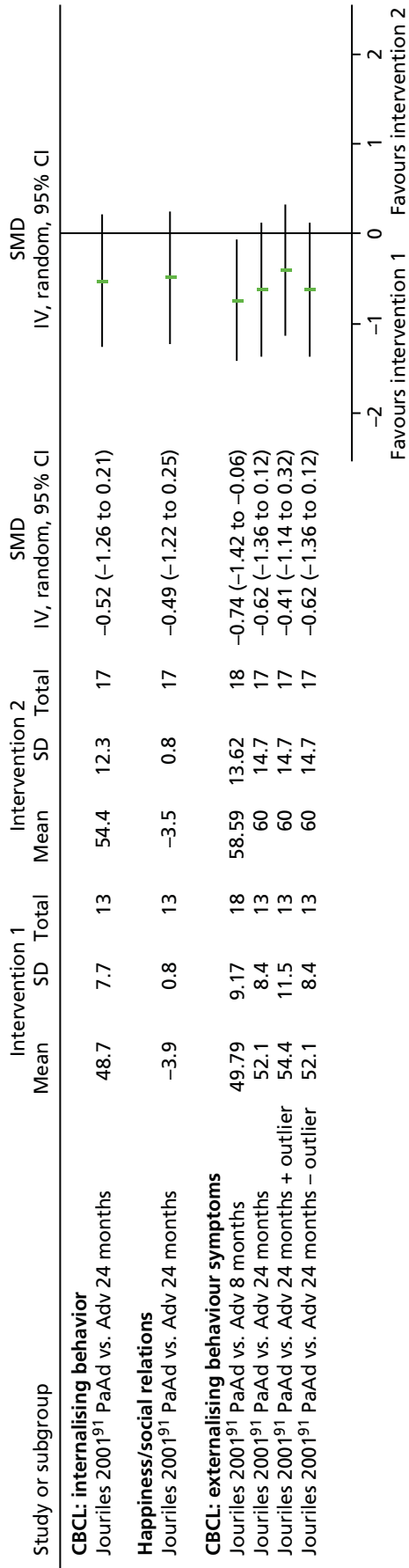


FIGURE 28 Forest plot of parenting interventions: mental health. Adv, advocacy; PaAd, parental skills training plus advocacy.

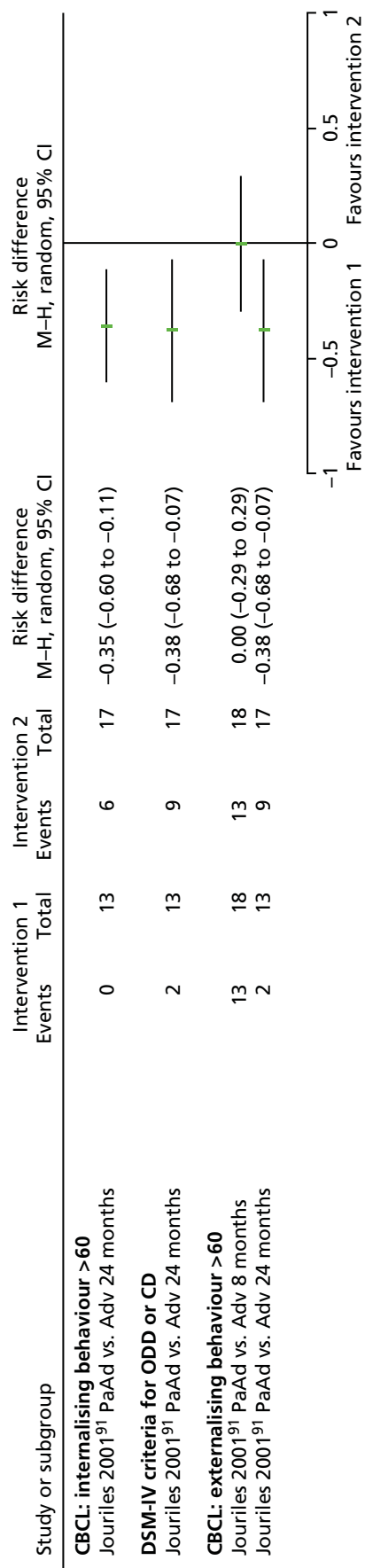
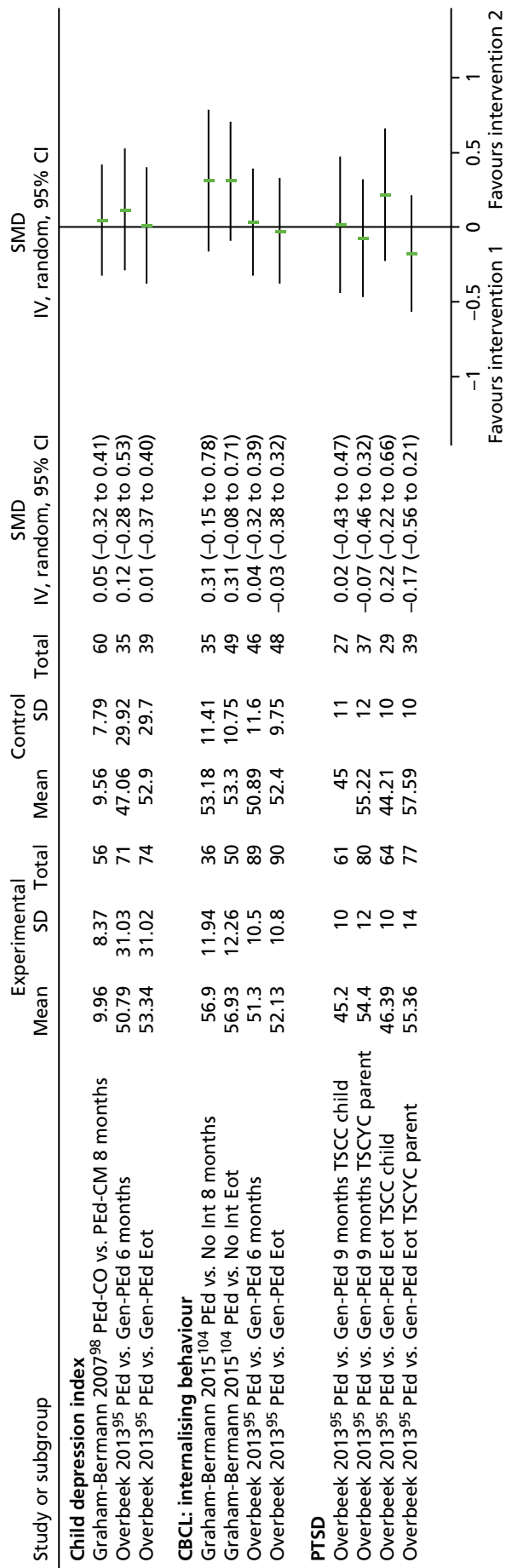
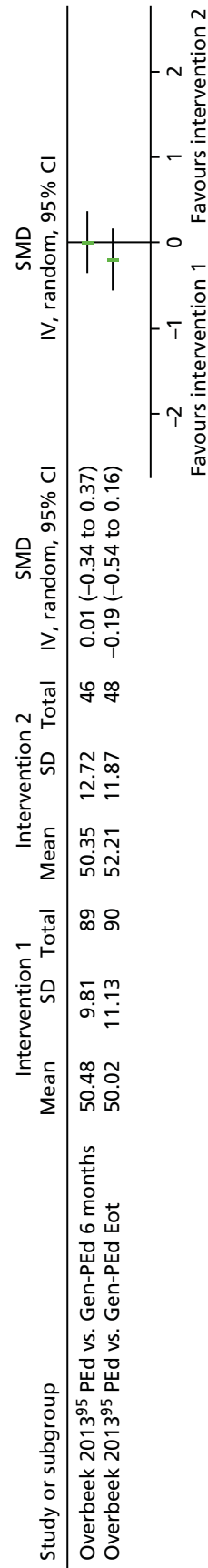


FIGURE 29 Forest plot of parenting interventions: behavioural outcomes. Adv, advocacy; M-H, Mantel-Haenszel; PaAd, parental skills training plus advocacy.



**FIGURE 30** Forest plot of psychoeducational interventions: mental health. Eot, End of treatment; Gen-PEd, general psychoeducation not focused on DVA; Int, internalising; PEd, psychoeducation; PEd-CO, child-only psychoeducation; PEd-CM, child-mother psychoeducation; TSCC, Trauma Symptom Checklist for Children; TSCYC, Trauma Symptom Checklist for Young Children.



**FIGURE 31** Forest plot of psychoeducational interventions: behavioural outcomes. Eot, End of treatment; Gen-PEd, general psychoeducation not focused on DVA; PEd, psychoeducation.

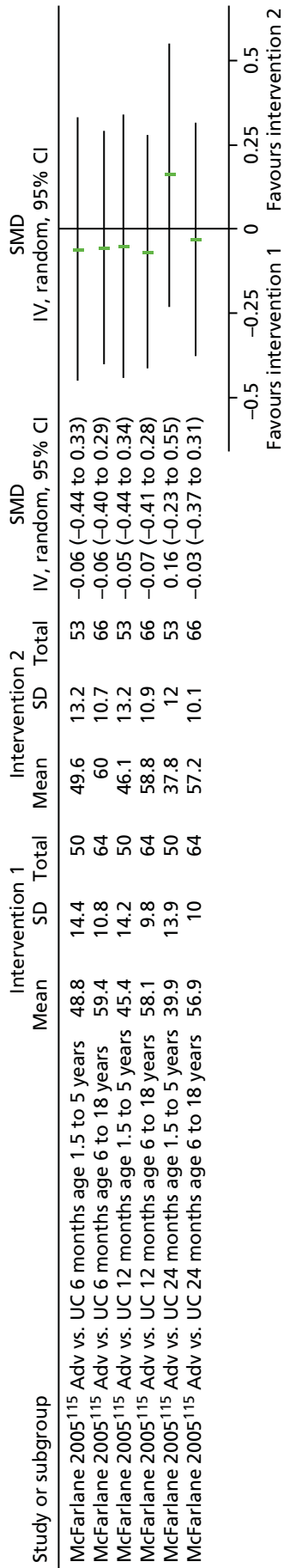


FIGURE 32 Forest plot of advocacy interventions: mental health. Adv, advocacy; UC, usual care.

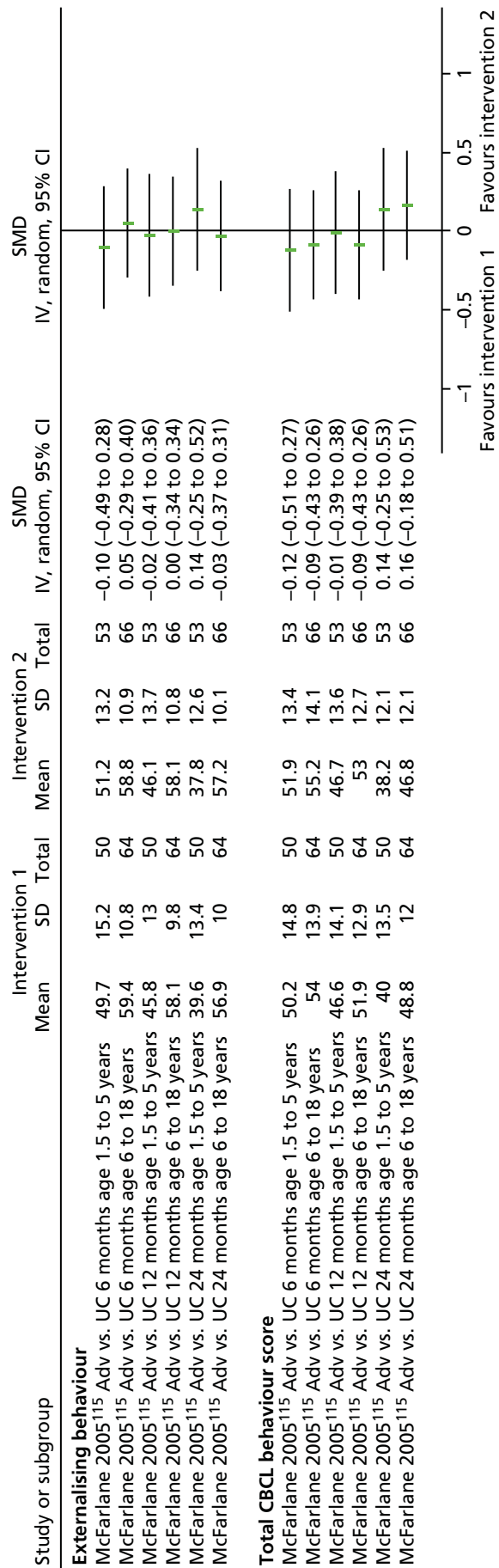


FIGURE 33 Forest plot of advocacy interventions: behavioural outcomes. Adv, advocacy; UC, usual care.

## Appendix 11 Translation of constructs: children

TABLE 29 Translation of constructs: children

Second-order constructs	Papers that include the second-order construct
<b><i>Personal readiness: contextual factors</i></b>	
Adjustment to the 'new reality' in their lives	157,158
Living in a refuge/shelter	158
Consequences of separation	158
Consequences of shelter living	158
Memory of abuse to siblings	158
Sadness at separation from father	157,158
Inability to accept fathers abusive behaviour 'reframing'	158
Issues that children are arriving with (e.g. sadness)	157
Mother's separation from father	157,158
Ongoing vs. cessation of abuse	158
Priming: in advance of the intervention	51,158
Mismatch in readiness; children are ready but mothers are not	51
<b><i>Personal readiness: willingness to break the secret</i></b>	
Hesitancy to share what has happened	162
Sharing the experience/learning to share the experience	130,157,158
I am not alone – benefit – release of stress particularly beneficial to children who have not spoken of it before	130
Costs of remembering	51,130
Comparing experiences could be beneficial; 'Realising things could have been worse'. BUT realising you had the worst experience could be harmful; 'Shameful secret'	130
Reducing shame and guilt	130
Depends on feeling safe	130
Having someone to tell	158
Not wanting to talk about the past	158
Not wanting to talk about their fathers	158
Acknowledging DVA had been a part of their lives	158
Readiness to talk	157
<b><i>Personal readiness: understanding and acknowledging DVA</i></b>	
Learning the violence vocabulary	130,158
Defining or labelling abuse	130,157,158
Attribution of responsibility for DVA	130,158
'abuse is not ok': 'de-normalising' the abusive environment	130,158
Need for support to acknowledge the abuse	158

continued

TABLE 29 Translation of constructs: children (continued)

Second-order constructs	Papers that include the second-order construct
<b>Personal readiness: facilitators or motivators</b>	
<i>Child perception of benefits</i>	
Helping mothers and other children (altruism as motivation for joining in)	51
Positive affirmation strengthens self-esteem	130
Positive interaction with leader	130
Feeling special/value	130
Conflict resolution skills and strategies	130
Helping understand mum's feelings	51
Helping understand my feelings	51
Enhancing communication (child–mother)	51
Spending time with mum	51
Sharing feelings as a way of avoiding future distress (coping)	158
Spending time together (Mum and child) was as important as activities themselves	49,51,130
<i>Derived benefits (stakeholder's appraisal of benefit to child perspective)</i>	
Ability to define abuse and understanding legitimacy of using abusive behaviour	130,162
Enhanced self-esteem	130,162
Variation in outcomes from 'quite noticeable' to 'harder to identify' – the intervention was 'one step in a long journey'	130
Sharing as therapy	158,162
Empathy for mothering situation	158
Expressing negative feelings is OK	162
Developing resistance	162
Development of empathy	162
Prosocial modelling (having a go at doing something nicely)	162
Building resilience	162
Safety planning	130,162
Learning to express angry feelings	162
<b>Difficulties and tensions</b>	
<i>Children's perceptions of difficulties</i>	
Psychoeducation around sexual abuse was uncomfortable for the children	130
Stress to child caused by tension between perception of parent as abuser and love the child feels for that parent	130,158
Need for tensions/stress to child to be managed by group leaders	130
Tensions are not always negative and may be uncomfortable (opening the door) for further work	130,158
Confidentiality in group process led to tension of when was it permissible to 'share' with family or friends	130
Tension caused by changing or new family dynamics/rules	130
Seeing your caregiver (mother) as a victim and conflicting messages to child	157
Safety planning for the future may raise in a child's mind possibility of future violence	130

TABLE 29 Translation of constructs: children (continued)

Second-order constructs	Papers that include the second-order construct
<b>Costs and barriers to child</b>	
Situational and practical (e.g. missing school, television or clubs)	49,130
Potential challenge of not being able to voice feelings with adults – including mother – power dynamic	51,162
Not wanting to talk about the past	51,158
Not wanting to talk about their fathers	51,162
<b>Factors of meeting in a group that enabled the therapeutic process</b>	
Developing trust in the group	130
Having fun/making friends/eating snacks	130,157,158
Feeling safe	130,157
Psychoeducation	130
Positive reinforcement by group leaders	130
Developing group norms and rules (e.g. confidentiality)	130,157
'Ok not to talk'; feeling supported in the group and not compelled to talk	130
<b>Factors of meeting in a group that enabled the therapeutic process (stakeholder's perspective)</b>	
Resocialising, practising new behaviours, conflict resolution	162
Developing group identity	162
Resistance and power struggles, testing limits	157,162
Disclosures to group members	162
Children assume responsibility for group	162
Modelling of prosocial interactions	162
Importance of group ending	162
Importance of group cohesion	162
<b>Child relationship with facilitator</b>	
Modelling group leader interaction/behaviour	130
Potential challenge of not being able to voice feeling with adult because of a power dynamic	51
<b>Acceptability of interventions</b>	
Parents appraisal of acceptability to child	130
Stakeholder appraisal of acceptability to child	49,157
Child view of acceptability	49,51,157
Expectation of what it was going to be (child perception)	49
<b>Tailoring of intervention to child</b>	
Variation in activities	49,157
<b>Locus of intervention/recommendations</b>	
Father–child relationship reducing confusion	158,162
Need to understand group process and how this will be manifested at different stages of development	162
Length of intervention	162
Structuring of intervention: planned activities vs. unstructured play	157,162
Need for parallel parent–child intervention	157,162
Setting within schools	162



## Appendix 12 Translation of constructs: parents

TABLE 30 Translation of constructs: parents

Second-order constructs	Papers that include the second-order construct <sup>a,b</sup>
<b>Readiness</b>	
<i>They were in a DVA relationship</i>	
Readiness of parents (fathers) to name and acknowledge DVA	159b
<i>DVA relationship has affected their child</i>	
Acknowledgement of negative impact on child	49,159,160
The way the intervention is presented to them feels appropriate	159
Perception of the reasoning behind the intervention	159b
Parents' perception of child's needs	159
'Protecting' the child (prevention from participating)	159a
Readiness to talk to their children about the past	51
Readiness to rebuild relationship with child	49
Parents need to know that their child is safe	51
Parents have a desire to get their child 'back to normal'	51
Primer preparatory work with parent on the impact of DVA on their child	49,51
<i>Able to see beyond their own needs to those of their child</i>	
Ready to see beyond own needs to those of their child	51,159,160
Their child's opposition to attending	159
<i>Practical aspects of readiness</i>	
Timing/post crisis (practical aspects: baby-sitting, no time court cases; emotional fear, uncertainty; time to reflect)	49,51
<b>Benefits</b>	
Improvement of reflective ability: comes through process of being in a group and seeing yourself through the eyes of others	160
Seeing child as separate from self and abuser	160
'I am not alone'/learning from each other (comes through process of being in a group)	160
Normalisation of parents' views of child behaviour, view of themselves (comes through the process of being in a group)	160
Enhanced parenting development of sensitive plus realistic expectations of children	160
Enhanced self-care; ability to nurture the self	160
Reframing experience of abuse	157,160
Mastery of negative emotion and revelation of emotion leading to more effective problem-solving	160
Quality time together is beneficial to parent-child relationship	49
Learning or relearning to talk about the past	49,51
Talking about the past with their children	49,51
Developing a shared understanding between the parent and child of their situations	49,51

continued



TABLE 30 Translation of constructs: parents (continued)

Second-order constructs	Papers that include the second-order construct <sup>a,b</sup>
<b>Tensions for parent (where the parent participated in the intervention)</b>	
Some felt a lack of a role or place for fathers	159a
Addressing dynamics of power and control between perpetrator and non-abusing parent and ethos of feminism was a problem for some fathers	157a
Parents may need access to additional support in coming to terms with what the children tell them (after the children receive an intervention)	49,130
Maternal stress from the child's reframing and/or re-evaluating abuse and criticising mother	130
The new capacity for the child to express feelings was bittersweet	130
Focus on confidentiality in group processes – for children can lead to a loss of sense of control for the mother	130
The intervention must be presented in a way that parents find acceptable (readiness of parents: priming for parents)	159
Practicalities: time missing television, leaving work early, babysitting siblings, waiting for an opening in a group, transportation, time, those with shared custody had limited time or control over child's activities and restricted time with child (perpetrator)	49,130,159
Perception of the intervention (philosophy/feminism)	159b
Child's opposition to attending	159
Focus on confidentiality in group processes for children can lead to a loss of sense of control for the mother	130
<b>Process through which changes were effected</b>	
'I am not alone'/learning from each other: comes through process of being in a group	160
Group sessions become a holding place (safe psychological space)	160
Mixed- vs. single-sex groups (safe psychological space)	157
'Safe space' promotes disclosure, honesty, bonding and safe expression of emotion	49,157
'Good grandmothering' overseeing parenting	160
Individual and group sessions valued for mothers	160
Enhanced self-care/nurturing self	160
Parents wanted more of the interventions, longer programmes and longer individual sessions; 'More is more'	157,160
For activities and intervention	157
Strengths-based approach/individualised	49
Mother-child relationship must be a focus of the intervention	49
Reframing experience of abuse	157,160
Focus on 'mother' and 'woman' roles	160
<b>Parent view of child benefit empowerment</b>	
Children have confidence to challenge abusive behaviour in their family	130
Increased emotional expressiveness of child	130
Correct attribution of blame for violence	130
Resilience is noticed, for example child's knowledge of safety planning	130
Child's awareness of measures around sexual abuse	130
a Includes views of perpetrator parent as well as non-perpetrator parent.	
b Views of perpetrator parent.	

## Appendix 13 Translation of constructs: stakeholders

TABLE 31 Translation of constructs: stakeholder

Dimensions of second-order constructs: stakeholder	Papers that include the second-order construct
<b>Personal readiness: child as reported by stakeholder</b>	
<i>Stakeholder view of child readiness</i>	
Child readiness	49,130
Adjustment to the 'new reality' in their lives	157,158,162
Issues that children are arriving with (e.g. sadness)	157,162
<b>Personal willingness: willingness to break the secret</b>	
Hesitancy to share what has happened	162
Sharing the experience/learning to share the experience	130,157,162
Having someone to tell	162
<b>Personal readiness: understanding and acknowledging DVA</b>	
Learning the violence vocabulary	130
Defining or labelling abuse	130,157
Attribution of responsibility for DVA	130
'abuse is not ok': 'de-normalising' the abusive environment	130,162
<b>Personal readiness: mother as reported by stakeholder</b>	
<i>Stakeholder view of mother readiness</i>	
Situational readiness: not in crisis	49,51
Safe: away from abuser	51
Acknowledge effect on children	51
Insight to address children's needs	51
Priming of mothers before introducing the intervention may be worthwhile	51,130
<b>Organisational readiness</b>	
Quality of mother-child relationship	51
Timing/readiness of mothers: facilitation of this by facilitators	51
Organisational readiness	51
Integrating intervention with everyday practice (in refuge)	
<b>Stakeholder/organisational/worker readiness</b>	
Worker readiness	51
Skills of working with women and children	51
<b>Derived benefits from intervention; stakeholder perceptions of benefits for child</b>	
Mental health symptoms	160
Reduction of feelings of isolation: 'I am not alone'	157
Breaking the secret	157
Ability to define abuse and understanding illegitimacy of using abusive behaviour	130,162
Enhanced self-esteem	130,162

continued

TABLE 31 Translation of constructs: stakeholder (continued)

Dimensions of second-order constructs: stakeholder	Papers that include the second-order construct
Variation in outcomes from 'quite noticeable' to 'harder to identify': the intervention was 'one step in a long journey'	130
Sharing as therapy	162
Expressing negative feelings is OK	162
Developing resistance	162
Development of empathy	162
Prosocial modelling (having a go at doing something nicely)	162
Building resilience	162
Safety planning	130,162
Learning to express angry feelings	162
<i>Derived benefits from intervention: stakeholders' views of benefits for parent</i>	
Improved engagement with services (mother)	160
Treatment compliance (mother)	160
More time together with child (mother)	157
Enhanced communication with partner (both parents)	157
Change and growth (both partners)	157
<i>Experiences of intervention: therapeutic relationship (with workers)</i>	
Transition from hesitancy to engagement (mothers)	160
Adequate communication between parents and group leaders	130
Creating trust/rapport for the therapeutic relationship trust	51,157
<i>Group process</i>	
Resocialising, practising new behaviours, conflict resolution (children)	162
Developing group identity (children)	162
Resistance and power struggles, testing limits (children)	157,162
Disclosures to group members (children)	162
Assuming responsibility for group (children)	162
Modelling of prosocial interactions (children)	162
Importance of group ending (children)	162
Importance of group cohesion (children)	162
Gender mix of groups (adults)	157
Mix of abusive and non-abusive participants (adults)	157
Prosocial modelling in groups (children)	157
Challenge children's behaviour (children)	157
Peer interactions (children)	157
Group cohesiveness (children)	157
Catharsis, expression of negative emotions (children)	157
Safe and supportive environment (adults)	157
More time in groups to practise (adults)	157
Time required in group to practise (adults)	157
Catharsis (children)	157
Ethos of group	157

TABLE 31 Translation of constructs: stakeholder (continued)

Dimensions of second-order constructs: stakeholder	Papers that include the second-order construct
<b>Barriers and facilitators</b>	
Crises	51
Culture	51
Quality of mother–child relationship	51
<b>Tensions and costs</b>	
Reconciling abuser as father (for children)	157
Ongoing safety issues (for children)	157
When doing whole family work, group work with abusive and non-abusive families can reinforce power imbalances	157
<b>Limitation to intervention</b>	
Group intervention is just one part of the process ‘one step on a long journey’	130
<b>Tailoring of interventions</b>	
Tailor to child experience as therapeutic process	130,157
Presence of child abuse	130
Involvement vs. non-involvement of parent	130
<b>Content of parent/adult intervention; directed at abusive parent</b>	
Alcohol	157
Anger, more constructive management without enacting violence	157
Gender stereotyping	157
Power dynamics	157
<b>Acceptability</b>	
Child	49
Stakeholder	49
<b>Locus of intervention (recommendations)</b>	
Father–child relationship reducing confusion	162
Need to understand group process and how this will be manifested at different stages of development	162
Length of intervention	162
Structuring of intervention: planned activities vs. unstructured play	157,162
Need for parallel parent–child intervention	157,162
Setting within schools	162



## Appendix 14 Complete study details: qualitative systematic review

TABLE 32 Details of studies included in the systematic review of qualitative studies

Source paper country Setting Respondents	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Paris <sup>157</sup>	Eight families	Children and parents who had attended the 'field test' of the RSVP programme	Focus groups for children and parents at the end of each group session to feedback to researchers about that session. Focus groups included interview guides. Each session also had a focus group for facilitators. Observation of all child group sessions	Constant comparison (Glaser and Strauss <sup>311</sup> )	Psychoeducation: RSVP programme. Group parallel psychoeducation for parents and children. Some whole family sessions. Time within sessions to practise new techniques. RSVP ran for 16 weeks, weekly meetings 90 minutes	'To develop and field test a structured multimodal family intervention strategy (RSVP) for use with small groups of families whose children have witnessed domestic violence'
USA	Five couples had children Children: $n = 4$ (6–12 years) Mothers: $n = 8$ Fathers: $n = 6$					
<b>Setting:</b> community <b>Respondents:</b> children Parents (both mothers and fathers) Stakeholders	The perpetrator parents had all previously attended a 23-week course for perpetrators of domestic violence (BIP) This attendance was 'state mandated'				Children met in small groups. Presentation, followed by group activities and a period of free play. Parents met separately and together (abusive and non-abusive parents) for 20–30 minutes, then in large mixed group	
	Stakeholders: Facilitators of the children's and parent's groups of RSVP. Providers of the BIP programme					

Source paper country	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Peled <sup>130</sup>	Children: <i>n</i> = 30 (age: 4–12 years)	All adult respondents attended DAP programme 1990 to 1991	Interviews: In-depth semistructured. Plus observation of one group process (10 group sessions and three family sessions). Thematic guides	Inductive content analysis Naturalistic research paradigm Lincoln and Guba <sup>312</sup>	Psychoeducation: The intervention is described by the authors as a 'support and education program for children'. This was offered to parents who were participating in an adult DAP. Intake to the children's group included screening and assessment for physical, emotional or sexual abuse. Concurrent education groups for parents were available	'Analysis of one group program from the multiple perspectives of those who were involved. Attempted to understand both change inducing processes, and intended and unintended outcomes, rather than just measuring the achievement of expected goals'
USA	Eight living with both parents Two living with grandparents 20 living with their mother					
<b>Setting:</b> community						
<b>Respondents:</b> children and fathers and stakeholders						
<b>Programme:</b> parents' DAP	Working class, low to moderate income Mothers: 16 Fathers: 5					

continued



TABLE 32 Details of studies included in the systematic review of qualitative studies (continued)

Source paper	country	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Setting Respondents		Stakeholders: group leaders and agency administration staff				The education included correct attribution of violence, and building self-esteem through positive affirmation. The groups were age specific. A single family session is offered at the end of the group process for parents and children to review material in child groups and recommend additional services	
						Groups were of mixed sex and were age-specific (4–6, 7–9, 10–12 years)	
						Groups meet once a week for 10 weeks. Concurrent educational parenting groups were also available to parents	

Source paper country	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Peled <sup>158</sup>	Children: <i>n</i> = 14. Mean age 11.3 years (10–13 years). Seven boys; seven girls. Five living with both parents, nine with mother only	Most families recruited through DAP and two from other community programmes. All children had witnessed DVA as reported by their mothers	Informal, conversational interviewing. Interviews were loosely guided by a list of Categories of Desired Information. Children interviewed 3 to 6 times (mean 4 x 1-hour interviews)	Inductive content analysis	As above for Peled <sup>130</sup>	One goal was to learn about ways in which children manage their exposure to violence
USA	<b>Setting:</b> community	Parents: <i>n</i> = 12 mothers		Phenomenological inquiry naturalistic enquiry		'this study is about the experiences of preadolescent children of battered women who had participated in a therapeutic educational domestic group'
	<b>Respondents:</b> children	Comorbidities: none of the children were physically abused. None were currently living exposed to DVA		Lincoln and Guba, <sup>312</sup> Patton <sup>313</sup>		
	parents' DAP	10/12 mothers completed a 'battered women's' group programme				
		5/12 fathers completed a 'battering men's' group programme				

continued

TABLE 32 Details of studies included in the systematic review of qualitative studies (continued)

Source paper country Setting Respondents	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Peled <sup>159</sup> USA <b>Setting:</b> Community <b>Respondents:</b> parents (both mothers and fathers)	Children: <i>n</i> = 204, mean age 10.4 (4–18 years); 61 (29.9%) of the children received services Mothers, <i>n</i> = 64 Fathers, <i>n</i> = 41	Contacted all eligible participants in a DAP (parents from 250 families) Participation of 42%	Structured telephone interview, interview guide, multiple choice and open ended. This paper has data from the open-ended questions	Inductive content analysis. Interviews were transcribed and coded and clustered into seven main themes. Then second analysis to six themes; Patton <sup>313</sup>	As above for Peled 1992 <sup>130</sup>	Our main study question was 'What are the factors that former adult clients of the agency identify as barriers to their child's participation in and completion of available services?'
Programme: DAP Humphreys <sup>49</sup> UK 10 refugees and <b>Setting:</b> refugees (50% and community settings <b>Respondents:</b> Mothers Stakeholders 'Talking to my mum'	No details in the paper: However the participants are probably those described in Humphreys <sup>51</sup> (see below)	Children and mothers and child workers interviewed separately by the researchers when they have completed the 'Talking to my mum' activity packs	Focus groups of mothers and children and focus groups of with children's workers in a refuge In the Humphreys <sup>51</sup> paper also interviews with mothers' children and workers	Action research. Stringer <sup>314</sup> No details were reported in this paper but grounded research theory (Denzin and Lincoln <sup>315</sup> ) were reported in Humphreys <sup>51</sup> (see below)	Guided self-help, improving parent-child communication: 'Talking to my mum' Developed at Colchester Women's Aid Shelters and families in the community to improve communication between mothers and children in the aftermath of domestic violence. Additional centres for research were Refuge Essex (which includes all seven refugees in Essex), Panahgar (Refuge) in Coventry and Leicester, and Milton Keynes Women's Aid. The research team was based at the University of Warwick	'To outline some of the abuse tactics that can damage mother-child relationships, together with their early impressions whether it may be possible to repair them through jointly focused work. Some of the wider implications for social work practice are discussed.'

Source paper country Setting Respondents	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/ theoretical approach	Description of intervention	Aim
Humphreys <sup>51</sup> UK <b>Setting:</b> refugees (50%) and community settings <b>Respondents:</b> children mothers stakeholders <b>Programme:</b> Research project: 'Talking to my mum'	Children: n = 52 (aged 5–6 years); 27 boys and 25 girls (12 families were from Asian backgrounds) Mothers: n = 45 (12 from Asian cultural heritage) Families were living in DVA refuges or at home but in receipt of DVA services in the UK (50% were living in a refuge) Interviews with 15 workers	5 focus groups. Reflection interviews with 45 mothers, and 52 children 27 boys and 25 girls. (12 families were Asian). Interviews with 15 workers	Focus groups of mothers and children and children's workers in a refuge. Day workshops at the end of each 'Action research cycle' were taped and transcribed to identify themes from the data. Data from researchers' 'project log books' were summarised. Data for families was looked at to identify key themes across families	Grounded theory methods (Denzin and Lincoln <sup>315</sup> )	Guided self-help, improving parent–child communication:  'Talking to my mum'  Mothers and children worked together on activities to improve their communication with the help of trained refuge workers who encouraged the sessions and found space and time for the sessions to happen. The mothers and children were provided with age-appropriate packs of stories with woodland animals for younger	To explore how communication between women and their children could be strengthened in the aftermath of DVA. What issues do workers, women and children identify as relevant to talk about? How do women and children evaluate materials developed to support their relationship in the aftermath of violence?

continued

TABLE 32 Details of studies included in the systematic review of qualitative studies (continued)

Source paper country Setting Respondents	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/ theoretical approach	Description of intervention	Aim
					children and photographs (posed by models) for older children that provided triggers for activities and discussion. They included different stages of the children's lives after separation, for example 'Early days in a refuge', 'Talking about things that matter' and 'Leaving the refuge'. The support of a trained refugee worker was available when needed. Children were aged 5–16 years. The activities were developed and tested through 'action research cycles'. Each cycle consisted of 4–6 months of implementation and continuous feedback, followed by 2 months of reflection and incorporation of feedback into the further development of materials	
					Setting: 10 refugees and two specialist, voluntary sector, community-based counselling teams; and two voluntary sector domestic violence outreach projects	

Source paper country Setting Respondents	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Kearney <sup>60</sup> USA <b>Setting:</b> community <b>Respondents:</b> parents – mothers stakeholders <b>Programme:</b>	Parents: <i>n</i> = 5 mothers aged 30–40 years living in the community with children aged 5–12 years receiving a trauma-focused psychiatric treatment. Five informants (eight eligible, six consented and one dropped out of the programme) Ethnicity: African American, Caucasian and Hispanic Mothers received a gift card for use in a local shop with children's goods	Purposive sampling and qualitative sampling of mothers whose children received trauma-focused treatment in an 'urban child guidance clinic'. The mothers were classified as 'treatment resistant'	Pre- and post-intervention interviews conducted by social workers (plus interviews with therapists). Maternal survey at end of intervention. Interviews with child therapists	No information about analytic method or theory	Psychoeducation: multimethod integrated intervention for mothers who had experienced domestic violence attending a trauma clinic. The intervention lasted 6 weeks and comprised three group sessions, one individual session with a clinician, one videotaped dyadic play session of mother and child, one video-assisted reflective functioning support session and weekly 'check in' telephone calls with the clinician. The intervention was grounded in	Evaluation of a multimethod pilot study of a relationally based intervention with mothers of school-aged children receiving treatment for exposure to domestic violence. Twofold: (1) to improve child outcomes (child functioning and progress in treatment); (2) to improve maternal functioning (psychological and behavioural)

continued

TABLE 32 Details of studies included in the systematic review of qualitative studies (continued)

Source paper	Country	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Setting Respondents						psychodynamic and attachment theory, and focused on relational work. It included 'psychoeducation, support, insight oriented work, reflective functioning support, corrective relational experiences, group learning and therapeutic process.' This pilot intervention was designed as a supplement to the child's treatment (in a trauma clinic) and not in place of any individual therapy that the mother may have been receiving. A total of 6 weeks of group work with 2 weeks of pre- and post-question sessions (8 weeks in total)	

Source paper country Setting Respondents	Participant type, age, ethnicity, socioeconomic class, guardianship of children	Sample size and strategy	Data collection methods	Method of analysis/theoretical approach	Description of intervention	Aim
Thompson <sup>162</sup> USA <b>Setting:</b> school <b>Respondents:</b> school-stakeholder <b>Programme:</b> school-based play therapy and psychoeducation	Stakeholder: first author of paper, white, middle-class woman Children: three African American; one Latin American	Single stakeholder's observations of four children who participated in the 'Child centred group play therapy'. All were from a single school. Sessions happened at the school	Participant observation. Video- and audio-taping of all 18 x 45-minute sessions, observational notes made. Transcribed verbatim	Retrospective case study using archival material. Observational notes were made during the viewing of each session. Each session was transcribed verbatim and transcripts read. Theory: Erikson's model of analytic induction	Play therapy: 'Child centred group play therapy'. A group play intervention for children only. 18 sessions, delivered in school for 16 weeks. Four children: three girls, one boy. Aged 6-7 years. Ethnicity: three African American, one Latin American	'The purpose of this qualitative case study is to illuminate the lived experiences of 4 young children between 6 and 7 years old who witnessed domestic violence while revealing the complex relationship between group process and stage development in their 18-week counseling group.' Abstract A multimodal intervention with components for adults and children. 16 weeks RSVP intervention included both abusive and non-abusive partner and children. The non-abusive partner must have provided in writing the wish for the abusive parent to remain a part of the family. Children met in small groups with only children. Groups for parents were run concurrently
Thompson <sup>162</sup> USA <b>Setting:</b> school <b>Respondents:</b> stakeholder – observation of children <b>Programme:</b>	Stakeholder: first author of paper, white, middle-class woman	Single stakeholder's observations of four children who participated in the 'Child centred group play therapy'. All were from a single school. Sessions happened at the school	As above for Thompson <sup>162</sup>	As above for Thompson <sup>162</sup>	Play therapy: 'Child centred group play therapy'. A group play intervention for children only. Delivered in school for 16 weeks. Four children: three girls, one boy. Aged 6-7 years. Ethnicity: two African American, one Latin American. First nine sessions had 10 minutes of structured exercises and 35 minutes of group play therapy. Remaining nine sessions were 45 minutes of group play therapy	

BIP, Batterers' Intervention Programme; RSVP, Responsible Steps Towards Violence Prevention Program.





## Appendix 15 Useable outcome measures and predictors of interest (behavioural or mental health) reported by study

**TABLE 33** Useable outcome measures and predictors of interest (behavioural or mental health) reported by study, and a description of the summary measures reported

Name	Outcomes with useable data	Predictors of interest (BEH or MH)	Summaries reported
Bagwell <i>et al.</i> <sup>316</sup>	None	N/A	N/A
Capaldi and Stoolmiller <sup>194</sup>	Depressive symptoms (17–19 years) Conduct problems Arrests Substance use (broken down into alcohol, tobacco, marijuana, other illicit drugs)	Conduct problems (BEH) and depressive symptoms (MH) at grade 6	Regression coefficients with SEs. Unclear if standardised or unstandardised regression coefficients
Farrington <sup>198</sup>	Convictions (21–40 years)	'Internalising concerns'	Note: results included in Leschied <i>et al.</i> , <sup>193</sup> meta-analysis
Barkley <i>et al.</i> <sup>317</sup>	Arrests in adulthood	'Externalising concerns' (hyperactivity)	Note: results included in Leschied <i>et al.</i> , <sup>193</sup> meta-analysis
Fergusson <i>et al.</i> <sup>191</sup>	Victimisation of domestic violence (24–25 years) Perpetration of domestic violence (24–25 years)	Conduct problems (7–13 years)	Unstandardised and standardised regression coefficients with SEs
Fergusson <i>et al.</i> <sup>191</sup>	Illicit drug use (ages 16–25 years) Illicit drug abuse/dependence (ages 16–25 years)	Conduct problems (7–13 years)	Unstandardised regression coefficients with SEs
Leschied <i>et al.</i> <sup>193</sup>	Adult criminality	<ul style="list-style-type: none"> <li>Internalising concerns early childhood (one study)</li> <li>Internalising concerns mid-childhood (five studies)</li> <li>Internalising concerns adolescence (seven studies)</li> <li>Externalising concerns early childhood (four studies)</li> <li>Externalising concerns mid-childhood (seven studies)</li> <li>Externalising concerns adolescence (eight studies)</li> </ul>	Random effects meta-analysis effect estimates and 95% CIs. Q-statistic, degrees of freedom, and z-scores

continued

**TABLE 33** Useable outcome measures and predictors of interest (behavioural or mental health) reported by study, and a description of the summary measures reported (*continued*)

Name	Outcomes with useable data	Predictors of interest (BEH or MH)	Summaries reported
Maggs <i>et al.</i> <sup>195</sup>	Weekly alcohol consumption age 16 years Weekly alcohol consumption age 23 years Weekly alcohol consumption age 33 years	<ul style="list-style-type: none"> <li>Internalising behaviour, age 7 years</li> <li>Internalising behaviour, age 11 years</li> <li>Externalising behaviour, age 7 years</li> <li>Externalising behaviour, age 11 years</li> </ul>	Unstandardised regression coefficients and SEs Standardised regression coefficients
Bergman and Andershed <sup>318</sup>	None	N/A	N/A
Fothergill <i>et al.</i> <sup>319</sup>	None	N/A	N/A
Topitzes <i>et al.</i> <sup>320</sup>	None	N/A	N/A
Clark <i>et al.</i> <sup>321</sup>	None	N/A	N/A
Gonzalez <i>et al.</i> <sup>322</sup>	None	N/A	N/A
Huesmann <i>et al.</i> <sup>197</sup>	Adult criminality	Externalising concerns (peer-nominated aggression)	Note: results included in Leschied <i>et al.</i> <sup>193</sup> meta-analysis
Fisher <i>et al.</i> <sup>323</sup>	None	N/A	N/A
Lohman <i>et al.</i> <sup>192</sup>	Victimisation of intimate partner psychological violence (emerging adulthood) Victimisation of intimate partner psychological violence (adulthood) Perpetration of intimate partner psychological violence (emerging adulthood) Perpetration of intimate partner psychological violence (adulthood)	Negative emotionality (adolescence)	Structural equation model standardised coefficients and SEs

BEH, behavioural; MH, mental health; N/A, not applicable.

## Appendix 16 Correlation between baseline and follow-up measures

Cohen *et al.*<sup>61</sup> is the only study that reports baseline measures and change from baseline measures. If we assume that the SD at follow-up is equal to that at baseline,  $sd_0 = sd_1$  then the correlation between the baseline and follow-up measures,  $\rho$ , can be estimated using the reported SD of the mean change from baseline,  $sd_{change}$ :

$$\rho = 1 - \frac{sd_0^2}{sd_{change}^2}. \quad (4)$$

Table 34 shows the estimated correlation for each arm and outcome from Cohen. With the exception of the Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime version (K-SADS-PL) outcome measure, the correlations are around 0.7. The mean correlation across arm and outcome is 0.67, and if K-SADS-PL is omitted it is 0.78. The CBCL is the most common outcome reported in our included studies, and is included in the Kot<sup>112</sup> study for which we need to assume a correlation value. We therefore assumed a correlation of 0.7, which is equal to that estimated from Cohen for the CBCL outcome measure, and also consistent with the average correlation across outcomes and arms.

The SD of the mean change from baseline,  $sd_{change}$ , in Kot<sup>112</sup> can then be estimated using:

$$sd_{change} = \sqrt{sd_0^2 + sd_1^2 - 2\rho sd_0 sd_1}. \quad (5)$$

**TABLE 34** Estimated correlation between baseline and follow-up measures in Cohen *et al.*<sup>102</sup>

Outcome measure	Arm	Estimated correlation
K-SADS-PL	Control	0.068789
K-SADS-PL	Experimental	0.329201
RI	Control	0.710567
RI	Experimental	0.8861
CDI	Control	0.752705
CDI	Experimental	0.908028
SCARED	Control	0.715252
SCARED	Experimental	0.887174
CBCL	Control	0.701066
CBCL	Experimental	0.692337

CDI, child depression inventory; RI, reaction index; SCARED, Screen for Child-Related Emotional Disorders.



## Appendix 17 The additivity assumption for the Child Behaviour Checklist

The additivity assumption is that the relative effect of interventions on the CBCL-Total can be considered the sum of the relative effects on the CBCL-Internalising and CBCL-Externalising on the SMD scale. McFarlane *et al.*<sup>115</sup> (under 5 years and 6–18 years), and Kot<sup>112</sup> report all of CBCL-Internalising, CBCL-Externalising, and CBCL-Total, which makes it possible to explore whether or not the results of these studies are consistent with the additivity assumption. We estimated two separate models: model 1 (M1): SMD for CBCL-Total is independent of the SMD for CBCL-Internalising and CBCL-Externalising; model 2 (M2): SMD for CBCL-Total is the sum of the SMD for CBCL-Internalising and the SMD for CBCL-Externalising.

The posterior mean residual deviance for M1 was 17.9 compared with 15.3 for model M2, compared with 18 data points. This suggests that both models fit adequately, with a better fit under the additive assumption. The Deviance Information Criterion<sup>186</sup> was 35.8 for model M1 compared with 30.2 for model M2, again suggesting that the additive model is the most parsimonious.

The results from the McFarlane *et al.*<sup>115</sup> (< 5 years and 6–18 years) and Kot<sup>112</sup> studies are therefore consistent with the additivity assumption



## Appendix 18 Network meta-analysis model

Let  $y_{i,k}$  be the mean change from baseline (Cohen *et al.*,<sup>61</sup> Kot<sup>12</sup>) and mean at follow-up (all other studies), for outcome and study combination  $i$ , and arm  $k$ , with corresponding SE,  $se_{i,k}$ . A normal likelihood is assumed:

$$y_{i,k} \sim N(m_{i,k}, se_{i,k}^2), \quad (6)$$

with mean  $m_{i,k} = \theta_{i,k} S_{i,pooled}$  where  $\theta_{i,k}$  is the standardised mean and  $S_{i,pooled}$  the pooled SD across arm for each outcome and study combination  $i$ . We put the model on the standardised mean scale

$$\theta_{i,k} = \begin{cases} \mu_i & k = 1 \\ \mu_i + \delta_{i,k} & k = 2, 3, \dots \end{cases} \quad (7)$$

where  $\mu_i$  is a nuisance parameter representing the arm 1 standardised mean, and  $\delta_{i,k}$  the SMD for arm  $k$  relative to arm 1 for outcome and study combination  $i$ . The  $\delta_{i,k}$  have a hierarchical model reflecting the belief that the different outcomes of a different type are 'similar' but not identical in their relative effectiveness:

$$\delta_{i,k} \sim \begin{cases} N(d_{t_{i,k},MH} - d_{t_{i,1},MH}, \sigma_{out}^2) & \text{if } i \text{ is mental health (MH) outcome} \\ N(d_{t_{i,k},BEH} - d_{t_{i,1},BEH}, \sigma_{out}^2) & \text{if } i \text{ is behavioural (BEH) outcome} \end{cases} \quad (8)$$

where  $t_{i,k}$  indicates which intervention type (or target) was used on arm  $k$  for outcome and study combination  $i$ .  $d_{t,MH}$  is the pooled mean SMD for intervention type  $t$  relative to intervention type 1 on mental health outcomes, and  $d_{t,BEH}$  is the pooled mean SMD for intervention  $t$  relative to intervention 1 on behavioural outcomes. The difference ( $d_{t_{i,k},MH} - d_{t_{i,1},MH}$ ) ensures that the right comparison across intervention types (or targets) is made for each study. A fixed-effects NMA model is used for the intervention effects  $d_{t,MH}$  and  $d_{t,BEH}$  owing to a lack of data to estimate a random-effects NMA model (we have only one or two studies for each pairwise comparisons).

Under the additivity assumption, studies reporting the CBCL-Total, which is a sum of a mental health and a behavioural outcome plus some other components, are assumed to have an intervention effect of:  $d_{t,MH} + d_{t,BEH}$ . This allows us to use Cohen *et al.*'s and Lieberman *et al.*'s studies,<sup>61,92,114</sup> which have mental health outcomes directly informing  $d_{t,MH}$ , to estimate  $d_{t,BEH}$  indirectly using the CBCL-Total composite outcome.

$d_{1,MH} = d_{1,BEH} = 0$ . Flat-normal(0,10000) priors are given to the intervention effects  $d_{t,MH}$  and  $d_{t,BEH}$  (for  $t > 1$ ), and a half-normal(0,100) prior given for the between outcomes within study SD,  $\sigma_{out}$ .





## Appendix 19 WinBUGS code for intervention types for the primary analysis: randomised controlled trials only

```

model{
    # *** PROGRAM STARTS
    for(i in 1:Narmout){
        # LOOP THROUGH STUDIES
        mu[i] ~ dnorm(0,.0001) # vague priors for all trial baselines
        for (k in 1:narms[i]) { # LOOP THROUGH ARMS
            prec[i,k] <- pow(se[i,k],-2) # set precisions
            y[i,k] ~ dnorm(mean[i,k],prec[i,k]) # Normal likelihood
            mean[i,k]<- theta[i,k]*sd.pooled[i] #Transform to standardised scale
            theta[i,k] <- mu[i] + delta[i,k] #Model on SMD's
            delta[i,k]~dnorm(md[i,k],prec.out) #Hierarchical model over outcomes
            md[i,k]<-d[t[i,k],type[i]] - d[t[i,1],type[i]]#NMA Model
#Deviance contribution
            dev[i,k] <- (y[i,k]-mean[i,k])*(y[i,k]-mean[i,k])*prec[i,k]
        }
        # residual deviance contribution, trial i
        resdev[i] <- sum(dev[i,1:narms[i]])
    }

    for (i in (Narmout+1):(Narmout+Nd)){
        prec[i,2]<-pow(se[i,2],-2)
        y[i,2]~dnorm(delta[i,2], prec[i,2])
        delta[i,2]~dnorm(md[i,2],prec.out) #Hierarchical model over outcomes

        md[i,2]<-d[t[i,2],type[i]] - d[t[i,1],type[i]]
#Deviance contribution, trial i
        resdev[i] <- (y[i,2]-delta[i,2])*(y[i,2]-delta[i,2])*prec[i,2]
    }

    totesdev <- sum(resdev[]) #Total Residual Deviance

    d[1,1]<-0
    d[1,2]<-0

    # vague priors for treatment effects
    for (k in 2:nt){
        d[k,1] ~ dnorm(0,.0001)
        d[k,2] ~ dnorm(0,.0001)
    }

    prec.out<-pow(sd.out,-2)
    sd.out~dnorm(0,.01)(0,)

    for (k in 1:nt.MH){
        best.MH[k]<- equals(rank(d[,1],k),1) #Smaller values good
    }
}

```

```

for (r in 1:nt.MH){
  prank.MH[k,r]<-equals(rank(d[,1],k),r) #count when k is ranked r
}
}

for (k in 1:nt.BEH){
  d.rank[k]<-d[k,2]
  best.BEH[k]<- equals(rank(d.rank[],k),1) #Smaller values good
  for (r in 1:nt.BEH){
    prank.BEH[k,r]<-equals(rank(d.rank[],k),r)#count when k is ranked r
  }
}

for (c in 1:(nt.MH-1)){for (k in (c+1):nt.MH){
  smd.MH[c,k]<- d[k,1] - d[c,1] # All pairwise SMDs
}
}

for (c in 1:(nt.BEH-1)){for (k in (c+1):nt.BEH){
  smd.BEH[c,k]<- d[k,2] - d[c,2]
}
}
}
dum<-s[1]
}

#DATA
list(Narmout=15,Nd=3,nt.MH=8, nt.BEH=5, nt=8)

s[] narms[]      t[,1]   t[,2]   t[,3]   type[]  y[,1]   se[,1]  y[,2]   se[,2]  y[,3]   se[,3]
      sd.pooled[]
1 3    1      2     3     1     11.030  1.255   7.290   0.929   11.290  1.412   9.343166844
1 3    1      2     3     2     14.960  1.702   18.310  2.003   12.790  1.097   12.37689479
2 2    1      4     NA     1     37.8    1.648   39.9    1.966   NA      NA      12.95662604
2 2    1      4     NA     2     37.8    1.731   39.6    1.895   NA      NA      12.9942714
3 2    1      4     NA     1     57.2    1.263   56.9    1.250   NA      NA      10.05012438
3 2    1      4     NA     2     45.5    1.438   48      1.388   NA      NA      11.30176977
4 2    4      5     NA     1     51.590  2.277   48.070  1.881   NA      NA      8.859909706
4 2    4      5     NA     2     58.590  3.210   49.790  2.161   NA      NA      11.61019595
6 2    7      8     NA     1     -2.44   0.753   -1.03   0.502   NA      NA      8.810326421
6 2    7      8     NA     1     -7.16   1.690   -1.66   1.180   NA      NA      18.45026993
6 2    7      8     NA     1     -6.66   1.573   -1.53   1.081   NA      NA      17.13600378
6 2    7      8     NA     1     -3.31   0.435   -1.68   0.416   NA      NA      2.663710434
7 2    4      6     NA     1     6.710   0.843   4.420   0.477   NA      NA      3.702017468
8 2    6      7     NA     1     -2.000  0.260   -1.930  0.259   NA      NA      1.246386596
8 2    6      7     NA     2     1.160   0.183   1.600   0.151   NA      NA      0.799522585
9 2    4      5     NA     2     NA      NA      -0.63   0.204   NA      NA      NA
9 2    4      5     NA     2     NA      NA      -0.66   0.31377551   NA      NA      NA
9 2    4      5     NA     2     NA      NA      -0.57   0.301020408   NA      NA      NA
END

#INITS
#chain 1
list(mu=c(0, 0, 0, 0, 0, 0, 0,0,0,0, 0, 0, 0, 0, 0), sd.out=1,
d=structure(.Data=c(NA,NA, -1,-1, 0,0, -1,-1, 0,0,
-1,-1, 0,0, -1,-1),.Dim=c(8,2)))

```

```
#chain 2
list(mu=c(-1, 1, 2, -1, -2, -3, -1,0,-2,0, -1, -3, 1, -5, 0), sd.out=0.5,
d=structure(.Data=c(NA,NA, 1,0, 0,0, 1,0, -1,-2,
0,-0.5, 0.7,1, -0.1,0),.Dim=c(8,2)))
```



## Appendix 20 Estimate of intervention costs

Costs assumed for health-care professionals are taken from the 2013 PSSRU database, summarised in *Table 35*.

Intervention costs are estimated for each study arm, as described below and summarised in *Table 36*.

### Cohen *et al.*:<sup>61</sup> psychotherapy and psychoeducation arm

Child and parent each received 45-minute individual therapy sessions for eight sessions.

The cost of the intervention is 6 hours of a social worker's (adults) time and 6 hours of a social worker's (children) time. The total cost is £1872 per family. No training costs were required in the trial, as this was standard care; however, in settings in which this is not standard care, training would be required.

### Lieberman *et al.*:<sup>92,114</sup> psychotherapy arm

Mother and child received weekly sessions of approximately 1 hour's duration conducted over 50 weeks. On average, 32.09 sessions were attended (SE = 2.53); however, we determined cost for the full 50 sessions. The clinicians had a master's degree and PhD-level training in clinical psychology. The cost of this intervention is 50 hours of a clinical psychologist. The total cost is £6700.

### Lieberman *et al.*:<sup>92,114</sup> advocacy arm

Mothers receive monthly 30-minute telephone calls and additional face-to-face meetings where scheduled when clinically indicated. At least 12 telephone calls were made. On the assumption that each mother received 12 telephone calls from a family support worker, the cost for the intervention will be £294 per mother. Note that ad hoc therapy was given to those on the advocacy arm, which we have not included costs for on the assumption that ad hoc therapy would be standard practice.

**TABLE 35** Hourly cost of health and social services professionals. Costs are from the 2013 PSSRU database ([www.pssru.ac.uk/project-pages/unit-costs/2013/](http://www.pssru.ac.uk/project-pages/unit-costs/2013/))

Trainer: community based	Cost
Clinical psychologist	£59 per hour; £134 per hour of client contact
Social worker (adult)	£40 per hour; £55 per hour of client-related work; £159 per hour of face-to-face contact
Social worker (children)	£40 per hour; £55 per hour of client-related work; £153 per hour of face-to-face contact
Social work assistant	£30 per hour
Nurse, day ward	£34 per hour; £84 per hour of patient contact
Home care worker	£19 per weekday hour, face-to-face: £24
Family support worker	£29 per hour; £49 per hour of client-related work
NHS community occupational therapist	£30 per hour

TABLE 36 Estimated study arm costs

Study ID	Intervention type	Child costs	Parent costs	Dyad costs	Total
Cohen <sup>61</sup>	Psychotherapy + Psychoeducational (type = PTh+PEd, target = C + P + D)	8 x 45-minute sessions with master's-level social worker = 6 x 153 = 918	8 x 45-minute sessions with master's-level social worker = 6 x 159 = 954	Already included in parent and child costs	£1872
	CBT (type = CBT, target = C + P + D)	8 x 45-minute sessions with master's-level social worker = 6 x 153 = 918	8 x 45-minute sessions with master's-level social worker = 6 x 159 = 954	Already included in parent and child costs	£1872
Lieberman <sup>92,114</sup>	Psychotherapy (type = PTh, target = D)			50 x 60-minute sessions with clinical psychologist = 50 x 134 = £6700	£6700
	Advocacy (type = Adv, target = P + C or D)			12 x 30-minute telephone calls from a family support worker = 6 x 49 = £249	£249
McWhirter <sup>84</sup>	CBT (type = CBT, target = C + P + D)			2.75 hours in total per week for 5 weeks in group sizes approx. 4.5 = 3 hours of a clinical psychologist plus 3 hours of a trainee (assumed 0.5 x cost of clinical psychologist) = 3 x 1.5 x 134 = £603	£603
	Psychotherapy (type = PTh, target = C+P+D)			As for CBT arm	£603
Jouriles 2009 <sup>90</sup>	Advocacy + Parenting skills training (type = Adv + Pting, target = C + P)			20 x 60min with clinical psychologist and trainee (assumed 0.5 x cost of clinical psychologist) = 20 x 1.5 x 134 = £4020	£4020
	Advocacy (type = Adv, target = P)		20 x 30-minute telephone calls from a family support worker = 10 x 49 = £490		£490

Study ID	Intervention type	Child costs	Parent costs	Dyad costs	Total
Jouriles 2001 <sup>91</sup>	Advocacy+Parenting skills training (type = Adv + Pting, target = C + P)			6x 1.5-hour sessions with clinical psychologist and trainee (assumed 0.5 x cost of clinical psychologist) = 6 x 1.5 x 1.5 x 134 = £1809	£1809
	Advocacy (type = Adv, target = P)		Monthly telephone calls. Assumed as for Jouriles <i>et al.</i> <sup>90</sup> 20 x 30-minute telephone calls from a family support worker = 10 x 49 = £490		£490
McFarlane <sup>15</sup>	Advocacy (type = Adv, target = P)		4 x 20 minutes with nurse = 1.33 x 84 = £112		£112
	None				£0
Graham-Bermann <sup>98</sup>	Psychoeducational (type = PEd, target = C+P)			10 sessions assumed 60 minutes in groups on average of six with a clinical psychologist and a trainee (assumed 0.5 x cost of clinical psychologist) for mother and child separately = 10 x 2 x 1.5 x 134/6 = £670	£670
	Psychoeducational (type = PEd, target = C)			As for child component of child + mother arm = 670/2 = £335	£335
	None			Assumed = £0	£0

Adv, advocacy; C, child only; D, dyad; P, parent only; Pting, parenting skills training.



### **McWhirter:<sup>94</sup> both intervention arms, cognitive-behavioural and psychotherapy arms**

Both intervention arms consisted of a women-only group, a children-only group and a joint family session. The women-only group lasted for 60 minutes, the children-only group lasted for 45 minutes and the family group lasted for 60 minutes. Each group consisted of four to five participants with a master's-level licensed counsellor and a trainee counsellor in each session. The families attended five sessions. The total cost of the intervention is  $(2.75 \times 5)/4.5 = 3$  hours of a clinical psychologist's time plus 3 hours of a trainee psychologist's time (assumed  $0.5 \times$  cost of clinical psychologist). This is a total of £603 per family.

### **Jouriles *et al.*:<sup>90</sup> advocacy plus parenting skills training arm**

The intervention was delivered by a trained therapist accompanied by one or more undergraduate or postgraduate students. The trained therapist was either a master's-level clinician or a clinical psychologist. The therapists primarily worked with the mothers, children being present in some of the sessions with the student acting as a child mentor. In practice the role of the student may be taken by a trainee (assumed  $0.5 \times$  cost of clinical psychologist). Families received an average of 20 home-based treatment sessions at a total cost of £4020 plus the cost of the student per family.

### **Jouriles *et al.*:<sup>90</sup> control arm**

Contact with the families in the control group were contacted monthly in person or by telephone.

Families averaged 3.7 contacts with project staff in which a safety issue was addressed, emotional support was provided, a referral was requested or offered, some form of instrumental support was provided, or the family received some combination of support services.

Among the 34 families in the comparison condition, 11 received some form of child mental health or parenting services outside our project over the course of the 20-month period following shelter departure. The cost of this intervention is 20 contacts (or attempted contacts). Assuming that a family support worker makes the contact and that each contact takes approximately 30 minutes, the cost is £490 per family.

### **Jouriles *et al.*:<sup>90,91</sup> intervention condition**

Families received sessions from a trained therapist and a postgraduate or an undergraduate student. Families received six weekly sessions lasting between 1 and 1.5 hours in their own home.

With the assumption each session lasts for 1.5 hours, and that the trainee cost  $0.5 \times$  the costs of a clinical psychologist, the total cost of the intervention is  $6 \times 1.5 \times 1.5 \times 134 = £1809$  per family.

### **Jouriles *et al.*:<sup>91</sup> advocacy arm**

Families were contacted once a month in person or by telephone. Families were encouraged to make use of the resources available to them; however, they received no clinical services throughout the study programme. The cost is assumed to be the same as for the control arm Jouriles *et al.*<sup>90</sup>

### **McFarlane *et al.*:<sup>115</sup> referral card arm**

Mothers received a wallet-sized card detailing information about local women's shelters and safe places, and sources of intimate partner violence services. This is assumed to be standard practice and, therefore, intervention cost is assumed to be £0.

### **McFarlane *et al.*:<sup>115</sup> advocacy arm**

Mothers were offered nurse case management. This consisted of supportive care, anticipatory guidance and guided referrals. The case management session lasted 20 minutes and 4 sessions were available. The cost of this intervention is 80 minutes of a nurse's time = £112 per mother.

### **Graham-Bermann *et al.*:<sup>98</sup> psychoeducational intervention for parent and child arm**

Child component: graduate students were paired with trained therapists to give group therapy to 6- to 12-year-olds in groups of five to seven. The intervention lasted for 10 weeks; the length of a session was not reported. Attendance ranged from 5 to 10 sessions (mean 7.35 sessions).

Parent component: 10-week programme given by a graduate student paired with a trained therapist.

Making the assumption that the sessions were 60 minutes long, group sizes were similar for mothers, and that a trainee costs 0.5 × a clinical psychologist, the total cost is  $10 \times 2 \times 1.5 \times 134/6 = £670$  per family.

### **Graham-Bermann *et al.*:<sup>98</sup> psychoeducational intervention for child arm**

This intervention is similar to the child component of the parent and child intervention above. The number of sessions received was a similar.

The cost of this intervention is the same as the child component of the child and parent intervention above;  $£670/2 = £335$  per family.

### **Graham-Bermann *et al.*:<sup>98</sup> no intervention arm**

The cost of this arm is assumed to be £0.



## Appendix 21 Summary of identified longitudinal studies and decision to include or exclude in analyses

Here we describe the longitudinal studies identified in our review, and in *Table 37* we detail the useable outcome measures and predictors of interest (behavioural or mental health) reported by study, together with a description of the summary measures reported.

**TABLE 37** Useable outcome measures and predictors of interest (behavioural or mental health) reported by study, and a description of the summary measures reported

Name	Outcomes with useable data	Predictors of interest (BEH or MH)	Summaries reported
Bagwell <i>et al.</i> <sup>316</sup>	None	N/A	N/A
Capaldi and Stoolmiller <sup>194</sup>	Depressive symptoms (17–19 years) Conduct problems Arrests Substance use (broken down into alcohol, tobacco, marijuana, other illicit drugs)	Conduct problems (BEH) and depressive symptoms (MH) at grade 6	Regression coefficients with SEs. Unclear if standardised or unstandardised regression coefficients
Farrington <sup>198</sup>	Convictions (21–40 years)	'Internalising concerns'	Note: results included in the Leschied <i>et al.</i> <sup>193</sup> meta-analysis
Barkley <sup>317</sup>	Arrests in adulthood	'Externalising concerns' (hyperactivity)	Note: results included in the Leschied <i>et al.</i> <sup>193</sup> meta-analysis
Fergusson <i>et al.</i> <sup>191</sup>	Victimisation of domestic violence (24–25 years) Perpetration of domestic violence (24–25 years)	Conduct problems (7–13 years)	Unstandardised and standardised regression coefficients with SEs
Fergusson <i>et al.</i> <sup>191</sup>	Illicit drug use (16–25 years) Illicit drug abuse/dependence (16–25 years)	Conduct problems (7–13 years)	Unstandardised regression coefficients with SEs
Leschied <i>et al.</i> <sup>193</sup>	Adult criminality	Internalising concerns early childhood (one study) Internalising concerns mid-childhood (five studies) Internalising concerns adolescence (seven studies) Externalising concerns early childhood (four studies) Externalising concerns mid-childhood (seven studies) Externalising concerns adolescence (eight studies)	Random effects meta-analysis effect estimates and 95% CIs. Q-statistic, degrees of freedom, and z-scores

continued

**TABLE 37** Useable outcome measures and predictors of interest (behavioural or mental health) reported by study, and a description of the summary measures reported (*continued*)

Name	Outcomes with useable data	Predictors of interest (BEH or MH)	Summaries reported
Maggs <i>et al.</i> <sup>195</sup>	Weekly alcohol consumption, age 16 years	Internalising behaviour, age 7 years	Unstandardised regression coefficients and SEs Standardised regression coefficients
	Weekly alcohol consumption, age 23 years	Internalising behaviour, age 11 years	
	Weekly alcohol consumption, age 33 years	Externalising behaviour, age 7 years	
		Externalising behaviour, age 11 years	
Bergman and Andershed <sup>318</sup>	None	N/A	N/A
Fothergill <i>et al.</i> <sup>319</sup>	None	N/A	N/A
Topitzes <i>et al.</i> <sup>320</sup>	None	N/A	N/A
Clark <i>et al.</i> <sup>321</sup>	None	N/A	N/A
Gonzalez <i>et al.</i> <sup>322</sup>	None	N/A	N/A
Huesmann <i>et al.</i> <sup>197</sup>	Adult criminality	Externalising concerns (peer-nominated aggression)	Note: results included in Leschied <i>et al.</i> <sup>193</sup> meta-analysis
Fisher <i>et al.</i> <sup>323</sup>	None	N/A	N/A
Lohman <i>et al.</i> <sup>192</sup>	Victim of intimate partner psychological violence (emerging adulthood)	Negative emotionality (adolescence)	Structural equation model standardised coefficients and SEs
	Victim of intimate partner psychological violence (adulthood)		
	Perpetration of intimate partner psychological violence (emerging adulthood)		
	Perpetration of intimate partner psychological violence (adulthood)		

BEH, behavioural; MH, mental health; N/A, not applicable.

### Bagwell *et al.*<sup>316</sup>

This study looks at the impact of fifth-grade measures of friendship status, peer rejection and traits on a variety of adult measures after 12 years' follow-up of US school children, including 'trouble with the law' and 'mental health difficulties'. The fifth-grade measures are mainly related to social competency (which we do not have short-term evidence on). The only figures reported that could be useful are:

- the regression co-efficient for 'aggression' as a predictor for 'trouble with the law' ( $\beta = -0.03$ )
- the regression of 'aggression and immaturity' as a predictor for 'mental health difficulties' ( $\beta = 0.01$ ).

Unfortunately, no SEs are reported, so we cannot use these figures. This study is therefore excluded from further analysis.

### Capaldi and Stoolmiller<sup>194</sup>

This is a US cohort of males in a 'poor neighbourhood' at high risk of delinquency. The study looks at the relationship between conduct problems and depressive symptoms in grade 6 as predictors for: conduct problems, depressive symptoms, arrests, self-esteem and substance use (broken down into alcohol, tobacco, marijuana, and other illicit drugs) at grade 12 (age 17–19 years). Multiple regression coefficients and SEs are reported. Predictors were unstandardised except where interaction terms were included; however, it was not clear whether interactions were included in the tables of results. Outcomes were transformed onto an appropriate scale to achieve normality and linearity. This study is included in our analyses.

### Farrington<sup>198</sup>

This study follows a cohort of males in South London from ages 8–40 years linking antisocial behaviour in childhood with convictions in adulthood. Odds ratios of convictions between 21 and 40 years of age are given for individual risk factors, including high neuroticism, unpopular, troublesome, antisocial and vulnerable, and also for various definitions (thresholds on a composite scale) of childhood antisocial behaviour. The results are already included in the meta-analysis conducted by Leschied *et al.*<sup>193</sup> Although it is unclear what inputs have been used in the meta-analysis, these are described as internalising concerns. This study is included in our analyses through inclusion of the meta-analysis by Leschied *et al.*<sup>193</sup>

### Barkley *et al.*<sup>317</sup>

This study follows up a cohort of hyperactive and non-hyperactive US children for 13 years. The focus is mainly on the comparison between hyperactive and non-hyperactive children; however, the authors do report regression coefficients for hard drug use, marijuana/Lysergic acid diethylamide use, and alcohol use, using child conduct problems as a predictor. Neither child nor teen conduct problems were found to have a significant effect on any of these outcomes. Unfortunately, the authors do not provide any SEs for these coefficients, so we cannot use them. This study is, however, included in the meta-analysis conducted by Leschied *et al.*,<sup>193</sup> because it reports the effect of hyperactivity (externalising concern) in childhood on arrests in adulthood. This study is therefore included in our analyses through inclusion of Leschied *et al.*<sup>193</sup>

### Fergusson *et al.*<sup>191</sup>

This study follows a birth cohort in New Zealand until 25 years of age. Multivariate regression coefficients are reported for victimisation and perpetration of domestic violence (24–25 years of age) using conduct problems at 7–13 years of age as a predictor. Results are given both pooled and broken down by sex. In all cases conduct problems at 7–13 years of age has a significant effect on the outcome. Depression and anxiety measures were candidates for inclusion in the regression model, but were eliminated in the model selection process, owing to lack of statistical significance. No regression coefficients are given for these predictors. Regression coefficients are reported unstandardised with SEs and also standardised (without SEs, but these can be derived). Correlations are also given for all potential predictor variables, but without SEs. This study has useful data and is included in our analysis.

### Fergusson *et al.*<sup>191</sup>

This study is based on the same New Zealand birth cohort as Fergusson *et al.*,<sup>191</sup> but reports the relationship between childhood conduct problems (7–13 years of age) as a predictor for illicit drug use and abuse in adulthood (16–25 years of age). Unstandardised regression coefficients are reported together with SEs. Standardised regression coefficients are not given. This study has useful data and is included in our analysis.

### Leschied *et al.*<sup>193</sup>

This study is a meta-analysis of childhood risk factors for adult criminality. Random effects models are fitted for adult criminality, using internalising and externalising concerns in early childhood, mid-childhood, and adolescence as predictors. Effect sizes with CIs are reported, along with Q-statistics, degrees of freedom (df) and z-scores. Unfortunately, this does not allow us to estimate the between study variance parameter,  $\tau^2 = \frac{Q-df}{C}$ , because we do not know the constant C. However, if we assume that each study has equal weight, then we can form an estimate of C, and hence an estimate of  $\tau$ . We note that heterogeneity is substantial, with Q-statistics well in excess of df and p-values < 0.0001 in all cases, except for early childhood externalising concerns as a predictor. There is strong evidence that externalising concerns at all ages are associated with adult criminality, but only weak evidence that internalising concerns (at any age) are associated with adult criminality. This study includes three studies from the longitudinal studies that we identified, two for externalising concerns as a predictor (Barkley *et al.*,<sup>317</sup> Huesmann *et al.*<sup>197</sup>) and one for internalising concerns as a predictor (Farrington<sup>198</sup>). This meta-analysis is used in our analysis.

### Maggs *et al.*<sup>195</sup>

This is a UK cohort study with childhood predictors measured at 7, 11 and 16 years of age, alcohol use outcomes at 16, 23 and 33 years of age, and harmful drinking at 42 years of age. Multiple regression coefficients are given unstandardised with SEs. Standardised coefficients are also given without SEs (although we can derive these). Externalising and internalising behaviour at 7, 11 and 16 years of age are used as predictors for weekly alcohol consumption at 16, 23 and 33 years of age. Logistic regression is used for the binary outcome of lifetime harmful drinking at age 42 years; however, SEs/CIs are not given for our predictors of interest in the final model (since they are non-significant). All results are broken down by sex. These results are useful, and this study is included in the analysis. However, note that the four-item measure of internalising symptoms was created for this study without external validation, and is therefore considered a weak instrument.

### Bergman and Andershed<sup>318</sup>

This is a Swedish cohort study with measures from 10 to 43 years of age (women) and 48 years of age (men). Present logistic regression coefficients are used to predict adult criminal behaviour, using a range of predictors including antisocial behaviour, aggression, hyperactivity, and norm-breaking. No SEs are given, and no coefficients are presented if non-significant. There is insufficient information reported to be of use, and so this study is excluded from our analysis.

### Fothergill *et al.*<sup>319</sup>

This is a US cohort of African Americans with measures at 6, 16, 32 and 42 years of age. A structural equation model was fitted to explore pathways from childhood, adolescent and early adulthood measures to substance use (marijuana and cocaine use) in mid-adulthood. Figures are given with model estimates displayed against each path; however, no SEs are given. Aggressive behaviour at childhood is positively associated with marijuana use in mid-adulthood along each of the pathways linking these two measures, and the same is true for cocaine use. There is insufficient information reported to be of use, and so this study is excluded from our analysis.

**Topitzes *et al.*<sup>320</sup>**

This is a US cohort with measures from 3 up to 24 years of age. A structural equation model is developed for tobacco use and depression in adulthood (22–24 years), including 'socioemotional classroom adjustment' at late elementary school, and 'frustration tolerance' at middle/high school. Low scores on each of these dimensions were positively associated with tobacco smoking and depression in adulthood. Regression coefficients are given, but no SEs. Hierarchical probit models were also fitted to predict daily tobacco smoking, frequent substance use, and those in the top quartile for depression, using socioemotional classroom adjustment (grades 3–6) and frustration tolerance (grades 6–7) along with other predictors. Regression coefficients are given, but no SEs. There is insufficient information for these results to be of use, and so this study is excluded from our analysis.

**Clark *et al.*<sup>321</sup>**

This study, which reports results from the same cohort study as reported by Maggs *et al.*,<sup>195</sup> is concerned with childhood predictors of psychopathology in adolescence, early adulthood, and mid-life. Psychopathology is not a focal outcome of interest in our analysis, and we therefore exclude this study from our analysis.

**Gonzalez *et al.*<sup>322</sup>**

This study reports results from a Canadian cohort of children aged 4–16 years at recruitment and aged 21–35 years at follow-up. Logistic regressions are presented with depression in adulthood as an outcome. A range of childhood predictors are used (sex, functional limitation, school performance, severe physical abuse, sexual abuse), but none of them fits our inclusion criteria of mental health or behavioural measures in childhood. We therefore exclude this study from our analysis.

**Huessmann *et al.*<sup>197</sup>**

This study reports results from a US cohort with childhood measures at 8 years as predictors for adult criminality measures. Outcome measures include whether ever arrested (males only), number of arrests by 30 years of age, arrested for violent crime (males only), total violence score for all arrests by 30 years of age. T-tests are reported to compare mean childhood aggression scores for those with and without the outcome, and a SMD reported as an effect size. Logistic regressions are presented, giving regression coefficients, but no SEs. This study is included in the meta-analysis conducted by Leschied *et al.*,<sup>193</sup> where peer reported childhood aggression is treated as an 'externalising concern' predictor, although it is unclear which criminality outcome(s) and effect estimates were used by Leschied *et al.*<sup>193</sup> This study is included in our analyses through inclusion of Leschied *et al.*<sup>193</sup>

**Fisher *et al.*<sup>323</sup>**

This study reports results from a New Zealand birth cohort who were followed up to 38 year of age. The study looks at the relationship between psychotic symptoms at 11 years of age as a predictor for a diagnosis of schizophrenia, PTSD and suicide attempts by 38 years of age. Strong relationships were observed. Psychotic symptoms is not an outcome that is reported in our short-term studies, and so this study does not fit our inclusion criteria. This study is, therefore, excluded from our analysis.



**Lohman *et al.*<sup>192</sup>**

This study reports results from a US cohort with measures in adolescence (ages 14, 15 and 18 years), as predictors for victimisation and perpetration of intimate partner psychological violence in emerging adulthood (ages 19, 21 and 23 years), and adulthood (ages 27, 29 and 31 years). The authors developed a structural equation model. There were high correlations between victimisation and perpetration of psychological violence at each time point. Standardised coefficients and SEs are reported on the path diagram for the final model fitted. Standardised regression coefficients and SEs are also given for all predictors (regardless of whether they were included in the final model or not). Adolescent measures used as predictors that are relevant to our analysis are: antisocial behaviour, low self-esteem, and negative emotionality. Of these, only negative emotionality was included in the final structural equation model, showing a positive relationship with both victimisation and perpetration of psychological violence in both emerging adulthood and adulthood. This study provides useful inputs and is therefore included in our analysis.

## Appendix 22 List of websites searched for relevant grey literature

1. Advance: supporting women against domestic violence.
2. Against Violence and Abuse.
3. Barnardo's.
4. Bielefeld Academic Search Engine.
5. Blackpool Council Domestic Abuse Team/Blackpool Advocacy Service.
6. Brave.
7. British Association for Adoption and Fostering.
8. Broken Rainbow UK.
9. Children and Family Court Advisory and Support Service (CAFCASS) and CAFCASS Cymru.
10. Centre for Social Justice.
11. Cheshire West and Cheshire Domestic Abuse Partnership.
12. Child Welfare Information Gateway.
13. Citizens Advice Bureau.
14. Co-ordinated Action Against Domestic Abuse.
15. DART-Europe E-theses Portal.
16. Dissertation Express.
17. Domestic abuse counselling service.
18. Domestic Violence & Abuse Service, South & West (South Hams, Teignbridge, West Devon).
19. Domestic Violence Intervention Project.
20. EMBASE.
21. EthOS: electronic theses online service.
22. Everyman Project.
23. Families Need Fathers.
24. Family Action.
25. Family Planning Association: the sexual health charity.
26. Futures Without Violence.
27. Girl Guiding UK.
28. Hampton Trust.
29. Home-Start.
30. Index to Theses.
31. London Development Centre for Mental Health.
32. ManKind Initiative.
33. Mozaic Women's Well-Being Project.
34. National Centre for Domestic Violence.
35. National Centre for Social Research.
36. National Children's Bureau.
37. National Federation of Women's Institutes.
38. New Zealand Domestic Violence Clearing House.
39. Next Link.
40. North Devon Against Domestic Abuse (North Devon & Torrridge).
41. Northern Rock Foundation.
42. OnePlusOne.
43. Project for Advocacy, Counselling and Education (PACE) LGBT mental health.
44. Parents against child sexual exploitation (PACE).
45. ProQuest Dissertations & Theses Database.
46. Refuge.
47. Relate.

48. Research in Practice.
49. Respect.
50. Save the Children.
51. Scottish Women's Aid.
52. Standing Together Against Domestic Violence.
53. Stop Abuse for Everyone (East, Exeter & Mid Devon).
54. Stop child abuse – support the children's charity – the NSPCC.
55. Sure Start.
56. Survive South Gloucestershire and Bristol.
57. Temper! Domestic Violence.
58. Thames Valley Partnership.
59. The Chrysalis Project.
60. The Economic and Social Research Council.
61. The Families Without Fear project.
62. University College London Institute for Child Health.
63. University of Bristol library catalogue.
64. Victim Support.
65. Victim Support Northern Ireland.
66. The Virginia Tech Library systems Thesis Search.
67. Wave Trust.
68. Web of Science.
69. Welsh Women's Aid.
70. Women's Aid.
71. Women's Aid Antrim, Ballymena, Carrickfergus, Larne and Newtownabbey.
72. Women's Aid Ireland.
73. Women's Aid Federation Northern Ireland.

## Appendix 23 Papers obtained through grey literature search

TABLE 38 Papers obtained through grey literature search

N	Author	Title	Type of document	Inclusion decision
1	Sharp <i>et al.</i> <sup>225</sup>	We Thought They Didn't See: Cedar in Scotland – Children and Mothers Experiencing Domestic Abuse Recovery	Evaluation report	Included
2	Enright <sup>227</sup>	Domestic Violence Interventions for Children. Pilot Group Report	Evaluation report	Included
3	Nolas <i>et al.</i> , <sup>212</sup> AVA	Evaluation of the Community Group Programme for Children and Young People: Final Report	Evaluation report	Included
4	London Borough of Hounslow <sup>223</sup>	Let's Talk Groups for Women and Children Affected by Domestic Violence	Evaluation report	Included
5	Debbonaire <sup>226</sup>	An Evaluation of the Sutton Stronger Families Group Programme for Children Exposed to Domestic Violence	Evaluation report	Included
6	Levell <sup>217</sup>	Young Survivors Project Work. End of Project Report	Evaluation report	Included
7	McManus <i>et al.</i> <sup>210</sup>	Domestic Abuse Recovery: The Evaluation of a New Approach Focused on Strengthening the Mother–Child Relationship	Conference presentation	Included
8	McConnell <i>et al.</i> <sup>209</sup>	Caring Dads: Safer Children	Evaluation report	Included
9	Hill <i>et al.</i> <sup>208</sup>	Feeling Safe Groups	Professionals leaflet	Included
10	Home-Start Westminster <sup>220</sup>	Home-Start Westminster. Annual report 2011/12. Art Start groups	Annual report	Included
11	Barraclough <sup>204</sup>	Assessment and Intervention for Young Children Exposed to Domestic Violence	Report to the Department of Health	Included
12	Ley <sup>221</sup>	An Investigation of Individual and Group Support Provided for Young People Who Have Witnessed Domestic Abuse. A particular focus on a new intervention: LINX, developing guidelines for practice	PhD thesis	Included
13	Donovan <i>et al.</i> <sup>206</sup>	Evaluation of Early Intervention Models for Change in Domestic Violence: Northern Rock Foundation Domestic Abuse Intervention Project, 2004–2009	Evaluation report	Included
14	Domestic Violence Intervention Project <sup>207</sup>	Increasing the Safety of Women, Children and Young People Affected by Domestic Abuse	Annual report	Included
15	Domestic Violence Intervention Project <sup>218</sup>	DVIP's Services. Out time group	Professionals leaflet	Included
16	McNamee Consulting <sup>222</sup>	Empowering Mothers – Supporting Children WAFNI You and Me, Mum programme evaluation	Evaluation report	Included
17	Chignell <sup>205</sup>	Back on Track. Report 2009–2012	Evaluation report	Included

continued

TABLE 38 Papers obtained through grey literature search (continued)

N	Author	Title	Type of document	Inclusion decision
18	Thiara <sup>216</sup>	'Talking to My Mum': Developing: Communication Between Children and Mothers Affected by Domestic Violence	Conference presentation	Included
19	Against Domestic Violence in Devon (ADVA) <sup>203</sup>	ADVA: Against Domestic Violence and abuse in Devon. Community Perpetrator Programme REPAIR	Evaluation report	Included
20	Curtis <sup>219</sup>	The Effects of Exposure to Domestic Abuse on Adolescents' Relationship Attitudes and Reasoning of Abusive Behaviour, and an Evaluation of an Intervention Programme for Those who are Displaying Perpetrator Behaviours	PhD thesis	Included
21	Walker <sup>214</sup>	The New Beginnings Domestic Abuse Project. 2012–2013 Annual Report	Annual report	Included
22	Sue Penna Associates <sup>224</sup>	Children's Recovery Toolkit: Evaluation of pilot	Evaluation report	Included
23	Sue Penna Associates <sup>213</sup>	Children and Young People's Recovery Toolkit	Professionals leaflet	Included
24	North Down and Ards Women's Aid <sup>215</sup>	Annual report 2013–14	Annual report	Included
25	McNamee <sup>211</sup>	Bonding families – Transforming Lives	Evaluation report	Included
26	Portman Early Childhood Centre	The Talking Without Fear Project	Programme leaflet	Included
27	Humphreys <i>et al.</i> <sup>49</sup>	'Talking to My Mum': Developing Communication Between Mothers and Children in the Aftermath of Domestic Violence	Qualitative paper in peer-reviewed journal	Excluded. Non-grey literature
28	Hemsing (not stated)	Grey literature references: children exposed to domestic violence	Reference list	Excluded. References used for search
29	McManus <i>et al.</i> <sup>228</sup>	Recovering from Domestic Abuse, Strengthening the Mother–Child Relationship: Mothers' and Children's Perspectives of a New Intervention	Qualitative paper in peer-reviewed journal	Excluded. Non-grey literature
30	The Early Intervention Foundation	Domestic violence and abuse review	Report for the Early Intervention Foundation	Excluded. Non-child health targeted
31	Women's Aid Federation Northern Ireland	Helping Hands Pilot	Evaluation report of Women's Aid Federation Northern Ireland and Department of Education	Excluded. Target population with unclear proportion of children experiencing or experienced DVA
32	Templeton, Galvani	Think Family Safely: Enhancing the Response of Alcohol Services to Domestic Abuse and Families	External evaluation final report	Excluded. Non-child health targeted
33	Sue Penna Associates	The Susie Project. Supporting and empowering women into education and employment	Evaluation report	Excluded. Non-child health targeted
34	Sue Penna Associates	Cornwall Women's Refuge Trust Parenting report	Draft report	Excluded. Non-child health targeted
35	Chignell H	Unveiling the shroud of silence . . . Domestic abuse amongst young women	Newspaper article	Excluded. Non-child targeted

TABLE 38 Papers obtained through grey literature search (continued)

N	Author	Title	Type of document	Inclusion decision
36	Holliday and Houghton	SWAAY residential education therapy. An overview of SWAAY	Conference presentation	Excluded. Target population with < 50% proportion of children experiencing or experienced DVA
37	NSPCC	New Orleans to Glasgow: A new intervention for maltreated infants	Programme description	Excluded. Target population with < 50% proportion of children experiencing or experienced DVA
38	DVIP	The Yuva Programme for young people who are using violence/abuse	Programme referral guidance	Excluded. Target population with an unclear proportion of children experiencing or experienced DVA
39	Lloyd <i>et al.</i>	Monitoring and evaluation of Intensive Intervention Projects for young people	Research report	Excluded. Target population with an unclear proportion of children experiencing or experienced DVA
40	Ofsted	Edging away from care – how services successfully prevent young people entering care	Report	Excluded. Non-DVA targeted
41	Cuthbert <i>et al.</i>	All babies count: prevention and protection for vulnerable babies	Review	Excluded. Non-DVA targeted
42	Wave Trust	Conception to age 2 – the age of opportunity. Addendum to the Government's vision for the Foundation Years: 'Supporting Families in the Foundation Years'	Primary prevention of DVA	Excluded. Non-targeted intervention
43	King and Gieve	Evaluation of a pilot to deliver forensic mental health interventions to young people at risk of violent offending	Evaluation report	Exclusion. Target population with an unclear proportion of children experiencing or experienced DVA
44	Mill and Church	Safe Learning: How to support the educational needs of children and young people affected by domestic violence		Excluded. Non-child health targeted
45	Coy <i>et al.</i>	Into the Foreground: an Evaluation of the Jacana Parenting Programme	Evaluation report	Excluded. Non-child targeted
46	Jeyasingham	Evaluation of Trafford Children and Young People Service Targeted Mental Health in Schools Project. Final Report February	Evaluation report	Excluded. Primarily a general mental health programme. Target population with an unclear proportion of children experiencing or experienced DVA.
47	Hosking and Walsh	The WAVE Report 2005. Violence and what to do about it	Annual report	Excluded. Non-UK based

continued

TABLE 38 Papers obtained through grey literature search (continued)

N	Author	Title	Type of document	Inclusion decision
48	McInnes and Newman	Domestic Abuse In North Somerset: A Scoping Exercise	Report	Excluded. Non-child health targeted
49	West Sussex Daphne research project team	Does witnessing domestic violence determine a child or young person's pattern of offending and are available interventions effective in reducing these patterns?	Report	Excluded. Non-intervention targeted
50	Sapouna <i>et al.</i>	What works to reduce reoffending: a summary of the evidence justice analytical services Scottish Government	Review	Excluded. Non-DVA targeted
51	Howard <i>et al.</i>	Women's Aid Annual Survey 2013. Domestic violence services	Report	Excluded. Non-child health targeted
52	Humphreys <i>et al.</i>	Literature Review: Better Outcomes for Children and Young People Experiencing Domestic Abuse – Directions for Good Practice	Literature review	Excluded. Best Practice Recommendations
53	Farmer and Callan	Beyond violence. Breaking cycles of domestic abuse	Policy report for the Centre for Social Justice	Excluded. Non-child health targeted
54	Matczak <i>et al.</i>	Review of Domestic Violence policies in England and Wales	Literature review	Excluded. Non-child health targeted
55	Hogan and O'Reilly	Listening to children: Children's stories of domestic violence	Report	Excluded. Non-child-health targeted
56	CAADA	In plain sight: Effective help for children exposed to domestic abuse. CAADA's Second National Policy Report	Policy report	Excluded. Non-child-health targeted
57	Barron	Kidspeak: Giving children and young people a voice on domestic violence	Report of consultation with young people	Excluded. Non-intervention targeted
58	Institute of Public Care	What works in promoting good outcomes for children in need who experience domestic violence?	Review for commissioners of Children in Need services in Wales	Excluded. Non-child health targeted
59	Smith <i>et al.</i>	Consultation with children and young people with experience of domestic abuse on Scottish government national domestic abuse delivery group draft proposals	Report on consultation with children and young people	Excluded. Non-child health targeted
60	Radford <i>et al.</i> <sup>50</sup>	Meeting the Needs of Children Living with Domestic Abuse in London	Research report	Excluded. Review of DVA services for children in London
61	Healy and Bell	Assessing the risks to children from domestic violence. Findings from two pilot studies using the Barnardo's Domestic Violence Risk Assessment Model	Briefing paper	Excluded. Non-intervention targeted
62	Mullender	Tackling Domestic Violence: providing support for children who have witnessed domestic violence	Home Office Development and practice report	Excluded. Best practice recommendations

AVA, Against Violence and Abuse; CAADA, Co-ordination Action Against Domestic Abuse; DVIP, Domestic Violence Intervention Project.

## Appendix 24 Programme descriptions

### Psychoeducation

Caring Dads: Safer Children is a group work programme for domestically abusive fathers.<sup>209</sup> Based on the Caring Dads: Safer Children model originating from Canada,<sup>324</sup> the programme uses the men's role as a father to motivate them to change their behaviour and thereby reduce the risk of further harm to their children through DVA. During the 17 weeks in which the father attends the programme, other workers try to engage with the father's children and his partner to provide them with information about the programme and to monitor risk. They also evaluate impact of the intervention on child's well-being.

LINX is a 12-week group intervention aimed at young people (12–18 years) who have witnessed DVA and are displaying behavioural problems.<sup>221</sup> The programme is targeted at empathy awareness through experiential learning. The LINX is looking to improve the behaviour of young offenders through helping them to come to terms with the DVA they experienced.

Stephen's Place Children's Centre, which is a branch of the Domestic Violence Intervention Project, offered a 10-week 'Our Time Group' for children aged 5–13 years.<sup>218</sup> The groups covered issues such as: what is domestic abuse, how to keep safe, how to identify safe people, how to manage emotions, how to manage anger and how to have fun as a child. A parent/caregiver was able to speak to the facilitators if she or he was worried about anything or had any questions. This was a one-off project that was delivered in 2011 and no subsequent groups were run thereafter owing to lack of funding.

The Back on Track intervention uses an approach that is young people centred with parental engagement and support.<sup>205</sup> The programme works with adolescents (11–17 years) who have witnessed DVA but are no longer living with the perpetrator. It includes 10 sessions of group work with facilitators. Multiagency facilitators are provided by DVA service Survive South Gloucestershire and Bristol, National Children's Charity Barnado's and the NHS-based CAMHS.

The CGP provides a 12-week group intervention for children and young people (aged 4–21 years) in recovery from DVA, alongside a concurrent group work programme for their mothers.<sup>212</sup> The CGP is based on the community group work treatment programme originally developed in Ontario, Canada, as a part of an integrated community response to DVA.<sup>229</sup> This was initially introduced and evaluated in the London Borough of Sutton<sup>226</sup> and is now being rolled out across London and Scotland.<sup>212,225</sup> The CGP is fully manualised and delivered by multiprofessional facilitators trained at the Against Violence and Abuse (AVA) course ([www.avaproject.org.uk/](http://www.avaproject.org.uk/)). A core part of the training is the introduction of quarterly networking sessions for all those group facilitators and co-ordinators that have been trained. They got to choose the themes according to need. The original Canadian CGP manuals have been modified by AVA to address cultural differences.<sup>325,326</sup> In addition, a new manual just for teenagers, which was lacking in the original model, was developed.<sup>327</sup> AVA also wrote a new manual for co-ordinators and a frequently asked questions document based on any question that was ever raised on training and beyond. The CGP was implemented in different localities under different names: 'The Sutton Stronger Families Groups Programme for Children Exposed to Domestic Violence' in London Borough of Sutton, 'The Community Group Programme for Children and Young People' in 32 London boroughs, 'Domestic Violence Interventions for Children' in East Essex, 'Let's Talk Groups for Women and Children Affected by Domestic Violence' in London Borough of Hounslow, 'The Talking without Fear' Project in Westminster, and 'Cedar' in Scotland.

The DART intervention focuses on enhancing the mother–child relationship. It is designed as a group work programme for children (aged 7–11 years) that runs for 10 weeks.<sup>210</sup> The programme is based on research undertaken by Humphreys *et al.*<sup>49</sup> Unlike the majority of DVA interventions with mothers and children, half of the sessions involve both the mother and her child. During these joint sessions, mothers and children



participate in a range of activities that aim to strengthen their relationship, promote communication about the abuse and support one another through their recovery. The rest of the sessions are spent in their separate peer groups.

The Feeling Safe project for children (5–18 years) affected by DVA and their non-abusive mothers offers a series of creative workshops for children running alongside a dedicated mothers group.<sup>208</sup> The group offers the children and mothers the opportunity and space to express their feelings and views, to share experiences, and to allow them to learn to manage the legitimate anger and trauma that follows DVA. Personal skills are learned that will help them to form and maintain positive future relationships.

The Link programme is a 12-week concurrent group programme for women and children who are experiencing DVA.<sup>211</sup> An option of individual work and/or parent/child couple work is also provided, depending upon the assessed therapeutic needs of individuals. The group work and individual programmes aim to highlight the potential impact that witnessing DVA has had upon the child. Mothers are supported to examine and understand their children's needs and experiences. The programme encourages and supports positive parenting. This will, in turn, contribute to the safety and physical and emotional well-being of the children. Work with children encourages them to share their experiences in a safe and supportive environment. It is anticipated that, with time, they will come to understand that the abuse was neither their fault nor their responsibility, and that they are not alone.

Transformers is a 10-week course for 8- to 12-year-olds who have experienced DVA.<sup>215</sup> It aims to help children to explore their thoughts and feelings on DVA and to equip them with safety planning for their future. The emphasis is made on learning through fun. Activities include painting, drawing, making masks, using clay and making puppets.

## Psychotherapy

Art Start is an art therapy project run by the Home-Start Westminster charity.<sup>220</sup> It is aimed at children who have witnessed the abuse of a parent/carer and who have behavioural and/or emotional difficulties. During weekly art therapy sessions children are encouraged to express themselves through the use of art materials such as paint, pastels, pencils or clay.

The Changing Places programme addresses the abusive behaviours of young men (14–21 years) who had been exposed to DVA and were subsequently displaying signs of abusive behaviour themselves.<sup>219</sup> This is a 16-week group intervention that uses the following cognitive-behavioural approaches: behaviour modification, consisting of positive and negative reinforcement; behaviour therapy, which includes relaxation training; social skills training using instruction, modelling, role-play and coaching; self-instructional training, using cognitive restructuring; problem-solving training; rational emotive therapy; cognitive therapy; and schema focus therapy. Targeted behaviours/skills include attitudes to abusive behaviour, perspective taking, improved decision making, and problem-solving skills, emotional awareness, self-awareness, self-control, confidence and self-esteem.

The Refuge charity runs a unique programme that helps children of mothers residing in Refuge safe houses to come to terms with the violence they have either witnessed or experienced themselves. The programme includes individual debriefing/play sessions for pre-school children, individual child-mother focused support sessions for mothers and empathy groups for the children.<sup>204</sup> Individual support sessions for pre-school children are based on the 'focused therapeutic interview protocol'. Its aim is to provide the child with the first opportunity to begin a spontaneous and complete exploration of their subjective experience of the trauma with an unbiased adult who is a mental health professional. Mothers of the children are provided with support both for managing the effects of DVA on themselves and to elicit effective parenting to support their children. The psychological approach adopted in individual sessions with mothers is based on feminist brief solution-focused therapy. Women are supported to find ways of managing their children's

behaviour and to explore effective ways of parenting in keeping with their own culture and beliefs. In addition, support is offered to the mothers in facilitating their child's development and in managing some of the behavioural effects of delayed language development. The structure and content of the empathy groups for children is primarily based on the Committee for Children's 'Second Step: A Violence Prevention Curriculum' for pre-school children. Each session focuses on a new empathy skill and consolidation of those learnt in previous sessions. Each session is based on a photograph accompanied by a story with discussion questions. Additional activities include stories, role-plays, songs, puppetry and physical exercise and games.

## Psychotherapy and psychoeducation

The Recovery Toolkit for Children and Young People (CYP) programme runs for 8 weeks and was developed as a complement to the Recovery Toolkit for parents.<sup>213</sup> First, a parent starts a 12-week Recovery Toolkit programme; at week 4 a child starts the Recovery Toolkit CYP, so that both finish their concurrent groups together with a conjoint session at the end. This programme is informed by trauma-focused CBT and psychoeducational work that comes from psychiatry. The overall aims of the groups are to help children and young people (10–15 years) come to terms with their experiences and to develop positive lifestyle and coping strategies. Psychoeducational work aims to provide the participants with information on managing their anxiety and challenging behaviour by not blaming them but teaching them about what causes anxiety and stress, and teaching them techniques such as relaxation and stress management to cope with their emotions, and teaching them problem-solving strategies. Week 5 looks at the parent–child relationship and has specific homework about the relationship with the non-abusive parent. The adult toolkit is aimed at the non-abusive parent and it can be run with women and men.

Kaleidoscope is part of the New Beginnings Project at Home-Start, Shepway.<sup>214</sup> The 8-week programme for children aged between 5 and 11 years is held three times each year. Two of the groups are for children aged 8–11 and one group is for children aged 5–7 years. Each session lasts for 1.5 hours and is facilitated by a play therapist and play worker. Parents bring and collect their children, and thus are actively involved. Places are offered pending an assessment, which includes taking a family history and an account of the child's difficulties. There is a maximum of six children in each group. Parents are often supported by other members of the New Beginnings Project (e.g. individual support), attending The Freedom Programme, as well as two further support groups, Power to Change and Butterflies, focusing on developing assertiveness and self-esteem. The aim of Kaleidoscope is to create a safe and consistent space so that children feel empowered to express themselves, and to help them form positive relationships. Each session begins with a simple meal. The purpose of this is twofold. First, for some children who have witnessed domestic abuse, mealtimes have been a particular source of stress and the aim is to give them a positive experience. Second, it serves as an informal setting for children to develop their social skills (e.g. listening to and speaking with others). Following this there is a focus on a particular topic: friendship, sharing worries, working together, families, bullying and sharing in general. This is supported through a range of activities, including the use of stories, puppets, art and craft to facilitate group discussion. The remainder of the session is spent in therapeutic play, which provides an opportunity for the children and young people to express themselves through a range of play therapy and creative resources.

## Advocacy and psychoeducation with a whole family

A whole-family approach is a key feature of the community perpetrator programme REPAIR established in three areas of Devon.<sup>203</sup> There are two distinct elements for men on the programme: the assessment and individual sessions, and the group-work sessions. Assessment/individual sessions comprise 10 1-hour sessions, facilitated by either a male or female worker. Much of this work is cognitive behavioural, focusing on motivation, responsibility, safety and acknowledgement. The 30 sessions of group work are loosely

divided into five six-session modules. The themes for each module are described in terms of abusive behaviour and appropriate behaviour.

The Women's Service aims to have regular contact with the perpetrator's current or ex-partner to enable REPAIR to assess risk; to gauge the man's minimisation, motivation and commitment; to emphasise that the man's violence and abuse is entirely his responsibility; to provide the woman with information about legal and support services; to provide the woman with supportive befriending; and to manage her expectations about the speed or certainty of change. The Women's Service does not follow a set programme in terms of the number of sessions. Each service is based on individual need and a period of intervention to which the woman agrees. A Woman's Support Worker provides advocacy, practical and psychological support.

For children (5–18 years), the aims of the group intervention are to enable them to perform better at school; to reduce the social, educational and emotional impact of DVA; and to lessen the behavioural problems and educational underachievement. The focus of the groups is predominantly on safety, risk assessment, the development of resilience, appropriate coping strategies and support networks and the processing difficult feelings. Another important element is the support of the Children and Young People's Worker who routinely makes contact with the school, liaising closely with the classroom teacher.

The Early Intervention Model for Victims/Survivors and their Children in Gateshead and Cumbria aims to provide holistic, early intervention, specialist services to victims/survivors of DVA, their children and perpetrators.<sup>206</sup> The objectives of the intervention are to improve the health and well-being of victims/survivors and their children, increase perpetrator accountability and promote multiagency working by focusing on early intervention at crisis. The programme provides tailored, one-to-one support to victims/survivors, both one-to-one and group work for children and voluntary perpetrator programmes. Independent Domestic Violence Advisors (IDVAs) undertake a risk assessment, offer safety planning and undertake an assessment of need, the outcome of which results in referrals to, and acting as an advocate with, appropriate partner agencies. Contact with victims/survivors varies in frequency and type depending on need. IDVAs also provide emotional and practical support and undertake regular reviews of victims/survivors' risk. The programme's work with children is described as 'seeing either the children's worker or the play therapist or both'.

### Advocacy and psychoeducation with mothers

The 'You and Me, Mum' programme was developed by Women's Aid Federation Northern Ireland to help mothers understand how living with a perpetrator of DVA can affect children.<sup>222</sup> It does not work directly with children. The aim of the intervention is to provide a 10-week self-help programme, which will empower, support and develop further understanding of women's role as mothers, in addressing the needs of children and young people who have lived with DVA. The programme is delivered to groups of mothers by two facilitators, one with expertise in working with mothers, and the other with expertise in working with children. All women on the programme are engaged with a one-to-one support worker within the relevant Women's Aid local group to ensure that their practical needs are met (advocacy).

### Psychotherapy for children and advocacy for parents

Stephen's Place Children's Centre offers a free specialist therapy on a weekly basis for up to 5 months.<sup>207</sup> The therapy is child centred and tailored to meet the needs and age of the child (3–17 years). For younger children, a play therapy model is offered. Older children and young people are provided with an opportunity to explore and process their experiences using a range of materials and approaches including creative arts. The weekly therapy sessions lasts for 50 minutes, and before a child or young person can start therapy, an assessment needs to be completed with their main parent/carer. This is to ensure that therapy is a suitable option to meet the child/young person's needs at that point in time. The therapy

service offers children and young people a safe, consistent, confidential space to be able to work through their difficult experiences and often muddled feelings. It also provides a source of support for children who are currently going through life changes. Rather than having to explain what is troubling them, children may use play and young people may use creative arts and/or talking to communicate. This helps to ensure that children and young people are going at their own pace and communicating at their own level, without feeling interrogated or threatened. All therapeutic work is facilitated by psychologists with specialist knowledge in relation to supporting children whose lives have been impacted by DVA. Children's mothers receive individual advocacy support.

## Guided self-help

The 'Talking to My Mum' intervention focuses on repairing communication between mothers and children.<sup>216</sup> The programme, originally developed by Humphreys *et al.*,<sup>49</sup> consists of a self-guided workbook designed for two different age groups (5–8 years and 9–16 years) which mothers and children work through together with the support of a specialist DVA worker. The authors highlight the 'conspiracy of silence' that surrounds DVA. This silence is perpetuated by children's and mothers' mutual concerns to protect one another, and by mothers' often mistaken belief that children are unaware of the abuse. Completion of the workbook facilitates quality time spent together, with the aim of building child's self-esteem and enhanced communication between mothers and children. There are two versions of the workbook, one for parents and children living in refuges, and another one for those remaining in their own homes.



## Appendix 25 List of professionals attending one or both expert stakeholder meetings

**TABLE 39** List of professionals attending one or both expert stakeholder meetings

First name	Surname	Organisation
Amanda	McIntyre	Stefanou Foundation
Dermot	Brady	London Probation Service
Emma	Pearce	CAMHS/Nottingham County Council
Fiona	Duncan	Gender-based nurse advisor
Fiona	Dwyer	Violence Against Women And Girls strategy manager, Tower Hamlets
Joanne	Hay	NSPCC
Helen	Chigwell	Survive
Hetti	Nanton	Joanna Simpson Foundation
Ian	Langley	Hampshire County Council
Jade	Levell	Standing Together
Joanna	Sharpen	AVA
Nicola	McConnell	NSPCC
Pam	Miller	NSPCC
Ravi	Thiara	University of Warwick
Rebecca	Vagi	Standing Together
Sally	Jackson	Standing Together
Sam	Wheeler	NSPCC
Sue	Penna	Sue Penna Associates
Suzie	Westmacott	Cardiff Women's Aid
Thienhuong	Nguyen	Women's Aid



## Appendix 26 Concepts of success for domestic violence and abuse interventions identified by stakeholder groups

TABLE 40 Concepts for success for DVA interventions identified by stakeholder groups

Outcome domain	Reporter		
	Professionals	Mothers	Young people
Symptoms and disorders	<ul style="list-style-type: none"> <li>• Perceptions of safety and feelings of fear</li> <li>• Improvements in global psychological health</li> <li>• Reduction in symptoms of anxiety and depression</li> <li>• Reduced levels of stress</li> <li>• Reduction in suicidal ideation</li> <li>• Reduced behaviour problems</li> <li>• Incidence of self-harm</li> <li>• Incidence of eating disorders</li> <li>• Risky behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• Perceptions of safety and feelings of fear</li> <li>• Knowledge of how to access help in the future</li> </ul>	
Function/impairment	<ul style="list-style-type: none"> <li>• School readiness</li> <li>• School attainment and attendance</li> <li>• Rates of employment</li> <li>• Increased self-efficacy</li> <li>• An enhanced ability to cope when things go wrong/resilience</li> <li>• The availability of positive coping strategies</li> <li>• A child's understanding of their strengths, weaknesses and personal attributes</li> <li>• Empathy</li> <li>• Social well-being</li> <li>• Ability to participate in everyday life</li> </ul>		<ul style="list-style-type: none"> <li>• Coping/resilience</li> </ul>
Wellbeing	<ul style="list-style-type: none"> <li>• Happiness</li> <li>• The extent to which children feel empowered</li> <li>• Increased self-esteem</li> <li>• Increased understanding of DVA</li> <li>• Understanding of who is responsible for DVA</li> </ul>	<ul style="list-style-type: none"> <li>• Happiness</li> <li>• The extent to which children feel empowered</li> <li>• Ability for self-expression</li> </ul>	<ul style="list-style-type: none"> <li>• Attitudes to violence</li> <li>• Self-concept</li> </ul>
Interpersonal and environmental contexts	<ul style="list-style-type: none"> <li>• Quality of attachment</li> <li>• Enhanced quality of parent-child relationship</li> <li>• The quality of parent-child communication</li> <li>• Quality of children's social networks</li> <li>• Homelessness</li> <li>• Missing from home</li> <li>• Looked after status/involvement with children's services</li> <li>• Reduced perpetration/victimisation of abuse in young people's own relationships</li> </ul>		<ul style="list-style-type: none"> <li>• Quality of interpersonal attachments</li> <li>• Experience of DVA in own relationships</li> </ul>







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**EME  
HS&DR  
HTA  
PGfAR  
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