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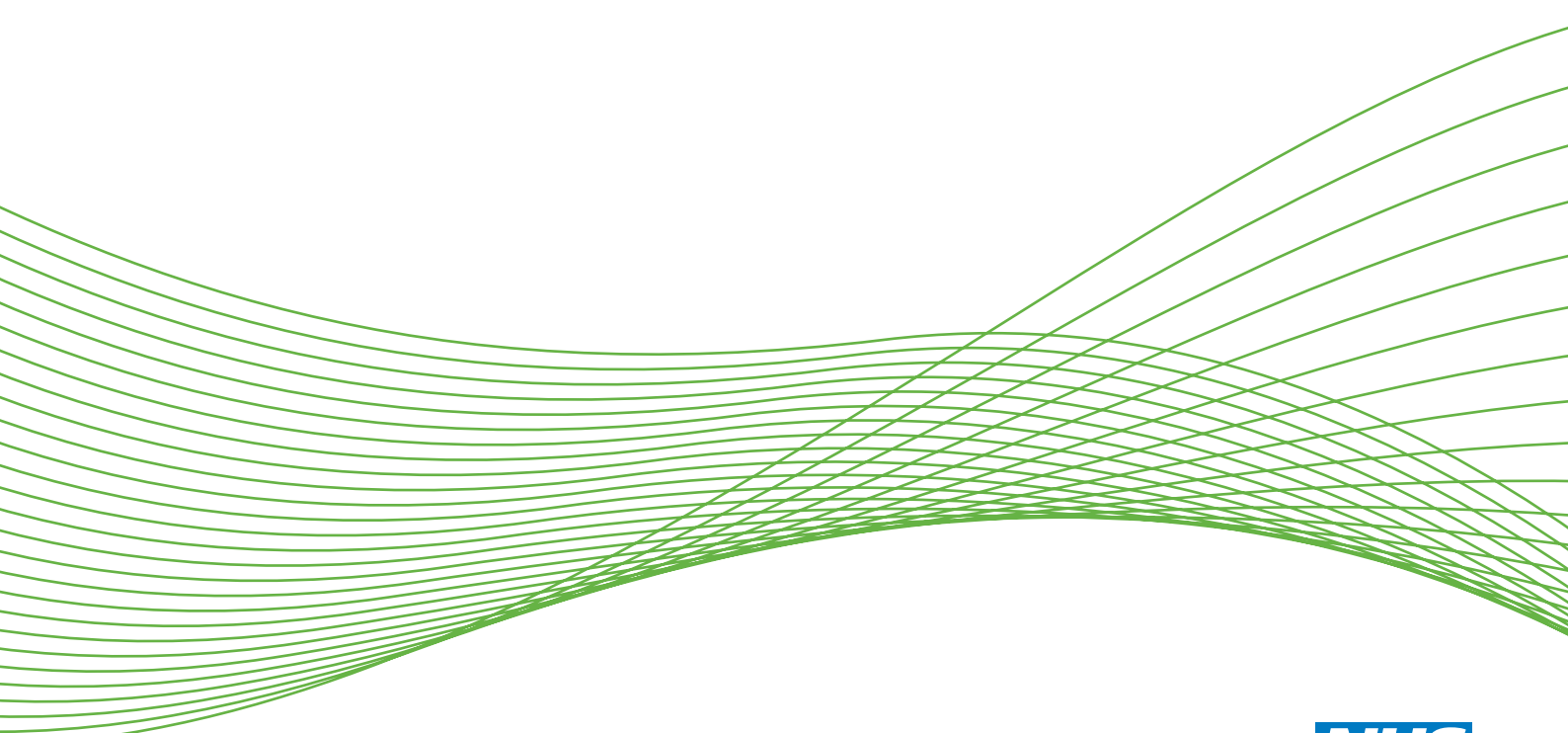
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## The effectiveness, acceptability and cost-effectiveness of psychosocial interventions for maltreated children and adolescents: an evidence synthesis

*Geraldine Macdonald, Nuala Livingstone, Jennifer Hanratty, Claire McCartan, Richard Cotmore, Maria Cary, Danya Glaser, Sarah Byford, Nicky J Welton, Tania Bosqui, Lucy Bowes, Suzanne Audrey, Gill Mezey, Helen L Fisher, Wendy Riches and Rachel Churchill*



**National Institute for  
Health Research**



# The effectiveness, acceptability and cost-effectiveness of psychosocial interventions for maltreated children and adolescents: an evidence synthesis

Geraldine Macdonald,<sup>1,2\*</sup> Nuala Livingstone,<sup>1</sup>  
Jennifer Hanratty,<sup>1</sup> Claire McCartan,<sup>1</sup>  
Richard Cotmore,<sup>3</sup> Maria Cary,<sup>4</sup> Danya Glaser,<sup>5</sup>  
Sarah Byford,<sup>4</sup> Nicky J Welton,<sup>6</sup> Tania Bosqui,<sup>1</sup>  
Lucy Bowes,<sup>7</sup> Suzanne Audrey,<sup>6</sup> Gill Mezey,<sup>8</sup>  
Helen L Fisher,<sup>4</sup> Wendy Riches<sup>9</sup> and Rachel Churchill<sup>6</sup>

<sup>1</sup>Institute of Child Care Research, School of Sociology, Social Policy and Social Work, Queen's University Belfast, Belfast, UK

<sup>2</sup>School for Policy Studies, University of Bristol, Bristol, UK

<sup>3</sup>Evaluation Department, National Society for the Prevention of Cruelty to Children (NSPCC), London, UK

<sup>4</sup>King's Health Economics, King's College London, London, UK

<sup>5</sup>University College London and Great Ormond Street Hospital for Sick Children, London, UK

<sup>6</sup>School of Social and Community Medicine, University of Bristol, Bristol, UK

<sup>7</sup>Department of Experimental Psychology, University of Oxford, Oxford, UK

<sup>8</sup>Population Health Sciences and Education, St George's, University of London, London, UK

<sup>9</sup>Riches and Ullman Limited Liability Partnership, London, UK

\*Corresponding author

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# Abstract

## The effectiveness, acceptability and cost-effectiveness of psychosocial interventions for maltreated children and adolescents: an evidence synthesis

Geraldine Macdonald,<sup>1,2\*</sup> Nuala Livingstone,<sup>1</sup> Jennifer Hanratty,<sup>1</sup> Claire McCartan,<sup>1</sup> Richard Cotmore,<sup>3</sup> Maria Cary,<sup>4</sup> Danya Glaser,<sup>5</sup> Sarah Byford,<sup>4</sup> Nicky J Welton,<sup>6</sup> Tania Bosqui,<sup>1</sup> Lucy Bowes,<sup>7</sup> Suzanne Audrey,<sup>6</sup> Gill Mezey,<sup>8</sup> Helen L Fisher,<sup>4</sup> Wendy Riches<sup>9</sup> and Rachel Churchill<sup>6</sup>

<sup>1</sup>Institute of Child Care Research, School of Sociology, Social Policy and Social Work, Queen's University Belfast, Belfast, UK

<sup>2</sup>School for Policy Studies, University of Bristol, Bristol, UK

<sup>3</sup>Evaluation Department, National Society for the Prevention of Cruelty to Children (NSPCC), London, UK

<sup>4</sup>King's Health Economics, King's College London, London, UK

<sup>5</sup>University College London and Great Ormond Street Hospital for Sick Children, London, UK

<sup>6</sup>School of Social and Community Medicine, University of Bristol, Bristol, UK

<sup>7</sup>Department of Experimental Psychology, University of Oxford, Oxford, UK

<sup>8</sup>Population Health Sciences and Education, St George's, University of London, London, UK

<sup>9</sup>Riches and Ullman Limited Liability Partnership, London, UK

\*Corresponding author [Geraldine.Macdonald@bristol.ac.uk](mailto:Geraldine.Macdonald@bristol.ac.uk)

**Background:** Child maltreatment is a substantial social problem that affects large numbers of children and young people in the UK, resulting in a range of significant short- and long-term psychosocial problems.

**Objectives:** To synthesise evidence of the effectiveness, cost-effectiveness and acceptability of interventions addressing the adverse consequences of child maltreatment.

**Study design:** For effectiveness, we included any controlled study. Other study designs were considered for economic decision modelling. For acceptability, we included any study that asked participants for their views.

**Participants:** Children and young people up to 24 years 11 months, who had experienced maltreatment before the age of 17 years 11 months.

**Interventions:** Any psychosocial intervention provided in any setting aiming to address the consequences of maltreatment.

**Main outcome measures:** Psychological distress [particularly post-traumatic stress disorder (PTSD), depression and anxiety, and self-harm], behaviour, social functioning, quality of life and acceptability.

**Methods:** Young Persons and Professional Advisory Groups guided the project, which was conducted in accordance with Cochrane Collaboration and NHS Centre for Reviews and Dissemination guidance. Departures from the published protocol were recorded and explained. Meta-analyses and cost-effectiveness analyses of available data were undertaken where possible.

**Results:** We identified 198 effectiveness studies (including 62 randomised trials); six economic evaluations (five using trial data and one decision-analytic model); and 73 studies investigating treatment acceptability. Pooled data on cognitive-behavioural therapy (CBT) for sexual abuse suggested post-treatment reductions in PTSD [standardised mean difference (SMD)  $-0.44$  (95% CI  $-4.43$  to  $-1.53$ )], depression [mean difference  $-2.83$  (95% CI  $-4.53$  to  $-1.13$ )] and anxiety [SMD  $-0.23$  (95% CI  $-0.03$  to  $-0.42$ )]. No differences were observed for post-treatment sexualised behaviour, externalising behaviour, behaviour management skills of parents, or parental support to the child. Findings from attachment-focused interventions suggested improvements in secure attachment [odds ratio  $0.14$  (95% CI  $0.03$  to  $0.70$ )] and reductions in disorganised behaviour [SMD  $0.23$  (95% CI  $0.13$  to  $0.42$ )], but no differences in avoidant attachment or externalising behaviour. Few studies addressed the role of caregivers, or the impact of the therapist-child relationship. Economic evaluations suffered methodological limitations and provided conflicting results. As a result, decision-analytic modelling was not possible, but cost-effectiveness analysis using effectiveness data from meta-analyses was undertaken for the most promising intervention: CBT for sexual abuse. Analyses of the cost-effectiveness of CBT were limited by the lack of cost data beyond the cost of CBT itself.

**Conclusions:** It is not possible to draw firm conclusions about which interventions are effective for children with different maltreatment profiles, which are of no benefit or are harmful, and which factors encourage people to seek therapy, accept the offer of therapy and actively engage with therapy. Little is known about the cost-effectiveness of alternative interventions.

**Limitations:** Studies were largely conducted outside the UK. The heterogeneity of outcomes and measures seriously impacted on the ability to conduct meta-analyses.

**Future work:** Studies are needed that assess the effectiveness of interventions within a UK context, which address the wider effects of maltreatment, as well as specific clinical outcomes.

**Study registration:** This study is registered as PROSPERO CRD42013003889.

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# List of abbreviations

AAT	animal-assisted therapy	CPP	child–parent psychotherapy
ABC	Attachment and Biobehavioral Catch-up	CPS	Child Protective Services
ANCOVA	analysis of covariance	CPSS	Child PTSD Symptom Scale
ARRM	AIDS Risk Reduction Model	CROPS	Child Report of Post-traumatic Symptoms
BDI	Beck Depression Inventory	CS	controlled study
BDI-II	Beck Depression Inventory-Second Edition	CSA	child sexual abuse
BPC	Behavior Problem Checklist	CSATP	Child Sexual Abuse Treatment Program
BSI	Brief Symptom Inventory	CSBI	Child Sexual Behavior Inventory
CAMHS	Child and Adolescent Mental Health Services	CSI	Coping Scales Inventory
CAPI	Child Abuse Potential Inventory	CTQ	Childhood Trauma Questionnaire
CBCL	Child Behavior Checklist	CTS	Conflict Tactics Scale
CBCT	Cognitively-Based Compassion Training	DDP	dyadic developmental psychotherapy
CBT	cognitive–behavioural therapy	DERS	Difficulties with Emotion Regulation Scale
CCI	Child Conflict Index	DISC	Diagnostic Interview Schedule for Children
CCT	child-centred therapy	DPICS	Dyadic Parent–Child Interaction Coding System
CD	conduct disorder	DSM-IV	<i>Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition</i>
CDI	Children’s Depression Inventory	ECBI	Eyberg Child Behavior Inventory
CDIrl	child-directed interaction	ECI	Early Childhood Inventory
CEAC	cost-effectiveness acceptability curve	EFT	emotional freedom techniques
CEI	Child Evaluation Inventory	EMDR	eye movement desensitisation and reprocessing
CES-D	Center for Epidemiologic Studies Depression Scale	FAD	Family Assessment Device
CGAS	Children’s Global Assessment Scale	FAF	Family Assessment Form
CI	confidence interval	FASM	Functional Assessment of Self-Mutilation
CITES-R	Children’s Impact of Traumatic Events Scale-Revised	FES	Family Environment Scale
CONSORT	Consolidated Standards of Reporting Trials	FHF	Fostering Healthy Futures
COS	controlled observational study	FT	family therapy
CPC-CBT	combined parent–child cognitive–behavioural therapy	GE	gradual exposure

GP	general practitioner	MTFC-A	Multidimensional Treatment Foster Care for Adolescents
HFD	human figure drawing	MTFC-P	Multidimensional Treatment Foster Care Program for Preschoolers
HoNOSCA	Health of the Nation Outcome Scales for Children and Adolescents	NML-2	Nijmegen Motivation List 2
HTA	Health Technology Assessment	NSPCC	National Society for the Prevention of Cruelty to Children
ICER	incremental cost-effectiveness ratio	OR	odds ratio
ICU-P	Inventory of Callous and Unemotional Traits-Parent Report	OSIQ-R	Offer Self-Image Questionnaire-Revised
IES	Impact of Events Scale	PAD	Parent Attachment Diary
IFA	Independent Fostering Agency	PAG	Professional Advisory Group
IGT	individual and group therapy	PCIT	parent-child interaction therapy
IPP	infant-parent psychotherapy	PDI	parent-directed interaction
IPV	intimate partner violence	PENN	Penn Inventory for Posttraumatic Stress Disorder
IT	individual therapy	PERQ	Parent Emotional Reaction Questionnaire
ITT	intention to treat	PFR	Promoting First Relationships
IY	Incredible Years Program	PHV	psychoeducational home visitation
KGAS	Kiddie Global Assessment Scale	PI	Project Image
KSADS	Kiddie Schedule for Schizophrenia and Affective Disorders	PPI	psychoeducational parenting intervention
KSADS-PL	Kiddie Schedule for Schizophrenia and Affective Disorders, Present and Lifetime Version	PPP	Pre-School-Parent Psychotherapy
LMM	linear mixed model	PPQ	Parenting Practices Questionnaire
LSI	Life Story Intervention	PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
LSS	Life Satisfaction Survey	PROPS	Parent Report of Post-traumatic Symptoms
<i>M</i>	mean	PSI	Parenting Stress Index
m-CBT	modified CBT intervention	PTSD	post-traumatic stress disorder
MANOVA	multivariate analysis of variance	QALY	quality-adjusted life-year
MASTR	motivation-adaptive skills-trauma resolution	QEx	quasi-experimental
MD	mean difference	RBI	relationship-based intervention
MFGT	multifamily group therapy	RCMAS	Revised Children's Manifest Anxiety Scale
MMP	MOSAC Massage Programme	RCT	randomised controlled trial
MST	multisystemic therapy	RET	reminiscing and emotion training
MST-CAN	Multisystemic Therapy for Child Abuse and Neglect		
MTFC	Multidimensional Treatment Foster Care		

RFC	regular foster care	SSRS	Social Skills Rating System
RPT	resilient peer treatment	STAI	State-Trait Anxiety Inventory
RRFT	Risk Reduction through Family Therapy	STAI-C	State-Trait Anxiety Inventory for Children
RSES	Rosenberg Self-Esteem Scale	STEP-TEEN	Systematic Training for Effective Parenting of Teens
RTC	residential treatment centre	STI	sexually transmitted infection
SAFE	Sexual Abuse Fear Evaluation scale	T3	time 3
SAS-CBT	Sexual Abuse-Specific Cognitive–Behavioural therapy	TAU	treatment as usual
SCARED	Screen for Child Anxiety Related Disorders	TF-CBT	trauma-focused cognitive behavioural therapy
SD	standard deviation	TN	trauma narrative
SDQ	Strengths and Difficulties Questionnaire	TRF	Teacher Report Form
SEI	Self-Esteem Inventory	TSC-40	Trauma Symptom Checklist-40
SES	socioeconomic status	TSCC	Trauma Symptom Checklist for Children
SESBI-R	Sutter–Eyberg Student Behaviour Inventory-Revised	TSCYC	Trauma Symptom Checklist for Young Children
SFI	Self-Report Family Inventory	TV/PCIT	time-variable parent–child interaction therapy
SIT	stress inoculation therapy	UC	usual care
SMD	standardised mean difference	UCLA-A	University of California Los Angeles PTSD Index for DSM-IV (Adolescent version)
SOF	Summary of Findings	VOYPIC	Voice of Young People in Care
S/PCIT	standard parent–child interaction therapy	YSR	Youth Self-Report
SPPC	Self-Perception Profile for Children		
SSRI	selective serotonin reuptake inhibitor		



# Plain English summary

## What is the problem?

Sometimes children and adolescents are abused or neglected by their parents or other adults. Abuse can be physical, sexual or emotional, and many children experience more than one kind of abuse and neglect. We call this child maltreatment. Maltreated children often do less well than other children. For example, they often have poorer physical and mental health, do less well at school and find it more difficult to establish good relationships than non-maltreated children. Psychosocial interventions are ways of helping that do not rely on drugs, for example counselling, group work and music therapy.

## What did we do?

We looked internationally for studies that assessed the effectiveness of psychosocial interventions for maltreated children and whether or not they were worth paying for (cost-effectiveness). We also looked for studies that told us something about what children and other people (such as parents or therapists) think about psychosocial interventions. We completed our searches in June 2014.

## What did we find?

We found 198 effectiveness studies, six cost-effectiveness studies and 73 studies that told us what people thought of these interventions. Only a handful of these were conducted in the UK and most did not address outcomes that young people told us were important.

## What does this mean?

Although we found some interventions that *might* improve outcomes for maltreated children, these need to be independently evaluated in the UK. Importantly, many of the interventions currently offered to children in the UK have not been evaluated at all. Our report makes recommendations for improving services for maltreated children, including looked-after children, and for future research.



# Scientific summary

## Background

Maltreatment adversely affects the development of children and young people in many ways, often over long periods of time, and the cumulative consequences of maltreatment in early childhood can be particularly devastating. Despite recent emphasis on the importance of early intervention, significant numbers of children continue to have to deal with the realities of physical and emotional abuse, physical and emotional neglect, and sexual abuse, whether directly, or indirectly as the result of witnessing the abuse of others.

## Objectives

We set out to answer the following questions:

- i. What interventions are effective, for which children, with what maltreatment profiles, in what circumstances?
- ii. When two or more interventions might be appropriate, which is most likely to be effective?
- iii. Which interventions are of no benefit or may result in harm?
- iv. Which interventions are most accessible and acceptable to carers, children and young people?
- v. What do we know about the economic benefits of interventions, and the potential value of undertaking future research?

## Project oversight

The research team were experienced in systematic review methodology and provided topic expertise in this field. A Steering Group was also established to guide the overall direction of the project and to ensure that a range of expertise and perspectives were properly considered.

The evidence synthesis work was planned in accordance with guidance provided by the Centre for Reviews and Dissemination and The Cochrane Collaboration. A protocol for the review consistent with Preferred Reporting Items for Systematic Reviews and Meta-Analyses criteria was developed and agreed with the Steering Group. The review protocol is registered with PROSPERO (PROSPERO 2013:CRD42013003889).

## Inclusion and exclusion criteria

As this review was designed to address questions of effectiveness, acceptability and economic benefits, it was necessary to consider different study types. The inclusion criteria were tailored accordingly and our inclusion criteria and associated searches were kept deliberately broad to identify studies that were relevant to our aims.

## Types of study

### *Synthesis of evidence of effectiveness*

Any controlled study in which psychosocial interventions were evaluated for this population was considered, including randomised and quasi-randomised trials, quasi-experimental (QEx) controlled studies and

controlled observational studies (COSs). Where no controlled effectiveness studies were identified, other study designs were considered, purely for the purposes of informing the development of future research.

### ***Synthesis of acceptability studies***

Studies that asked participants for their views were included, irrespective of study design or data type.

### ***Economic evaluation***

In addition to the study designs included in the synthesis of evidence of effectiveness, uncontrolled costing studies were considered. For the purposes of the synthesis of economic studies, randomised controlled trials (RCTs) were prioritised, although QEx controlled studies and COSs (cohort studies and case-control studies) were also considered.

## **Types of populations/patients**

Studies were eligible if they involved children aged between 0 and 17 years 11 months, who had experienced maltreatment. Whole studies were included if recruitment was targeted at maltreated children and young people of this age range. Studies of young people up to the age of 24 years 11 months were included if the maltreatment had taken place before the age of 17 years and 11 months.

## **Types of interventions**

Any psychosocial intervention provided to maltreated infants, children or adolescents in any setting (e.g. family, community, residential, school) and by any provider, aiming specifically to address the consequences of any form of maltreatment, with or without the involvement of a carer or carers.

We included any intervention based on cognitive theories [e.g. cognitive-behavioural therapy (CBT), trauma-focused CBT (TF-CBT), and abuse-focused CBT]; eye movement desensitisation and reprocessing; interventions based primarily on forms of expression and communication drawn from the arts (e.g. art therapy, drama therapy, music therapy, play therapy and narrative group therapy); attachment-based interventions; interventions based on psychoanalytic theories, offered to the child or parent-child dyads; family/systemic interventions; multisystemic therapy; peer mentoring; enhanced foster care, including treatment foster care; and residential care, including models of therapeutic residential care. We included studies where interventions were targeted at those responsible for the child (e.g. parents or services) *and* that included outcomes for children. Studies where psychotropic medication was provided alongside psychosocial interventions were included.

## **Types of comparisons**

Studies comparing psychosocial interventions with no-treatment arms, wait-list control groups, treatment as usual (TAU) and other active treatment controls were included.

## **Types of outcomes**

### ***Primary outcomes***

Psychological distress/mental health [particularly post-traumatic stress disorder (PTSD), depression and anxiety, and self-harm]; behaviour (particularly internalising and externalising behaviours); social functioning, including attachment and relationships with family and others; cognitive/academic attainment; and quality of life.

## Secondary outcomes

Substance misuse, delinquency, resilience and acceptability. We were also interested in any outcome related to carer distress, carer efficacy and, where appropriate, placement stability.

Consultations were undertaken with key stakeholders in order to identify appropriate primary and secondary outcomes.

## Search methods

One overarching search strategy was developed to ensure coverage across all elements of the review. Research, professional, policy and grey literature were searched using systematic and comprehensive search strategies. No language limits or study design filters were applied. The main databases for health and allied health literature, social sciences and social welfare literature, education literature, other evidence-based research repositories and economic databases were searched to June 2014.

We searched the following databases from their date of inception between 28 February and 5 March 2015 and conducted an updated search of the main databases between 29 May and 2 June: Ovid MEDLINE, CINAHL, PsycINFO, EMBASE, CENTRAL, CDSR, DARE, Science Citation Index Expanded (SCIE), Health Managing Information Consortium (HMIC), Social Care Online, Social Science Citation Index, Campbell Library of Systematic Reviews, ERIC, Australian Education Index, British Education Index, Database of Promoting Health Effectiveness Reviews (DoPHER), Trials Register of Promoting Health Interventions (TroPHI), NHS Economic Evaluation Database (NHS EED), Paediatric Economic Database Evaluation (PEDE), Health Economic Evaluations Database (HEED), EconLit and the IDEAS economics database.

## Data collection and analysis

### Screening of citations and study selection

The original search was completed on 26 June 2013 and an updating search was undertaken on 4 June 2014. Two reviewers read full reports and determined eligibility for all studies.

### Data extraction and management

Forms tailored to review objectives were developed and refined for both the effectiveness and acceptability studies. Two review authors independently extracted and recorded the data.

## Data synthesis: effectiveness studies

All studies were mapped against type of maltreatment (specific or multiple) and goals of treatment (outcome domains and measures). Interventions were grouped according to a simple classification system. Priority was given to randomised and quasi-randomised trials.

Dichotomous measures of treatment effect: we calculated effect sizes as odds ratios (ORs) with 95% confidence intervals (CIs).

Continuous measures of treatment effect: we extracted unadjusted data where possible, both for consistency of interpretation across studies and because we anticipated that this data source would be less susceptible to selective reporting bias (in particular, the strategy prevents the possibility of biased selection of covariates for inclusion in the model). We converted continuous outcome data (e.g. post-intervention depression) into standardised mean differences (SMDs) and presented data with 95% CIs.

Where appropriate data were available, data synthesis was performed to pool the results. As clinical and trial heterogeneity were expected (even similar interventions are provided under different circumstances, by different providers, to different groups), we used a random-effects model.

*Assessment of heterogeneity* We explored the extent to which age (< 10 years old vs. > 10 years old), gender, ethnicity, type of maltreatment (sexual vs. physical), intervention type and parent involvement (child-only intervention vs. parent-and-child intervention) might moderate the effects of psychosocial interventions.

*Sensitivity analyses* Publication bias and small study effects were investigated using standard methods (e.g. funnel plots) and also within the synthesis models. When the data did not support such methods, the likelihood of publication bias was summarised narratively.

We examined the impact of trial/study factors, including risk-of-bias domains and cointerventions.

For outcomes for which there was an indication of intervention efficacy, we checked the robustness of results to using a 'change from baseline' measure, rather than post-treatment 'follow-up' measure as part of our sensitivity analyses.

## Data synthesis: acceptability studies

A synthesis of acceptability data was undertaken using a narrative approach. Studies were grouped into the same intervention groups used for the synthesis of effectiveness studies.

## Data synthesis: economic evidence

We conducted cost-effectiveness analyses for the most promising intervention using SMDs from meta-analyses as the measure of outcome and additionally using the results of a meta-analysis of a subgroup of studies that reported outcomes in terms of a single clinical measure: for example, the Children's Depression Inventory (CDI). Intervention costs were calculated from data included in each paper on the nature of the intervention under evaluation, including the number and duration of sessions, and the format of delivery (group or individual). Unit costs were estimated using nationally applicable UK unit costs per hour of face-to-face contact for relevant professionals ([www.pssru.ac.uk/project-pages/unit-costs/2014/](http://www.pssru.ac.uk/project-pages/unit-costs/2014/)). It was not always clear from the papers what professionals had delivered the interventions and thus we estimated costs for three categories of professional: (1) clinical psychologist; (2) psychologist; and (3) counsellor. Cost-effectiveness was explored initially through the calculation of incremental cost-effectiveness ratios, defined as the difference in mean costs divided by the difference in mean effects between the two groups. Uncertainty was explored using probabilistic sensitivity analysis, a form of analysis that involves assigning probability distributions to parameters (costs and effects) and sampling at random from the distributions to generate an empirical distribution for each parameter.

## Results

We identified 198 studies assessing the effectiveness of relevant psychosocial interventions for maltreated children (including 62 trials); six studies assessing the cost-effectiveness (including five carried out using data from a trial and one decision-analytic model); and 73 studies that looked at acceptability of treatment.

Meta-analyses of effectiveness were possible only for CBT for sexual abuse and relationship-based interventions (RBIs). Summarising data in this way for studies of CBT for sexual abuse suggested a post-treatment reduction in PTSD [SMD -0.44 (95% CI -4.43 to -1.53)]; a post-treatment reduction in

depression [CDI mean difference  $-0.283$  (95% CI  $-0.453$  to  $-0.113$ ); and a post-treatment reduction in anxiety [SMD  $-0.23$  (95% CI  $-0.03$  to  $-0.42$ )]. No differences were observed for post-treatment sexualised behaviour, externalising behaviour, behaviour management skills of parents or parental support to the child. It was not possible to undertake meta-analyses for the remaining comparisons. Findings from attachment-focused interventions suggested improvements in secure attachment [OR  $0.14$  (95% CI  $0.03$  to  $0.70$ )], reductions in disorganised behaviour [SMD  $0.23$  (95% CI  $0.13$  to  $0.42$ )], but no differences in avoidant attachment or externalising behaviour. Effectiveness research rarely considers issues of accessibility/acceptability and, although this project highlighted the important role of parents/other caregivers, relatively few studies had addressed this, or indeed the impact of the therapist–child relationship.

The results of the six ‘full’ economic evaluations located were conflicting. Exploration of the cost-effectiveness of the most promising intervention, CBT for children who had been sexually abused, using outcome data from meta-analysis, was still unable to provide a clear conclusion. Very limited economic evidence of RBIs, psychoeducation, co-ordinated models of care and intensive service models was available. No economic evaluations of systemic interventions, group work, psychotherapy/counselling, peer mentoring, therapeutic residential or day-care services, or activity-based therapies with children who have been maltreated, were located.

## Conclusions

The available evidence provides only partial answers to our review questions.

1. It is difficult to draw very firm conclusions about which interventions are effective for which children, with what maltreatment profiles, in what circumstances. The use of other-treatment controls, plus susceptibility to bias, may account for the evidence being less than clear cut in relation to some interventions. For some interventions, the results of studies are unequivocally positive, but they are few in number and some also suffer from weaknesses in design and implementation. In almost all cases they have been conducted in policy and practice contexts that differ markedly from the circumstances in which interventions might be offered in the UK. Furthermore, the intervention has often been monitored and quality assured to an extent that the studies evaluating them are closer to efficacy trials than effectiveness trials. This means that even where we have identified evidence of positive outcomes following specific therapeutic approaches, there can be no expectation that these results would necessarily be observed in practice.

For treating the symptoms of PTSD, TF-CBT currently enjoys the strongest evidence of effectiveness, although there have been few independent evaluations of this intervention. The most effective CBT interventions for children who have been sexually abused appear to be those that involve the non-offending parents. Therapeutic day care and peer mentoring may also provide opportunities to address developmental and social-specific sequelae of maltreatment in preschool children. For infants and preschool children, the evidence suggests that interventions that target parental sensitivity and responsiveness [Attachment and Biobehavioral Catch-up (ABC); child–parent psychotherapy; multidimensional treatment foster care for preschoolers] may be effective in promoting secure attachments with birth parents and foster carers. Given the importance of secure attachment in promoting children’s overall development and well-being, these are important findings.

2. Although a number of studies compared an intervention with TAU, few studies compared treatments ‘head to head’, and it was not possible to confidently draw conclusions about the comparative effects of different interventions.
3. On the basis of the studies identified in this review, it is not currently possible to conclude, with any certainty, which interventions were of no benefit, or may result in harm, but we identified a total absence of robust evidence for many of the interventions currently provided to maltreated children within the UK.

4. Few unequivocally clear answers are to be found from studies seeking to ascertain which factors encourage people to seek therapy, to accept an offer of therapy, to actively engage with therapy and to 'stick with it'. A key observation is that researchers routinely miss the opportunity to consider issues of accessibility and acceptability, although there are some low-cost strategies that could be deployed to explore the barriers and facilitators both of engagement or retention in therapy. Given the difficulty of disinterring retention in a study from retention in an intervention, there is a research gap in relation to these important issues within the UK. Some of the studies did focus on issues that mattered to the young people in our advisory group, and some of the findings resonate with their concerns. The pivotal role that parents and other caregivers play in ensuring the availability of therapy to young people, particularly younger children, was recognised as an issue in our consultations, and mirrored in the findings from the included studies. Only one study included in this review mentioned the importance of being believed, but the concern about not being believed was a very significant issue for some of the young people with whom we talked.
5. The profile of included studies indicates a bias towards the psychiatric sequelae of maltreatment. Although these are important, they represent only one of the many adverse consequences of maltreatment on children's development, and studies of interventions that promote children's social, emotional and physical development are needed.
6. Little is known about the cost-effectiveness of alternative interventions for maltreated children. Only six economic evaluations that could be considered 'full' economic evaluations (comparative analysis of alternative interventions in terms of both costs and effects) were located and the results are conflicting.
7. Well-designed and carefully implemented RCTs are required to test the relevance of promising interventions in the UK context, and to evaluate those interventions that are most commonly provided, but which currently lack empirical support. The particular needs of seriously maltreated children raise important issues about the most appropriate conceptualisations of need and their implications for professional training and the nature of services required.

## Study registration

This study is registered as PROSPERO CRD42013003889.

## Funding

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# Chapter 1 Background, aims and objectives

Child maltreatment is a serious public health issue and a major cause of health inequality.<sup>1</sup> Children who experience serious or persistent maltreatment are at risk of a range of social, emotional, behavioural and economic adversities, alongside the impact of maltreatment on their physical and mental health. The major focus of UK policy has been on preventing serious abuse and neglect, triggered and sustained by periodic reports of the circumstances surrounding child deaths.<sup>2–4</sup> Little attention has been given to how best to address the consequences of maltreatment for those who have experienced it or been adversely affected by it. While prevention is preferable to dealing with the consequences of maltreatment, the reality is that in 2014 almost 50,000 children in England were subject to a child protection plan because of maltreatment or risk of significant harm. Behind those 50,000 children are many more who also experience maltreatment, but who either do not come to the attention of social services or whose maltreatment falls below the undoubtedly high thresholds of harm currently operated by Children's Services Departments. In 2012, the Health Technology Assessment (HTA) programme commissioned two evidence syntheses that were relevant to the needs of maltreated children. One was a review of interventions aimed at improving outcomes for children exposed to domestic violence (PHR 11/3007/01).<sup>5</sup> The second was an evidence synthesis of psychosocial interventions aimed at improving outcomes for children who experienced maltreatment, and this is the focus of this report.

## Categories of maltreatment

Child maltreatment has been defined as any act or series of acts of commission (physical abuse, sexual abuse, emotional/psychological abuse) or omission (neglect) by a parent, caregiver or other person, which leads to harm, the potential for harm, or threat of harm to a child (someone under 18 years). Most child maltreatment takes place within the family home, but it can also occur in an institutional or a community setting. The perpetrators of maltreatment are usually known to the children concerned, but more rarely they may be strangers. Although most maltreatment is attributable to adults, child-to-child maltreatment is also a concern. Some forms of maltreatment can take place on the internet.

Detailed definitions can be found in a number of guidelines.<sup>6–9</sup>

Briefly:

- *Physical abuse* may involve hitting, shaking, throwing, poisoning, burning or scalding, drowning, suffocating or otherwise causing physical harm to a child. Physical harm may also be caused when a parent or carer fabricates the symptoms of, or deliberately induces, illness in a child.
- *Emotional/psychological abuse* is the persistent emotional abuse of a child such as to cause severe and persistent adverse effects on the child's emotional development. Emotional maltreatment may take the form of age or developmentally inappropriate expectations on children. It may involve conveying to children that they are worthless or unloved; not giving them opportunities to express their views or 'making fun' of what they say or how they communicate; seeing or hearing the ill-treatment of another; being seriously bullied (including cyberbullying), or exploited or corrupted. Emotional abuse is involved in all types of maltreatment, although it may occur alone. Children who are the subject of fabricated illness are also subject to emotional abuse, either as a result of being brought up in a fabricated sick role, or because of an abnormal relationship with their carer, or disturbed family relationships.<sup>10–15</sup> More recently, domestic violence has been recognised as maltreatment, and is a common cause of emotional or psychological harm to children.
- *Sexual abuse* involves forcing or enticing a child or young person to take part in sexual activities, not necessarily involving a high level of violence, whether or not the child is aware of what is happening. Activities may involve physical contact, including assault by penetration or non-penetrative acts and non-contact activities, such as involving children in watching sexual activities, encouraging them to

behave in sexually inappropriate ways, or grooming them in preparation for abuse (including via the internet). Sexual abuse is perpetrated by men and women, although the majority of sexual abuse of children is by male perpetrators against female children, typically someone known to them (i.e. a family member or family friend). Abuse by a stranger is less common. Sexual abuse can occur between children.

- *Neglect* is the persistent failure to meet a child's basic physical and/or psychological needs, likely to result in the serious impairment of his or her health or development. Neglect may occur during pregnancy as a result of maternal substance abuse. Once a child is born, neglect may involve a parent or carer failing to provide a child with adequate food, clothing and shelter (including exclusion from home or abandonment); failing to protect him or her from physical and emotional harm or danger; or failing to ensure access to appropriate medical care or treatment. It may include neglect of, or unresponsiveness to, a child's basic emotional needs.

Most children experience more than one form of maltreatment, and there is growing recognition of the need to better take into account children's profiles of maltreatment in order to improve policy and practice.<sup>16–18</sup> Although maltreatment can result in death, serious injury or impairment (see below), it is not itself a disorder but an event or exposure; not all maltreated children experience impairment.

## Prevalence, aetiology, contributory factors

Child maltreatment poses significant threats to children's health, development and well-being. It is recognised that statistics on the number of referrals to child protection services, and the numbers of children for whom there is a child protection plan, let alone the number of criminal offences against children, are an underestimate of the scale of the problem within the UK. The term 'registration' is used here to describe children for whom there is a child protection plan (England) or whose names are on child protection registers (Wales, Scotland and Northern Ireland). As at March 2009, registrations in the UK were England, 34,100; Wales, 2512; Northern Ireland, 2488; and Scotland, 2682. It is important to note that these data may not be measuring precisely the same thing in each jurisdiction. Data on trends in child maltreatment are difficult to interpret,<sup>19</sup> but, overall, the numbers of children registered in each jurisdiction has increased steadily since 2002, although there is some evidence of a fall in the numbers of violent child deaths in infancy and middle childhood within the UK.<sup>20</sup> The 2014 figure for children subject to a child protection plan in England as at 31 March was 48,300 (excluding unborn children), an increase of 12.1% on the numbers at the same time in 2013. This represents an increase of 23.4% since 31 March 2010. In 2011 the National Society for the Prevention of Cruelty to Children (NSPCC) published a cross-sectional, self-report survey of 2275 children aged 11–17 years and adults aged 18–24 years. Their findings indicated that 18.6% of the 11- to 17-year-olds 'had been physically attacked by an adult, sexually abused, or severely neglected' and 25.3% of the 18- to 24-year-olds reported severe maltreatment during childhood.<sup>21</sup>

## Consequences of maltreatment

A growing body of evidence suggests that being exposed to maltreatment may result in structural and functional changes to the developing brain,<sup>22–24</sup> as well as long-lasting changes in the way genes are expressed in the brain.<sup>25–27</sup> The adverse effects of maltreatment can be found across multiple domains of functioning, including physical and mental health and well-being, security of attachment, cognitive and emotional development, aggression, violence and criminality, and socioeconomic attainment.<sup>28–33</sup>

Maltreatment is a non-specific risk factor for a wide range of adverse long-term health and social care outcomes, and children who experience multiple forms of maltreatment are at increased risk.<sup>34–36</sup> There is also *some* evidence of maltreatment type-specific risks, although generally this is stronger for sexual abuse than other forms of child maltreatment. Widom *et al.*<sup>37</sup> found that both child physical abuse and neglect, but not sexual abuse, were associated with an increased risk for lifetime major depressive disorder in young adulthood, with children exposed both to physical abuse *and* neglect being most at risk.

A longitudinal study by Kotch *et al.*<sup>38</sup> concluded that neglect within the first 2 years of life, in the absence of other forms of maltreatment, predicted levels of aggression at ages 4, 6 and 8 years. Preschool children exposed to severe physical neglect have been found to evidence increased rates of internalising symptomatology and withdrawn behaviour compared with other maltreated children.<sup>39</sup> Generally though, the fact that few children experience only one form of maltreatment makes it difficult to link particular forms of maltreatment with specific risks or adverse outcomes.

The impact of maltreatment may depend on the interaction of a number of factors, including the child's genetic endowment, age, gender, type(s) of abuse, severity, frequency and duration of maltreatment, and the availability of protective factors that function to enhance a child's resilience.<sup>40–45</sup> Children who appear to be 'asymptomatic' following maltreatment may, nonetheless, be at risk for the development of later psychosocial problems, triggered by subsequent stressors and the need to negotiate key developmental tasks, for example forming intimate relationships, managing interpersonal conflict, becoming a parent and so on.

For the child who is removed from their birth parents or other primary carers under relevant legislation, the adverse effects of maltreatment may be compounded by delays arising from lengthy care proceedings and instability of placements. For infants and young children, these factors may exacerbate attachment difficulties or disorders. In developing effective interventions, it is therefore important to understand how and why maltreatment impacts throughout the life course, and the variables that either mediate or moderate adverse sequelae.

## Economic consequences of maltreatment

The economic costs of maltreatment, both to individuals<sup>46–50</sup> and to society,<sup>51–55</sup> are well documented. Costs to individuals include adverse effects on physical and mental health; social and emotional development; cognitive development and levels of educational attainment; and employment status and earnings. Societal costs include the health and social care costs of illness or injury; the intergenerational costs of teenage pregnancy and poor parenting; criminal justice system costs; and losses in productivity.

## Psychosocial interventions

There is a wide range of psychosocial interventions currently available to children and young people who have experienced maltreatment, although availability varies enormously.<sup>56–58</sup> These are based on a variety of theoretical underpinnings and include:

- interventions based on cognitive theories, including cognitive-behavioural therapy (CBT), trauma-focused CBT (TF-CBT) and abuse-focused CBT
- eye movement desensitisation and reprocessing (EMDR)
- interventions based primarily on forms of expression and communication drawn from the arts, including art therapy, drama therapy, music therapy, play therapy and narrative group therapy
- attachment-based interventions
- interventions based on psychoanalytic theories, offered to the child or parent-child dyad.
- family/systemic interventions.
- multisystemic therapy (MST)
- peer mentoring.
- enhanced foster care, including treatment foster care
- residential care, including models of therapeutic residential care, such as CARE® (Cornell University, Ithaca, NY, USA) and Sanctuary® (Sanctuary Institute, Philadelphia, PA, USA).

Interventions may be delivered in one or more of a range of contexts, for example clinic, school, community. Interventions may be individual or group based, or a combination, and may involve only the child or the child and his or her primary carer(s). Some entail a change of caregiver, as in adoption, kinship care, foster care or residential care. Most are commissioned, or provided by, the UK NHS. Some are available from a range of voluntary and private sector providers, and some are primarily social care or education based.

## Timing of, and pathways to, treatment

For some forms of maltreatment, treatment can be offered appropriately only after the child is protected from further abuse. This applies to sexual abuse and serious physical injury, and here protection can be ensured only when the contact between the child and the abuser is constantly supervised or halted. In the more persistent or chronic forms of maltreatment – emotional abuse and neglect – treatment may be offered to the child and caregivers simultaneously to deal both with the effects of the maltreatment and with the harmful parent–child interactions.

Maltreatment per se may be the trigger for some referrals to Child and Adolescent Mental Health Services (CAMHS). For example, a child may be referred following recognition of a specific form of maltreatment, most commonly sexual abuse. Sometimes children are referred as a result of maltreatment although the precise nature of that maltreatment may not be known. Other children may be referred because they have experienced several forms of maltreatment. Emotional maltreatment is often seen as integral to other forms of abuse or neglect.

Some children will be referred for help with specific symptoms, for example post-traumatic stress disorder (PTSD), depression or anxiety. In some cases this will be clearly identified as the results of exposure to maltreatment, such as physical or sexual abuse or intimate partner violence (IPV). Others will be referred when there is no mention or initial awareness of the existence or relevance of previous maltreatment, but where a causal link is subsequently found. This review focuses on those children whose pathways to referral are clearly linked with maltreatment.

## Treatment acceptability and engagement

Children who have experienced abuse and neglect can be difficult to engage, not least because of the adverse impact of maltreatment on their ability and willingness to engage with, or trust, adults. Evidence from a NSPCC survey<sup>21</sup> indicated that some 80% of young adult women who reported abuse by a caregiver said they had talked to a professional following the abuse taking place, compared with just 18% of boys. However, those who sought help from a professional did not always think that it had brought about a better outcome. Carers too can feel excluded from some therapeutic approaches, when their involvement may be critical.

But many children do not have the opportunity of help. Historically, child maltreatment has been seen as a problem for social care, rather than CAMHS,<sup>59</sup> and effective interagency working between CAMHS and social services continues to be elusive. Referral pathways to CAMHS are long and complex,<sup>60,61</sup> and, for those referred, acceptance thresholds are high and waiting lists are often extremely long. Little, if anything, is known about what maltreated children want from health-care professionals or what kinds of intervention or service arrangements they find acceptable, and possible to engage with, or unacceptable.

## Importance of this evidence synthesis

Reviews in this area suffer from a number of weaknesses.<sup>62</sup> These include (1) searches that are out of date, have restricted search dates or language restrictions; (2) the predominance of research conducted in North America, with little or no consideration of the generalisability of evidence to other policy contexts; (3) a lack of adequate consideration of the maltreatment profiles of study participants; (4) a lack of consideration of the logic models underpinning included interventions; (5) inadequate, and sometimes no, consideration of the risk of bias of included studies; (6) heterogeneity of outcomes and measures used; and (7) a lack of consideration of issues of acceptability or accessibility of interventions for children and their families.

Most reviews, for good methodological reasons, restrict their inclusion criteria to randomised or quasi-randomised trials. Although it is arguably unethical to expose maltreated children to interventions of unknown effectiveness, the technical challenges of implementing randomised trials of maltreatment interventions are considerable, sometimes resulting in studies with high risk of bias<sup>63,64</sup> or little useful information. Other types of study may provide valuable information about interventions not yet subjected to more rigorous evaluation, and may provide a picture of the evidence gaps when compared with the profile of available services.

As with studies and reviews of interventions, most studies of the cost-effectiveness of interventions appear to have focused on primary prevention rather than secondary and tertiary prevention, or the treatment of children who have experienced maltreatment.<sup>65–67</sup> A review by Goldhaber-Fiebert *et al.*<sup>68</sup> identified 19 reviews and 30 original papers reporting research on the costs and effectiveness of interventions for children at risk of (the majority), or already involved in, child welfare (protection) services. They observe that existing model-based evaluations of secondary prevention have, so far, used 'relatively simple multiplicative decision trees' that do not reflect the variety of pathways that children follow, how these may impact on the effectiveness of subsequent interventions or adequately address factors such as the child's age (p. 737). They concluded that current epidemiological data, combined with evidence from well-conducted outcome studies and improved modelling techniques, make it timely to revisit the cost-effectiveness of interventions for maltreated children.

## Research aims and objectives

This review aimed to bring high standards of evidence synthesis to bear in this important but challenging area of public health. It provides an up-to-date overview of research on interventions aimed at addressing the adverse consequences of child maltreatment, and a synthesis of what we know about their effectiveness and cost-effectiveness. The objectives of the research were to answer the following questions:

- i. Which interventions are effective, for which children, with what maltreatment profiles, in what circumstances?
- ii. When two or more interventions might be appropriate, which is most likely to be effective?
- iii. Which interventions are of no benefit or may result in harm?
- iv. Which interventions are most accessible and acceptable to carers, children and young people?
- v. What do we know about the economic benefits of interventions, and the potential value of undertaking future research?



## Chapter 2 Review methods

### Focus of the review

In line with the HTA brief, this review sought to include effectiveness studies of any psychosocial intervention provided to maltreated infants, children or adolescents in any setting (e.g. family, community, residential) specifically to address the consequences of maltreatment. We included studies of any intervention aimed at addressing the consequences of any type of maltreatment, irrespective of service provider or setting (e.g. family, institution, school), whether or not provided to children individually or in a group format, and whether or not the treatment involved parents or other carers. We included studies in which the intervention was delivered to a child by, or through, a parent or other carer, as long as this was concerned with addressing the consequences for the child of his or her experiences of maltreatment.

This meant excluding two groups of studies that are also relevant to improving outcomes for children experiencing maltreatment or who are at risk of maltreatment, namely:

1. Studies aimed at the secondary prevention of maltreatment. These are studies of interventions aimed primarily at improving quality of parenting in families in which there are concerns about maltreatment. Arguably, by improving parenting in ways that prevent future maltreatment and enhance the quality of parenting and family relationships, such interventions make an important contribution towards addressing the adverse consequences caused by maltreatment to children within these families. There are a number of parenting programmes that specifically target these vulnerable families, but their focus is primarily the parents and their parenting, rather than the children. Only if the programme combined an intervention aimed specifically at the child, as well as the parents, were such studies included in this review.
2. Studies concerned with evaluating interventions that addressed problems known to be associated with maltreatment (such as depression or PTSD) but for which the target population was any child experiencing the health problem. In other words, these studies did not set out to recruit children who, because of maltreatment, were experiencing depression, anxiety, behaviour problems and so on. Our searches identified many studies of this kind, in which the study sample included participants (typically adolescents or young adults) who might have experienced maltreatment, but whose maltreatment was not the reason for their recruitment.

### Project oversight

The research team were experienced in systematic review methodology and provided topic expertise in this field. Alongside the research team, a Steering Group was established to guide the overall direction of the project, and to ensure that a range of expertise and perspectives, particularly those of guideline developers, were properly considered in decisions taken during the course of the review. The research team and Steering Group members are listed in *Appendix 1*.

### Professional Advisory Group

To enhance the clinical and professional representation in the project, a Professional Advisory Group (PAG) was established to help shape the work, interpret the evidence and draw conclusions from the data. Approximately 50 professionals were invited to participate. They represented a range of disciplines (including mental health nursing, general practice, psychology, psychiatry, social work, teaching and foster care) from different settings (tertiary care, CAMHS, residential care, community, etc.) and different providers (NHS,

private and voluntary sectors). The objective of the PAG consultations was to help ensure relevance to health and social care provision in the UK. In particular, these consultations helped with the identification of potential barriers and facilitators to implementation from the perspective of those (1) involved in identifying children who need psychosocial interventions as a result of maltreatment; (2) responsible for referring them to appropriate services; and (3) delivering services. Information was shared with the PAG throughout the project and two face-to-face meetings were convened in London. The first meeting, involving around 40 participants, took place near the start of the project on 1 May 2013, and was designed to help identify and prioritise key issues. The second meeting, involving around 20 participants, took place on 27 November 2014 once the initial findings were available, and was intended to take the form of a consensus meeting. The names of PAG participants are provided in *Appendix 2*.

### **Young Persons' Advisory Groups**

Several Young Persons' Advisory Groups were convened to provide advice on general issues relevant to the project. In particular, the groups were established to help us understand the experience of receiving treatment from professionals concerned with maltreated children, the factors that enhance acceptability of treatment, and what outcomes matter most to children and adolescents. One group in Belfast, Voice of Young People in Care (VOYPIC) and one Cardiff-based group, Voices from Care, were approached and invited to participate in the project. At the beginning of the project, an initial meeting of seven young people aged between 16 and 24 years from the VOYPIC group was convened in Belfast on 27 March 2013. A subsequent meeting of seven young people aged  $\geq 18$  years from the Voices from Care group was convened in Cardiff on 9 April 2013. Both meetings were coconvened by dedicated facilitators from their respective organisations, who were experienced in consulting with young people in care or previously in care, as well as one member of the research team (either NL or JH). Towards the end of the project, a group of six young people aged between 15 and 19 years contributed to the interpretation of the project's findings during a NSPCC participation event held on 27 October 2014.

### **Early planning with advisory groups**

A plan for undertaking consultations was agreed with the project Steering Group. The early advisory groups were intended to help shape the plan of the review. The key questions and methods used for these initial advisory group meetings were broadly similar. Both professionals and Young Persons' Advisory Groups were consulted on relevant outcomes following psychosocial interventions for maltreated young people, factors that would facilitate their getting the help they needed, and factors that would act as barriers to their getting that help. The Young Persons' Advisory Groups were asked to consider three additional questions:

1. What difference would 'helpful help' make for a child or young person who had been treated badly?
2. What would make it easier to ask for help or get help?
3. What would make it harder to ask for help or get help?

In both the PAG and the Young Persons' Advisory Groups, a sorting and ranking exercise called the Q-sort was used to elicit individual views and help develop some consensus views. On the basis of their knowledge of the field, the research team and the Steering Group agreed an initial set of potential outcomes, facilitators for getting help, and barriers to getting the help they needed. Group members were presented with a group of cards, each of which had a different possible outcome, facilitator or barrier. Group members were first asked to review the cards individually and consider their own opinions on where each card should be placed on the large Q-sort pyramidal grid. They were then asked to discuss their opinions in the group, and to work together to create one single agreed Q-sort pyramid. Cards placed to the right of the grid would be those that were the most important outcomes/facilitators/barriers and the least important to the left. Group members were informed that they could amend the cards if necessary. They were also welcome to add new cards if they felt that any potential factors were missing and to remove any cards that they felt were irrelevant.

The Q-sort process proved to be quite effective at engaging the young people and serving as a basis for discussion. Based on the experience of the first group, the process was slightly modified for the following

sessions, so that the sequence of issues was revised and part of the session was spent in smaller subgroup discussions.

In view of the large size of the PAG, to enable meaningful discussion the Steering Group decided to establish smaller groups based on professional discipline for the Q-sort task. This allowed all groups to contribute, but also highlighted areas of agreement and differences between the groups, so that potential reasons could be discussed. Each small group was facilitated by a member of the research team/Steering Group.

### *Final Professional Advisory Group meeting*

A detailed and technical presentation of the review findings was provided for this PAG. The smaller number of participants at this meeting enabled whole-group discussion.

Participants were first asked to consider a series of questions about the findings of the review, including whether or not there were any important studies missing, any surprises about the coverage of maltreatment types or the profile of evidence across different types of intervention, and whether or not any of the findings were puzzling/unexpected. Participants were also asked the extent to which the review findings matched their experience of what is offered through health and social care services and, if different, what might account for this (e.g. training, therapeutic context, therapeutic preferences, resource constraints or other explanations).

They were then asked to consider how clinicians were likely to react to the messages about the weight of evidence in favour of CBT interventions, whether or not there were likely to be any barriers to implementing the findings and how these issues might be considered in the final report.

Finally, in light of existing evidence, participants were asked to identify any priorities for future research.

### *Final Young Persons' Advisory Group meeting*

The young persons' group was cofacilitated by members of the research team and Steering Group, without an adult present whom the young people knew well. This session was part of a broader participation event, for which known and trusted adults were available to support the young people should they become distressed. We explained to them that during the session they would hear quite powerful quotations from young people, which they might find unsettling. In such an event we told them that they could let us know if they wanted a break or simply take themselves off to the agreed point to find their identified adult supporter.

In the first part of the session, members of the research team provided an overview of the key intervention types that were identified through the review: CBT; counselling or psychotherapy; family intervention; attachment therapy; activity-based interventions; and therapeutic residential care. In addition to talking about these, pictures were provided on large laminated sheets to help illustrate key features of these approaches. The main part of the session was focused around three sets of questions/statements:

1. Prioritising between interventions:
  - i. Which of these intervention types would young people want more?
  - ii. Some therapies have a lot of evidence showing that they work, but others do not. If you were the government, to which ones would you give the money?
2. Responses to 'acceptability' statements:
  - i. 'Therapy doesn't help people to forget about abuse, they just make them talk about it over and over again.'

- ii. 'In some situations where the child starts therapy, they can get upset, and the parent then doesn't want them to go. What advice would you give a parent if their child was upset for the first time?'
  - iii. 'It's not just the child that needs help, parents do too.'
  - iv. 'Do other people need to know what the therapist and child talk about?'
  - v. 'Does a young person have to like their therapist for treatment to help?'
3. Disseminating research evidence and findings to young people: suggestions for how to do this most effectively.

The group was given a range of tools to help the discussion. For example, they were given a pile of fake bank notes to help them allocate the funds to different intervention types. The visual component to this was important and the young people ensured that they distributed the money carefully, to reflect their priorities. They were also given voting cards with which to respond to the acceptability statements, with different colours representing different options.

## Protocol

The evidence synthesis work was planned in accordance with guidance provided by the NHS Centre for Reviews and Dissemination<sup>69</sup> and the Cochrane Collaboration.<sup>70</sup> The nature of the research objectives required evidence syntheses of (1) studies of the effectiveness of psychosocial interventions provided for children and adolescents who have suffered maltreatment; (2) studies of their acceptability to children, adolescents and their carers; and (3) the cost-effectiveness of these interventions.

A protocol for the review based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria<sup>71</sup> was developed and agreed with the Steering Group. The review protocol, which details the objectives, types of study design, participants, interventions and outcomes considered, is registered with PROSPERO (PROSPERO 2013: CRD42013003889). A copy of the review protocol is available at [www.crd.york.ac.uk/PROSPERO/display\\_record.asp?ID=CRD42013003889](http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42013003889).

## Inclusion and exclusion criteria

As this review was designed to address questions of effectiveness, acceptability and economic benefits, it was necessary to consider different study types. The inclusion criteria were tailored accordingly and our inclusion criteria and associated searches were kept deliberately broad to identify studies relevant to the aims set out in *Chapter 1*. The review considered both published and unpublished literature.

## Types of study

### Synthesis of evidence of effectiveness

Any controlled study (CS) in which psychosocial interventions were evaluated for this population was considered, including randomised and quasi-randomised trials, quasi-experimental (QEx) controlled studies and controlled observational studies (COSs). We used the following definitions.

*Randomised controlled trial (RCT)* Individuals followed in the trial are *actively assigned* to one of two (or more) alternative forms of intervention or health care, using an entirely random method of allocation (such as computer random number generation).

*Quasi-randomised trial* Individuals followed in the trial are *actively assigned* to one of two (or more) alternative forms of intervention or health care, using a quasi-random method of allocation (such as alternation, date of birth or case record number).

*Quasi-experimental study* Individuals followed in the study are *actively assigned* to one of two (or more) alternative forms of intervention or health care, using a non-random method of allocation (such as assignment based on experimenter's choice).

*Controlled observational study* Individuals followed in the study are receiving one of two (or more) alternative forms of intervention or health care. However, they are *not actively assigned* to the alternative forms of intervention or health care. The control group is likely to comprise those who were not offered the intervention or who refused to participate in the intervention.

*Uncontrolled study* All individuals followed in the study are given the *same treatment* or health care, and simply followed for a period of time to see if they improve, with no comparison against another group (control group) that is either taking another treatment or no treatment at all.

Where no controlled effectiveness studies were identified, other study designs were considered, but purely for the purposes of informing the development of future research.

Case studies, descriptive studies, editorials, opinion papers and evaluations of pharmacological or physical interventions without an adjunctive psychosocial component were excluded from the synthesis of effectiveness studies.

### Synthesis of acceptability studies

For this part of the review, studies that asked participants for their views were included, irrespective of study design or data type.

Any studies that provided quantitative data on non-participation, withdrawal and adherence rates were included as part of the effectiveness synthesis. We imposed no restrictions on design for this synthesis, as long as the study was about psychosocial interventions for treating the consequences of child maltreatment.

### Economic evaluation

For this part of the review, we included economic evaluations that were carried out alongside trials and decision-analytic models, and uncontrolled study designs – such as uncontrolled costing studies – were considered, in addition to the study designs included in the synthesis of evidence of effectiveness. For the purposes of the synthesis of economic studies, whether trial based or decision model, economic evaluations based on data from RCTs were prioritised, although QEx controlled studies and COSs (cohort studies and case-control studies) were also considered. Uncontrolled study designs and descriptive costing studies were also considered, in addition to the study designs included in the synthesis of evidence of effectiveness, for the purposes of populating a decision model.

### Types of populations/patients

Studies were eligible if recruitment was targeted at maltreated. Because young people in care remain entitled to support up until the age of 25 years, and because the effects of maltreatment are not always immediate, we included studies in which maltreatment took place before 17 years 11 months, but where the participants were aged up to 24 years 11 months. This also enabled us to minimize the loss of potentially relevant data. If the age range of participants was broader (e.g. 10–30 years) but the study met all other criteria, authors were contacted for further information, as appropriate.

Studies of interventions for a wide range of maltreatment types, including physical abuse, emotional and psychological abuse (including those witnessing domestic violence), sexual abuse and neglect were included. Studies were included if they involved maltreated participants as well as children and young people who had suffered other kinds of trauma (e.g. violent assault by a stranger) *only* if the participants were randomised and data for analyses were presented separately (or were obtainable). Studies that described children as 'at risk' because they had already experienced maltreatment were included. Studies

involving children in care were included only if there was evidence that the participants were maltreated and the focus of the intervention was designed to address the sequelae of maltreatment. Studies were included whether or not the children involved were displaying any symptoms.

We excluded studies that were designed to evaluate interventions for other kinds of trauma, including teenage dating violence, those with children who had experienced violent physical assault by a stranger, and those where maltreatment had occurred during a conflict/war situation. We excluded studies that may have involved, but did not specifically target, maltreated children (e.g. studies of psychosocial interventions for depression in children and adolescents) and studies in which children were described as 'at risk' of maltreatment but which provided no evidence that they had already experienced maltreatment.

### Types of interventions

Any psychosocial intervention provided to maltreated infants, children or adolescents in any setting (e.g. family, community, residential, school), and by any provider, aiming specifically to address the consequences of any form of maltreatment, with or without the involvement of a carer or carers.

Examples of eligible psychosocial interventions are listed in *Chapter 1*. We included any intervention based on cognitive theories (e.g. CBT, TF-CBT and abuse-focused CBT); EMDR; interventions based primarily on forms of expression and communication drawn from the arts (e.g. art therapy, drama therapy, music therapy, play therapy and narrative group therapy); attachment-based interventions; interventions based on psychoanalytic theories, offered to the child or parent-child dyads; family/systemic interventions; MST; peer mentoring; enhanced foster care, including treatment foster care; and residential care, including models of therapeutic residential care, such as CARE® and Sanctuary®. Further details about included interventions are provided in *Appendix 5*.

We included studies in which interventions were targeted at those responsible for the child (e.g. parents or services) and included outcomes for the children studied. Studies in which psychotropic medication was provided alongside psychosocial interventions were included.

As the review was focused on interventions addressing the consequences of maltreatment, we excluded studies that were aimed at the prevention, identification and cessation of maltreatment. We also excluded any study that assessed outcomes of those in standard foster care or standard residential care, for which no specific therapeutic aspect was being evaluated.

### Types of comparisons

Studies comparing psychosocial interventions with no-treatment arms, wait-list control groups, 'treatment as usual' (TAU) and 'other active treatment controls' were included.

### Types of outcomes

As described above, consultations were undertaken with key stakeholders in order to ensure appropriate primary and secondary outcomes were considered and at meaningful time points. We were interested in the following broad core outcome domains.

Primary outcomes of interest for children included the following domains: (1) psychological distress/mental health (particularly PTSD, depression and anxiety and self-harm); (2) behaviour (particularly internalising and externalising behaviours); (3) social functioning, including attachment and relationships with family and others; (4) cognitive/academic attainment; and (5) quality of life.

Secondary outcomes included (1) substance misuse; (2) delinquency; (3) resilience; and (4) acceptability.

We were also interested in recording any outcome related to carer distress, carer efficacy (the degree to which they feel empowered to care for the child appropriately and safely) and, where appropriate, placement stability. Outcomes themselves were not used as inclusion/exclusion criteria.

## Search methods

One overarching search strategy was developed to ensure coverage across all elements of the review. Research, professional, policy and grey literature was searched using systematic and comprehensive search strategies of appropriate bibliographic databases and relevant websites.

### Search term generation

Search terms relating to the key concepts of the review were initially identified through discussion between the research team and information scientists working for the Cochrane Developmental, Psychosocial and Learning Problems Review Group and the Cochrane Depression, Anxiety and Neurosis Group. Background literature and controlled vocabulary lists of relevant databases (e.g. medical subject heading terms in MEDLINE) were also scanned. Initial pilot search strategies were developed and discussed by the research team and Steering Group, and the electronic search strategy was modified and refined several times before implementation. No language limits or study design filters were applied. Examples of final electronic search strategies for several different databases [via MEDLINE Ovid; Cochrane Central Register of Controlled Trials (CENTRAL), Cochrane Database of Systematic Reviews (CDSR) and Database of Abstracts of Reviews of Effects (DARE) (via The Cochrane Library); ProQuest; EBSCOhost; [eppi.ioe.ac.uk/webdatabases](http://eppi.ioe.ac.uk/webdatabases)] are provided in *Appendix 3*.

### Electronic searches

The following databases were first searched from the date of their inception between 28 February and 5 March 2013. Updating searches of the main databases were undertaken between 29 May 2014 and 2 June 2014. A full list of databases searched, with exact dates, is provided in *Appendix 6*.

- i. Health and allied health literature [Ovid MEDLINE, CINAHL PsycINFO, EMBASE, CENTRAL, CDSR, DARE, Science Citation Index Expanded (SCIE), Health Management Information Consortium (HMIC)].
- ii. Social sciences and social welfare literature [Social Services Abstracts, Social Care Online, Social Science Citation Index (SSCI), Campbell Library of Systematic Reviews].
- iii. Education literature [Education Resources Information Center (ERIC), Australian Education Index, British Education Index].
- iv. Other evidence-based research repositories [Database of Promoting Health Effectiveness Reviews (DoPHER), Trials Register of Promoting Health Interventions (TRoPHI)].
- v. Economic databases [NHS Economic Evaluation Database (NHS EED), Paediatric Economic Database Evaluation (PEDE), Health Economic Evaluations Database (HEED), EconLit and the IDEAS economics database].

Updating searches planned prior to publication included trials registers [International Clinical Trials Registry Platform (ICTRP) and ClinicalTrials.gov; UK Clinical Research Network (UKCRN) Study Portfolio].

### Grey literature and other resource searches

Material generated by user-led or voluntary sector enquiry was identified via OpenGrey, searching the internet (using Google and Google Scholar) and browsing the websites of relevant UK government departments and charities (Mental Health Foundation, Barnardo's, Carers UK, ChildLine, Children's Society, Depression Alliance, MIND, Anxiety UK, NSPCC, Princess Royal Trust for Carers, SANE, The Site, Turning Point, Young Minds and the National Child Traumatic Stress Network). These sites were systematically searched by members of the research team or members of the wider Steering Group using a selection and combination of search terms as appropriate. The process is described in detail in *Appendix 7*. Grey literature searches were up to date as of 25 June 2014. Requests were also sent to members of the Steering Group for additional studies.

### Reference lists

We checked references in studies that met the inclusion criteria, in previous reviews and other studies.

### *Targeted author searches*

We conducted targeted author searches following the identification of key researchers in the field and looked for follow-up studies using Google Scholar. Authors of ongoing and recently completed research projects were also contacted directly as required to establish whether or not any results were available.

## **Data collection and analysis**

### *Screening of citations and study selection*

The original search was completed on 26 June 2013 and an updated search was undertaken on 4 June 2014. Search results were either imported into EndNote version 4 (Thomson Reuters, CA, USA) or saved as text files. After removing obvious duplicates and irrelevant records, remaining records were imported into EPPI-Reviewer 4.71<sup>72</sup> (Evidence for Policy and Practice Information and Co-ordinating Centre, University of London, London, UK), through which further duplicates were removed. Duplicates were removed by two reviewers (NL and JH). Citations were then stored for sifting and management using EPPI-Reviewer.

Owing to the volume of citations identified, it was not possible to double-code the screening of all citations. To ensure that reviewers were consistent in their decisions, five reviewers (JH, NL, CMcC, MC, GM) initially coded the same 300 citations. Decisions were discussed, and selection criteria refined and clarified. Once this process was complete and reviewers were satisfied that selection criteria were being understood and applied consistently, each reviewer was assigned citations in batches of 1000 citations at a time. To ensure that reviewers decisions remained consistent, 10% of citations were double-coded and disagreements were resolved by discussion before moving on to the next batch of citations. Wherever a reviewer was uncertain about which code should be applied a second opinion was sought from another member of the research team.

When both reviewers agreed on inclusion, or whenever there was disagreement or uncertainty about inclusion, the full-text article was obtained. When potentially relevant studies were published as abstracts, or when there was insufficient information to assess eligibility or extract the relevant data, authors were contacted directly. To ensure consistency in the application of inclusion criteria for full-text articles, the same checking procedures were used. Each reviewer was assigned full-text articles in batches of 500 articles. Although 10% of full-text articles were initially cross-checked, second opinions were required on almost every article. Therefore, two reviewers read full reports and determined eligibility for all studies.

Any unresolved disagreements were discussed with the research team and, where necessary, eligibility criteria were further operationalised through discussion with input from the Steering Group. When maltreatment was not confirmed in the population but was considered likely to have occurred (e.g. concern from referring person that neglect was occurring), authors were contacted for further information. Principal reasons for the exclusion of studies were recorded.

### *Data extraction and management*

Data extraction forms tailored to review objectives were developed for both the effectiveness and acceptability studies. These were piloted and refined using the first 10 papers marked for inclusion. For each included study, two review authors independently extracted and recorded the following data using a data collection form: study design and methods, sample characteristics, intervention characteristics (including theoretical underpinning of services, delivery, duration, outcomes and within-intervention variability), outcome measures and assessment time points. Where necessary, study investigators were contacted for clarification about study characteristics and data. Any differences that could not be resolved were noted.

As expected, the studies that met our inclusion criteria covered a heterogeneous group of psychosocial interventions designed to address the adverse consequences of child maltreatment. For the purposes of this review, we sought to group these according to common factors in their underlying theories of change.

We recognise that there is much debate about the theoretical underpinnings and classification of different types of therapy, and that some may disagree about the decisions we have made.

We summarised therapies according to the groupings below. Further details and descriptions of the therapeutic approaches can be found in *Appendix 5*.

- Cognitive-behavioural therapies:
  - CBT
  - behavioural therapies
  - modelling and skills training
  - TF-CBT
  - EMDR.
- Relationship-based interventions (RBIs):
  - attachment-orientated interventions
  - Attachment and Biobehavioral Catch-up (ABC)
  - parent-child interaction therapy (PCIT)
  - parenting interventions
  - dyadic developmental psychotherapy (DDP).
- Systemic interventions:
  - systemic family therapy (FT)
  - transtheoretical intervention
  - MST
  - multigroup FT
  - family-based programme.
- Psychoeducation
- Group work with children
- Psychotherapy (unspecified)
- Counselling
- Peer mentoring
- Intensive service models:
  - treatment foster care
  - therapeutic residential/day care
  - co-ordinated care.
- Activity-based therapies:
  - arts therapy
  - play/activity interventions
  - animal therapy.

### **Assessment of risk of bias/study quality**

Risk of bias in RCTs was assessed using the Cochrane Risk of Bias Tool.<sup>73</sup> We searched ClinicalTrials.gov and the World Health Organization International Clinical Trials Registry Platform to identify prospectively registered trial.

For non-randomised studies, the Downs and Black Checklist<sup>74</sup> for non-randomised studies was used. The quality of acceptability studies was assessed against the relevant Critical Appraisal Skills Programme tool<sup>75</sup> and the principles of good practice for conducting social research with children. The quality/risk of bias of all eligible studies was assessed, but no study was excluded from the acceptability phase of the review on the basis of its strength of evidence. The quality of data included within the economic evaluation was assessed using the critical appraisal criteria proposed by Drummond *et al.*<sup>76</sup> (see *Appendix 8*). The aim of the checklist is to assist users of economic evaluations to assess the validity of the results by attempting to determine if the methodology used in the study is appropriate. The checklist asks 10 questions, as reproduced in *Appendix 7*.

### **Data synthesis: effectiveness studies**

We first mapped all of the studies of interventions against type of maltreatment (specific or multiple) and goals of treatment (outcome domains and measures). Interventions were grouped according to a simple classification system (e.g. whether or not the intervention had a given component, i.e. psychodynamic, cognitive). Priority was given to randomised and quasi-randomised trials, followed by non-randomised studies with comparison groups, although only data from RCTs were included in any meta-analyses, largely due to concerns about the quality of the data.

### **Measures of treatment effect**

*Dichotomous outcomes* For dichotomous outcomes (e.g. attachment behaviours), we calculated effect sizes as odds ratios (ORs) with 95% confidence intervals (CIs). We converted continuous outcome data (e.g. post-intervention depression) into standardised mean differences (SMDs) and presented data with 95% CIs.

*Continuous data* Unadjusted data were extracted where possible, both for consistency of interpretation across studies and because we anticipated that this data source would be less susceptible to selective reporting bias (in particular, the strategy prevents the possibility of biased selection of covariates for inclusion in the model). Ideally we would use 'change from baseline' measures in the meta-analyses because these reflect the correlations between measures at baseline and follow-up within individuals, and also avoids biases that can be introduced if there is an imbalance in baseline measures across arms (The Cochrane Handbook). However, 'change from baseline' measures were only rarely reported. We instead use follow-up measures in the meta-analyses; however note that these measures can be biased, especially if there is an imbalance in baseline measures between arms (which may occur because of flaws in randomisation process or simply due to small numbers). We compared baseline characteristics between arms and across studies, and for outcomes where there was an indication of intervention efficacy, we checked the robustness of these results by performing a sensitivity analysis to using 'change from baseline measures' with assumed values for correlation (see *Sensitivity analyses*).

### **Data synthesis**

Where appropriate data were available, data synthesis was performed to pool the results. As clinical and trial heterogeneity were expected (even similar interventions are provided under different circumstances, by different providers, to different groups), we used a random-effects model.<sup>77</sup>

### **Assessment of heterogeneity**

We explored the extent to which age (< 10 years old vs. > 10 years old), gender, ethnicity, type of maltreatment (sexual vs. physical), intervention type and parent involvement (child-only intervention vs. parent-and-child intervention) might moderate the effects of psychosocial interventions.

### **Sensitivity analyses**

Publication bias and small study effects were investigated using standards methods (e.g. funnel plots) and also within the synthesis models.<sup>78</sup> When the data did not support such methods, the likelihood of publication bias was summarised narratively.

We examined the impact of trial/study factors, including risks of bias domains and cointerventions.

For outcomes where there was an indication of intervention efficacy, we checked the robustness of results to using a 'change from baseline' measure, rather than 'follow-up' measure. In the sensitivity analysis, we derived 'change from baseline' measures by assuming values for the correlation between baseline and follow-up measures:  $\rho = 0, 0.25, 0.5, 0.75, 1$ . The standard deviation (SD) of the mean change from baseline,  $sd_{change}$ , can then be estimated from the SD at baseline,  $sd_0$ , and the SD at follow-up,  $sd_1$ , using the formula:

$$sd_{change} = \sqrt{sd_0^2 + sd_1^2 - 2\rho sd_0 sd_1}. \quad (1)$$

### Data synthesis: acceptability studies

A synthesis of acceptability data was undertaken, using a narrative approach to synthesis.<sup>79</sup> Studies were grouped into theoretically distinct subgroups. Using these intervention subgroupings, each study was described, and data synthesis was conducted and reported using the following categories: children's views of the intervention, caregiver views, clinician views and attrition/engagement metrics. The structure of this narrative was informed and framed by the content and methodological expertise available within the research team and consultation with Young Persons' Advisory Groups. Thematic analysis was also carried out to identify common issues and barriers relating to acceptability.

### Data synthesis: economic evidence

The economic component of the project aimed to (1) systematically review all full economic evaluations of interventions that were designed to improve outcomes for maltreated children, using a narrative approach, where full economic evaluation is defined as the analysis of both the costs and effects of one intervention compared with another (including cost-effectiveness, cost-utility, cost-benefit or cost-consequences analysis); (2) produce a decision-analytic model to quantitatively explore the relative cost-effectiveness of interventions found to show promising levels of effectiveness in the effectiveness review and meta-analyses; and (3) perform a value of information analysis to quantify the extent to which further primary research to reduce uncertainty is warranted and where additional research may be most valuable. However, lack of relevant economic evidence precluded both decision-analytic modelling and value-of-information analyses.

Instead, we conducted cost-effectiveness analyses for the most promising intervention using SMDs from meta-analyses as the measure of outcome, and, additionally, using the results of a meta-analysis of a subgroup of studies that reported outcomes in terms of a single clinical measure – the Children's Depression Inventory (CDI).<sup>80</sup> Although the first analysis allowed us to utilise all the available evidence, the second analysis provides evidence that is easier to interpret, focusing on the additional cost per unit improvement in CDI score, rather than per unit improvement in SMD.

Intervention costs were calculated from data included in each paper on the nature of the intervention under evaluation, including the number and duration of sessions and the format of delivery (group or individual). Unit costs were estimated using nationally applicable UK unit costs per hour of face-to-face contact for relevant professionals<sup>81</sup> ([www.pssru.ac.uk/project-pages/unit-costs/2014/](http://www.pssru.ac.uk/project-pages/unit-costs/2014/)). It was not always clear from the papers which professionals had delivered the interventions and thus we estimated costs for three categories of professional: clinical psychologist, psychologist and counsellor. We applied an average cost of the three categories of professionals, weighted to take into consideration the number of group-based interventions compared with individual interventions. Data on the use of broader health and social care services were not available from the literature, so these costs were excluded.

Cost-effectiveness was explored initially through the calculation of incremental cost-effectiveness ratios (ICERs), defined as the difference in mean costs divided by the difference in mean effects between the two

groups.<sup>82</sup> We report the ICERs for SMD and CDI<sup>80</sup> post treatment (for which the greatest number of studies were available) and 12-month follow-up (to capture the longer-term implications).

Uncertainty was explored using probabilistic sensitivity analysis, a form of analysis that involves assigning probability distributions to parameters (costs and effects) and sampling at random from the distributions to generate an empirical distribution for each parameter.<sup>83</sup> To represent uncertainty in costs, we fitted a gamma distribution constrained between 0 and positive infinity, to reflect the fact that cost data are commonly skewed in nature. For SMD and CDI,<sup>80</sup> we assigned a normal distribution. Cost-effectiveness acceptability curves (CEACs) are presented, which are derived from the joint density of incremental costs and incremental effects and represent the probability of one intervention being more cost-effective than the comparison as a function of the willingness to pay for a unit improvement in outcome.<sup>84</sup> As willingness to pay for an improvement in SMD and CDI<sup>80</sup> are not known, a range of possible values of willingness to pay are plotted.

## Changes from the original protocol

During the course of the review, we had cause to agree several minor departures from the original published protocol, as described below.

*Inclusion of unpublished dissertations* We had originally intended to include unpublished dissertations. The search strategy identified a much larger than anticipated number of citations, including 290 unpublished dissertations, many of which proved very difficult to access (most were from American universities). Owing to resources constraints, we took a pragmatic decision to exclude these from the review. To minimise the loss of relevant studies, two reviewers (JH, NL) independently reviewed the title and abstract of all 290 dissertations a second time, to identify any that were clearly evaluations of relevant interventions. We then searched for published papers associated with the 36 dissertations so identified, all of which had already been found in the original search.

*Population* A clarification is necessary regarding eligible study participants. As per protocol, we included only papers that aimed to address the sequelae of maltreatment. We had also originally aimed to include studies in which recruitment was 'biased towards' maltreated children. During the course of the review, we identified studies in which recruitment may have favoured maltreated children (e.g. foster children) but which did not actually address a sequelae of maltreatment. These studies were therefore excluded.

*Outcomes* We originally intended to map treatment goals and measures used as part of an examination of the underpinning 'logic model' of interventions and to inform future research priorities. The studies identified rarely provided sufficient information to be of any value in making such an assessment. Instead, for descriptive purposes, where available, we recorded the aim of the intervention and the outcome measures reported for all included papers. This information is presented in *Chapter 3* (see *Tables 3* and *4*).

*Searches* We had planned to hand-search relevant journals. In view of the considerable number of potentially relevant studies that were identified through other search strategies, the research group agreed that additional hand searches were no longer necessary. We had also planned to search Health Searches Research Projects in Progress, but this database retrieves many hundreds of records of funded projects without publication details or links to reports. It was decided that the resources required to properly search this resource could not be justified.

*Study screening and selection* We used EPPI-Reviewer version 4 (Evidence for Policy and Practice Information and Co-ordinating Centre, University of London, London, UK) rather than a project website for the submission and addition of new references so that the team could screen and discuss them. Owing to the complexity of the topic, we chose not to check inter-rater reliability for judgements on study screening and selection, instead favouring detailed discussion and consensus about studies of uncertain eligibility.

*Data synthesis – effectiveness studies* We originally planned to contact study authors about any missing information so that we could consider the extent to which this might alter the conclusions of the syntheses. The considerable volume of eligible studies and the poor quality of the available data meant this was not an appropriate use of resources. If the data had allowed, we had planned to extend our meta-analysis by fitting network meta-analysis models to explore in more detail the effectiveness of different types and different components of interventions.<sup>85,86</sup> The quantity and quality of the data did not allow for this technique to be used.

*Subgroup analyses* If the available data had allowed, we had planned to explore the extent to which a variety of study characteristics moderated the effects of treatment. We did not have sufficient data to support these analyses and therefore present data descriptively where available, including: impact of current symptoms; ethnicity; maltreatment history (including whether intra- or extra-familial); time since maltreatment; care setting (family/out-of-home care including foster care/residential); care history; characteristics of intervention (setting, provider, duration); and the adjunctive treatments.

We had planned to perform sensitivity analyses based on the inclusion of the QEx-randomised and non-randomised studies but, owing to concerns about the quality of the data, we pooled data only from RCTs in any of the meta-analyses.

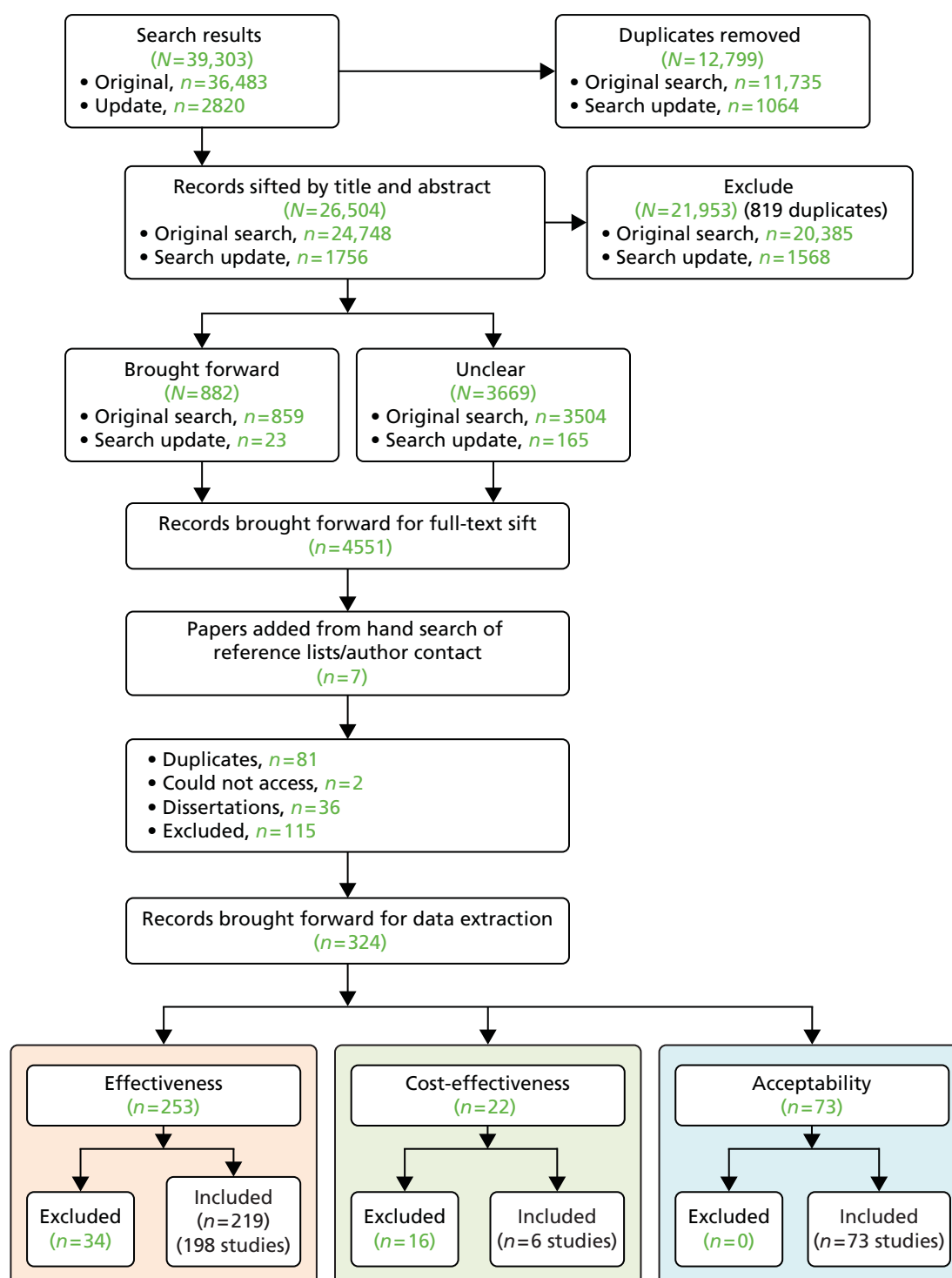
*Economic synthesis* We had planned to undertake decision-analytic modelling of the relative cost-effectiveness of interventions found to show promising levels of effectiveness in the effectiveness review and meta-analyses, and to use the decision model developed to perform a value-of-information analysis to quantify the extent to which further primary research to reduce uncertainty is warranted. However, lack of relevant economic evidence precluded decision modelling and thus the value-of-information analyses, as described above.

## Overview of the evidence base

The search and sifting process is summarised in the PRISMA flow chart in *Figure 1*. A total of 39,541 citations were identified in the search, which were either imported into EndNote or saved as text files. After removing obvious duplicates and irrelevant records, a total of 39,303 records were imported into EPPI-Reviewer, and a further 12,799 duplicates were removed, leaving 26,504 citations to be sifted by title and abstract. Reviewers excluded 21,953 citations based on title and abstract. Reasons for exclusion included:

- duplicate citation (819)
- clearly irrelevant (4634)
- adult participants (661)
- not a maltreated sample (1515)
- form of maltreatment not included in the review, for example peer bullying, trauma due to war (445)
- participants were maltreated children but study not an evaluation study (7083)
- a relevant intervention was described but not evaluated (2348)
- evaluation of an intervention that was not relevant, for example abuse prevention programmes or drug interventions (999)
- evaluation used a study design excluded from the review, for example case study (2093)
- paper contained relevant background information but not an evaluation of a relevant intervention (299)
- paper was a review paper not primary research (1057).

The remaining 4551 were initially brought forward to be sifted by full text. However, two published papers<sup>87,88</sup> could not be accessed despite searches via a number of university libraries, interlibrary loans and attempts to contact the authors and 36 dissertations were not accessed. An additional seven papers were identified through searches of the reference list of included studies. Of those articles reviewed at the full-text stage, 4196 were excluded (of which 81 were duplicates), leaving 324 citations brought forward for data extraction. Of these citations, 230 were potentially relevant for effectiveness, 17 cost-effectiveness,



**FIGURE 1** Maltreatment review: flow chart. Original search date 26 June 2013, search update 4 June 2014. Numbers reflect the number of records, not the included studies for which there may be multiple citations. Sifting decisions are up to date as of 30 January 2014. Green numbers refer to records and black numbers refer to studies.

54 acceptability, four relevant to both effectiveness and cost-effectiveness, 18 relevant to both effectiveness and acceptability, and one relevant to all three.

A number of these citations were subsequently excluded after discussions within the review team (34 effectiveness, 16 cost-effectiveness – see *Chapter 3, Table 7*). This left 219 effectiveness citations, six economic citations and 73 acceptability papers.

## Chapter 3 Description of studies

### Effectiveness studies

#### Included studies

In total, we identified 198 studies (217 citations) assessing the effectiveness of relevant psychosocial interventions for maltreated children. Of these, 62 studies followed a randomised ( $n = 61$ ) or quasi-randomised ( $n = 1$ ) design. QEx designs were identified in eight studies, with a further 26 COSs and 101 uncontrolled studies. *Table 1* provides an overview of evaluations of interventions by study design. *Table 2* provides an overview of the distribution of evaluations across intervention category and maltreatment types, by study design (controlled, uncontrolled).

**TABLE 1** Intervention categories identified by study design

Intervention category		Study design					Total
		RCT	Q-RCT	QEx	COS	UCS	
CBT	CBT for sexual abuse	11			1	30	<b>56</b>
	CBT for physical abuse	3					
	CBT for multiple abuse	7					
	EMDR	2					
RBIs	Attachment-oriented interventions	9			1	10	<b>24</b>
	PCIT	3					
	Parenting interventions	2					
Systemic interventions	Systemic FT	1				14	<b>22</b>
	Trans-theoretical intervention	1					
	Multisystemic FT	3			1		
	Multigroup FT	1					
	Family-based programme			1			
Psychoeducation	Psychoeducation	7		3	7	11	<b>28</b>
Group work with children	Group work with children		1		4	3	<b>8</b>
Psychotherapy/counselling	Psychotherapy/counselling	3		1	3	4	<b>11</b>
Peer mentoring	Peer mentoring	2				0	<b>2</b>
Intensive service models	Treatment foster care	4 <sup>a</sup>			2	15	<b>24</b>
	Therapeutic residential/day care	1			2		
	Co-ordinated care	1					
Activity-based therapies	Arts therapy			2		14	<b>21</b>
	Play/activity interventions	1		1	1		
	Animal therapy				2		
Totals <sup>b</sup>		<b>61</b>	<b>1</b>	<b>8</b>	<b>26</b>	<b>101</b>	<b>198</b>

Q-RCT, quasi-randomised trial; UCS, uncontrolled study.

<sup>a</sup> One RCT of Treatment Foster Care was embedded in a larger COS. It is counted here only as a RCT.

<sup>b</sup> Numbers reflect the number of studies.

**TABLE 2** Summary of included studies by abuse type: total number of studies (controlled studies, uncontrolled studies)

Intervention category	Types of abuse (controlled, uncontrolled)					
	Physical	Emotional	Sexual	Neglect	Multiple	Other
CBT	21 (11, 10)	8 (4, 4)	45 (20, 25)	6 (3, 3)	11 (3, 8)	10 (6, 4)
Relationship-based interventions	13 (7, 6)	6 (5, 1)	7 (3, 4)	14 (7, 6)	7 (5, 2)	14 (9, 5)
Systemic interventions	11 (6, 5)	5 (2, 3)	12 (4, 8)	5 (3, 2)	3 (1, 2)	4 (0, 4)
Psychoeducation	9 (7, 2)	5 (7, 1)	21 (12, 9)	5 (3, 2)	4 (2, 2)	8 (6, 2)
Group work with children	0 (0, 0)	0 (0, 0)	8 (5, 3)	0 (0, 0)	0 (0, 0)	0 (0, 0)
Psychotherapy (unspecified)	4 (3, 1)	1 (1, 0)	10 (6, 4)	3 (3, 0)	2 (2, 0)	0 (0, 0)
Peer mentoring	2 (2, 0)	0 (0, 0)	0 (0, 0)	2 (2, 0)	1 (1, 0)	0 (0, 0)
Intensive service models	16 (7, 9)	5 (4, 1)	14 (5, 9)	11 (6, 5)	8 (6, 2)	7 (1, 6)
Activity-based therapies	8 (3, 6)	1 (0, 1)	16 (5, 11)	4 (1, 3)	2 (0, 2)	6 (2, 4)
<b>Totals</b>	<b>84 (45, 39)</b>	<b>30 (19, 11)</b>	<b>134 (60, 72)</b>	<b>49 (28, 21)</b>	<b>38 (20, 18)</b>	<b>49 (24, 25)</b>

The interventions and comparisons evaluated are summarised below and described in detail in *Chapter 4*. All controlled studies are summarised in *Table 3* (participant characteristics), *Table 4* (intervention characteristics and comparators) and *Table 5* (outcomes domains and outcome measures used). The uncontrolled studies identified are summarised in *Table 6*. In the protocol, we specified that these studies would be included only if no other controlled studies were identified for the intervention evaluated. This was the case only for 'systemic interventions' for 'other' types of abuse (e.g. witnessing domestic violence, Munchausen's syndrome by proxy) and 'activity-based interventions' for 'emotional' forms of abuse. We therefore consider these only in *Chapter 6*, in the context of highlighting important gaps in the evidence base.

### Summary of study characteristics

#### Sample size

Sample sizes in identified studies varied considerably with samples ranging from just 3 to 834 participants. The majority of studies (107) had < 50 participants, with just 14 having > 200 participants.

#### Location

The overwhelming majority of studies were conducted in the USA (130 out of 196). The remaining studies took place in Canada (22), the UK (17) or other European countries (11), Australia (6) or New Zealand (1), North America (1), South America (4), Iran (2), Israel (1), South Africa (1), Turkey (1) and the Philippines (1).

#### Age

Participants in identified studies ranged in age from 0 to 25 years old. The median age across all studies was approximately 10 years old. There appeared to be differences in the age groups targeted by different interventions. Cognitive-behavioural approaches included participants from 4 to 24 years old with a mean age of approximately 13 years old. Attachment-orientated interventions tended to target younger children, with most aged between 1 and 4 years old. Systemic interventions appeared to be targeted towards children between 2 and 17 years old with a mean age of approximately 8 years old. For psychotherapy/counselling mean age was often not reported but participants ranged from 3 to 19 years old. Finally, Intensive service models mainly included young participants from birth to age 16 years, with a mean age of approximately 5 years.

#### Gender

The victims of abuse in the identified studies were typically female (61% female, 39% male). In studies that were specifically addressing the consequences of sexual abuse, 80% of participants were female, with

**TABLE 3** Characteristics of participants in included studies

Intervention category	Design	Study/record	Country	n	Mean age (SD), range	% Female	P	E	S	N	M	O
CBT for sexual abuse	RCT	Berliner 1996 <sup>89</sup>	USA	154	8 years	89			X			
	RCT	Celano 1996 <sup>90</sup>	USA	47	10.5, 8–13 years	100			X			
	RCT	Cohen 1996 <sup>91,92</sup>	USA	86	4.68, 2.11–7.1 years	58			X			
	RCT	Cohen 1998 <sup>93,94</sup>	USA	82	11, 7.2–15.3 years	68			X			
	RCT	Cohen 2004 <sup>95,96</sup>	USA	229	10.76, 8–14.9 years	79			X			
	RCT	Deblinger 1996 <sup>97,98</sup>	USA	100	9.89 (2) 7–13 years	83			X			
	RCT	Deblinger 2001 <sup>99</sup>	USA	63	5.45 (1.47), 2–8 years	61			X			
	RCT	Deblinger 2011 <sup>100</sup>	USA	210	7.6 (2.07), 4–11 years	62			X			
	RCT	Foa 2013 <sup>101</sup>	USA	61	Intervention: 15.4, 14.9–15.8 years Control: 15.3, 14.7–15.9 years	100			X			
	RCT	Jaberghaderi 2004 <sup>102</sup>	Iran	14	12–13 years	100			X			
	RCT	King 2000 <sup>103</sup>	Australia	36	11.4, 5.2–17.4 years	69			X			
	COS	Paquette 2011 <sup>104,105</sup>	Canada	35	14.3 (1.5) years	100			X			
CBT for physical abuse	RCT	LeSure-Lester 2002 <sup>106</sup>	USA	12	13.16, 12–16 years	0	X					
	RCT	<sup>a</sup> Kolko 1996 <sup>107,108</sup>	USA	55	8.6 (2.2) years (no information on control group)	28	X					
	RCT	Runyon 2010 <sup>109</sup>	USA	75	9.88 (2.02), 7–13 years	47	X					

continued

**TABLE 3** Characteristics of participants in included studies (*continued*)

Intervention category	Design	Study/record	Country	<i>n</i>	Mean age (SD), range	% Female	P	E	S	N	M	O
CBT for multiple abuse	RCT	Champion 2012 <sup>110</sup>	USA	559	16.46 (1.34) 14–18 years	100	x	x	x			
	RCT	Church 2012 <sup>111</sup>	Peru	16	13.9, 12–17 years	0						x
	RCT	Jensen 2014 <sup>112,113</sup>	Norway	156	15.1 (2.2), 10–18 years	80	x		x		x	
	RCT	Linares 2006 <sup>114</sup>	USA	128	6.2 (2.3), 3–10 years	No info	x			x		x
	RCT	Linares 2012 <sup>115</sup>	USA	94	6.7 (1.1) 5–8 years	51	x		x	x		
	RCT	Rushton 2010 <sup>116</sup>	UK	38	67 (18), 36–102 months	55	x	x	x	x	x	x
	RCT	Shirk 2014 <sup>117</sup>	USA	43	Intervention: 15.25 (1.52) years Control: 15.69 (1.55), 13–17 years	84	x	x	x		x	x
	COS	Kolko 2011 <sup>118</sup>	USA	52	9.1 (3.7), 3–17 years	48	x		x			x
	COS	Rondeau 1983 <sup>119</sup>	USA	17	7.6 years (median)	24						x
EMDR	RCT	Farkas 2008 <sup>120</sup>	Canada	65	Intervention: 14.3 (1.4) years Control: 14.9 (1.3) years	63			x			
	RCT	Scheck 1998 <sup>121</sup>	USA	85	20.93, 16–25 years	100	x	x	x			

Intervention category	Design	Study/record	Country	n	Mean age (SD), range	% Female	P	E	S	N	M	O
Attachment-orientated interventions	RCT	Bernard 2012 <sup>122</sup>	USA	120	Intervention: 19.2 (5.2), 1.7–21.4 months Control: 19.2 (5.8), 1.7–21.4 months	43				X		X
	RCT	Cicchetti 2006 <sup>123</sup>	USA	189	13.31 (0.81) months	53	X	X		X	X	
	RCT	Cicchetti 2011 <sup>124</sup>	USA	137	Intervention 1: 13.36 (0.87) months Control 1: 13.32 (0.87) months  Intervention 2: 13.36 (0.82) months Control 2: 13.32 (0.71) months	51	X	X		X	X	
	RCT	Dozier 2006 <sup>125,126</sup>	USA	60	Intervention: 19.01 (9.64) 3.9–39.4 months Control: 16.3 (7.42) 3.6–33.6 months	50						X
	RCT	Lieberman 2005 <sup>127–129</sup>	USA	75	4.06 (0.82) 3–5 years	52						X
	RCT	Moss 2011 <sup>130</sup>	Canada	79	Intervention: 3.29 (1.44) years Control: 3.42 (1.34) years	39	X		X	X	X	
	RCT	Spieker 2012 <sup>131</sup>	USA	210	Intervention: 18.29 (5.32) months Control: 18.15 (4.79) months	44						X
	RCT	Sprang 2009 <sup>132</sup>	USA	58	42.5 (18.6) months	49						X
	RCT	Toth 2002 <sup>133</sup>	USA	155	Intervention 1: 48 (7.71) months Control 1: 49.16 (7.54) months  Intervention 2: 47.86 (6.07) months Control 2: 47.77 (6.66) months	45	X	X	X	X	X	
	COS	Becker-Weidman 2006 <sup>134,135</sup>	USA	69	Intervention: 9.4 (2.6) 6.0–15.2 years Control: 11.7 (4.0) 5.3–16.2 years	41	X	X	X	X	X	X

continued

**TABLE 3** Characteristics of participants in included studies (*continued*)

Intervention category	Design	Study/record	Country	<i>n</i>	Mean age (SD), range	% Female	P	E	S	N	M	O
PCIT	RCT	Chaffin 2004 <sup>136</sup>	USA	110	4–12 years	No info	x			x		
	RCT	Thomas 2011 <sup>137</sup>	Australia	150	5 (1.6) years	30	x	x		x		
	RCT	Thomas 2012 <sup>138</sup>	Australia	151	4.75 (1.3) years	29	x	x		x		
Parenting interventions	RCT	Hughes 2004 <sup>139</sup>	Canada	28	Intervention: 65 (19.09) 42–100 months Control: 61 (17.63) 36–93 months	38						x
	RCT	Valentino 2013 <sup>140</sup>	USA	44	Intervention: 5.44 (0.23) years Control: 5.59 (0.22) years	55						x
Systemic FT	RCT	<sup>a</sup> Kolko 1996 <sup>107,108</sup>	USA	55	8.6 (2.2) years (no info on control group)	28	x					
Transtheoretical intervention	RCT	Linares 2015 <sup>141</sup>	USA	22	Average age of sibling pairs 7.2 – 9.7 years	55	x			x		
Multisystemic FT	RCT	Brunk 1987 <sup>142</sup>	USA	43	8.3 years	45	x			x		
	RCT	Danielson 2012 <sup>143</sup>	USA	30	14.8 (1.5) 13–17 years	88			x			
	RCT	Swenson 2010 <sup>144</sup>	USA	90	Intervention: 13.81 (2.22) years Control: 13.95 (1.91) years	56	x					
	RCT	Biehal 2012 <sup>145,146</sup>	UK	34	12.7 years							x
	COS	Schaeffer 2013 <sup>147</sup>	USA	44	Intervention: 12.8 years Control: 10.8 years	44	x	x	x			
Multigroup FT	RCT	Meezan 1998 <sup>148,149</sup>	USA	81	2–11 years	No info	x	x	x	x	x	
Family-based programme	QEx	Bagley 2000 <sup>150</sup>	Canada	93	Intervention: 11.2 years Control: 11.8 years	100			x			

Intervention category	Design	Study/record	Country	n	Mean age (SD), range	% Female	P	E	S	N	M	O
Psychoeducation	RCT	Graham-Berman 2007 <sup>151</sup>	USA	181	8.49 (2.16) 6–12 years	50	x					x
	RCT	Howell 2013 <sup>152</sup>	USA	113	4.95 (0.86) 4–6 years	47						x
	RCT	Overbeek 2013 <sup>153</sup>	Netherlands	164	Intervention: 9.35 (1.55) years Control: 8.99 (1.43) years	45						x
	RCT	Sullivan 2002 <sup>154</sup>	USA	80	8.3, 6.5–11 years	55	x	x				x
	RCT	Trowell 2002 <sup>155</sup>	UK	71	10 (2.2) 6–14	100			x			
	RCT	Wagar 1995 <sup>156</sup>	Canada	42	Intervention: 10.2 (1.74) years Control: 10.57 (1.93) years	29						x
	RCT	Wolfe 2003 <sup>157</sup>	Canada	191	Intervention: 15.1 (1.1) years Control: 15.2 (1.1) years	52	x	x	x	x		
	QEx	Noether 2007 <sup>158</sup>	USA	253	7.28 years	90	x		x			x
	QEx	Simoneau 2008 <sup>159</sup>	Canada	57	9.19 (2.0) 6–13	78.9			x			
	QEx	Tourigny 2007 <sup>160</sup>	Canada	55	Intervention 1: 14.4 years Control 1: 14.8 years  Intervention 2: 15.2 years	100			x			
	COS	Barth 1994 <sup>161</sup>	USA	27	Intervention: 8.2 years Control: 9.6 years	83			x			
	COS	Duffany 2009 <sup>162</sup>	USA	834	6.8 (2.6) 3–12 years	51			x			
	COS	Hébert 2010 <sup>163</sup>	Canada	107	Intervention: 8.67 (2.00) years Control: 8.64 (1.78) years	80			x			
	COS	Holland 2004 <sup>164</sup>	Canada	66	13 (median), 5–19 years	70	x	x	x	x	x	
	COS	Santibáñez 2000 <sup>165</sup>	Spain	30	14.35 (1.65) 11–16 years	37	x	x	x	x	x	

continued

**TABLE 3** Characteristics of participants in included studies (*continued*)

Intervention category	Design	Study/record	Country	<i>n</i>	Mean age (SD), range	% Female	P	E	S	N	M	O
	COS	Tourigny 2005 <sup>166,167</sup>	Canada	42	Intervention: 14.8 years Control: 14.3 years	100			X			
	COS	Tourigny 2008 <sup>168</sup>	Canada	53	Intervention: 15.5 years Control: 14.6 years	no info			X			
Group work with children	Q-RCT	Monck 1996 <sup>169</sup>	UK	47	4–13 years	85			X			
	COS	De Luca 1995 <sup>170</sup>	Canada	70	7–12 years	100			X			
	COS	Grayston 1995 <sup>171</sup>	Canada	12	7–10 years	0			X			
	COS	McGain 1995 <sup>172</sup>	USA	30	10.5 (1.21), 9–12 years	100			X			
	COS	Verleur 1986 <sup>173</sup>	USA	30	13–17 years	100			X			
Psychotherapy/ counselling	RCT	Thun 2002 <sup>174</sup>	USA	13	16–18 years	100			X			
	RCT	Haight 2010 <sup>175</sup>	USA	22	9.6, 7–14.6 years	40	X		X	X	X	
	RCT	Reddy 2013 <sup>176</sup>	USA	70	14.7 (1.14) years	56	X	X	X	X		
	RCT	Trowell 2002 <sup>155</sup>	UK	71	11.5; 11.4 [I;C] (2.2) 6–14	100			X			
	QEx	Cadol 1975 <sup>177</sup>	USA	140	Intervention 1: 17.2 months Control 1: 15.8 months  Intervention 2: 14.0 months Control 2: 17.7 months	34	X			X	X	
	COS	Nolan 2002 <sup>178</sup>	Ireland	38	Intervention 1: 12.6 (2.3) 6–17 years Intervention 2: 12.7 (2.2) 6–17 years	93			X			
	COS	Sullivan 1992 <sup>179</sup>	USA	72	12–16 years	29			X			
	COS	Downing 1988 <sup>180</sup>	USA	22	6–12 years	59			X			

Intervention category	Design	Study/record	Country	n	Mean age (SD), range	% Female	P	E	S	N	M	O
Peer mentoring	RCT	Fantuzzo 1988 <sup>181</sup>	USA	36	4.3, 3.1–5.3 years	22	X			X		
	RCT	Fantuzzo 1996 <sup>182</sup>	USA	46	Intervention: 4.53 (0.21) years Control: 4.34 (0.30) years	60	X			X	X	
Treatment foster care	RCT	Fisher 2005 <sup>183–188</sup>	USA	177	4.4 (0.79–0.86), 3–6 years	47	X	X	X	X	X	
	RCT	Smith 2011 <sup>189</sup>	USA	100	11.54 (0.48) years	100	X		X			
	RCT	Taussig 2010 <sup>190,191</sup>	USA	156	10.4 (0.9), 9–11 years	49	X	X	X	X		
	COS	Fisher 2000 <sup>192</sup>	USA	30	Intervention: 5.35 years Control 1: 4.40 years Control 2: 4.48 years	30						X
	COS	Graham 2012 <sup>193</sup>	USA	37	73.26 (10.9), 59.89–106.09 months	49	X	X	X	X	X	
Therapeutic residential and day care	RCT	Moore 1998 <sup>194</sup>	USA	61	Intervention: 0.92 (0.6) years Control: 1.1 (0.7) years	54						X
	COS	Culp 1987 <sup>195,196</sup>	USA	70	2.4, 0.1–6.2 years	44	X			X		
	COS	Culp 1991 <sup>197</sup>	USA	34	4.8, 3.9–5.9 years	44	X			X		
Co-ordinated care	RCT	Swenson 2000 <sup>198</sup>	USA	66	8, 0–16 years	53	X	X	X	X	X	X
Arts therapy	QEx	Brillantes-Evangelista 2013 <sup>199</sup>	Philippines	33	13–18 years	64	X		X			
	QEx	Pretorius 2010 <sup>200</sup>	South Africa	12	8–11 years	100			X			
Play/activity	COS	D'Andrea 2013 <sup>201</sup>	USA	88	12–21 years	100	X		X	X		
	RCT	McDonald 1989 <sup>202</sup>	USA	38	8–17 years	50						X
	QEx	Udwin 1983 <sup>203</sup>	UK	34	Intervention: 58.3 (9.45) months Control: 55.82 (12.29) months	41						X

continued

TABLE 3 Characteristics of participants in included studies (continued)

Intervention category	Design	Study/record	Country	n	Mean age (SD), range	% Female	P	E	S	N	M	O
Animal therapy	COS	Dietz 2012 <sup>204</sup>	USA	153	Intervention 1: 11.57 (2.85) years Intervention 2: 10.97 (2.63) years Control: 11.63 (2.46) years	95			x			
	–	Hamama 2011 <sup>205</sup>	Israel	18	Intervention: 15.33 (1.12) years Control: 14.56 (1.88) years	100	x		x			

E, emotional (abuse); M, multiple (types of maltreatment); N, neglect; O, other (forms of maltreatment); P, physical (abuse); Q-RCT, quasi-randomised controlled trial; S, sexual (abuse).  
a Kolko 1996<sup>107,108</sup> appears twice – once in section ‘CBT for physical abuse’ and once in section ‘systemic family therapy’.  
Code:

	Cognitive-behavioural		Relationship based		Systemic		Psychoeducation
	Psychotherapy/counselling		Peer mentoring		Intensive service models		Activity based
	Group work with children						

**TABLE 4** Characteristics of interventions and comparators in included studies

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
CBT for sexual abuse	Berliner 1996 <sup>89</sup>	RCT	Health service/hospital	<p><i>Name:</i> Enhanced group treatment approach</p> <p><i>Aim:</i> To reduce fear and anxiety in sexually abused children</p> <p><i>Theory:</i> Designed to be a structured equivalent of conventional sexual abuse-specific group therapy treatment – included elements of GE treatment procedures and SIT</p>	Comparison treatment included common elements of conventional sexual abuse treatment, but it did not include SIT
	Celano 1996 <sup>90</sup>	RCT	Health service/hospital	<p><i>Name:</i> RAP</p> <p><i>Aim:</i> To address children's maladaptive beliefs, affects, and behaviour along four dimensions, (self-blame/stigmatisation, betrayal, traumatic sexualisation, powerlessness)</p> <p><i>Theory:</i> Finkelhor's and Browne's (1985<sup>206</sup>) theoretical model of the four traumatic dynamics intrinsic to sexual abuse</p>	TAU
	Cohen 1996 <sup>91,92</sup>	RCT	Health service/hospital	<p><i>Name:</i> CBT for sexually abused preschoolers</p> <p><i>Aim:</i> Treatment of the sequelae of sexual abuse in preschool children and their parents</p> <p><i>Theory:</i> CBT</p>	Non-directive supportive therapy
	Cohen 1998 <sup>93,94</sup>	RCT	Health service/hospital	<p><i>Name:</i> SAS-CBT and behavioural difficulties related to sexual abuse</p> <p><i>Theory:</i> Finkelhor (1987)<sup>207</sup> – theoretical model of the impact of sexual abuse on children</p>	Non-directive supportive therapy
	Cohen 2004 <sup>95,96</sup>	RCT	Health service/hospital	<p><i>Name:</i> TF-CBT</p> <p><i>Aim:</i> Treatment of the sequelae of sexual abuse</p> <p><i>Theory:</i> Cognitive and learning theories about PTSD in children</p>	CCT
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Deblinger 1996 <sup>97,98</sup>	RCT	Community	<p><i>Name:</i> CBT for PTSD for sexually abused children</p> <p><i>Aim:</i> To target sexually abused children's PTSD symptoms, as well as other behavioural and emotional problems</p> <p><i>Theory:</i> CBT</p>	Standard community care
	Deblinger 2001 <sup>99</sup>	RCT	Not reported	<p><i>Name:</i> Cognitive Behavioural Group</p> <p><i>Aim:</i> (1) Help child communicate about their feelings; (2) identify 'OK' and 'Not OK' touches; and (3) learn abuse response skills</p> <p><i>Theory:</i> No specific but CBT theoretical framework is well known. Supportive therapy: unclear</p>	Supportive counselling
	Deblinger 2011 <sup>100</sup>	RCT	Not reported	<p><i>Name:</i> TF-CBT</p> <p><i>Aim:</i> Assess effects of treatment on severity of the PTSD, internalising, externalising, depressive and anxiety symptoms of the children, along with their levels of sexualised behaviours, fear, shame and body safety skills</p> <p><i>Theory:</i> CBT</p>	No non-CBT comparison – study compared TF-CBT with and without TN
	Foa 2013 <sup>101</sup>	RCT	Health service/hospital	<p><i>Name:</i> Prolonged exposure programme modified for adolescent girls with sexual abuse-related PTSD</p> <p><i>Aim:</i> To reduce PTSD severity, rate of PTSD diagnosis, self-reported PTSD severity and depression, and improve general functioning</p> <p><i>Theory:</i> Prolonged exposure therapy</p>	Supportive counselling
	Jaberghaderi 2004 <sup>102</sup>	RCT	Health service/hospital – university clinic	<p><i>Name:</i> (1) EMDR and (2) CBT</p> <p><i>Aim:</i> Overall aim of both – to address the sequelae of sexual abuse</p> <p><i>Theory:</i> Not specified</p>	No non-CBT comparisons – study compared CBT with EMDR

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	King 2000 <sup>103</sup>	RCT	Not reported	<p><i>Name:</i> Child CBT Intervention</p> <p><i>Aim:</i> To help the child overcome his or her post-abuse distress and PTSD symptoms</p> <p><i>Theory:</i> Deblinger's work<sup>20,208</sup> on the CBT of sexually abused children exhibiting PTSD was particularly influential in the development and refinement of the treatment protocol</p>	Wait-list control
	Paquette 2011 <sup>104,105</sup>	COS	Community	<p><i>Name:</i> Group therapy programme</p> <p><i>Aim:</i> To 'reduce the after effects associated with sexual abuse, increase social support seeking and prevent revictimisation'</p> <p><i>Theory:</i> An 'eclectic viewpoint (cognitive-behavioural, cognitive and humanistic) was adopted while various technical approaches were used (e.g. modelling, social support, cognitive reframing)'</p>	No treatment comparison group
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
CBT for physical abuse	LeSure-Lester 2002 <sup>106</sup>	RCT	Care setting	<p><i>Name:</i> Cognitive behaviour therapeutic approach</p> <p><i>Aim:</i> To 'teach the adolescent alternative ways of thinking about, responding to, and feeling about, stressful situations typical to the adolescents social encounters'</p> <p><i>Theory:</i> Cognitive-behavioural therapeutic approach</p>	Active listening
	Kolko 1996 <sup>107,108</sup>	RCT	Home based/health service/hospital	<p><i>Name:</i> Individual child-parent CBT</p> <p><i>Aim:</i> Designed to alter participants' cognitive, affective and behavioural-social repertoires</p> <p><i>Theory:</i> Social learning principles</p>	Routine community services
	Runyon 2010 <sup>109</sup>	RCT	Health service/hospital	<p><i>Name:</i> Combined parent-child cognitive-behavioural group therapy for families</p> <p><i>Aim:</i> (1) Decrease the risk of recurrence of physically abusive episodes; (2) assist parents in correcting unrealistic expectations and misinterpretations of children's behaviours; (3) increase parents' ability to manage their anger and utilise non-violent child management skills; (4) increase positive parent-child interactions; and (5) improve children's overall emotional adjustment</p> <p><i>Theory:</i> CPC-CBT is based on cognitive-behavioural principles and includes some of the CBT techniques that have been included in pre-existing empirically validated models, such as TF-CBT (Deblinger and Heflin 1996<sup>208</sup>)</p>	No non-CBT comparison – study compared CPC-CBT with parent-only CBT

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
CBT for multiple abuse	Champion 2012 <sup>110</sup>	RCT	Health service/hospital	<p><i>Name:</i> PI intervention</p> <p><i>Aim:</i> Counselling for abused ethnic minority adolescent women on infection with STI</p> <p><i>Theory:</i> Theory-based ARRM; (Catania <i>et al.</i> 1990<sup>209</sup>) cognitive-behavioural intervention model vs. enhanced counselling</p>	Enhanced clinical counselling
	Church 2012 <sup>111</sup>	RCT	Care setting	<p><i>Name:</i> EFT</p> <p><i>Aim:</i> Treatment for traumatic stress</p> <p><i>Theory:</i> 'EFT employs brief forms of certain components of therapies that have demonstrated efficacy, such as cognitive restructuring and exposure. To these it adds a somatic component, having therapists or subjects tap with their fingers on prescribed acupuncture points while cognitive statements are made'</p>	Wait-list control
	Jensen 2014 <sup>112,113</sup>	RCT	Health service/hospital	<p><i>Name:</i> TF-CBT</p> <p><i>Aim:</i> To treat children and youth exposed to traumatising events</p> <p><i>Theory:</i> CBT</p>	TAU
	Linares 2006 <sup>114</sup>	RCT	Not reported	<p><i>Name:</i> Parenting course (Incredible Years<sup>210</sup>)</p> <p><i>Aim:</i> The proximal outcomes are positive discipline practices and collaborative coparenting, whereas the distal goal is the reduction of child externalising problems over time</p> <p><i>Theory:</i> Coparenting strategy, whereby caregivers acknowledge the inequality in their roles, learn to communicate and resolve conflict directly and work to promote the emotional adjustment of children in foster care</p>	Standard UC condition
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Linares 2012 <sup>115</sup>	RCT	A classroom-like setting at each study site	<p><i>Name:</i> Child training – using 12 out of 18 lessons from Incredible Years Dina Program for Young Children<sup>211</sup></p> <p><i>Aim:</i> Reducing conduct problems at home and school and improving conflict management strategies with peers</p> <p><i>Theory:</i> Incredible Years Dina Program for Young Children<sup>211</sup></p>	Standard UC condition
	Rushton 2010 <sup>116</sup>	RCT	Home based	<p><i>Name:</i> Cognitive-behavioural intervention</p> <p><i>Aim:</i> To improve the adopters' understanding of the meaning of the children's current behaviour and increase their ability to manage the behaviour</p> <p><i>Theory:</i> 'The cognitive-behavioural approach. The most direct influence in writing the manual for this approach has been the work of Webster-Stratton (Webster-Stratton 2003;<sup>212</sup> Webster-Stratton and Hancock 1998<sup>213</sup>)'</p>	Wait-list control
	Shirk 2014 <sup>117</sup>	RCT	Health service/hospital	<p><i>Name:</i> m-CBT</p> <p><i>Aim:</i> Focus on addressing cognitive deficits and distortions to treat depression in traumatised adolescents</p> <p><i>Theory:</i> CBT with focus on mindfulness techniques</p>	TAU
	Kolko 2011 <sup>118</sup>	COS	Community	<p><i>Name:</i> Alternatives for Families</p> <p><i>Aim:</i> AF-CBT is an EBT for child physical abuse and family aggression/conflict</p> <p><i>Theory:</i> Social learning/behavioural theory; family-systems theory; cognitive therapy; developmental victimology</p>	No non-CBT comparison – study compared AF-CBT with combination of other EBTs, including TF-CBT, PCIT, CPP, cognitive behavioural intervention for trauma in schools
	Rondeau 1983 <sup>119</sup>	COS	Care setting	<p><i>Name:</i> Art therapy, with or without token reward system</p> <p><i>Aim:</i> Increase co-operative behaviour and art production</p> <p><i>Theory:</i> Operant conditioning social exchange theory</p>	Art therapy without token reward system

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
EMDR	Farkas 2008 <sup>120</sup>	RCT	Not reported	<i>Name:</i> MASTR/EMDR  <i>Aim:</i> To reduce trauma symptoms and behavioural problems  <i>Theory:</i> MASTR and EMDR	Wait-list controls receiving routine care
	Scheck 1998 <sup>121</sup>	RCT	Therapist setting	<i>Name:</i> EMDR  <i>Aim:</i> 'Using a series of manualised steps, the client reactivates the troubling memory while the practitioner intervenes at a variety of choice points to resolve distress (Shapiro 1995 <sup>214</sup> )'  <i>Theory:</i> 'EMDR is a specific desensitising treatment designed around a complex method'	Active listening
Attachment-orientated interventions	Bernard 2012 <sup>122</sup>	RCT	Home based	<i>Name:</i> ABC  <i>Aim:</i> 'Targets nurturing, sensitive care among the parents identified as being at risk for neglecting their young children, with the aim of decreasing disorganised attachment'  <i>Theory:</i> Attachment theory	DEF
	Cicchetti 2006 <sup>123</sup>	RCT	Home based	<i>Name:</i> (1) IPP (2) PPI  <i>Aim:</i> To foster secure attachment in infants in maltreating families  <i>Theory:</i> IPP is derived from the work of Fraiberg <i>et al.</i> (1975 <sup>215</sup> ); PPI is derived from the work of Olds <i>et al.</i> (Olds <i>et al.</i> 1997, <sup>216</sup> 1998, <sup>217</sup> Olds and Kitzman 1990 <sup>218</sup> )	Community standard group – received services as usual
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Cicchetti 2011 <sup>124</sup>	RCT	Home based	<p><i>Name:</i> CPP PPI</p> <p><i>Aim:</i> CPP ‘encourages sensitive interactions between caregivers and their children by helping parents form positive representations of themselves and the caregiver–child relationship;’ PPI ‘teaches parenting skills, relaxation techniques, and behaviours that promote social support’</p> <p><i>Theory:</i> CPP is attachment based; PPI is a behavioural/ education-based intervention</p>	Community Standard group – received services as usual
	Dozier 2006 <sup>125,129</sup>	RCT	Home based	<p><i>Name:</i> ABC</p> <p><i>Aim:</i> Designed to help children develop regulatory control by helping foster carers to reinterpret children’s difficult behavior, overcome personal issues that interfere with their ability to provide nurturing care, and provide an environment that facilitates the development of self-regulation in children</p> <p><i>Theory:</i> The intervention draws on strategies known to be associated with children’s ability to self-regulate, for example, following the child’s lead, recognizing the importance of value of touch, and creating the conditions under which children can express their emotions, and learn to recognize and understand them</p>	DEF
	Lieberman 2005 <sup>127–129</sup>	RCT	Not reported	<p><i>Name:</i> CPP</p> <p><i>Aim:</i> To alleviate children’s traumatic stress symptoms and behaviour problems</p> <p><i>Theory:</i> Attachment theory; developmental psychopathology models</p>	Case management plus individual psychotherapy

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Moss 2011 <sup>130</sup>	RCT	Home based	<p><i>Name:</i> Short-term attachment-based home-visiting intervention</p> <p><i>Aim:</i> 'Enhancing maternal sensitivity to child emotional and behavioural signals in order to promote greater child security'</p> <p><i>Theory:</i> Based on the work of Bakermans-Kranenburg <i>et al.</i> (1998<sup>219</sup>), Dozier <i>et al.</i> (2006<sup>125</sup>) and Moran <i>et al.</i> (2005<sup>220</sup>)</p>	Standard agency services
	Spieker 2012 <sup>131</sup>	RCT	Home based	<p><i>Name:</i> PFR</p> <p><i>Aim:</i> To 'increase caregiver awareness of children's behavioural cues and miscues for nurturance'</p> <p><i>Theory:</i> 'PFR includes many of the effective elements of brief attachment-based interventions summarised by Bakermans-Kranenburg <i>et al.</i><sup>219</sup>'</p>	EES
	Sprang 2009 <sup>132</sup>	RCT	Home based	<p><i>Name:</i> ABC</p> <p><i>Aim:</i> To promote self-regulation among children in foster care by means of optimizing the parenting skills of foster parents</p> <p><i>Theory:</i> Maltreated children often engage in resistant-avoidant behaviour, which can result in their carers withdrawing from them (Stovall-McClough and Dozier 2004<sup>221</sup>). By helping foster carers provide them with optimally sensitive parenting, children learn to depend on their assistance to manage their emotions, thereby develop their own emotional self-regulation skills</p>	Wait-list controls attended a biweekly support group
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Toth 2002 <sup>133</sup>	RCT	Home based/health service/hospital	<p><i>Name:</i> PPP, PHV</p> <p><i>Aim:</i> The PPP model highlights the importance of parent–child attachment in fostering positive child development, improved parent–child interaction and decreases in child maltreatment. PHV focuses on parenting skill improvement and child adaptive competencies</p> <p><i>Theory:</i> PPP based on attachment theory; PHV integration of ecological–transactional development model with psychoeducational and behavioural techniques</p>	Community Standard group
	Becker-Weidman 2006 <sup>134,135</sup>	COS	Health service/hospital	<p><i>Name:</i> DDP</p> <p><i>Aim:</i> To reduce symptoms of attachment disorder, to increase capacity to use the caregiver as a secure base for comfort and security, to resolve grief and loss issues, to improve ability to form social relationships, to improve cause–effect thinking, to reduce aggression, to reduce delinquent behaviour</p> <p><i>Theory:</i> An attachment-based treatment approach 'Developmental Psychotherapy has as its core, or central therapeutic mechanism and as essential for treatment success, the maintenance of a contingent collaborative and affectively attuned relationship between therapist and child, between caregiver and child, and between therapist and caregiver'</p>	UC from other providers at other clinics

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
PCIT	Chaffin 2004 <sup>136</sup>	RCT	Health service/hospital	<i>Name:</i> PCIT  <i>Aim:</i> Disrupting escalating coercive cycles and improving the quality of parent–child interactions  <i>Theory:</i> Social learning theory based	Standard community group
	Thomas 2011 <sup>137</sup>	RCT	No information	<i>Name:</i> PCIT  <i>Aim:</i> To address risk factors associated child maltreatment  <i>Theory:</i> ‘PCIT was developed to improve parenting skills and parent–child interactions among families struggling with their children’s (ages 3–7 years) behaviour problems (e.g. ODD; Eyberg 1988; <sup>222</sup> Hembree-Kigin and Neil 1995 <sup>223</sup> )’	Wait-list control
	Thomas 2012 <sup>138</sup>	RCT	Tertiary referral service/research programme	<i>Name:</i> PCIT  <i>Aim:</i> To compare the effectiveness of standard PCIT with PCIT that only moves from child-directed interaction to parent-directed interaction when mastery criteria for child-directed interaction have been reached  <i>Theory:</i> As Thomas 2011 <sup>137</sup>	Wait-list control
	Hughes 2004 <sup>139</sup>	RCT	Community	<i>Name:</i> The Webster-Stratton parent programme  <i>Aim:</i> To assist parents in improving their parenting ‘by helping they learn how to (a) play with and assist children to learn; (b) use praise and give reinforcement; (c) set age-appropriate limits; and (d) handle misbehaviour’  <i>Theory:</i> Intervention based on Social Learning Theory (Bandura 1977 <sup>224</sup> )	Wait-list control
	Valentino 2013 <sup>140</sup>	RCT	Home based	<i>Name:</i> RET  <i>Aim:</i> To help maltreating parents improve their communication skills and relationships with their children  <i>Theory:</i> Parent–child reminiscing	Wait-list control
Parenting Interventions					

continued

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Systemic FT	Kolko 1996 <sup>107,108</sup>	RCT	Home based/health service/hospital	<p><i>Name:</i> FT</p> <p><i>Aim:</i> To enhance family functioning and relationships</p> <p><i>Theory:</i> 'FT was designed to enhance family functioning and relationships (Alexanders and Parsons 1982,<sup>225</sup> Robin and Foster 1989<sup>226</sup>), in accord with the interactional or ecological model approach to child maltreatment (Belsky 1993<sup>227</sup>)'</p>	Routine community services
Transtheoretical intervention	Linares 2015 <sup>141</sup>	RCT	Community	<p><i>Name:</i> PSB</p> <p><i>Aim:</i> To increase positive interaction between siblings, reduce conflict during play and promote conflict mediation strategies</p> <p><i>Theory:</i> 'Transtheoretical intervention model, which integrates principles of family systems, emotional regulation, social learning and parent mediation'</p>	TAU
Multisystemic FT	Brunk 1987 <sup>142</sup>	RCT	Home based/care setting	<p><i>Name:</i> MST</p> <p><i>Aim:</i> To effect 'change in parental control strategies, including parental responsibility and effectiveness and child compliance'</p> <p><i>Theory:</i> Behaviour problems are assumed to be multidetermined and multidimensional; they therefore require interventions that can target one or more systems or combinations of systems</p>	Standard outpatient plus parent training
	Danielson 2012 <sup>143</sup>	RCT	Health service/hospital	<p><i>Name:</i> RRFT</p> <p><i>Aim:</i> To reduce risk of substance use and other high-risk behaviours and trauma-related psychopathology in adolescents who have experienced CSA</p> <p><i>Theory:</i> Ecological Theory, Mowrer's Two-Factor Theory (Mowrer 1960<sup>228</sup>) and Negative Reinforcement Theory (Baker <i>et al.</i> 2004<sup>229</sup>)</p>	TAU

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Multigroup FT	Swenson 2010 <sup>144</sup>	RCT	Home based/school/ other convenient locations	<p><i>Name:</i> MST-CAN</p> <p><i>Aim:</i> To 'improve youth and parent functioning, reduce abusive parenting behaviour, and decrease reabuse and placement to a greater degree than an enhanced version of the standard outpatient treatment for child physical abuse provided at that agency (i.e. EOT)'</p> <p><i>Theory:</i> The core components of standard MST (Henggeler <i>et al.</i> 2009<sup>230</sup>) adapted for use with maltreated youth and their families</p>	EOT: Included the standard services the centre provided for physically abused youths and their parents, as well as enhanced engagement and parent training interventions
	Schaeffer 2013 <sup>147</sup>	COS	Home based	<p><i>Name:</i> MST-BSF</p> <p><i>Aim:</i> To address 'the co-occurring problem of parental substance abuse and child maltreatment among families involved in the child welfare system'</p> <p><i>Theory:</i> Ecological theory, systems and social learning theory</p>	Comprehensive community treatment
	Meezan 1998 <sup>148,149</sup>	RCT	Community	<p><i>Name:</i> MFGT</p> <p><i>Aim:</i> To prevent and treat child abuse and neglect, to reduce abusive and neglectful carer behaviours, and to reduce the effects of maltreatment on the child</p> <p><i>Theory:</i> Components of the intervention were drawn from family systems theory, structural FT, group therapy, CBT, reality therapy, parent education and crisis intervention</p>	Traditional FT (several theoretical frameworks including structural FT, behaviour modification and CBT strategies; also some case management)

continued

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Family-based program	Bagley 2000 <sup>150</sup>	QEx	Not reported	<p><i>Name:</i> CSATP</p> <p><i>Aim:</i> Treatment of children subject to sexual abuse</p> <p><i>Theory:</i> Maslow's self-actualisation Theory, 'A person's strongest drive is to feel contented about himself or herself, and about others, 'described as a humanistic model of intervention'</p>	No treatment comparison group
Psychoeducation	Graham-Berman 2007 <sup>151</sup>	RCT	Community	<p><i>Name:</i> Kids' Club</p> <p><i>Aim:</i> To educate children about family violence and influence their attitudes and beliefs about families and family violence; to facilitate their emotional adjustment and promote their social competence</p> <p><i>Theory:</i> 'Relies on the theoretical assumptions that children may be distressed or made anxious by exposure to IPV as well as learn deleterious patterns of behaviour, attitudes, and beliefs as a result of observing violence (e.g. engage in aggressive behaviour with others; believe that violence is acceptable)'</p>	Wait-list control
	Howell 2013 <sup>152</sup>	RCT	Community	<p><i>Name:</i> The Preschool Kids' Club intervention</p> <p><i>Aim:</i> To promote the social competence of preschool children who have witnessed domestic violence</p> <p><i>Theory:</i> as for Graham-Berman 2007<sup>151</sup></p>	No treatment comparison group

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Overbeek 2013 <sup>153</sup>	RCT	Not reported	<p><i>Name:</i> 'Ennuik . . . !' ('It's my turn now!')</p> <p><i>Aim:</i> '(a) To process the interparental violence experiences; (b) to learn how to differentiate and express emotions; and (c) to learn how to cope with feelings and problems in a different (non-violent) way'</p> <p><i>Theory:</i> Trauma theory (Perry 1993<sup>231</sup>)</p>	<p>Control programme 'Jij hoort erbij' ('You belong')</p> <p>The control programme was based on an analysis of non-specific factors used in the specific factors intervention programme</p>
	Sullivan 2002 <sup>154</sup>	RCT	Community	<p><i>Name:</i> Community-based programme for battered women and their children</p> <p><i>Aim:</i> Therapy aimed to: alleviate children's guilt, treat their depression, help them learn to express anger, provide them with basic information about normal sexuality, help them deal with sexual preference and maltreatment issues, teach them self-protection techniques and equip them with an affective vocabulary to label emotions and feelings, promote emotional independence, and help them to establish a meaningful and stable identity, a personal value system and a capacity for lasting relationships</p> <p><i>Theory:</i> The role of domestic violence support and education groups in helping children; the effect of mothers' well-being on children's well-being</p>	Services as usual
	Trowell 2002 <sup>155</sup>	RCT	Home based/health service/hospital	<p><i>Name:</i> Psychoeducational group therapy</p> <p><i>Aim:</i> Reduction in psychiatric disorders and traumatogenic response; reduced frequency of sexualised and eroticised behaviour; and emotional development</p> <p><i>Theory:</i> No explicit theory. Described as group psychotherapy with a psychoeducational component</p>	Brief focused individual psychotherapy
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Wagar 1995 <sup>156</sup>	RCT	Not reported	<p><i>Name:</i> Group treatment programme</p> <p><i>Aim:</i> To 'help children modify their responses and adopt new responses to past experiences of witnessing violence, to develop new problem-solving skills for future encounters, to address interpersonal responsibilities and attitudes regarding behaviours, and to examine present modes of conflict resolution and to foster self-esteem'</p> <p><i>Theory:</i> Programme developed by Jaffe <i>et al.</i> 1986<sup>232</sup></p>	No treatment comparison group
	Wolfe 2003 <sup>157</sup>	RCT	Community	<p><i>Name:</i> YRP</p> <p><i>Aim:</i> To enable teenagers to make informed choices and learn non-violent means of communicating with their current and future partners</p> <p><i>Theory:</i> Based on learning and feminist theories (Dobash and Dobash 1992<sup>233</sup>)</p>	Standard CPS
	Noether 2007 <sup>158</sup>	QEx	Health service/hospital	<p><i>Name:</i> Skills-based approach to promoting resilience</p> <p><i>Aim:</i> To promote resilience</p> <p><i>Theory:</i> Psychoeducation enhances the emotional and behavioural strengths of children</p>	Children in the comparison group received individual, group and family services

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Simoneau 2008 <sup>159</sup>	QEx	Community	<p><i>Name:</i> Group psychotherapy</p> <p><i>Aim:</i> To reduce the sequelae associated with sexual abuse</p> <p>Specific objectives: Reduce social isolation; improve self-esteem; reduce behaviour problems; reduce guilt</p> <p><i>Theory:</i> Describes evidence base for group therapy (as opposed to individual psychotherapy)</p>	Service as usual
	Tourigny 2007 <sup>160</sup>	QEx	Community	<p><i>Name:</i> Group treatment</p> <p><i>Aim:</i> To reduce the negative and traumatic consequences of sexual abuse; to ensure survivors may attain normal development; to reduce social isolation and to reduce shame and culpability; and to help rely on personal resources and develop skills</p> <p><i>Theory:</i> The psychoeducational approach</p>	No non-experimental comparison – study compared open-group format to closed-group format
	Barth 1994 <sup>161</sup>	COS	Not reported	<p><i>Name:</i> Psychoeducational group for foster parents</p> <p><i>Aim:</i> To provide specialised training for foster parents caring for sexually abused children</p> <p><i>Theory:</i> Providing foster parents with an understanding of the impact of sexual abuse on children's behaviour will help them to be more empathetic and enable them to help their foster children to express their fears and concerns, instead of acting them out</p>	No treatment comparison group
	Duffany 2009 <sup>162</sup>	COS	Community	<p><i>Name:</i> CTP</p> <p><i>Aim:</i> To prevent children who have been sexually abused from being reabused</p> <p><i>Theory:</i> Group therapy may reduce feelings of stigmatization, isolation and shame. Groups provide 'corrective' experiences of their perceptions of self, and enable them to explore their experience of abuse and its consequences, and develop coping strategies</p>	No treatment comparison group
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Hébert 2010 <sup>163</sup>	COS	Health service/hospital	<p><i>Name:</i> Psychoeducational Group Intervention</p> <p><i>Aim:</i> To '(a) reduce the negative consequences associated with CSA; (b) foster positive self-esteem; (c) help children recognise and express their feelings; (d) help children identify their personal coping resources to manage the aftermaths of CSA; (e) reduce sense of social isolation and shame; (f) foster positive parent-child relationship; and (g) prevent revictimisation'</p> <p><i>Theory:</i> Groups enable children to share experiences with other abused children, providing an opportunity to reduce any sense of isolation or stigmatisation. Groups provide a supportive social network and an opportunity for peer-to-peer learning, and building a sense of empowerment and self-esteem. They also provide an important forum for developing the skills associated with therapeutic objectives, e.g. social skills, expressing and communicating emotions about the traumatic event</p>	UC services
	Holland 2004 <sup>164</sup>	COS	Health service/hospital	<p><i>Name:</i> Sexual Abuse Intervention Program</p> <p><i>Aim:</i> The client-centred, life space intervention methods used are individual counselling, family support, and group work (psychoeducational and social skills training, closed, 16 weeks) within a case management model</p> <p><i>Theory:</i> Eclectic practice framework seems based on elements of generalist, problem-solving, ecological systems, and some feminist theories</p>	No treatment comparison group
	Santibáñez 2000 <sup>165</sup>	COS	Care setting	<p><i>Name:</i> Self-management programme</p> <p><i>Aim:</i> To improve the educational intervention self-control and moral development of children living in homes dependent on the public network of group homes</p> <p><i>Theory:</i> Draws various theories and experts, including Kanfer (1975<sup>234</sup>), Karoly (1977<sup>235</sup>) and Bandura (1969<sup>236</sup>)</p>	No treatment comparison group

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Tourigny 2005 <sup>166,167</sup>	COS	Community	<p><i>Name:</i> Psychoeducational group</p> <p><i>Aim:</i> Reduce negative consequences of sexual abuse, social isolation, shame and culpability, and enhance coping skills development</p> <p><i>Theory:</i> Psychoeducational approach – group discussions, personal testimonies, exercises and lectures</p>	Wait-list control
	Tourigny 2008 <sup>168</sup>	COS	Health service/hospital	<p><i>Name:</i> Brief group therapy</p> <p><i>Aim:</i> To support victims of sexual abuse and to reduce sequelae associated with aggression; to reduce symptoms associated with sexual abuse (anxiety, depression, low self-esteem, behavioural problems, aggression, post-traumatic stress, school difficulties); to improve functioning, reduce isolation, reduce guilt, to help them use their internal resources to develop coping strategies; and to improve sense of control</p> <p><i>Theory:</i> Describes group-based efficacy (cost-effectiveness, peer support); psychoeducational approach includes group discussions, storytelling, relaxation and visualisation/main themes covered but open to influence by participants</p>	No treatment comparison group
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Group Work with Children	Monck 1996 <sup>169</sup>	Q-RCT	Health service/hospital	<p><i>Name:</i> Family network treatment programme with or without group treatment</p> <p><i>Aim:</i> To reduce effects of sexual abuse</p> <p><i>Theory:</i> Intervention makes use of psychoeducation and narrative therapeutic activities (e.g. storytelling). Study refers to group work approach by Giarretto (1980<sup>237</sup>) and the family systems approach by Furniss (1983<sup>238</sup>)</p>	Family network treatment programme without group treatment
	De Luca 1995 <sup>170</sup>	COS	Not reported	<p><i>Name:</i> Group therapy programme at the University of Manitoba</p> <p><i>Aim:</i> To address issues and themes regarded as central in the treatment of sexual abuse (e.g. feelings about the offender, body image and self-esteem enhancement, social skills, sex education, prevention of abuse)</p> <p><i>Theory:</i> Groups may reduce social isolation, as they provide sexually abused children with an opportunity to can meet others who have had similar experience. Groups provide opportunities for children to expand their social support networks and provide a number of educational opportunities, e.g. to develop their coping and social skills, and learn about healthy relationships. They are also cost-effective</p>	No treatment comparison group
	Grayston 1995 <sup>171</sup>	COS	Health service/hospital	<p><i>Name:</i> Group therapy programme</p> <p><i>Aim:</i> Unclear: treating sexually abused boys, reducing internalising, externalising and sexual behaviour problems</p> <p><i>Theory:</i> Unclear</p>	Wait-list control

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	McGain 1995 <sup>172</sup>	COS	Community	<p><i>Name:</i> Group treatment</p> <p><i>Aim:</i> To provide a safe environment in which children can discuss their experiences of abuse, and which can enhance their self-worth. To prevent remolestation. To avoid long-term psychological damage to children, and provide appropriate, non-exploitative adult role models. To provide support for children during court proceedings, and teach them practical steps to help them to protect themselves. The intervention also aims to help children talk about the dynamics of abuse, and to provide them with sustained peer support. Finally, the intervention aims to secure approval for treatment of the child's family. Achieving these aims is thought to secure a decrease in distress and symptomatology</p> <p>Such a programme ought to (11) provide a decrease in distress and symptomology</p> <p><i>Theory:</i> Social Learning Theory</p>	Wait-list control
	Verleur 1986 <sup>173</sup>	COS	Care setting	<p><i>Name:</i> Group therapy for female incest victims</p> <p><i>Aim:</i> To increase self-esteem and knowledge of human sexuality, birth control and venereal disease</p> <p><i>Theory:</i> Poor self-esteem is targeted as this appears to be a problem with the majority of incest victims</p>	No treatment comparison group
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Psychotherapy/counselling	Thun 2002 <sup>174</sup>	RCT	Not reported	<p><i>Name:</i> Group therapy</p> <p><i>Aim:</i> To improve the self-image of adolescent survivors of sexual abuse</p> <p><i>Theory:</i> A multidimensional model incorporating skills, psychotherapeutic and educational components</p>	No treatment comparison group
	Haight 2010 <sup>175</sup>	RCT	Care setting	<p><i>Name:</i> LSI</p> <p><i>Aim:</i> To establish an emotionally supportive relationship with the children, to help children interpret and gain a feeling of control and continuity in their lives, rethink views of themselves and others, and begin to alter problematic beliefs</p> <p><i>Theory:</i> Theoretical perspective and methods of cultural developmental science (e.g. Rogoff 2003;<sup>239</sup> Shweder <i>et al.</i> 2006<sup>240</sup>)</p>	No non-experimental comparison – study compared IT to IGT
	Trowell 2002 <sup>155</sup>	RCT	Home based/health service/hospital	<p><i>Name:</i> Focused individual psychotherapy vs. psychoeducational group therapy</p> <p><i>Aim:</i> Reduction in psychiatric disorders and traumatogenic response, reduced frequency of sexualised and eroticised behaviour and emotional development</p> <p><i>Theory:</i> Describes itself as individual psychoanalytic psychotherapy and the group as psychotherapeutic with a psychoeducational component</p>	Other treatment control
	Reddy 2013 <sup>176</sup>	RCT	Not reported	<p><i>Name:</i> CBCT</p> <p><i>Aim:</i> Developing acceptance and understanding of others (Salzberg 2002<sup>241</sup>), stress management and coping techniques, additional health-relevant benefits</p> <p><i>Theory:</i> Mindfulness meditation modified for children</p>	No treatment comparison group

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Cadol 1975 <sup>177</sup>	QEx	Health service/hospital	<p><i>Name:</i> Counselling</p> <p><i>Aim:</i> 'Feeling secure in social situations and community; managing crisis situations; assertiveness; personal awareness; educational counselling; child-care techniques; language improvement based on developmental delay of each child; appropriate expectations of children; recognising and rewarding positive behaviours'</p> <p><i>Theory:</i> No information</p>	Wait-list control group
	Nolan 2002 <sup>178</sup>	COS	Health service/hospital	<p><i>Name:</i> IT vs. combined IGT</p> <p><i>Aim:</i> Treatment of the psychological sequelae of CSA</p> <p><i>Theory:</i> 'Therapy was predominantly integrative and based on principles drawn from IGT practices within the broad traditions of psychodynamic psychotherapy, client-centred therapy and CBT'</p>	Wait-list control group
	Sullivan 1992 <sup>179</sup>	COS	Care setting	<p><i>Name:</i> Psychotherapy</p> <p><i>Aim:</i> Alleviation of guilt, treatment of depression, learning to express anger, providing basic information about normal human sexuality, dealing with sexual preference, dealing with maltreatment issues, teaching the children self-protection techniques, development of an affective vocabulary to label emotions and feelings, attainment of emotional independence in the children, assistance in the establishment of a meaningful and stable identity, development of a personal value system; and development of a capacity for lasting relationships</p> <p><i>Theory:</i> The psychological and behavioural impact on children of witnessing domestic violence is influenced by the availability of support and education groups, and their mother's psychological well-being</p>	No treatment comparison group
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Peer mentoring	Downing 1988 <sup>180</sup>	COS	School	<p><i>Name:</i> Psychodynamic group counseling</p> <p><i>Aim:</i> 'to help families build support within their family unit: help families explain ideas, feelings and the nature of abusive events. Focus of treatment was (a) relief of guilt and (b) building positive self-concepts. Reinforcement orientation aimed to help parents provide the best possible child-rearing atmosphere'</p> <p><i>Theory:</i> Psychodynamic and reinforcement theories</p>	No non-experimental comparison group – study compared psychodynamic orientation group to reinforcement orientation
	Fantuzzo 1988 <sup>181</sup>	RCT	Community	<p><i>Name:</i> (1) Peer social initiation and (2) adult social initiation</p> <p><i>Aim:</i> To increase positive social behaviour</p> <p><i>Theory:</i> Social initiation procedures</p>	In control-group dyads peers or teacher's aide were instructed to respond positively to social initiations but not to initiate social interactions
	Fantuzzo 1996 <sup>182</sup>	RCT	School	<p><i>Name:</i> RPT</p> <p><i>Aim:</i> 'To promote the development of social competencies for preschool children in the context of classroom play mediated by a resourceful peer'</p> <p><i>Theory:</i> RPT</p>	Comparison children were each paired with a classmate of average interactive play ability

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Treatment foster care	Fisher 2005 <sup>183–188</sup>	RCT	Home based/ care setting	<p><i>Name:</i> MTFC-P</p> <p><i>Aim:</i> To facilitate attachment with caregivers, reduce insecure behaviour, decrease resistant and avoidant behaviours, and decrease permanent placement failure rate</p> <p><i>Theory:</i> Attachment theory, social learning theory, systems theory</p>	Foster care services as usual
	Biehal 2012 <sup>145,146</sup>	RCT	Home based/ care setting	<p><i>Name:</i> MTFC-A</p> <p><i>Aim:</i> To reduce problem behaviour, promote pro-social behaviour and enhance placement stability</p> <p><i>Theory:</i> Social learning theory, systems theory</p>	RFC
	Smith 2011 <sup>189</sup>	RCT	Home based/ care setting	<p><i>Name:</i> Preventive intervention for girls in foster care</p> <p><i>Aim:</i> To prevent 'internalising and externalising problems during the transition to middle school to help prevent more serious, longer-term outcomes, such as delinquency, substance use, and high-risk sexual behaviour in later middle school'</p> <p><i>Theory:</i> Aims could be achieved by helping participants set personal goals, establish and maintain positive relationships with peers and adults, develop effective decision-making and problem-solving strategies, develop support systems for reaching goals and modelling, practising and reinforcing adaptive behaviours</p>	Foster care services as usual
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
	Taussig 2010 <sup>190,191</sup>	RCT	Not reported	<p><i>Name:</i> FHF preventive intervention</p> <p><i>Aim:</i> Skills groups were designed to bring children in foster care together in order to reduce stigma and provide opportunities for them to learn skills in a supportive environment</p> <p>Mentoring was designed to provide children in foster care with an additional supportive adult who could serve as a role model and advocate</p> <p><i>Theory:</i> No information</p>	No treatment comparison group
	Fisher 2000 <sup>192</sup>	COS	Home based/school	<p><i>Name:</i> EIFC, RFC, Community Comparison of Non-maltreated Children</p> <p><i>Aim:</i> To meet the developmental needs of foster children. 'It uses the foster care setting as the milieu for therapeutic intervention and actively engages foster parents as therapeutic agents'</p> <p><i>Theory:</i> Aims can be achieved by (1) consistent, non-abusive discipline; (2) high levels of positive reinforcement; and (3) close monitoring and supervision of the child'</p>	Foster care services as usual
	Graham 2012 <sup>193</sup>	COS	Home based/ community	<p><i>Name:</i> MTFC-P</p> <p><i>Aim:</i> To facilitate attachment with caregivers, reduce insecure behaviour, decrease resistant and avoidant behaviours, and decrease permanent placement failure rate</p> <p><i>Theory:</i> Attachment theory</p>	Foster care services as usual

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Therapeutic residential and day care	Moore 1998 <sup>194</sup>	RCT	Community	<p><i>Name:</i> Childhaven</p> <p><i>Aim:</i> Therapeutic early intervention for maltreated children</p> <p><i>Theory:</i> Study cited the theories of Gogerty and Durkan 1981;<sup>242</sup> Miller and Whittaker 1988;<sup>243</sup> DePanfilis 1996;<sup>244</sup> and Durkin 1986<sup>245</sup></p>	CPS services as usual
	Culp 1987 <sup>195,196</sup>	COS	School	<p><i>Name:</i> Therapeutic day-treatment programme</p> <p><i>Aim:</i> To develop strong teacher–child relationships, facilitate self-esteem, develop caring peer relationships, and help children to recognise and deal with their own feelings</p> <p><i>Theory:</i> Cognitive–developmental model</p>	No treatment comparison group
	Culp 1991 <sup>197</sup>	COS	Community	<p><i>Name:</i> Therapeutic day-treatment programme</p> <p><i>Aim:</i> To improve ‘children’s psychological health, their ability to interact with peers and adults, and their developmental level’</p> <p><i>Theory:</i> No information provided</p>	Wait-list control
Coordinated care	Swenson 2000 <sup>198</sup>	RCT	Home based/ care setting	<p><i>Name:</i> Charleston Collaborative Project</p> <p><i>Aim:</i> Reduce risk factors to promote child safety, child functioning and caregiver functioning; provide cost savings; improve service system efficiency</p> <p><i>Theory:</i> Family-based intervention based on the manual by Ralston and Swenson 1998<sup>246</sup></p>	TAU following state guidelines
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Arts therapy	Brillantes-Evangelista 2013 <sup>199</sup>	QEx	Health service/hospital	<p><i>Name:</i> (1) Visual arts group or (2) poetry group</p> <p><i>Aim:</i> To alleviate depression and PTSD</p> <p><i>Theory:</i> Narrative/constructivist approach, Gestalt approach, response and arousal, psychoanalytic approach, Jung's active imagination and archetypes, mindfulness and spiritual encounter</p>	No treatment comparison group
	Pretorius 2010 <sup>200</sup>	QEx	Not reported	<p><i>Name:</i> Structured group art therapy programme</p> <p><i>Aim:</i> To reduce depression, anxiety, sexual trauma and low self-esteem</p> <p><i>Theory:</i> 'Based on the existential-humanistic perspective, and incorporated principles from Gestalt therapy (Naranjo 2000;<sup>247</sup> Perls 1990<sup>248</sup>), the client-centred approach (Rogers 1967;<sup>249</sup> Du Toit <i>et al.</i> 1998<sup>250</sup>) and the abuse-focused approach (Briere 1992<sup>251</sup>)'</p>	No treatment comparison group

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Play/activity Interventions	D'Andrea 2013 <sup>201</sup>	COS	Care Setting	<p><i>Name:</i> DtG sports-based intervention</p> <p><i>Aim:</i> Treating maltreated children</p> <p><i>Theory:</i> Intervention designed using trauma-informed treatment principles</p>	TAU
	McDonald 1989 <sup>202</sup>	RCT	Care setting	<p><i>Name:</i> Challenge/initiative programme</p> <p><i>Aim:</i> To enhance self-concept, using 'new' cooperative and adventure games, in an existing recreation setting (as opposed to the typical wilderness/outdoor settings)</p> <p><i>Theory:</i> Low-income families tend to have least access to open space. Previously challenge/initiative programmes have been shown to be effective but usually in a 'wilderness/ adventure' programme. This is testing a lower-cost alternative</p>	Played other games with the same researcher (such as kickball, volleyball, etc.) with no debriefing
	Udwin 1983 <sup>203</sup>	QEx	Not reported	<p><i>Name:</i> Imaginative play training</p> <p><i>Aim:</i> To improve imaginative play, levels of concentration, positive affect and social interaction, and aggression</p> <p><i>Theory:</i> Not stipulated. Previous research suggests that imaginative play training can under controlled conditions, enhance both the scope and frequency of imaginative play amongst lower class children (e.g. Feitelson and Ross 1973,<sup>252</sup> Freyberg 1973<sup>253</sup>). Gains have also been demonstrated in relation to children's affect, cognition and social competence</p>	Control group exposed to 10 play sessions, but with no active training in make-believe
continued					

**TABLE 4** Characteristics of interventions and comparators in included studies (*continued*)

Intervention category	Study	Design	Setting	Name, aim, theory	Comparators
Animal therapy	Dietz 2012 <sup>204</sup>	COS	Not reported	<p><i>Name:</i> AAT in group treatment for CSA</p> <p><i>Aim:</i> To address trauma symptoms including anxiety, depression, anger, PTSD, dissociation, and sexual concerns</p> <p><i>Theory:</i> AAT is a goal-directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. 'AAT is directed and/or delivered by a health/human service professional with specialised expertise, and within the scope of practice of his or her profession' (Delta Society, 2012<sup>254</sup>)</p>	No treatment comparison group
	Hamama 2011 <sup>205</sup>	COS	High school	<p><i>Name:</i> Canine-assisted therapy</p> <p><i>Aim:</i> To improve psychological stress (depression and PTSD symptoms) among traumatised teenage girls (sexual or physical abuse)</p> <p><i>Theory:</i> The presence of an animal can lower anxiety and facilitate trust building between therapist and client. Talking to the animal while the therapist listens is easier than talking to the therapist, and can help clients focus on an issue while they interact with the animal. Engagement with the animal can help clients engage with their feelings and share these. Animals offer an opportunity for unconditional acceptance and interaction</p>	No treatment comparison group

AAT, animal-assisted therapy; AF-CBT, alternatives for families-cognitive-behavioural therapy; AIDS, acquired immune deficiency syndrome; ARRM, AIDS risk reduction model; CBCT, cognitively-based compassion training; CCT, child-centred therapy; CPC-CBT, Combined Parent–Child Cognitive–Behavioural Therapy; CPP, child–parent psychotherapy; CPS, Child Protective Services; CSATP, child sexual abuse treatment program; CTP, Children’s Treatment Program; DEF, Developmental Education for Families; DtG, ‘Do the Good’; EBT, evidence-based treatment; EES, early education support; EFT, emotional freedom techniques; EIFC, Early Intervention Foster Care Program; EOT, Enhanced Outpatient Treatment; FHF, Fostering Healthy Futures; GE, gradual exposure; IGT, individual and group therapy; IPP, infant–parent psychotherapy; IT, individual therapy; LSI, Life Story Intervention; m-CBT, modified-CBT intervention; MASTR, motivation–adaptive skills–trauma resolution; MFGT, multifamily group therapy; MST-BSF, Multisystemic Therapy–Building Stronger Families; MST-CAN, Multisystemic Therapy for Child Abuse and Neglect; MTFC-A, Multidimensional Treatment Foster Care for Adolescents; MTFC-P, Multidimensional Treatment Foster Care Program for Preschoolers; ODD, oppositional defiant disorder; PFR, Promoting First Relationships; PHV, psychoeducational home visitation; PI, Project Image; PPI, psychoeducational parenting intervention; PPP, Pre-School–Parent Psychotherapy; PSB, Promoting Sibling Bonds; Q-RCT, quasi-randomised controlled trial; RAP, Recovering from Abuse Program; RET, reminiscing and emotion training; RFC, regular foster care; RPT, resilient peer treatment; RRFT, Risk Reduction through Family Therapy; SAS-CBT, sexual abuse-specific Cognitive–Behavioural Therapy; SIT, stress inoculation therapy; STI, sexually transmitted infection; TN, trauma narrative; UC, usual care; YRP, Youth Relationships Project.

**TABLE 5** Outcomes domains and measures used in included studies

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
CBT for sexual abuse	Sexual	RCT	Berliner 1996 <sup>89</sup>	Primary: 1. Psychological distress 2. Behaviour	1. Fear Survey Schedule for Children-Revised (FSSC-R; Ollendick 1983 <sup>255</sup> ) 2. Sexual Abuse Fear Evaluation Scale (SAFE; Wolfe and Wolfe, Children's Hospital of Western Ontario, 1986, unpublished questionnaire) 3. Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds 1985 <sup>256</sup> ) 4. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>257</sup> ) 5. Children's Depression Inventory (CDI; Kovacs 1992 <sup>258</sup> ) 6. Child Sexual Behavior Inventory (CSBI; Friedrich 1992 <sup>259</sup> )
	Sexual	RCT	Celano 1996 <sup>90</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Other: 1. Parent/carer outcomes	1. Children's Impact of Traumatic Events Scale-Revised (CITES-R; Wolfe and Gentile, Department of Psychology, London Health Sciences Centre, London, 1991, unpublished) 2. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>260</sup> ) 3. Children's Global Assessment Scale (CGAS; Shaffer 1993 <sup>261</sup> )  1. Parental Reaction to Incest Disclosure Scale (PRIDS; Everson 1989 <sup>262</sup> ) 2. Parental Attribution Scale (PAS <sup>a</sup> )
	Sexual	RCT	Cohen <sup>91,92</sup>	Primary: 1. Psychological distress 2. Behaviour	1. Preschool symptom self-report (PRESS; Martini 1990 <sup>263</sup> ) 2. Child Sexual Behavior Inventory (CSBI; Friedrich 1992 <sup>259</sup> ) 3. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>257</sup> ) 4. Weekly Behaviour Record (WBR; Cohen 1983 <sup>264</sup> )
	Sexual	RCT	Cohen 1998 <sup>93,94</sup>	Primary: 1. Psychological distress 2. Behaviour	1. State-Trait Anxiety Inventory for Children (STAI-C; Spielberg 1973 <sup>265</sup> ) 2. Child Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 3. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>266</sup> )
continued					

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Sexual	RCT	Cohen 2004 <sup>95,96,267</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive/academic  Secondary: 1. Parent/carer outcomes	1. Kiddie Schedule for Schizophrenia and Affective Disorders (K-SADS; Kaufman 1997 <sup>268</sup> ) 2. Child Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 3. State-Trait Anxiety Inventory for Children (STAI-C; Spielberger 1973 <sup>265</sup> ) 4. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>269</sup> ) 5. Child Sexual Abuse Inventory (CSI; Friedrich 1992 <sup>259</sup> ) 6. Children's Attributions and Perceptions Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 7. Shame Questionnaire (Feiring 2002 <sup>271</sup> )  1. Beck Depression Inventory-Second Edition (BDI-II; Beck 1996 <sup>272</sup> ) 2. Parent Emotional Reaction Questionnaire (PERQ; Mannarino 1996 <sup>273</sup> ) 3. Parent Practices Questionnaire (PPQ; Strayhorn 1988 <sup>274</sup> ) 4. Parental Support Questionnaire (PSQ; Mannarino 1996 <sup>273</sup> )
	Sexual	RCT	Deblinger 1996 <sup>97,98</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Other: 1. Parent/carer outcomes	1. Kiddie Schedule for Schizophrenia and Affective Disorders, epidemiologic version (KSADS-E; Orvaschel 1982 <sup>275</sup> ) 2. State-Trait Anxiety Inventory for Children (STAI-C; Spielberger 1973 <sup>265</sup> ) 3. Child Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 4. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>257</sup> )  1. Parenting Practices Questionnaire (PPQ; Strayhorn 1988 <sup>274</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Sexual	RCT	Deblinger 2001 <sup>99</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Secondary: 1. Acceptability  Other: 1. Parent/carer outcomes	1. PTSD Scale for Children Based on Kiddie Schedule for Affective Disorders (Orvaschel 1982 <sup>275</sup> ) 2. Child Behavior Checklist (CBCL; Achenbach 1991) 3. Child Sexual Behavior Inventory (CSBI; Friedrich 1992 <sup>259</sup> ) 4. What If Situations Test (WIST; Sarno 1997 <sup>276</sup> )  1. Therapist Satisfaction Questionnaire (TSQ <sup>a</sup> )  1. Miller Behavior Style Scale (Miller 1990 <sup>277</sup> ) 2. SCL-90-R Post Traumatic Symptom Scale (Derogatis 1983 <sup>278</sup> ) 3. Impact of Events Scale (IES; Horowitz 1979 <sup>279</sup> ) 4. Parent Emotional Reaction Questionnaire (PERQ; Cohen 1996 <sup>280</sup> ) 5. Parenting Practices Questionnaire (PPQ; Strayhorn 1988 <sup>274</sup> ) 6. Social Support Questionnaire (SSQ; Zich 1987 <sup>281</sup> )
	Sexual	RCT	Deblinger 2011 <sup>100</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive  Other: 1. Parent/carer outcomes	1. Kiddie Schedule for Affective Disorders (K-SADS; Kaufman 1999 <sup>275</sup> ) 2. Children's Depression Inventory (CDI; Kovacs 1992 <sup>258</sup> ) 3. The Fear Thermometer (Hersen 1988 <sup>282</sup> ) 4. Multidimensional Anxiety Scale for Children (MASC; March 1997 <sup>283</sup> ) 5. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>269</sup> ) 6. Child Sexual Behavior Inventory (CSBI; Friedrich 1992 <sup>259</sup> ) 7. What If Situations Test (WIST; Sarno 1997 <sup>276</sup> ) 8. Shame Questionnaire (Feiring 1999 <sup>284</sup> )  1. Beck Depression Inventory (BDI; Beck 1996 <sup>285</sup> ) 2. Parent Emotional Reaction Questionnaire (PERQ; Cohen 1996 <sup>280</sup> ) 3. Parenting Practices Questionnaire (PPQ; Strayhorn 1988 <sup>274</sup> )

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Sexual	RCT	Foa 2013 <sup>101</sup>	Primary:  1. Psychological distress 2. Social functioning  Secondary:  1. Acceptability	1. Child PTSD Symptom Scale – Interview (CPSS-I; Foa 2001, <sup>286</sup> Gillihan 2013 <sup>287</sup> ) 2. Kiddie Schedule for Schizophrenia and Affective Disorders (K-SADS-D, PTSD module; Kaufman <sup>268</sup> ) 3. Children’s Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 4. Children’s Global Assessment Scale (CGAS; Shaffer 1983 <sup>261</sup> )  1. Expectancy of Therapeutic Outcomes for Adolescents (EDT-A <sup>a</sup> )
	Sexual	RCT	Jaberghaderi 2004 <sup>102</sup>	Primary:  1. Psychological distress 2. Behaviour	1. Child Report of Post-traumatic Symptoms (CROPS; Greenwald 1999 <sup>288</sup> ) 2. Parent Report of Post-traumatic Symptoms (PROPS; Greenwald 1999 <sup>288</sup> ) 3. Rutter Teacher Scale (Rutter 1967 <sup>289</sup> )
	Sexual	RCT	King 2000 <sup>103</sup>	Primary:  1. Psychological distress 2. Behaviour 3. Cognitive/academic	1. Anxiety Disorder Interview Schedule for DSM-IV: (ADIS; Silverman 1996 <sup>290</sup> ) 2. Fear Thermometer for Sexually Abused Children (Kleinknecht 1988 <sup>291</sup> ) 3. Coping Questionnaire for Sexually Abused Children (developed by the authors <sup>292</sup> ) 4. Revised Children’s Manifest Anxiety Scale-Revised (RCMAS-R; Reynolds 1978 <sup>293</sup> ) 5. Children’s Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 6. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>294</sup> ) 7. PTSD Subscale (Wolfe 1989 <sup>295</sup> ) 8. Global Assessment Functioning Scale (GAF; American Psychiatric Association 1987 <sup>296</sup> )
	Sexual	COS	Paquette 2011 <sup>104,105</sup>	Primary:  1. Psychological distress 2. Behaviour 3. Social functioning	1. Children’s Attributions and Perception Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 2. Child Behavior Checklist (CBCL Youth Self-Report and Profile; Achenbach 2001 <sup>297</sup> ) 3. Ways of Coping Questionnaire (Knussen 1992 <sup>298</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
CBT for physical abuse	Physical	RCT	LeSure-Lester 2002 <sup>106</sup>	Primary: 1. Behaviour	1. Rating system developed by the facility measuring:  i. aggression towards peers ii. aggression towards staff iii. compliance to house rules
	Physical	RCT	Kolko 1996 <sup>107,108</sup>	Primary:  1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive/academic  Secondary:	1. Child Conflicts index (CCI; Frantel 1990 <sup>52</sup> ) 2. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>269</sup> ) 3. Children's Depression Inventory (CDI; Kovacs 1981 <sup>299</sup> ) 4. Friendship Questionnaire (FQ; Bierman 1987 <sup>300</sup> ) 5. Children's Attributions and Perceptions Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 6. Kiddie Global Assessment Scale (KGAS <sup>a</sup> ) 7. Hostility (Children's Hostility Inventory, CHI; Kazdin 1987 <sup>301</sup> )
	Physical	RCT	Runyon 2010 <sup>109</sup>	Primary:  1. Psychological distress 2. Behaviour 3. Cognitive/academic  Other:  1. Parent/carer outcomes	1. Kiddie Schedule for Schizophrenia and Affective Disorders (K-SADS-PL, PTSD; Kaufman 1997 <sup>268</sup> ) 2. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>260</sup> ) 3. Parent and Child Report Measures  1. Alabama Parenting Questionnaire-Self Report (APQ; Frick, University of Alabama, Tuscaloosa, AL, 1991, unpublished) 2. Parent-Child Conflict Tactics Scale (CTSPC; Straus 1998 <sup>302</sup> )

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
CBT for multiple abuse	Physical, emotional, sexual	RCT	Champion 2012 <sup>110</sup>	Other: 1. Other	1. Sexually transmitted infection (dichotomous)
	Other	RCT	Church 2012 <sup>111</sup>	Primary: 1. Psychological distress	1. Impact of Events Scale (IES; Horowitz 1979, <sup>279</sup> Spanish translation Báguena 1998 <sup>303</sup> )
	Physical, sexual, multiple	RCT	Jensen 2014 <sup>112,113</sup>	Primary: 1. Psychological Distress 2. Behaviour 3. Social Functioning	1. Child PTSD Symptom Scale (CPSS; Foa 2001 <sup>286</sup> ) 2. Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA; Nader 1996, <sup>304</sup> 2004 <sup>305</sup> ) 3. Mood and Feelings Questionnaire (MRQ; Angold 1995 <sup>306</sup> ) 4. The Screen for Child Anxiety-Related Disorders (SCARED; Birmaher 1999 <sup>307</sup> ) 5. The Strengths and Difficulties Questionnaire (SDQ; Goodman 2001 <sup>308</sup> )
	Physical, neglect, other	RCT	Linares 2006 <sup>114</sup>	Primary: 1. Behaviour  Other: 1. Parenting	1. Child Behavior Checklist (CBCL; Achenbach 1991, <sup>294</sup> 1992 <sup>309</sup> ) 2. Eyberg Child Behavior Inventory (ECBI; Eyberg 1980 <sup>310</sup> ) 3. Sutter-Eyberg Behaviour Inventory-Revised (SESBI-R; Eyberg 1999 <sup>311</sup> )  1. Parenting Practices Interview (PPI; Webster-Stratton 1998 <sup>312</sup> ) 2. Home Observation for the Measurement of the Environment (HOME; Caldwell 1984 <sup>313</sup> )
	Physical, sexual, neglect	RCT	Linares 2012 <sup>115</sup>	Primary: 1. Behaviour 2. Social functioning 3. Cognitive/academic  Secondary: 1. Acceptability	1. Physical aggression [Child Behavior Checklist (CBCL; Achenbach 1991 <sup>294</sup> )] 2. 7-item measure derived from the SESBI-R (Eyberg <sup>311</sup> ) 3. Self-control (Wills 2007 <sup>314</sup> )  1. Self completion questionnaire

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, emotional, sexual, neglect, multiple, other	RCT	Rushton 2010 <sup>116</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Secondary: 1. Acceptability  Other: 1. Placement stability 2. Carer outcome	1. Strengths and Difficulties Questionnaire (SDQ; Goodman 2001 <sup>308</sup> ) 2. Expression of feelings questionnaire (Quinton 1998 <sup>315</sup> ) 3. Post placement problems (a nine-item adopter-completed questionnaire designed for this study) 4. Visual analogue scales [adopters asked to mark on a line whether their child's behaviour in each dimension had improved, stayed the same (centre point) or deteriorated]  1. Satisfaction with parenting intervention feedback (Davis 1998 <sup>316</sup> )  1. Parenting Sense of Competence Scale (PSCS; Johnston 1989, <sup>317</sup> Ohan 2000 <sup>318</sup> ) 2. Parenting Daily Hassles Scale (Crnic 1991 <sup>319</sup> )
	Physical, emotional, sexual, multiple, other	RCT	Shirk 2014 <sup>117</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Secondary: 1. Acceptability	1. Kiddie Schedule for Schizophrenia and Affective Disorders-Present and Lifetime version (KSADS-PL; Kaufman 1997 <sup>268</sup> ) 2. Beck Depression Inventory-Second Edition (BDI-II; Beck 1996 <sup>320</sup> ) 3. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>260</sup> )  1. Client Satisfaction Questionnaire Treatment (Larsen 1979 <sup>321</sup> ) 2. Treatment Evaluation Inventory (Kazdin 1981, <sup>322</sup> 1980 <sup>323</sup> )
	Physical, sexual, other	COS	Kolko 2011 <sup>118</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning	1. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>269</sup> ) 2. Child Sexual Behavior Inventory (CSBI; Friedrich 2001 <sup>324</sup> ) 3. Trauma Symptom Checklist for Children (TSCC; Briere 1996 <sup>325</sup> ) 4. Expectations Test (ET; Gully 2000 <sup>326</sup> ) 5. Social Behavior Inventory (SBI; Gully 2001 <sup>327</sup> ) 6. Parent and therapist perceptions of adjustment
continued					

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Other	COS	Rondeau 1983 <sup>119</sup>	Primary: 1. Behaviour 2. Social functioning	1. Token rewards 2. Significant work art products 3. Working on group posters 4. Personal ratings of the group 5. Aggressive behaviours 6. Children joining in sharing circle 7. Caregiver interaction ratings
EMDR	Sexual	RCT	Farkas 2008 <sup>120</sup>	Primary: 1. Psychological distress 2. Behaviour	1. Trauma Symptom Checklist for Children (TSCC; Briere 1996, <sup>325</sup> Briere 1989 <sup>328</sup> ) 2. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>269,294</sup> ) 3. Lifetime Incidence of Traumatic Events (LITE; Greenwald 2004, <sup>329</sup> 1999, <sup>288</sup> 2002 <sup>330</sup> )
	Physical, emotional, sexual	RCT	Scheck 1998 <sup>121</sup>	Primary: 1. Psychological distress	1. PTSD-I (Watson 1991 <sup>331</sup> ) 2. Beck Depression Inventory (BDI; Beck 1993 <sup>332</sup> ) 3. State-Trait Anxiety Inventory (STATE; Spielberger 1983 <sup>333</sup> ) 4. Penn Inventory for Posttraumatic Stress Disorder (PENN; Hammarberg 1992 <sup>334</sup> ) 5. Impact of Events Scale (IES, avoidance and intrusions from trauma; Horowitz 1979 <sup>279</sup> ) 6. Tennessee Self-Concept Scale (TSCS; Roid 1991 <sup>335</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Attachment-orientated interventions	Neglect, other	RCT	Bernard 2012 <sup>122</sup>	Primary: 1. Psychological distress	1. Attachment status (Strange Situation Procedure; Ainsworth 1978 <sup>336</sup> )
	Physical, emotional, neglect, multiple	RCT	Cicchetti 2006 <sup>123</sup>	Other: 1. Carer efficacy 2. Carer distress	1. Childhood Trauma Questionnaire (CTQ; Bernstein 1994 <sup>337</sup> ) 2. Perceptions of Adult Attachment Scale (PAAS; Lichtenstein 1991 <sup>338</sup> ) 3. Maternal Behavior Q-Set (MBQ; Pederson 1995 <sup>339</sup> ) 4. Adult-Adolescent Parenting Inventory (AAPI; Bavolek, 1984 <sup>340</sup> ) 5. Social Support Behaviors Scale (SBS; Vaux 1987 <sup>341</sup> ) 6. Parenting Stress Inventory (PSI; Abidin 1990 <sup>342</sup> )
	Physical, emotional, neglect, multiple	RCT	Cicchetti 2011 <sup>124</sup>	Primary: 1. Psychological distress	1. Cortisol – from saliva samples
	Other	RCT	Dozier 2006 <sup>125,126</sup>	Primary: 1. Behaviour	1. Cortisol, from saliva samples 2. Parents Daily Report (PDR, adapted from Chamberlain 1987 <sup>291</sup> )
	Other	RCT	Lieberman 2005 <sup>127–129</sup>	Primary: 1. Psychological distress 2. Behaviour  Secondary: 1. Carer distress	1. Semistructured Interview for Diagnostic Classification DC: 0–3 for Clinicians, Traumatic Stress Disorder (DC-0-3 TSD; Zero to Three/ National Center for Clinical Infant Programs 1994 <sup>343</sup> ) 2. Child Behavior Checklist (CBLC; Achenbach 1991, <sup>294,344</sup> 1983 <sup>257</sup> )  1. Life Stressor Checklist-Revised (Wolfe 1996 <sup>345</sup> ) 2. Symptoms Checklist-90 Revised (SCL-90-R; Derogatis 1994 <sup>278</sup> ) 3. Clinician Administered PTSD Scale (CAPS; Blake 1990, <sup>346</sup> Spitzer 1987, <sup>347</sup> Weathers 1994 <sup>348</sup> )
continued					

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, sexual, neglect, multiple	RCT	Moss 2011 <sup>130</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive/academic  Other: 1. Carer distress	1. Ainsworth Strange Situation Procedure (Ainsworth 1978 <sup>336</sup> ) 2. Preschool Separation–Reunion Procedure (Cassidy and Marvin, Working Group on Attachment, University of Virginia, Charlottesville, VA, 1992, unpublished) 3. Child behaviour (CBCL; Achenbach 2000 <sup>349</sup> )  1. Maternal Behaviour Q-Set (MBQS; Pederson 1995 <sup>339</sup> )
	Other	RCT	Spieker 2012 <sup>131</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive/academic  Other: 1. Carer competence 2. Carer distress	1. Toddler Attachment Sort-45 (TAS45; Kirkland 2004 <sup>350</sup> ) 2. Indicator of Parent–Child Interaction (IPCI; Baggett 2009 <sup>351</sup> ) 3. Brief Infant Toddler Social Emotional Assessment (BITSEA; Briggs-Gowan 2002 <sup>352</sup> ) 4. Child Behavior Checklist (CBCL; Achenbach 2000 <sup>353</sup> ) 5. Emotional Regulation Bayley-III (Bayley 2006 <sup>354</sup> ) 6. Selected items from the Bayley-III Screening Test (Bayley 2005 <sup>355</sup> ) and the Bayley Behavior Rating Scales (Bayley 1993 <sup>356</sup> )  1. Nursing Child Assessment Teaching Scale (NCATS; Barnard 1994 <sup>357,358</sup> ) 2. Indicator of Parent–Child Interaction (IPCI; Baggett 2009 <sup>351</sup> ) 3. Commitment to child – <i>This Is My Baby</i> (TIMB; Bates 1998, Dozier 2006 <sup>359</sup> ) 4. Understanding – <i>Raising a Baby</i> (RAB; Kelly JF, Korfmacher J, University of Washington, WA, 2008, unpublished) 5. Parenting Stress Index (PSI; Abidin 1995 <sup>360</sup> )
	Other	RCT	Sprang 2009 <sup>132</sup>	Primary: 1. Psychological distress 2. Behaviour  Other: 1. Parent/carer outcomes	1. Child Behavior Checklist (CBCL; Achenbach 1991, <sup>269</sup> Achenbach 2000 <sup>349</sup> )  1. Child Abuse potential Inventory (CAPI; Milner 1990 <sup>361</sup> ) 2. Parenting Stress Index (PSI; Abidin 1995 <sup>360</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, emotional, sexual, neglect, multiple	RCT	Toth 2002 <sup>133</sup>	Primary: 1. Psychological distress 2. Cognitive/academic	1. Narrative story items selected from MacArthur Story Stem Battery (MSSB; Bretherton I, Oppenheim D, Buchsbaum H, Emde RN and the MacArthur Narrative Group, University of Wisconsin-Madison, 1990, unpublished) and the Attachment Story Completion Task (ASCT; Bretherton 1990 <sup>362</sup> ) 2. Wechsler Preschool and Primary Scale of Intelligence-Revised (WPPSI-R; Wechsler 1989 <sup>363</sup> )
	Physical, emotional, sexual, neglect, multiple, other	COS	Becker-Weidman 2006 <sup>134,135</sup>	Primary: 1. Psychological distress 2. Behaviour	1. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>294</sup> ) 2. Randolph Attachment Disorder Questionnaire (RADQ; Randolph 2000 <sup>364</sup> )
PCIT	Physical, neglect	RCT	Chaffin 2004 <sup>136</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Other: 1. Parent/carer outcomes	1. Physical abuse rereport outcomes 2. Behavior Assessment System for Children (BASC; Reynolds 1992 <sup>365</sup> )  1. Child Abuse Potential Inventory (CAPI; Milner 1986 <sup>366</sup> ) 2. Dyadic Parent-Child Interaction Coding System (DPICS-II; Eyberg SM Bessmer D, Newcomb K, Edwards D, Robinson E. Dyadic Parent-Child Interaction Coding System-II manual, University of Florida, Gainesville, FL, 1994, unpublished manuscript)

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, neglect	RCT	Thomas 2011 <sup>137</sup>	Primary: 1. Behaviour 2. Quality of life  Secondary: 1. Carer distress 2. Carer competence	1. Child Behavior Checklist [CBCL; Achenbach <sup>260</sup> (externalising behaviour; internalising behaviour)] 2. Eyberg Child Behavior Inventory [ECBI; Eyberg 1989 <sup>311</sup> (intensity of behaviour problems)] 3. Repeat maltreatment  1. Parenting Stress Index (PSI; Abidin 1990 <sup>367</sup> ) 2. Beck Depression Inventory II (BDI-II; Beck 1996 <sup>272</sup> ) 3. Child Abuse Potential Inventory (CAPI; Milner 1995 <sup>366</sup> ) 4. Dyadic Parent-Child Interaction Coding System III (DPICS; Eyberg SM, Duke M, McDiarmid M, Boggs S, Robinson E, Washington E. University of Florida, Gainesville, FL, 2004. Dyadic Parent-Child Interaction Coding System 3rd edition. Unpublished manuscript)
	Physical, neglect	RCT	Thomas 2012 <sup>138</sup>	Primary: 1. Behaviour 2. Quality of life  Secondary: 1. Carer distress 2. Carer competence	1. Child Behavior Checklist [CBCL; Achenbach <sup>260</sup> (externalising behaviour; internalising behaviour)] 2. Eyberg Child Behavior Inventory [ECBI; Eyberg 1989 <sup>311</sup> (intensity of behaviour problems)]  1. Parenting Stress Index (PSI; Abidin 1990 <sup>367</sup> ) 2. Beck Depression Inventory II (BDI-II; Beck 1996 <sup>272</sup> ) 3. Child Abuse Potential Inventory (CAPI; Milner 1995 <sup>366</sup> ) 4. Dyadic Parent-Child Interaction Coding System III (DPICS; Eyberg SM, Duke M, McDiarmid M, Boggs S, Robinson E, Washington E. 2004. Dyadic Parent-Child Interaction Coding System 3rd edition. Unpublished Manuscript, University of Florida, Gainesville, FL, USA) 5. A subscale of the Emotional Availability Scales, <sup>368</sup> modified to assess parental sensitivity from videotaped interactions

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Parenting interventions	Other	RCT	Hughes 2004 <sup>139</sup>	Primary:  1. Behaviour  Other:  1. Parent/carer outcomes	1. Child Autonomy Observational scale (CAO, developed for the study: 16 items, three subscales)  1. Parenting Skills Observation Scale (PSOS, developed for the study) 2. Maternal Depression (CES-D; Radloff 1977 <sup>369</sup> ) 3. Social Support (three-item scale developed for the study) 4. Satisfaction (Mothers' Opinion Questionnaire – three items developed for the study)
	Other	RCT	Valentino 2013 <sup>140</sup>	Primary:  1. Psychological distress	1. Child reminiscing (coding of conversations)
Systemic FT	Physical	RCT	Kolko 1996 <sup>107,108</sup>	Primary:  1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive  Secondary:	1. Child Conflicts index (CCI; Frantel 1990 <sup>52</sup> ) 2. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>269</sup> ) 3. Children's Depression Inventory (CDI; Kovacs 1981 <sup>299</sup> ) 4. Friendship Questionnaire (FQ; Bierman 1987 <sup>300</sup> ) 5. Children's Attributions and Perceptions Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 6. Kiddie Global Assessment Scale (KGAS <sup>a</sup> ) 7. Hostility (Children's Hostility Inventory, CHI; Kazdin 1987 <sup>301</sup> )
Transtheoretical intervention	Physical, neglect	RCT	Linares 2015 <sup>141</sup>	Primary:  1. Behaviour 2. Social functioning  Other:  1. Carer efficacy	1. Sibling Interaction Quality (SIQ; Kramer, University of Illinois, Urbana-Champaign, Urbana, IL, 2010, unpublished)  1. Parent Conflict Mediation, The Conflict Checklist (CCh; Smith 2007 <sup>370</sup> ) 2. Sibling Aggression Scale (Linares, NYU Child Study Center, New York University, New York, NY, 2008, unpublished)

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Multisystemic FT	Physical, neglect	RCT	Brunk 1987 <sup>142</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning	1. Symptom Checklist-90 (SCL-90; Derogatis 1983 <sup>371</sup> ) 2. Behavior Problem Checklist [BPC; Parent Report (Quay and Peterson, University of Miami, Coral Gables, FL, 1975, unpublished)] 3. Family Environment Scale (FES; Moos 1981 <sup>372</sup> ) 4. Family Inventory of Life Events and Changes (McCubbin 1985 <sup>373</sup> ) 5. Treatment Outcome Questionnaire (TOQ; developed by authors)
	Sexual	RCT	Danielson 2012 <sup>143</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning	1. UCLA PTSD Index for the <i>Diagnostic and Statistical Manual of Mental Disorders</i> (DSM-IV; Steinberg 2004 <sup>374</sup> ) 2. Children's Depression Inventory (CDI; Kovacs M. <i>The Interview Schedule For Children (ISC): Interrater and Parent-Child Agreement</i> . 1983. Unpublished manuscript, Pittsburgh, PA) 3. Family Environment Scale (FES, cohesion and conflict subscales; Moos 1986 <sup>375</sup> ) 4. Time Line Follow Back Interview (TLFB; Sobell 1996 <sup>376</sup> ) plus urine tests 5. Risky Sexual Behaviour (number of sexual partners in previous 3 months plus any diagnosis of a sexually transmitted infection)
	Physical	RCT	Swenson 2010 <sup>144</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Quality of life  Other: 1. Carer efficiency	1. Child Behavior Checklist (CBLC; Achenbach 1991 <sup>266</sup> ) 2. Child Behavior Checklist-Post-Traumatic Disorder Scale (CBCL-PTSD; Ruggiero 2000 <sup>377</sup> ) 3. Trauma Symptom Checklist for Children (TSCC; Briere 1989 <sup>378</sup> ) 4. Social Skills Rating System (SSRS; Gresham 1990 <sup>379</sup> ) 5. Reabuse (CPS records)  1. Global Severity Index (GSI) of the Brief Symptom Inventory (BSI; Derogatis 1975 <sup>380</sup> ) 2. Parental Support – Interpersonal Support Evaluation List (ISEL; Cohen 1985 <sup>381</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Multiple	RCT	Biehal 2012 <sup>145,146</sup>	Primary: 1. Psychological distress/mental health 2. Social functioning 3. Academic achievement  Secondary: 1. Offending  Other: 1. Placement stability	1. Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA; Gowers 1999 <sup>382</sup> ) 2. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>257</sup> ) 3. Administrative data plus two education related domains of the Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA) 4. Children's Global Assessment Scale (CGAS; Shaffer 1983 <sup>261</sup> )  1. Information from social workers and carers  1. Administrative data
	Physical, emotional, sexual	COS	Schaeffer 2013 <sup>147</sup>	Primary: 1. Psychological distress 2. Quality of life  Other: 1. Carer distress 2. Carer competence	1. Trauma Symptom Checklist for Children (TSCC; Briere 1996 <sup>383</sup> ) 2. Reabuse and out of home placement  1. Addiction Severity Index – fifth Edition (ASI; McLellan 1982 <sup>384</sup> ) 2. Beck Depression Inventory (BDI-II; Beck 1996 <sup>332</sup> ) 3. Conflict Tactics Scale (CTS; Straus 1998 <sup>302</sup> )
continued					

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Multigroup FT	Physical, emotional, sexual, neglect, multiple	RCT	Meezan 1998 <sup>148,149</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive  Other: 1. Parent/carer outcomes 2. Placement stability	1. Child Behavior Checklist (CBCL; Achenbach 1986 <sup>258</sup> ) 2. Children's Action Tendency Scale (CAS; Deluty 1979 <sup>385</sup> ) 3. Index of Peer Relations (IPR; Hudson 1990 <sup>386</sup> )  1. Parenting Social Support Index (SSI; Telleen 1985 <sup>387</sup> ) 2. Problem-Solving Inventory (PrSI; Heppner 1982 <sup>388</sup> ) 3. Adult-Adolescent Parenting Inventory (AAP; Bavolek 1999 <sup>340</sup> ) 4. Knowledge of child development (30-item, developed by authors) 5. Family Adaptability and Cohesion Evaluation Scale II (FACES-II; Olson 1985 <sup>389</sup> ) 6. Child Abuse Potential Inventory (CAPI; Milner 1991 <sup>366</sup> ) 7. Family Assessment Form (FAF-modified; McCroskey 1997 <sup>390</sup> )
Family-based programme	Sexual	QEx	Bagley 2000 <sup>150</sup>	Primary: 1. Psychological distress 2. Behaviour  Secondary: 1. Delinquency	1. CES-D (Center for Epidemiologic Studies Depression Scale; Radloff 1977 <sup>369</sup> ) 2. Rosenberg Self-Esteem Scale (RSES; Bagley 1999 <sup>391</sup> ) 3. Parent, social worker, and self report of problem/delinquent behaviours

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Psychoeducation	Physical, other	RCT	Graham-Berman 2007 <sup>151</sup>	Primary: 1. Behaviour  Other: 1. Care efficacy	1. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>294,344</sup> )  1. Conflict Tactics Scale (CTS; Straus 1979 <sup>392</sup> ) 2. Severity of Violence against Women Scales (SCAWS; Marshall 1992 <sup>393</sup> ) 3. Attitudes About Family Violence (AAFV) scale (Graham-Bermann 1994 <sup>394</sup> )
	Other	RCT	Howell 2013 <sup>152</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Other: 1. Carer efficiency 2. Carer distress	1. Social Competence Scale (SCS; Conduct Problems Prevention Research Group 2002 <sup>395</sup> )  1. Alabama Parenting Questionnaire (APQ; Frick, 1999 <sup>396</sup> ) 2. Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977 <sup>369</sup> ) 3. Posttraumatic Stress Diagnostic Scale (PDS; Foa 1995 <sup>397</sup> ) 4. Revised Conflict Tactics Scale (CTS-2; Straus 1996 <sup>398</sup> )
	Other	RCT	Overbeek 2013 <sup>153</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Quality of life  Other: 1. Carer efficiency 2. Carer distress	1. Trauma Symptom Checklist for Young Children (TSCYC; Briere 1997 <sup>399</sup> ) or Trauma Symptom Checklist for Children (TSCC; Briere 1996 <sup>325</sup> ) according to age. Parent report for (TSCYC) self-completion by children aged 7.5 years (TSCC) 2. Child Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 3. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>344,400</sup> ) (Internalising and externalizing problems, Teacher Report Form (TRF); Youth Report when over 7.5 years old. Dutch translations; Verhulst 1996 <sup>400</sup> ) 4. Parent–Child Conflict Tactics Scales (CTSPC; Strauss 1998 <sup>302</sup> )  1. Revised Conflict Tactics Scale (CTS2; Strauss 1996 <sup>398</sup> )

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, emotional, other	RCT	Sullivan 2002 <sup>154</sup>	Primary:  1. Psychological distress  Other:  1. Parent/carer outcomes	1. Self-Perception Profile for Children (8- to 12-year-old version) (Harter 1985 <sup>401</sup> )    1. Mother's perceived quality of life (nine-item scale adapted from Andrews 1976 <sup>402</sup> ) 2. Adults Social Support Questionnaire (Mothers) (Bogat 1983 <sup>403</sup> ) 3. Center for Epidemiologic Studies Depression Scale (CES-D, mother's depression; Radloff 1977 <sup>369</sup> ) 4. Rosenberg Self-Esteem Inventory (Rosenberg 1965 <sup>404</sup> )
	Sexual	RCT	Trowell 2002 <sup>155</sup>	Primary:  1. Psychological distress 2. Social functioning	1. Kiddie Schedule for Schizophrenia and Affective Disorders (K-SADS, short; Chambers 1885 <sup>405</sup> ) 2. PTSD Scale (K-SADS extension; Orvaschel 1989 <sup>406</sup> ) 3. Kiddie Global Assessment Scale (K-GAS; Shaffer 1983 <sup>261</sup> )
	Other	RCT	Wagar 1995 <sup>156</sup>	Primary:  1. Psychological distress	1. Child Witness to Violence Questionnaire (CWVQ)
	Physical, emotional, sexual, neglect	RCT	Wolfe 2003 <sup>157</sup>	Primary:  1. Psychological distress 2. Social functioning	1. Conflict in Adolescent Dating Relationships Inventory (CADRI; Wolfe 2001 <sup>407</sup> ) 2. Trauma Symptom Checklist-40 (TSC-40; Elliot 1992 <sup>408</sup> ) 3. Adolescent Interpersonal Competence Questionnaire (AICQ; Buhrmester 1990 <sup>409</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, sexual, other	QEx	Noether 2007 <sup>158</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Secondary: 1. Carer distress	1. Behavioral and Emotional Rating Scale (BERS; Epstein 1998 <sup>410</sup> ) – overall strength quotient – primary outcome; subscales – secondary outcomes to assess healthy/positive interpersonal relationships and positive self-identity) 2. Other subscales of BERS to measure family involvement, relationship tools, and capacity for closeness  1. Brief Symptom Inventory (BSI; Derogatis 1975 <sup>380</sup> ) 2. Posttraumatic Stress Disorder Symptom Scale (PSS) of the Posttraumatic Stress Diagnostic Scale (Foa 1996 <sup>397</sup> ) 3. Addiction Severity Index (ASI; McLellan 1992 <sup>384</sup> )
	Sexual	QEx	Simoneau 2008 <sup>159</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive/academic	1. Children's Knowledge of Abuse Questionnaire (CKAQ; Tutty 1995 <sup>411</sup> ) and Personal Safety Questionnaire (PSQ; Wurtele 1989 <sup>412</sup> ) 2. Self-Perception Profile for Children (SPPC; Harter 1982 <sup>413</sup> ) 3. Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds 1985 <sup>293</sup> ) 4. Children's Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 5. Children's Impact of Traumatic Events Scale (CITES; Wolfe 1991 <sup>414</sup> ) 6. Child Sexual Behavior Inventory (CSBI; Friedrich 1992, <sup>259</sup> Wright <sup>415</sup> ) 7. Child Post Traumatic Stress Reaction Index (CPTSRI, French version; Hébert 2002 <sup>416</sup> ) 8. Child Dissociative Checklist (CDC; Putnam 1988 <sup>417</sup> ) 9. Child Behavior Checklist (CBCL; Achenbach 2001 <sup>297</sup> )
continued					

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Sexual	QEx	Tourigny 2007 <sup>160</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Trauma Symptoms Checklist for Children (TSCC; Briere 1996 <sup>325</sup> ) 2. Child Behavior Checklist (CBCL, Youth Self-Report and Profile; Achenbach 1991 <sup>418</sup> ) 3. Ways of Coping Questionnaire (French version, Bouchard 1995, <sup>419</sup> Folkman 1988; <sup>420</sup> Knussen 1992 <sup>298</sup> ) 4. Empowerment Scale (23-item) (Rogers 1997 <sup>421</sup> ) 5. Children's Attributions and Perceptions Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 6. Self-Injurious Behaviours Questionnaire (SIBQ; Sadowsky, Mayo Clinic, Rochester, MN, 1995, unpublished) 7. Child's Attitude to Mother (CAM) and Father (CAF) Questionnaires (Giuli 1977 <sup>422</sup> )
				Secondary: 1. Resilience	
	Sexual	COS	Barth 1994 <sup>161</sup>	Primary: 1. Behaviour	1. Child Behavior Checklist (CBCL– Foster Parent Report; Achenbach <sup>a</sup> ) 2. Child Sexual Behavior Inventory (CSBI; Friedrich 1986 <sup>423</sup> )
				Secondary: 1. Acceptability	1. Brief Client Satisfaction Inventory – developed by authors
	Sexual	COS	Duffany 2009 <sup>162</sup>	Primary: 1. Psychological distress	1. Youth Outcomes Questionnaire (YOQ; Brown 2001 <sup>424</sup> )
				Secondary: 1. Delinquency	1. Recidivism

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Sexual	COS	Hébert 2010 <sup>163</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Self-Perception Profile for Children (SPPC; Harter 1982 <sup>401</sup> ) 2. Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds 1985 <sup>256</sup> ) 3. Children's Depression Inventory (CDI; Kovacs 1985 <sup>80</sup> ) 4. Children's Impact of Traumatic Events Scale (CITES; Wolfe 1991, unpublished) 5. Self-Report Coping Scale (SRCS; Causey 1992 <sup>425</sup> ) 6. Child Dissociative Checklist (CDC; Putnam 1993 <sup>426</sup> ) 7. Child Behavior Checklist (CBCL; Achenbach 2001 <sup>297</sup> )
	Physical, emotional, sexual, neglect, multiple	COS	Holland 2004 <sup>164</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning  Secondary: 1. Delinquency	1. Conflict with other children in care 2. Sexually aggressive 3. Mental health condition 4. Attempted or threatened suicide 5. Behaviour disorder  1. Delinquent. Note: all based on workers' perceptions
	Physical, emotional, sexual, neglect, multiple	COS	Santibáñez 2000 <sup>165</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Disruptive behaviour (Diaz-Aguado 1995 <sup>427</sup> ) 2. Shapiro Control Inventory (SCI; Shapiro 1982 <sup>428</sup> ) 3. Cognitive Mediators of Aggression Questionnaire (Diaz-Aguado 1995 <sup>427</sup> ) 4. Level of moral reasoning [qualitative interview plus hypothetical dilemma (Heinz proposed by Kohlberg 1982 <sup>429</sup> )]

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Sexual	COS	Tourigny 2005 <sup>166,167</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Trauma Symptoms Checklist for Children (TSCC; Bieri 1996 <sup>383</sup> ) 2. Child Behavior Checklist – Youth Self-Report and Profile (CBCL; Achenbach 1991 <sup>418</sup> ) 3. Ways of Coping Questionnaire (Bouchard 1995; <sup>419</sup> Knussen 1992 <sup>298</sup> ) 4. Empowerment Scale (23-item; Rogers 1997 <sup>425</sup> ) 5. Children's Attributions and Perceptions Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 6. Self-Injurious Behaviours Questionnaire (SIBQ; Sadowsky, unpublished) 7. Child's Attitude to Mother (CAM) and Father (CAF) Questionnaires (Giuli 1977 <sup>422</sup> )
	Sexual	COS	Tourigny 2008 <sup>168</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Trauma Symptoms Checklist for Children (TSCC; Briere 1996 <sup>383</sup> ) 2. Child Behavior Checklist (CBCL – Youth Self-Report and Profile; Achenbach 1991 <sup>418</sup> ) 3. Ways of Coping Questionnaire (Bouchard 1995; <sup>419</sup> Knussen 1992 <sup>298</sup> ) 4. Empowerment Scale (23-item; Rogers 1997 <sup>421</sup> ) 5. Children's Attributions and Perceptions Scale (CAPS; Mannarino 1994 <sup>270</sup> ) 6. Self-Injurious Behaviours Questionnaire (SIBQ; Sadowsky, unpublished) 7. Child's Attitude to Mother (CAM) and Father (CAF) Questionnaires (Giuli 1977 <sup>422</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Group work with children	Sexual	Q-RCT	Monck 1996 <sup>169</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive  Other: 1. Parent/carer outcomes	1. Child Depression Inventory (CDI; Kovacs 1977 <sup>430</sup> ) 2. Self-Perception Profiles for Children and Adolescents (SPPC/A, adapted; Harter 1988; <sup>431</sup> Harter 1987 <sup>432</sup> ) 3. Fear Schedule for Children-Revised (FSC-R; Ollendick 1993 <sup>433</sup> ) 4. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>294</sup> )  1. General Health Questionnaire (GHQ-28; Goldberg 2000 <sup>434</sup> ) 2. Adult Self-Esteem Profile (ASEP; adapted from Messer 1986 <sup>435</sup> )
	Sexual	COS	De Luca 1995 <sup>170</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive  Secondary: 1. Acceptability	1. Self-Esteem Inventory (SEI; Coopersmith 1981 <sup>436</sup> ) 2. Revised Children's Manifest Anxiety Scale/What I Think and Feel Questionnaire (RCMAS; Reynolds 1978 <sup>293</sup> ) 3. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>257</sup> )  1. Child Feedback Questionnaire (developed by University of Manitoba to assess acceptability of treatment) 2. Parent Feedback Questionnaire (developed by University of Manitoba to assess acceptability of treatment)
	Sexual	COS	Grayston 1995 <sup>171</sup>	Primary: 1. Behaviour	1. Child Behavior Checklist (CBCL; Achenbach 1983 <sup>257</sup> ) 2. Child Sexual Behavior Inventory (CSBI; Friedrich 1992 <sup>259</sup> ) 3. Parent report of problematic behaviours (type and frequency, based on Minden 1982 <sup>437</sup> )
	Sexual	COS	McGain 1995 <sup>172</sup>	Primary: 1. Behaviour	1. Behavior Problem Checklist-Revised (BPC-R; Quay 1987 <sup>438</sup> ) 2. Eyberg Child Behavior Inventory (ECBI; Eyberg 1980 <sup>439</sup> )
	Sexual	COS	Verleur 1986 <sup>173</sup>	Primary: 1. Psychological distress 2. Cognitive	1. Self-Esteem Inventory (SEI; Coopersmith 1981 <sup>436</sup> ) 2. Anatomy/Physiology Sexual Awareness Scale – designed by Verleur
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**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Psychotherapy/ counselling	Sexual	RCT	Thun 2002 <sup>174</sup>	Primary: 1. Psychological distress	1. Offer Self-Image Questionnaire-Revised (OSIQ-R; Offer 1992 <sup>440</sup> )
	Physical, sexual, neglect, multiple	RCT	Haight 2010 <sup>175</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive  Secondary: 1. Acceptability	1. Child Behavior Checklist (CBCL; Achenbach 2001 <sup>297</sup> ) 2. Peabody Picture Vocabulary Test-Third Edition (PPVT-III; Dunn 1997 <sup>441</sup> ) 3. Community clinicians' perspectives (interview)  1. Children's perspectives (interview) 2. Caregivers' perspectives (interview)
	Physical, emotional, sexual, neglect	RCT	Reddy 2013 <sup>176</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Cortisol and C-reactive protein levels 2. Child Behavior Checklist (CBCL; Achenbach 2001 <sup>297</sup> ) 3. Quick Inventory of Depressive Symptomatology–Self-Report (QIDS-SR; Rush 2003 <sup>442</sup> ) 4. State-Trait Anxiety Inventory-Trait Subscale (STAI-T; Spielberger 1983 <sup>333</sup> ) 5. Functional Assessment of Self-Mutilation (FASM; Lloyd 1997 <sup>443</sup> ) 6. Self–Other Four Immeasurables Scale (SOFI; Kraus 2009 <sup>444</sup> ) 7. Children's Hope Scale (CHS; Snyder 1991 <sup>445</sup> ) 8. Difficulties with Emotion Regulation Scale (DERS; Gratz 2004 <sup>446</sup> ) 9. Inventory of Callous and Unemotional Traits-Parent Report (ICU-P; Essau 2006 <sup>447</sup> ) 10. Childhood Trauma Questionnaire (CTQ; Fink 1995 <sup>448</sup> )
	Sexual	RCT	Trowell 2002 <sup>155</sup>	Primary: 1. Psychological distress 2. Social functioning	1. Kiddie Schedule for Schizophrenia and Affective Disorders (K-SADS, short; Chambers 1985 <sup>405</sup> ) 2. PTSD Scale (K-SADS extension; Orvaschel 1989 <sup>406</sup> ) 3. Kiddie Global Assessment Scale (K-GAS; Shaffer 1983 <sup>261</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Physical, neglect, multiple	QEx	Cadol 1975 <sup>177</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive 5. Quality of life  Other: 1. Placement stability	1. Bayley Scales of Infant Development (children aged 24–30 months; Bayley 1993 <sup>449</sup> ) 2. McCarthy Scales of Children's Abilities (children aged over 30 months; MacCarthy 1972 <sup>450</sup> ) 3. Height, weight and head circumference 4. Bayley Infant Behavior Record (IBR; Matheny 1980 <sup>451</sup> ) 5. Child Behaviour Characteristics Questionnaire [CBCQ, Mother's perceptions of child's behaviour; Borgatta 1970 (not referenced in Cadol 1975 <sup>177</sup> )] 6. Reabuse  1. Miscellaneous outcome measures (Foster care, number of times family moved, where child resident at time of service closure)
	Sexual	COS	Nolan 2002 <sup>178</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive	1. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>344,418</sup> ) 2. Children's Depression Inventory (CDI; Kovacs 1992 <sup>258</sup> ) 3. Trauma Symptom Checklist for Children (TSCC; Briere 1996 <sup>452</sup> )
	Sexual	COS	Sullivan 1992 <sup>179</sup>	Primary: 1. Behaviour	1. Child Behavior Checklist (CBCL – Parent Report completed by house-parent; Achenbach 1983 <sup>257</sup> )
	Sexual	COS	Downing 1988 <sup>180</sup>	Primary: 1. Behaviour	1. Behavioural observations of parents and teachers
Peer mentoring	Physical, neglect	RCT	Fantuzzo 1988 <sup>181</sup>	Primary: 1. Behaviour 2. Social functioning	1. Positive Social Behaviour (observational coding; Strain 1974, <sup>453</sup> 1976 <sup>454</sup> ) 2. Preschool Behavior Questionnaire (PBQ; Behar 1974 <sup>455</sup> ) 3. Brigance Diagnostic Inventory of Early Development (Brigance 1978 <sup>456</sup> )
	Physical, neglect, multiple	RCT	Fantuzzo 1996 <sup>182</sup>	Primary: 1. Behaviour 2. Social functioning	1. Interactive peer play observational coding system 2. Preschool Social Skills Rating System (SSRS; Gresham 1990 <sup>379</sup> ) 3. Peer Play Interactive Checklist (PPIC; Fantuzzo 1995 <sup>457</sup> )
continued					

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Treatment foster care	Physical, emotional, sexual, neglect, multiple	RCT	Fisher 2005 <sup>183–188</sup>	Primary: 1. Psychological distress  Other: 1. Placement stability	1. Salivatory cortisol 2. Parent Attachment Diary (PAD)  1. Permanent placement type 2. Placement disruptions 3. Number of foster care placements 4. Time in foster care prior to a permanent placement
	Physical, sexual	RCT	Smith 2011 <sup>189</sup>	Primary: 1. Behaviour	1. Parent Daily Report Checklist (PDR; Chamberlain 1987 <sup>458</sup> )
	Physical, emotional, sexual, neglect	RCT	Taussig 2010 <sup>190,191</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive/academic  Other: 1. Placement stability  Economic: 1. Service use	1. Trauma Symptom Checklist for Children (TSCC; Briere 1996 <sup>325</sup> ) 2. Child Behavior Checklist (CBCL, Internalising Scales Teacher Report Form, TRF; Achenbach 1991 <sup>269</sup> ) 3. Mental Health Index created from principal components factor analysis (PCFA) of mean scores from 1 and 2 above 4. Life Satisfaction Survey (Andrews 1976 <sup>402</sup> ) 5. Coping Scales Inventory (CSI, Positive and Negative Coping scales; Dise-Lewis 1988 <sup>459</sup> ) 6. Self-Perception Profile for Children [Social Acceptance and Global Self-Worth scales (SPPC); Harter 1982 <sup>413</sup> ] Social Support Factor Score (derived from PCFA of scales scores from 'The People in My Life – Short Form'; Gifford-Smith 2000 <sup>460</sup> )  1. Number of placement changes  1. Children's use of mental health services and psychotropic medication

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
	Multiple	COS	Fisher 2000 <sup>192</sup>	Primary: 1. Behavioural	1. Child Caregiver Interviewer Impressions Form (parenting strategies; Chamberlain 1997 <sup>461</sup> ) 2. Parent Daily Report (PDR; Chamberlain 1987 <sup>458</sup> ) 3. Early Childhood Inventory (behaviour problems) (ECI; Gadow 1994 <sup>462</sup> ) 4. L-HPA axis activity (salivary cortisol)
	Physical, emotional, sexual, neglect, multiple	COS	Graham 2012 <sup>193</sup>	Other:	1. Diurnal cortisol slope
Therapeutic residential and day care	Multiple	RCT	Moore 1998 <sup>194</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive/academic  Secondary: 1. Care efficacy 2. Addictions 3. Delinquency	1. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>294,344,418</sup> ) 2. Winters Personal Experiences Screening Questionnaire (PESQ; Winters 1992 <sup>463</sup> ) 3. Self-perception profile for children (SPPC; Harter 1985 <sup>401</sup> )  1. Home Observation for Measurement of the Environment (HOME; Bradley 1988 <sup>464</sup> ) 2. Juvenile court and school files 3. Indexes of drug/alcohol use
	Physical, neglect	COS	Culp 1987 <sup>195,196</sup>	Primary: 1. Social functioning 2. Cognitive	1. Early Intervention Development Profile (Bricker 1982, <sup>465</sup> Schafer 1981 <sup>466</sup> )
	Physical, neglect	COS	Culp 1991 <sup>197</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Social functioning 4. Cognitive	1. Perceived Competence and Social Acceptance Scale (PCSAS; Harter 1984 <sup>467</sup> ) 2. Early Intervention Developmental Profile (Bricker 1982, <sup>465</sup> Schafer 1981 <sup>466</sup> )

continued

**TABLE 5** Outcomes domains and measures used in included studies (*continued*)

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Coordinated Care	Physical, emotional, sexual, neglect, multiple, other	RCT	Swenson 2000 <sup>198</sup>	Primary:	
				1. Psychological distress 2. Behaviour 3. Quality of life	1. Child Behavior Checklist (CBCL; Achenbach 1991 <sup>418</sup> ) 2. Denver II for infants and toddlers (Frankenburg 1992 <sup>468</sup> ) 3. Abuse reincidence
				Secondary:	
				1. Substance misuse	1. Addiction Severity Index (ASI McLellan 1985, <sup>469</sup> 1980 <sup>470</sup> )
				Other:	
				1. Carer distress	1. Parenting Stress Index (PSI; Abidin 1990 <sup>471</sup> )
				Economic:	
				1. Services and costs	1. Service utilisation and cortisol 2. Service system performance (interviews with careworkers)
Arts therapy	Physical, sexual	QEx	Brillantes-Evangelista 2013 <sup>199</sup>	Primary:	
				1. Psychological distress	1. Self-Rating Depression Scale (SDS; Zung 1965 <sup>a</sup> ) 2. Child Report of Posttraumatic Symptoms (CROPS; Greenwald 1999 <sup>a</sup> ) 3. Children's thoughts and feelings about treatment (interview) 4. References as cited in Corcoran 2000 <sup>472</sup>
	Sexual	QEx	Pretorius 2010 <sup>200</sup>	Primary:	
				1. Psychological distress	1. Trauma Symptom Checklist for Children (TSCC; Briere 1996 <sup>473</sup> ) 2. Human figure drawing (HFD: measure of self-esteem, depression, anxiety and sexual trauma; Koppitz 1968 <sup>474</sup> )

Intervention category	Abuse type	Design	Study/record	Outcome domain	Outcome measures
Play/activity	Physical, sexual, neglect	COS	D'Andrea 2013 <sup>201</sup>	Primary: 1. Psychological distress 2. Behaviour	1. Milieu Behavioural Data (chart review) 2. Child Behavior Checklist (CBCL, completed by child's therapist; Achenbach 1991 <sup>260</sup> ) 3. Observational data also collected on the use of player skill (e.g. conflicts, loss of temper, conflict resolution)
	Other	RCT	McDonald 1989 <sup>202</sup>	Primary: 1. Psychological distress	1. Piers–Harris Children's Self-Concept Scale (PHSCS; Piers 1969 <sup>475</sup> )
	Other	QEx	Udwin 1983 <sup>203</sup>	Primary: 1. Psychological distress 2. Behaviour 3. Cognitive	1. Play behaviours during free play, using rating scale (Singer 1973 <sup>476</sup> ) 2. Guilford's Unusual Uses Test (GUUT; Guilford 1950 <sup>477</sup> ) 3. Children's Apperception Test (CAT; Bellak 1954 <sup>478</sup> )
Animal therapy	Sexual	COS	Dietz 2012 <sup>204</sup>	Primary: 1. Psychological distress	1. Trauma Symptom Checklist for Children (TSCC, Briere 1996 <sup>383</sup> )
	Physical, sexual	COS	Hamama 2011 <sup>205</sup>	Primary: 1. Psychological distress 2. Social functioning  Secondary: 1. Resilience	1. Subjective well-being 'All things being considered, how satisfied are you with your life these days?' (five-point Likert scale) 2. Coping with stressful life events (ask participants to rate their perception of coping with daily life on a 5-point Likert scale) 3. Short Center for Epidemiologic Studies Depression Scale (S-CESD; Radloff 1977 <sup>369</sup> ) 4. PTSD Checklist-Civilian Version (PCL-C; Ruggiero 2003 <sup>479</sup> )
CPS, Child Protective Services (USA); L-HPA, limbic–hypothalamic–pituitary–adrenal; Q-RCT, quasi-randomised controlled trial; QEx, quasi-experimental; UCLA, University of California, Los Angeles. a Reference not available. Kolko 1996 appears twice: once in 'CBT for Physical Abuse', and once in 'Systemic Family Therapy'. Trowell 2001 appears twice: once in 'psychoeducation' and once in 'Psychotherapy/counselling'.					

TABLE 6 Uncontrolled studies: participant characteristics

Intervention	Study/record	Country	n	Mean (SD), range	% female	P	E	S	N	M	O
CBT	Arnold 2003 <sup>480</sup>	USA	45	12–17 years	100			X			
	Barker 2005 <sup>481</sup>	UK	67	9.2, 4–18 years	60	X	X	X	X		
	Chasson 2008 <sup>482</sup>	USA	99	10.88 (3.48), 5–19 years	68			X			
	Clarke 1994 <sup>483</sup>	UK	3	22.33, 19–24 years	100			X			
	Cohen 2007 <sup>484</sup>	USA	12	10–17 years	100			X			
	Deblinger 1990 <sup>485</sup>	USA	19	7.79, 3–16 years	100			X			
	Feather 2006 <sup>486</sup>	New Zealand	4	10.75 (2.06), 9–13 years	50					X	
	Feather 2009 <sup>487</sup>	Canada	8	11.63 (1.3), 9–13 years	50	X	X	X	X	X	
	Habib 2013 <sup>488</sup>	USA	24	14–21 years	75					X	
	Habigzang 2008 <sup>489</sup>	Brazil	10	9–13 years	100			X			X
	Habigzang 2009 <sup>490</sup>	Brazil	40	9–16 years	100			X			
	Habigzang 2013 <sup>491</sup>	Brazil	49	11.43 (1.81), 9–16 years	100			X			
	Hubel 2014 <sup>492</sup>	USA	97	10 (1.63), 6.97–12.83 years	77			X			
	Jarero 2013 <sup>493</sup>	Mexico	34	9–14 years	47	X	X	X	X	X	
	Kirsch 2011 <sup>494</sup>	Germany	15	10.5 (1.8) years	40	X		X		X	X
	Kjellgren 2013 <sup>495</sup>	Sweden	25	9.2 (1.8), 6–14 years	40	X					
	Kruczek 1999 <sup>496</sup>	USA	41	14.21, 13–17 years	100			X			
	Lange 2010 <sup>497</sup>	The Netherlands	24	20 (3.5), 14–25 years	No information			X			
	Lanktree 1995 <sup>498</sup>	USA	105	11.6, 8–15 years	85			X			
	Matulis 2014 <sup>499</sup>	Germany	12	18.08 (1.67), 15–21 years	83	X		X		X	
	Misurell 2011 <sup>500</sup>	USA	123	7.93 (1.5), years	63			X			
	Misurell 2014 <sup>501</sup>	USA	45	10 (median) (3.44) years	74			X			
	Rosenberg 2011 <sup>502</sup>	USA	9	16, 14–18 years	75	X		X		X	

Intervention	Study/record	Country	n	Mean (SD), range	% female	P	E	S	N	M	O
	Runyon 2009 <sup>503</sup>	USA	33	8.1 (2.65), 4–14 years	39	X		X		X	
	Salloum 2014 <sup>504</sup>	USA	6	4.7 (0.87) years	22	X		X			X
	Silovsky 2007 <sup>505</sup>	USA	85	4.9 (1.1) years	58			X			
	Smith 2008 <sup>506</sup>	Australia	6	14, 11–16 years	33			X			
	Stauffer 1996 <sup>507</sup>	USA	19	4.21 (1.08), 2–6 years	67			X			
	Sullivan 2004 <sup>508</sup>	USA	79		No information						X
	Timmons-Mitchell 1986 <sup>509</sup>	USA	16		44	X	X				
RBIs	Ducharme 2000 <sup>510</sup>	USA	15	3–10 years	No information	X					X
	Golding 2004 <sup>511</sup>	UK	57	5–15 years	37	X			X		
	Jackson 2009 <sup>512</sup>	Australia	56	10.87, 0.6–17 years	40	X	X	X	X	X	X
	Lanier 2011 <sup>513,514</sup>	USA	120	6.6 (2.8), 2–13 years	36	X			X	X	
	Osofsky 2007 <sup>515</sup>	USA	57	20.19 (10.91), 2–52 months	35						X
	Puckering 2011 <sup>516</sup>	Scotland/UK	12	6–9 years	25				X		X
	Timmer 2005 <sup>517</sup>	USA	307	4.58, 2–8 years	33	X		X	X		
	Timmer 2006 <sup>518</sup>	USA		4.46 years							X
	Timmer 2010 <sup>519</sup>	USA	129	4.6 (1.5), 2–8 years	33	X		X	X		
	Winton 1990 <sup>520</sup>	USA	23	4.63 (2.37) years	78			X			

continued

**TABLE 6** Uncontrolled studies: participant characteristics (*continued*)

Intervention	Study/record	Country	<i>n</i>	Mean (SD), range	% female	P	E	S	N	M	O
Systemic interventions	Arabgol 2014 <sup>521</sup>	Iran	73	4 (3.12) years	41	x	x				
	Bentovim 1987 <sup>522</sup>	UK	274		77			x			
	Berg 1999 <sup>523</sup>	UK	13	24 (23), 1–78 months	46						x
	Coren 2013 <sup>524</sup>	UK	42	12.75 (3.28), 4–18 years	69			x			
	Crusto 2008 <sup>525</sup>	USA	82	3.3, 0–6 years	56	x					x
	Danielson 2010 <sup>526</sup>	USA	10	15 (1.7), 13–17 years	100			x			
	De Paul 2003 <sup>527</sup>	Spain	289	0–18 years		x	x		x	x	
	Donohue 1999 <sup>528</sup>	USA	47	9 (5), 0–17 years	57	x	x	x	x	x	
	Forbes 2003 <sup>529</sup>	UK	31	9 (2.92), 4–14 years	74			x			
	Huang-Storms 2006 <sup>25</sup>	USA	20	10.43 (2.66), 6–15.5 years	45						x
	McClure 2005 <sup>530</sup>	USA	6	14.67 (1.21), 13–16 years	No information	x		x			
	Staff 1995 <sup>531</sup>	USA	244	9 (median), 2–16 years	> 50						x
	Tourigny 1998 <sup>532</sup>	Canada	41	11.6 years	73			x			
	Woodworth 1991 <sup>533</sup>	USA	22	13.3 years	> 50			x			

Intervention	Study/record	Country	n	Mean (SD), range	% female	P	E	S	N	M	O
Psychoeducation	De Luca 1995 <sup>170</sup>	Canada	6	10–11 years	100			X			
	Grosz 2000 <sup>534</sup>	USA	246	2–14 years	58			X			
	Hack 1994 <sup>535</sup>	Canada	6	8–11 years	0			X			
	Harbeck 1992 <sup>536</sup>	USA	20	10.05, 4–16 years	80			X			
	Hiebert-Murphy 1992 <sup>537</sup>	Canada	6		100			X			
	Hyde 1995 <sup>538</sup>	UK	47	4–16 years	85			X			
	Lee 2012 <sup>539</sup>	USA	27	8.41, 6–11 years	59						X
	Macmillan 2003 <sup>540</sup>	Canada	47	9.02 (1.91) years	49	X	X	X		X	X
	Merrick 1994 <sup>541</sup>	USA	47	12.57, 4–17 years	79	X		X	X	X	
	Mukaddes 2000 <sup>542</sup>	Turkey	15	31.4, 21–45 months	44				X		
Group work with children	Nelki 1989 <sup>543</sup>	UK	6	4–8 years	100			X			
	Lindon 1994 <sup>544</sup>	UK	6	13–17 years	100			X			
	Reeker 1998 <sup>545</sup>	USA	19	6.32 (0.95), 4–8 years	47			X			
Psychotherapy	Sinclair 1995 <sup>546</sup>	USA	43	12–18 years	100			X			
	Friedrich 1992 <sup>547</sup>	USA	42	4–16 years	0			X			
Counselling	Rust 1991 <sup>548</sup>	USA	25	12.5, 9–18 years	100			X			
	Jarvis 2006 <sup>549</sup>	USA	62	9.9, 4–18 years	44	X		X			
	Wagner 1993 <sup>550</sup>	USA	36	12.19 years	100			X			

continued

**TABLE 6** Uncontrolled studies: participant characteristics (*continued*)

Intervention	Study/record	Country	<i>n</i>	Mean (SD), range	% female	P	E	S	N	M	O
Intensive service models	Brown 2013 <sup>551</sup>	USA	70		0	x		x		x	x
	Cross 2004 <sup>552</sup>	USA	384	6+ years	47	x		x			
	Culp 1987 <sup>195,196</sup>	USA	109	2.4 (0.1–6.2) years	44	x	x				
	Gallagher 2013 <sup>553</sup>	UK	16	18.8, 16–24 years	63	x	x	x	x		
	Grey 2000 <sup>554</sup>	USA	27	6–11 years	59	x		x	x	x	
	Heede 2009 <sup>555</sup>	Denmark	24	6–16 years							x
	Hussey 2005 <sup>556</sup>	USA	119	9.7 (4.03), 5–18 years	60	x		x	x		x
	Jones 2010 <sup>557</sup>	USA	58	12.3 (1.9), 9–18 years	22	x		x	x		
	Oates 1995 <sup>558</sup>	USA	24	3 years	54	x		x			
	Parish 1985 <sup>559</sup>	USA	53	30–60 months	45	x					
	Pugh 1987 <sup>560</sup>	USA	246	6.94 years	35						x
	Ray 1995 <sup>561</sup>	USA	15	10.5, 7–15 years	27			x			
	Schram 1991 <sup>562</sup>	USA	24	17.8 (median), years	100	x		x	x		
	Stubenbort 2010 <sup>563</sup>	USA	53	47 months	51						x
	Vernberg 2004 <sup>564</sup>	USA	50	9.64 (2.05) years	16						x

Intervention	Study/record	Country	<i>n</i>	Mean (SD), range	% female	P	E	S	N	M	O
Activity-based therapies	Coulter 2000 <sup>565</sup>	USA	9	9–17 years	44	x		x		x	
	Ernst 2007 <sup>566</sup>	USA	58	8.5 (3.5), 3–17 years	51						x
	Hall-Marley 1993 <sup>567</sup>	USA	13	4–7 years	54			x			
	Kemp 2013 <sup>568</sup>	Australia	30	12.65, 8–17 years	80			x			
	Mackay 1987 <sup>569</sup>	Canada	5	12–18 years	100	x		x	x		
	Clausen 2012 <sup>570</sup>	USA	20	5–10.7 years	30						x
	Nilsson 2010 <sup>571</sup>	Sweden	15	15.6 (2), 13–18 years	87	x		x			
	Pifalo 2002 <sup>572</sup>	USA	13	8–17 years	100			x			
	Pifalo 2006 <sup>573</sup>	USA	13	8–17 years	100			x			
	Purvis 2006 <sup>574</sup>	USA	12	7.84 years	17				x		x
	Purvis 2007 <sup>575</sup>	USA	19	8.2, 3–14 years	53	x	x	x	x	x	
	Reyes 2005 <sup>576</sup>	USA	18	11.1, 7.3–16.6 years	72			x			
	Schultz 2007 <sup>577</sup>	USA	63	10.8, 4–16 years	41	x		x			x
	Scott 2003 <sup>578</sup>	USA	26	5.6 years	73			x			

E, emotional (abuse); M, multiple (types of maltreatment); N, neglect; O, other (forms of maltreatment); P, physical (abuse); S, sexual (abuse).

many interventions targeting only female survivors of child sexual abuse (CSA). A total of 31 of these studies (see *Table 3*) included only female participants compared it with just three studies including only male participants. By contrast, in studies specifically addressing physical abuse, participants were more likely to be male (60% male, 40% female).

### Abuse type

The majority of studies included children who had suffered from multiple types of abuse. A total of 135 studies (see *Table 3*) included participants who had experienced sexual abuse. Participants who had experienced physical abuse were included in 85 of the included studies. Participants who had experienced neglect were included in 50 studies. Participants who had experienced emotional abuse were included in 31 studies. A total of 37 studies specified that their participants had experienced 'multiple' forms of abuse. Finally, 49 studies included participants who had experienced 'other' forms of abuse (e.g. witnessing domestic violence, Munchausen's syndrome by proxy, etc.).

### Outcomes

We were interested in five primary outcome domains [(1) psychological distress/mental health, particularly PTSD, depression and anxiety, self-harm; (2) behaviour, particularly internalising and externalising behaviours; (3) social functioning, including attachment and relationships with family and others; (4) cognitive/academic attainment; and (5) quality of life]. We also wanted to record the reporting of other outcomes, including substance misuse, delinquency, resilience and treatment acceptability, outcomes related to parent/carer distress, parent/carer efficacy (the degree to which they feel empowered to care for the child appropriately and safely) and, where appropriate, placement stability.

A wide variety of types and forms of measures have been used to evaluate outcomes in this field. A good many that are used routinely are well accepted and appear with citations demonstrating some aspect of validity and reliability. Some have been developed around the evaluation of formal diagnostic criteria [e.g. the Kiddie Schedule for Schizophrenia and Affective Disorders (KSADS);<sup>268</sup>] problem behaviour [e.g. the Child Behavior Checklist (CBCL)<sup>260</sup>] or in relation to specific therapeutic approaches [e.g. Beck Depression Inventory (BDI)<sup>272</sup>]. Others have been developed by study investigators for the evaluation of specific outcomes which, although potentially strong in terms of face validity, are generally without supporting evidence. Outcome measures routinely used in this field most often take the form of rating scales and questionnaires, and can be administered by an assessor or completed self-report.

We identified a considerable number of measures intended to evaluate the different outcome domains, either partially or fully (see *Table 5*). The measurement of psychological distress alone was undertaken using over 60 different measures or adaptations of measures across these studies. A list of the outcome domains, and judgements about the main measures used to assess them, is provided in *Appendix 9*. A sizeable proportion of these studies reported multiple measures ostensibly assessing the same outcome domains, or a mix of overlapping global and specific measures. The choice of outcome measure was often appropriately influenced by the nature of the intervention and/or the target group, although in view of the consequences and longer-term sequelae of maltreatment, the range of outcome domains considered by many studies was frequently quite limited.

### Cognitive-behavioural therapy interventions

Of the 12 studies<sup>89–105</sup> examining the effects of CBT for sexual abuse, all measured psychological distress, 11 recorded behaviour outcomes,<sup>89–100,102–105</sup> seven measured some form of social functioning<sup>90,95–101,104,105</sup> and three measured acceptability.<sup>99,101</sup> Five studies<sup>90,95–100</sup> also looked at parent/carer outcomes.

Of the three studies<sup>106–109</sup> using CBT to specifically target physical abuse, all three measured some form of behavioural outcomes, two studies<sup>107–109</sup> measured psychological distress, two studies<sup>107–109</sup> measured cognitive function/academic attainment and one study<sup>107,108</sup> measured social functioning. One study<sup>109</sup> also looked at parent/carer outcomes.

Five<sup>111,112,116–118</sup> of the nine studies that looked at CBT for multiple abuse measured psychological distress, six studies<sup>114–119</sup> measured behaviours, four studies<sup>115,117–119</sup> measured social functioning, four studies<sup>115–119</sup> looked at cognitive function/academic attainment,<sup>114,115,117,118</sup> three studies<sup>115–117</sup> looked at acceptability and four studies<sup>115,117–119</sup> looked at parent/carer outcomes.

Of the two studies<sup>120,121</sup> that used EMDR, both looked at psychological distress, and one study<sup>120</sup> also measured behaviour outcomes.

### Relationship-based interventions

Of the 15 studies<sup>122–140</sup> that looked at attachment-orientated and parenting interventions, nine studies evaluated psychological distress, 10 studies measured behavioural outcomes, three studies looked at social functioning and six studies measured cognitive function. Six of these studies looked at parent/carer outcomes.

### Systematic interventions

Eight<sup>107,108,142–150</sup> of the nine studies<sup>107,108,141–150</sup> looking at systemic and family-focused interventions measured outcomes related to psychological distress and behaviour. Six studies looked at social functioning,<sup>107,108,141–144,148,149</sup> two included measures related to cognitive functioning.<sup>107,108,148,149</sup> One UK study<sup>145,146</sup> examined the impact of intervention on education and two UK studies reported delinquency as an outcome.<sup>145,146,150</sup> Carer efficacy and/or distress were measured in three studies<sup>141,144,148,149</sup> and placement stability in two studies.<sup>145,146,148,149</sup>

### Psychoeducation

Of the 17<sup>151–153,155–168</sup> psychoeducation intervention studies, 15 studies<sup>150,152,153,155,157–160,163–168</sup> measured a psychological distress outcome, 12 studies looked at behaviour outcomes,<sup>151–153,158–161,163–168</sup> 10 studies<sup>152,155,157–160,163–168</sup> looked at social functioning and eight studies<sup>153,159–161,163,165–168</sup> looked at some measure of cognitive functioning/academic attainment. One study<sup>157</sup> measured substance misuse, two studies<sup>162,164</sup> looked at delinquency, three studies<sup>160,166–168</sup> measured resilience and one study<sup>161</sup> looked at acceptability. Two studies<sup>150,152</sup> also looked at parent/carer outcomes.

### Group work

Of the five studies<sup>169–173</sup> looking at group work with children, three studies<sup>169,170,173</sup> looked at psychological distress outcomes, four studies<sup>169–172</sup> measured behaviour and four studies<sup>169–171,173</sup> measured cognitive functioning. One study<sup>170</sup> also looked at acceptability and one study<sup>169–171</sup> recorded parent/carer outcomes.

### Psychotherapy/counselling

Of the seven studies<sup>174–180</sup> evaluating psychotherapy/counselling, five studies<sup>174–178</sup> measured psychological distress outcomes, all but one<sup>174</sup> measured behaviour outcomes, five studies<sup>175–178</sup> looked at cognitive outcomes, and one study<sup>177</sup> looked at placement stability. One study<sup>175</sup> reported on the intervention's acceptability.

### Peer mentoring

The two peer-mentoring studies<sup>181,182</sup> both reported behaviour and social functioning outcomes.

### Intensive service models

Nine studies<sup>183–198</sup> examined the effects of these models of care. Five studies<sup>183–188,190,191,194,198</sup> measured psychological distress, five studies<sup>189,192,194,197,198</sup> looked at behavioural outcomes, four studies<sup>190,191,194,195,197</sup> explored social functioning, three studies<sup>190,191,197</sup> measured cognitive performance, two studies<sup>194,198</sup> examined addiction behaviour, one study<sup>190,191</sup> examined resilience and two studies<sup>190,191</sup> looked at placement stability.

### Activity-based interventions

All seven activity-based interventions<sup>199–205</sup> measured psychological distress. Two studies<sup>201,203</sup> also reported behaviour outcomes and one study<sup>205</sup> reported measures of social functioning and resilience.

### Excluded studies

A total of 34 records<sup>280,579-611</sup> were excluded from this review (Table 7). Of these records, five<sup>586,592,598-600</sup> were excluded because the focus of the study was on preventing abuse, not treating the sequelae of abuse. Five records<sup>581,584,596,608,609</sup> were excluded because they focused on the family preservation services, rather than treating the child. Three records<sup>580,591,611</sup> were excluded because the focus was on parenting stress and parenting outcomes, rather than child-focused outcomes. Seven records<sup>579,582,589,593,597,606,607</sup> were excluded because participants were not recruited or selected on the basis of their maltreatment; instead they were recruited on the basis of problems including depression, PTSD, substance abuse and delinquency. Three records<sup>585,587,603</sup> were excluded because they focused on general services, such as general foster care and child protection service, and did not focus on a therapeutic intervention for maltreatment. Five studies<sup>280,601,604,605,610</sup> were excluded because they did not include a relevant evaluation of the intervention of interest. The remaining six studies<sup>583,588,590,594,595,602</sup> were excluded because there was either no specific focus on child outcomes ( $n = 3^{583,590,602}$ ) or no specific focus on maltreatment ( $n = 3^{588,594,595}$ ).

**TABLE 7** Excluded studies: effectiveness

Study ID	Reason for exclusion	Design	Intervention category
Amaya-Jackson 2003 <sup>579</sup>	Intervention focus is not maltreatment but PTSD	UCS	CBT
Barton 1994 <sup>580</sup>	Focus is family stress reduction through intensive support; the intervention does not focus on the child	CS	Systemic interventions
Barton 1994 <sup>581</sup>	Family preservation services – not focused on treating the child	QEx	Systemic interventions
Brook 2007 <sup>582</sup>	Focus on substance abuse intervention	CS	Systemic interventions
Cohen 1998 <sup>280</sup>	Focus of the study on mediating factors, now effectiveness	RCT	CBT
Cohen 2000 <sup>583</sup>	No outcome data presented	RCT	CBT
Coleman 2000 <sup>584</sup>	Family preservation services – not focused on treating the child	UCS	Systemic interventions
Collado 2007 <sup>585</sup>	Foster care, not an evaluation of a specific intervention	UCS	Intensive service models
Currier 1996 <sup>586</sup>	Focus was on preventing abuse, not treating the sequelae of abuse	UCS	Systemic interventions
DeSena 2005 <sup>587</sup>	Intervention to improve the working of child protection/welfare – not a therapeutic intervention for maltreatment	CS	Intensive service models
Edinburgh 2009 <sup>588</sup>	Focus was on sexual exploitation	UCS	Systemic interventions
Friman 1997 <sup>589</sup>	No focus on maltreatment	UCS	Intensive service models
Graham-Berman 2013 <sup>590</sup>	No child outcomes reported for the children's group	RCT	Group work with children
Hakman 2009 <sup>591</sup>	Focus on the parents, to prevent abuse recidivism and not treat the child	RCT	Systemic interventions
Harder 2005 <sup>592</sup>	Intervention targeted at parents with the aim of preventing further abuse	CS	Systemic interventions
Harold 2013 <sup>593</sup>	Focus on delinquency, not maltreatment	RCT	Intensive service models
Howes 1998 <sup>594</sup>	Therapeutic preschool programme, but no maltreatment	UCS	Intensive service models
Iwaniec 1997 <sup>611</sup>	Focus was on parent intervention and parent outcomes	CS	Systemic interventions
Iwaniec 2003 <sup>595</sup>	Not clearly maltreated and intervention is not clear	UCS	Intensive service models
Kirk 2004 <sup>596</sup>	Focus was on family preservation	CS	Intensive service models
Lewis 2010 <sup>597</sup>	Focus was on participants with depression, not abuse	RCT	CBT

**TABLE 7** Excluded studies: effectiveness (*continued*)

Study ID	Reason for exclusion	Design	Intervention category
Lorber 1984 <sup>598</sup>	Abuse prevention only	UCS	Systemic interventions
MacMillan 2005 <sup>599</sup>	Abuse prevention only	RCT	Systemic interventions
Mersky 2011 <sup>600</sup>	Abuse prevention only	QEx	Systemic interventions
Overbeek 2014 <sup>601</sup>	Not evaluating the intervention – assessing risk factors as moderators of recovery across both interventions (i.e. two interventions combined as one)	RCT	Systemic interventions
Pereira 2013 <sup>602</sup>	No child outcomes	UCS	RBI
Rivara 1985 <sup>603</sup>	Not child focused	UCS	Psychotherapy
Sagatun 1988 <sup>604</sup>	No evaluation	UCS	Intensive service models
Sullivan 1990 <sup>605</sup>	No data presented and no specific information about the intervention aside from general descriptions of the techniques used in the facility	CS	Psychotherapy
Swart 2014 <sup>606</sup>	Participants were not recruited/selected on the basis of their maltreatment	RCT	CBT
Swart 2014 <sup>607</sup>	Participants were not recruited/selected on the basis of their maltreatment	RCT	CBT
Szykula 1985 <sup>608</sup>	Focus on family preservation	CS	Intensive service models
Vitulano 1990 <sup>609</sup>	Family preservation; the only results presented are about placement and removal from home	CS	Intensive service models
Waxman 2009 <sup>610</sup>	Child advocate programme, not a therapeutic intervention	CS	Intensive service models

UCS, uncontrolled study.

## Economic studies

### Included studies

In total we identified six studies<sup>198,612–616</sup> assessing the cost-effectiveness of relevant psychosocial interventions for maltreated children: five studies<sup>198,613–616</sup> were carried out using data from a trial and one study<sup>612</sup> used a decision-analytic model. Of the five trial-based studies,<sup>198,613–616</sup> data were from four RCTs<sup>198,613–615</sup> and one cohort study.<sup>616</sup> All six studies<sup>198,612–616</sup> were published in English and were carried out in the USA<sup>198,615,616</sup> ( $n = 3$ ), the UK<sup>613,614</sup> ( $n = 2$ ) and Australia<sup>612</sup> ( $n = 1$ ). The basic characteristics of the six included studies<sup>198,612–616</sup> are presented in *Table 8*, and more detailed descriptions are presented in *Chapter 4*.

### Summary of study characteristics

#### Participants

**Age** In the RCT-based evaluations, one study<sup>615</sup> included preschool children in foster care aged between 3 and 5 years, one study<sup>615</sup> included children who had been adopted between the ages of 3 and 8 years,<sup>613</sup> and two studies<sup>198,614</sup> included a broader age range: the first study<sup>198</sup> involved maltreated children between 1 and 16 years and the second study<sup>614</sup> used a sexual abuse sample of children aged between 6 and 14 years. In the cohort study,<sup>616</sup> no age range was reported, just the mean of the groups, which was 8.9 years in one group and 5.4 years in the other. The decision model<sup>612</sup> focused on a hypothetical cohort of 10-year old children.

**Gender** Four<sup>198,613,615,616</sup> of the five trial-based studies included both girls and boys, with an average of 49% being girls (range 43–54%). The exception focused on an intervention that was specifically for girls who had been victims of sexual abuse.<sup>614</sup>

**TABLE 8** Characteristics of included economic studies

Intervention category	Design	Study record	Country	Intervention	Comparator	Type of abuse	Method of economic evaluation	Measure of outcome	Costs included	Time horizon
CBT	Decision model	Gospodarevskaya 2012 <sup>612</sup>	Australia	TF-CBT and TF-CBT plus SSRI	Non-directive counselling and no treatment	Sexual abuse	Cost–utility	QALYs	Cost of intervention only	1 year and 30 years
	RCT	Sharac 2011 <sup>613</sup>	UK	Parenting programmes	Services as usual	Not specified	Cost-effectiveness	Strengths and difficulties and parent satisfaction	Health, social care and education	6 months
Psychoeducation	RCT	McCrone 2005 <sup>614</sup>	UK	Individual psychotherapy	Group-based psychoeducational therapy	Sexual abuse	Cost–consequences	Various symptom and functioning	Cost of intervention only	2 years
Intensive service models	RCT	Lynch 2014 <sup>615</sup>	USA	MTFC	RFC	Not specified	Cost-effectiveness	Placement permanency	Health, social care and education	2 years
	Cohort	Wood 1988 <sup>616</sup>	USA	Families First child abuse prevention service	Services as usual	Abuse or neglect	Cost–consequences	Family functioning and out-of-home placements	Cost of intervention and out-of-home placements	1 year
Co-ordinated care	RCT	Swenson 2000 <sup>198</sup>	USA	Charleston Collaborative Project for maltreated children	Services as usual	Abuse or neglect	Cost–consequences	Caregiver and child psychosocial functioning	Programme costs, youth service and out-of-home placements	3 months

RFC, regular foster care; SSRI, selective serotonin reuptake inhibitor.

*Abuse type* Two studies<sup>612,614</sup> evaluated interventions for sexual abuse, two studies<sup>198,616</sup> described the maltreatment type as abuse and neglect, and the remaining two were unspecified,<sup>613,615</sup> focusing on adopted or foster care populations.

## Interventions

The interventions evaluated in these economic evaluations were heterogeneous, including treatment-focused CBT compared with non-directive counselling and a no-treatment arm for sexual abuse, parenting programmes compared with services as usual for adoptive parents, individual psychotherapy compared with group-based psychoeducation therapy for sexual abuse, multidimensional treatment foster care (MTFC) compared with regular foster care (RFC) for preschool children with emotional and behavioural problems, a child abuse prevention service compared with services as usual, and a collaborative care intervention for maltreated children compared with services as usual.

## Economic study type and quality

The method of economic evaluation was a cost-effectiveness analysis in two studies<sup>613,615</sup> (effects measured on disease-specific scales), a cost-utility analysis in a third study<sup>612</sup> [effects measured using a generic quality-of-life scale capable of generating quality-adjusted life-years (QALYs)] and the remaining three studies<sup>198,614,616</sup> are most accurately described as cost-consequences analyses (costs and outcomes presented separately and not formally combined).

The performance of each study on the economic evaluation critical appraisal checklist<sup>76</sup> is summarised in *Table 9*. Sample sizes were small in all of the trial-based studies,<sup>198,613–616</sup> ranging from a total of 37 participants (two groups of 19 and 18) to a maximum of 117 participants (two groups of 57 and 60). Perspectives were commonly narrow, with two studies<sup>612,614</sup> including only the cost of the interventions

**TABLE 9** Performance of economic studies on the Economic Evaluation Critical Appraisal Checklist

Critical appraisal checklist criteria	Gospodarevskaya 2012 <sup>612</sup>	Sharac 2011 <sup>613</sup>	McCrone 2005 <sup>280</sup>	Lynch 2014 <sup>615</sup>	Wood 1988 <sup>616</sup>	Swenson 2000 <sup>198</sup>
1. Was a well-defined question posed?	Yes	Yes	Yes	Yes	Yes	Yes
2. Comprehensive description of competing alternatives?	Yes	Yes	Yes	Yes	Yes	Yes
3. Was the effectiveness established?	Yes	Yes	Yes	Yes	Yes	Yes
4. Were all costs and outcomes identified?	No	Yes	No	Yes	No	Yes
5. Were costs and outcomes measured accurately?	Yes	Yes	Yes	Yes	Yes	Yes
6. Were costs and outcomes valued credibly?	Yes	Yes	Yes	Yes	No	Yes
7. Were costs and outcomes adjusted for differential timing?	Yes	N/A	No	No	N/A	N/A
8. Was an incremental analysis performed?	Yes	Yes	No	Yes	No	No
9. Was allowance made for uncertainty?	Yes	No	No	No	No	No
10. Were all issues of concern to users included?	Yes	No	Yes	No	No	No
N/A, not applicable.						

under evaluation and two studies<sup>198,616</sup> additionally including the cost of out-of-home placements. The remaining two studies<sup>613,615</sup> took a broader perspective, covering health, social care and education. Incremental analyses were reported in three<sup>612,613,615</sup> of the six studies and uncertainty was explored in only one study.<sup>612</sup> Discounting of costs and effects was not applied in two<sup>614,615</sup> of the three studies with a follow-up duration of > 1 year. Quality varied greatly, with the decision model,<sup>612</sup> published in 2012, meeting a relatively high number of the critical appraisal criteria and the cohort study,<sup>616</sup> published in 1988, meeting relatively few.

### Excluded economic studies

A total of 16 papers<sup>116,504,587,588,617–628</sup> were excluded from the review of economic evidence and these are reported in *Table 10*. Six papers<sup>619–621,623,626,628</sup> were excluded because they did not involve an intervention and four papers<sup>587,618,624,625</sup> because the intervention in question did not meet criteria for inclusion, focusing on prevention rather than treatment. Two records<sup>622,627</sup> did not have a specific focus on maltreatment, three records<sup>116,504,588</sup> did not meet criteria for a full economic evaluation and one record<sup>617</sup> was a conference abstract.

## Acceptability studies

### Description of included acceptability studies

Of the 73 included acceptability studies, the majority were set in the USA (42 studies<sup>107,108,161,175,176,482,492,504,505,510,515,526,533,621,629–657</sup>). The remainder were in Canada (four studies<sup>170,658–661</sup>), the UK (14 studies<sup>145,169,481,511,538,662–670</sup>) and elsewhere in Europe: the Netherlands (three studies<sup>497,671,672</sup>), Norway (three studies<sup>673–675</sup>) and Sweden (one study<sup>676</sup>), with one multisite review of services<sup>145,146,640,665–670</sup> across Italy, the Netherlands and the UK. A small number of studies were based outside North America and Europe: Australia (two studies<sup>506,677</sup>), Brazil (one study<sup>678</sup>), India (one study<sup>679</sup>) and the Philippines (one study<sup>680</sup>).

**TABLE 10** Excluded economic studies

Report ID	Reason for exclusion	Design	Intervention category
Blazey 2011 <sup>618</sup>	Not an included intervention	UCS	Intensive service models
Clark 2011 <sup>619</sup>	No intervention	UCS	N/A
Cohen 1998 <sup>620</sup>	No intervention	UCS	N/A
Conrad 2006 <sup>621</sup>	No intervention	UCS	N/A
DePanfilis 2008 <sup>622</sup>	No maltreatment	RCT	Systemic interventions
DeSena 2005 <sup>587</sup>	Not an included intervention	CS	Intensive service models
Edinburgh 2009 <sup>588</sup>	Not a full economic evaluation	UCS	Systemic interventions
Florence 2013 <sup>623</sup>	No intervention	N/A	N/A
Foster 2008 <sup>624</sup>	Not an included intervention	UCS	Multiservice
Lynch 2011 <sup>617</sup>	Conference abstract	N/A	Intensive service models
Maher 2012 <sup>625</sup>	Not an included intervention	UCS	Systemic interventions
New 2000 <sup>626</sup>	No intervention	UCS	N/A
Reynolds 2002 <sup>627</sup>	No maltreatment	CS	Systemic interventions
Rovi 2014 <sup>628</sup>	No intervention	UCS	N/A
Rushton 2010 <sup>116</sup>	Not a full economic evaluation	RCT	CBT
Salloum 2014 <sup>504</sup>	Not a full economic evaluation	UCS	CBT
N/A, not applicable; UCS, uncontrolled study.			

Most studies were uncontrolled, with only one RCT.<sup>107,108,145</sup> Sample sizes varied greatly from single case studies (two studies<sup>621,629</sup>) to a large national sample of  $n = 1085$ .<sup>634</sup> The majority of sample sizes were  $< 50$  cases (40 studies<sup>169,175,497,504,506,510,511,526,533,538,621,629,636-639,641-643,645,646,648,651,652,658,661-663,665,666,668-670,675,677,678,680</sup>), between 50 and 100 cases (15 studies<sup>107,170,176,481,482,492,505,644,647,650,660,664,671,673,674</sup>) and 18 studies<sup>145,515,630-634,640,649,653-658,667,672,679</sup> had sample sizes of  $> 100$  cases.

Sexual abuse was the most commonly cited type of abuse across the acceptability studies (33 studies<sup>161,169-171,189,492,497,505,506,526,533,538,621,633,636-638,640-643,645,647,648,653,657,660,662,664,668,673,677-680</sup>) and some intervention categories reported data for only this population group [systemic interventions,<sup>526,533,621,673,678</sup> psychoeducational interventions,<sup>161,538,647,664</sup> peer mentoring<sup>660</sup> (note: there was only one study in this category)]. Three studies<sup>510,639,652</sup> also reported on a physical abuse sample that had also witnessed domestic violence. Considering the large number of studies reporting a sexual abuse sample and targeted intervention, a large proportion of studies had a 100% or majority female population, and fewer than half of the studies had a majority male population, with only two studies<sup>170,171</sup> that had 100% male population. The age range of included studies was 1–22 years.



## Chapter 4 Results

In this chapter we present evidence for the clinical effectiveness and cost-effectiveness of treatment modalities as described in the previous chapters, drawing solely on the evidence of controlled trials or, in the case of economic evidence, decision models. The evidence is organised around intervention groups.

The breadth of this evidence synthesis meant that it was not possible, a priori, to establish a limited number of primary and secondary outcomes. In *Chapter 3*, we presented descriptively the broad outcome domains that studies reported having measured, whether or not data were presented. In this chapter, and based on what we know about the proximal adverse effects of maltreatment on children's emotional and psychological well-being, we examine the evidence for the impact of interventions on mental health outcomes, such as post-traumatic effects, depression and anxiety. We then assess the evidence for the effectiveness of interventions on those outcomes that the study authors stated were their intended outcomes; however, we recognise that, in doing so, we may be underestimating biases that are associated with selective outcome reporting, as well as publication bias more generally. Finally, we report any evidence of cost-effectiveness located in the systematic review.

### Cognitive-behavioural therapy

We identified 26 controlled studies<sup>90–103,106–112,114–117,121,176,268</sup> of cognitive-behavioural interventions (CBT), of which 23 were randomised trials. There were sufficient randomised trials to attempt to explore the differential effect on different maltreatment histories, broadly defined, and so this section is organised into the following three groupings, and does not include the three COSs of CBT interventions.

1. CBT interventions for children who have been sexually abused<sup>89–103</sup>
2. CBT for children who have been physically abused<sup>106–109</sup>
3. CBT for children with maltreatment histories, including those with experience of multiple forms of maltreatment and those that recruit children irrespective of type of maltreatment history.<sup>110–112,114–117,121,176</sup>

#### Description of studies

Of the 11 studies<sup>89–103</sup> of CBT interventions for children who have been sexually abused, two<sup>89,90</sup> were studies of group-based treatments and nine<sup>91–103</sup> were studies of treatments provided to children individually, sometimes in parallel with treatment for the non-offending parent or carer.

Six<sup>89–99</sup> of the 11 studies were conducted by a team of clinical researchers who had developed a particular approach to treating children traumatised by sexual abuse, known sometimes as TF-CBT. Although among the most rigorous and well-conducted studies, studies of this particular intervention (and others) are compromised by the lack of independent evaluation.

#### Location of studies

All studies were conducted in the USA, with the exception of the study by Jaberghaderi *et al.*,<sup>102</sup> which was conducted in Iran, and King *et al.*,<sup>103</sup> which was undertaken in Australia.

#### Study size

Five studies<sup>90,99,101–103</sup> had small sample sizes ranging from 18 to 63 participants. A multisite trial by Cohen 2004,<sup>95,96</sup> had a sample of 229 participants. The remainder ranged from 82 to 210 participants.<sup>91–94,97,98,100</sup> As a result, the meta-analyses we conducted were not sufficiently powered to detect small, but potentially

important, effects. Baseline differences in these studies also proved problematic in drawing any conclusions based on end-point data, as it did for almost all included studies.

## Participants

### Gender

Three studies<sup>90,101,102</sup> focused solely on girls who had been sexually abused. The remaining studies included both boys and girls, with the percentage of boys ranging from 11%<sup>89</sup> to 42%.<sup>91,92</sup>

### Age

One study<sup>91,92</sup> was concerned with preschoolers (boys and girls aged 3–6 years). Five studies<sup>90,95–98</sup> set inclusion criteria for similar age groups: 7–13 years,<sup>90,97,98</sup> 8–14 years,<sup>95,96</sup> 12–13 years<sup>102</sup> and 13–18 years.<sup>101</sup> Inclusion criteria for the other five studies<sup>89,93,94,99,103</sup> ranged from children aged 2–8 years<sup>99</sup> to children aged 4–13 years,<sup>89</sup> 5–17 years<sup>103</sup> and 7–15 years.<sup>93,94</sup>

### Maltreatment

The range of abuse experienced by participants was broad, and differently reported, but the following picture of participants emerged. Most were abused by men known to them. The majority of perpetrators were family members. In three studies,<sup>89,90,93,94</sup> approximately half of the children and young people had experienced oral, vaginal or anal penetration. In the study<sup>91,92</sup> dealing with the youngest participants, the percentage that had experienced vaginal or anal intercourse was 26%.<sup>91,92</sup> In the study of children aged 2–8 years,<sup>99</sup> the number reported to have experienced penile penetration was 16%. Participants in all studies ranged from those who had experienced one incident of abuse to those who had experienced multiple incidents, sometimes over many years. Many participants also reported the use of force, or threat of force. Not all studies reported detailed abuse data, for example Deblinger 2001<sup>99</sup> or Jaberghaderi 2004.<sup>102</sup> See *Table 3* for a profile of participants in each study.

### Inclusion criteria

All studies had inclusion criteria that specified contact sexual abuse. All but two trials<sup>101,102</sup> made the independent substantiation of sexual abuse an inclusion criterion. Most set cut-off points on the time of last episode of abuse as an inclusion criterion, ranging from 3 months<sup>101</sup> through 6 months<sup>91–94</sup> to 2 or 3 years.<sup>103</sup> Although Deblinger *et al.*<sup>99</sup> did not set a time limit, the authors report that the mean age of the children was 5.45 years (SD 1.47 years) and the mean age of first experience of sexual abuse was 4.5 years (SD 1.47 years), based on mothers' estimates. The report by Berliner and Saunders<sup>89</sup> did not specify inclusion or exclusion criteria, but all participants were said to have provided statements, substantiated by independent assessment, that they had been sexually abused. The Jaberghaderi *et al.* study<sup>102</sup> required that girls had experienced sexual abuse at  $\geq 6$  months prior to the study.

The presence and severity of symptoms as inclusion criteria were highly variable. Six studies<sup>91,92,95–98,101–103</sup> reported the presence of particular symptomatology thresholds as an inclusion criterion. Cohen *et al.*<sup>91,92</sup> required a minimal level of symptomatology defined as a Weekly Behavior Report total behaviour score of  $> 7$  or any sexually inappropriate behaviour reported on the Child Sexual Behavior Inventory (CSBI).<sup>259</sup> Cohen *et al.*<sup>95,96</sup> stipulated that participants had to meet five criteria for sexual abuse-related *Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition* (DSM-IV)-defined PTSD, including at least one in each of the three clusters (re-experiencing, avoidance or numbing and hyperarousal). Deblinger *et al.*<sup>97,98</sup> required the presence of three PTSD symptoms, including at least one symptom of avoidance or re-experiencing the phenomenon. Investigators decided to take both children who met full *Diagnostic and Statistical Manual of Mental Disorders-Third Edition, Revised* criteria for PTSD and those with partial PTSD symptoms because of the possibility of delayed onset of episodic course. King *et al.*<sup>103</sup> required that the children met diagnostic criteria for PTSD or provided evidence of high risk of developing the disorder. Foa *et al.*<sup>101</sup> required a primary diagnosis (DSM-IV, Text Revision) of chronic or subthreshold PTSD. Jaberghaderi *et al.*<sup>102</sup> recruited girls whose scores on the Child Report of Post-traumatic Symptoms (CROPS)<sup>229</sup> indicated a clinically significant level of post-traumatic symptoms.

## Interventions and comparison

Two studies<sup>99,268</sup> provided a group-based intervention, and the remainder provided individual therapy (IT).

## Group treatments

### Interventions

In Berliner and Saunders 1996<sup>89</sup> both groups received a therapy described as a 'structured equivalent of sexual abuse-specific group therapy'. In the experimental arm, a focus was added on explaining fear (in the session on feelings), stress inoculation therapy (SIT) was substituted for one of the two 'family and friends' sessions, two sessions were devoted to GE and SIT principles were applied to sessions on disclosure impact and self-esteem. Children were taught about the automatic nature of fear as a response to danger and how to manage this through progressive relaxation and coping strategies (quieting reflex and thought-stopping). Children were encouraged to practice these skills between group sessions (pp. 299–30).

Deblinger *et al.* 2001<sup>99</sup> provided group-based CBT to children and their mothers in separate groups. The parents' groups covered a range of topics that varied somewhat according to the specific needs of each group but commonly followed the following order and number of sessions: education/coping (three sessions), communication, modelling, GE (two sessions) and behaviour management (six sessions). The children's group took the form of an interactional behavioural therapy, facilitated by an interactive workbook,<sup>507</sup> and which incorporated a range of cognitive-behavioural methods, including GE, modelling, education, coping and body safety training. In addition, members of the CBT group met for an additional 15 minutes each week for a joint parent and child activity session.

### Comparisons

The comparison groups in Berliner and Saunders 1996<sup>89</sup> received conventional sexual abuse-specific group therapy with or without SIT and the specific CBT focus on fear and anxiety. The sessions covered: getting acquainted and establishing ground rules; feelings; family and friends (two sessions); disclosure impact, self-esteem and sexual abuse; body awareness and sexuality (two sessions) and prevention and termination.

Deblinger *et al.* 2001<sup>99</sup> compared the effectiveness of group CBT for parents and children with supportive group therapy (for parents) paired with a more didactic, information-based approach for children.

## Individual treatments

Those studies headed by Cohen and Deblinger<sup>95,96</sup> are essentially evaluations of a manualised programme first developed by the authors in the early nineties.<sup>283</sup>

Cohen 1995<sup>91,92</sup> evaluated a manualised, short-term treatment model designed for sexually abused children and their parents, named Cognitive-Behavioural Therapy-Sexually Abused Preschool Children. Children receive safety education and assertiveness training, are helped to identify appropriate compared with inappropriate touching, and to deal with attributions regarding the abuse, ambivalent feelings towards the perpetrator, regressive and inappropriate behaviours, and fear and anxiety. Specific issues for parents include ambivalence in their belief in the child's account, ambivalent feelings towards the perpetrator, attributions regarding the abuse, concerns that the child is 'damaged', how to provide appropriate emotional support for the child and manage inappropriate child behaviours, fear and anxiety. Interventions include the use of cognitive reframing, thought-stopping, positive imagery, contingency reinforcement programmes, parent management training and problem-solving. Psychoeducation and support are embedded in the programme.

Cohen 1998<sup>93,94</sup> evaluated a programme entitled Sexual Abuse-Specific Cognitive-Behavioural Therapy (SAS-CBT). The programme is not described in detail, but it was designed specifically to address depression, anxiety and behavioural difficulties. SAS-CBT addressed feelings of helplessness (including not being believed), distorted attributions (self-blame) about the abuse and other negative events, feeling damaged/different, and consequent low self-esteem. It incorporated anxiety reduction techniques, such as

thought replacement, positive imagery/relaxation, enhancement of safety and management of intrusive thoughts. It helped children to address behavioural problems by teaching them about the connections between thoughts, feelings and behaviour, management techniques and problem-solving skills. The focus in the parents' groups was on reducing their emotional distress (again, including addressing distorted attributions, anxiety and anger), enhancing their ability to support their child and behaviour management.

Deblinger 1996<sup>97,98</sup> explored variations of a programme described as similar to that of Cohen and Mannarino.<sup>91,92</sup> Participants were assigned to one of three experimental conditions: child only, parent only or combined child and parent. Children in all of the experimental arms received an intervention that included GE, modelling, education, coping and body safety skills. GE was described as the cornerstone of the intervention aimed at helping the children to disconnect the associations frequently made between highly negative emotions and abuse-related thoughts, discussion and other reminders. Parents in the experimental arms were taught how to respond therapeutically to their children's behaviours and needs, that is, how to reduce their fears and avoidance behaviours (through the use of modelling, GE and processing exercises); how to analyse their own interactions with their children behaviourally, thus identifying those situations when they might inadvertently have reinforced problem behaviours and the maintenance of PTSD symptoms; and child management skills.

Cohen 2004<sup>95,96</sup> delivered the same manualised TF-CBT intervention used in earlier studies by this team, but in a more representative sample of children across two sites. This manualised intervention also forms the basis of the study conducted by Deblinger *et al.*<sup>100</sup> in 2011. In this paper<sup>100</sup> the authors describe the TF-CBT intervention evaluated in this study as including components 'that spell out the acronym PRACTICE:

- Psychoeducation and parenting
- Relaxation
- Affective modulation
- Cognitive coping
- Trauma narrative (TN)
- In vivo exposure
- Conjoint parent-child sessions, and
- Enhancing safety and future development' (p. 69; © 2010 Wiley-Liss, Inc. Reproduced with permission).

In this study,<sup>100</sup> the authors were concerned to investigate the importance of the TN to effective treatment of children with PTSD. This four-arm trial compared two versions of TF-CBT (as described for Deblinger 2001<sup>99</sup>), one with, and one without, the inclusion of the TN component and at the same time manipulated the length of treatment and degree of time given to the TN. The authors report that in all conditions both children and parents received psychoeducation about CSA and skill-building (e.g. relaxation, affective modulation, cognitive coping and body safety training), as well as parenting skills training. However, only those children assigned to the two TN groups 'were actively encouraged to develop a detailed narrative about the sexual abuse and related experiences, which they processed and reviewed with the therapist as well as their non-offending parent' (p. 69).<sup>100</sup> Children in the eight-session TN condition spent three to four sessions on the TN component; this was at least doubled in the 16-session condition.

King *et al.*<sup>103</sup> evaluated the effectiveness of two CBT interventions, both of which the authors say were particularly influenced by the work of Deblinger *et al.*<sup>208,485</sup> The first was a child-only intervention. This began with a session that specified the problem areas, presented the rationale for the programme and set goals. The following three sessions focused on teaching coping skills to enable children to deal with disturbing memories of abuse and their feelings of anxiety and guilt (relaxation training, behaviour rehearsal and cognitive therapy). Sessions 5 through to 18 focused on graded exposure, and sessions 19–20 on relapse prevention and education, including personal safety skills. The second intervention was family CBT, in which the child received the programme outlined above, and non-offending mothers also received a CBT intervention. The parent intervention began with the rationale of the programme and issues relating to CSA, followed by nine sessions 'on the development of parent-child communication skills

in order to facilitate listening and problem sharing and to overcome avoidance of abuse-related discussion within the family' (p. 1350).<sup>103</sup> The remaining 10 sessions focused on child behaviour management, including antecedent stimulus control and contingency management. Parents were encouraged to monitor their own emotional responses in order to provide an appropriate coping model for the child.

Celano *et al.*<sup>90</sup> evaluated the impact of the Recovering from Abuse Program, an eight-session group that focused on children's maladaptive beliefs, affects and behaviour along four dimensions: self-blame/stigmatisation; betrayal; traumatic sexualisation and powerlessness.

Jaberghaderi 2004<sup>102</sup> compared individual CBT with EMDR, and Foa 2013<sup>101</sup> compared exposure therapy with supportive counselling.

Foa 2013<sup>101</sup> evaluated the effectiveness of prolonged exposure therapy, delivered in eight modules, comprising (1) explaining the treatment rationale; (2) establishing an index of trauma and teaching participants breathing control; (3) presenting common reactions to trauma; (4) explaining the rationale for in vivo exposure, establishing an in vivo hierarchy and arranging homework for the participant; (5) two to five sessions of imaginal exposure lasting between 15 and 45 minutes, combined with reprocessing of the experiences; (6) four to seven further sessions of imaginal exposure centred on the most extreme periods of trauma; (7) generalisation of newly acquired skills and relapse prevention; and (8) a final project, 'such as making booklets about the trauma and the gains made in treatment' (Foa 2013<sup>101</sup> p. 2652).

## Comparisons

Four studies<sup>91–94,101</sup> compared CBT for children and parents with non-directive supportive therapies:

Cohen 2004<sup>95,96</sup> compared TF-CBT with child-centred therapy (CCT), described as 'child/parent[-]centred treatment model focused on establishing a trusting therapeutic relationship that is self-affirming, empowering, and validating for the parent and child . . . Therapists provided active listening, reflection, accurate empathy, encouragement to talk about feelings, and belief in the child's and parent's ability to develop positive coping strategies for abuse-related difficulties . . . Although sessions were generally client directed, written psychoeducational information about CSA was provided, and children, specifically, were prompted to share their feelings about sexual abuse during two therapy sessions if they did not do so spontaneously'<sup>95</sup> (p. 398; reproduced with permission).

Deblinger 1996<sup>97,98</sup> and King *et al.*<sup>103</sup> included a community control and wait-list group, respectively.

Celano *et al.*<sup>90</sup> compared the efficacy of CBT provided to children and their mothers with supportive, unstructured psychotherapy, also to children and their mothers.

Jaberghaderi 2004<sup>102</sup> compared individual CBT with EMDR.

Deblinger 2011<sup>100</sup> explored the differential effectiveness of eight sessions compared with 16 sessions of TF-CBT, with or without a TN component, that is, a four-arm trial.

## Number and duration of sessions

### Group treatments

The group-based therapies were provided over 10 and 11 sessions, respectively.<sup>89,99</sup> For the experimental group, Berliner 1996<sup>89</sup> augmented the conventional sexual abuse specific group therapy provided to the control group with sessions specifically explaining the nature of fear, the principles of SIT and their application to disclosure impact and self-esteem. In the Deblinger 2001<sup>99</sup> study, parents and children met for a joint group session of 15 minutes each week.

### ***Individual treatments***

The individual therapies were provided for between 8 and 20 sessions. Participants in the Celano *et al.*<sup>90</sup> study had eight sessions of 1 hour each. In all but two or three sessions, the therapist spent half of the time with the mother and half with the child. The remaining sessions were conducted conjointly.

Three studies<sup>91–93,95,96</sup> provided around 1.5 hours per week, divided between parents and child over 8 and 12 weeks, respectively.

Deblinger 1996<sup>97,98</sup> provided therapy in 12 × 45-minute sessions to participants in the parent-only and child-only arms. In the parent-and-child arm, therapy also entailed 12 sessions, but this time of up to 90 minutes. In King 2006,<sup>103</sup> all participants each received 20 × 50-minute sessions. This means that, in the parent-and-child arm, 40 × 50-minute sessions were provided.

Adolescent girls in Foa 2013<sup>101</sup> received up to 14 sessions of between 60 and 90 minutes, and in the Jaberghaderi *et al.*<sup>102</sup> study they received up to 12 sessions of 45 minutes in the experimental group and 30 in the EMDR comparison group.

Participants in Deblinger 2011<sup>100</sup> were allocated to one of four TF-CBT treatment conditions: eight sessions with a TN component; eight sessions without a TN component; 16 sessions with a TN component; 16 sessions without a TN component. Sessions were each 90 minutes, usually divided into two 45-minute individual sessions for the child and caregiver, respectively. Some sessions included 30 minutes of conjoint parent–child time.

### ***Outcomes and measures used in studies of cognitive–behavioural therapy for sexually abused children***

#### **Outcomes assessed using the same measure**

When the impact of intervention on parenting practices was assessed, the measure used was the Parenting Practices Questionnaire (PPQ).<sup>274</sup>

In each study that examined child depression, child sexual behaviour and child behaviour, the same measures were used, namely the CDI,<sup>80</sup> the CSBI<sup>259</sup> and the CBCL,<sup>260</sup> respectively, although different authors may cite different sources for the same measure.

#### **Outcomes assessed using different measures**

##### ***Post-traumatic stress disorder***

Six studies<sup>90,93–99,103</sup> assessed the impact of CBT on symptoms of post-traumatic stress using six different measures.

In addition, Celano 1996<sup>90</sup> and King 2000<sup>103</sup> used both the PTSD subscale of the CBCL,<sup>260</sup> completed by the child's parent, and one other measure of PTSD.

Celano 1996<sup>90</sup> used a child report measure [Children's Impact of Traumatic Events Scale-Revised (CITES-R); Wolfe and Gentile, Department of Psychology, London Health Sciences Centre, London, 1991, unpublished] and King *et al.*<sup>103</sup> used a measure administered by a research assistant (the child version of the Anxiety Disorders Interview Schedule for DSM-IV<sup>290</sup>).

Two studies<sup>97–99</sup> used the Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children-Epidemiologic Version administered to parents,<sup>275</sup> two studies<sup>95,96,100</sup> used the Kiddie Schedule for Schizophrenia and Affective Disorders, Present and Lifetime Version (KSADS-PL).<sup>268</sup>

Cohen 1996<sup>93,94</sup> used the Trauma Symptom Checklist for Children (TSCC<sup>325</sup>). Jaberghaderi 2004<sup>102</sup> used two measures of post-traumatic symptomatology, the Parent Report of Post-traumatic Symptoms (PROPS) and CROPS.<sup>288</sup>

Foa 2013<sup>101</sup> assessed PTSD with the Child PTSD Symptom Scale-Interview<sup>286,287</sup> and (as a secondary outcome measure) a self-report version of the same measure.

### Anxiety

Of the studies using the State-Trait Anxiety Inventory for Children (STAI-C), we used data on STAI-C State subscale (as opposed to STAI-C Trait subscale), as this measures present state anxiety.<sup>93–97</sup> Other measures used to assess the impact of interventions on anxiety, included the Revised Children's Manifest Anxiety Scale (RCMAS)<sup>681</sup> and the STAI-C.<sup>682</sup>

### Fear

Three measures of fear were used in four of the included studies. Berliner and Saunders<sup>89</sup> used the Fear Survey Schedule for Children-Revised<sup>255</sup> and the Sexual Abuse Fear Evaluation Scales (SAFE).<sup>306</sup> King *et al.*<sup>103</sup> used the Fear Thermometer for Sexually Abused Children.<sup>291</sup>

Study authors typically reported data for study completers rather than for those recruited to the study, for example Cohen and Mannarino.<sup>91,92</sup>

### **Risk of bias: randomised controlled trials of cognitive-behavioural therapy for sexually abused children**

Quality aspects were generally not well reported. Of the CBT studies, this is probably the strongest group in terms of risk of bias, although the amount of missing information makes this judgement somewhat speculative.

The difficulties of blinding participants and personnel in studies of psychosocial interventions means that this risk-of-bias domain has largely been assessed as high risk of bias, and, unless there are reasons to believe that the lack of blinding has not resulted in a high risk of bias, we do not comment on this in the following text.

The reliance in many studies on self-report measures, in the absence of other 'masked' data collection, also contributes to judgements of high risk of bias in relation to detection bias. On the other hand, we recognise that self-report measures may be a more valid approach to the assessment of some outcomes.

Full details of our assessments of these studies (and all others in this chapter) can be found in *Appendix 10*. *Figure 24* provides an overview of the risk of bias in the body of evidence as a whole for CBT interventions for children who have experienced sexual abuse.

### Sequence generation

Sequence allocation was deemed sufficiently robust to be judged low risk of bias in four studies.<sup>89,91–94,99</sup> The Jaberghaderi *et al.*<sup>102</sup> study was judged as being of 'unclear' risk of bias because the authors write 'Participants were randomly assigned to treatment condition, with some adjustments to promote equivalence between groups' but then go on to describe a blocked randomisation approach (p. 361). The remaining studies were also judged 'unclear', as the authors simply report that participants were randomly assigned.<sup>90,95–98,100–103</sup>

### Allocation concealment

Only two studies<sup>89,101</sup> described steps taken to conceal allocation or stated clearly that allocation had been concealed. The Berliner and Saunders<sup>89</sup> study reported that 'Assigned therapists and other staff were blind to the random assignment schedule' (p. 299) and the Foa *et al.*<sup>101</sup> study reported that 'On completing the preparatory phase but prior to the patient beginning treatment, a research assistant consulted the randomisation table and notified the therapist of the patient's treatment condition' (p. 2651).

No information was provided in the remaining studies. The Jabergadheri *et al.*<sup>102</sup> study was assessed as 'unclear' on this basis.

### Blinding of outcome assessors

Four trials<sup>90,93,94,101,102</sup> were judged as 'low risk of bias' for outcome assessment. Foa *et al.*<sup>101</sup> state that 'assessment was conducted by two psychologists, blind to assignment' (p. 2651), and Cohen 1998<sup>93,94</sup> say that 'The evaluator conducting the initial and follow-up assessments was blind to treatment condition or assignment' (p. 139); Jaberghaderi *et al.*<sup>102</sup> says that assessment was conducted 'by two psychologists, blind to assignment' (p. 362). Celano *et al.*<sup>90</sup> reported that 'standardised measures were administered by a clinician not involved in the child's treatment. Additionally, a psychiatrist or psychologist blind to treatment condition rated the child's overall psychosocial functioning based on child and caretaker interviews'.

The remaining studies<sup>91,92,95,96,99,100,103</sup> were deemed as 'high risk of bias', as they relied wholly on self-report or parent-report measures.

### Incomplete outcome data

Four studies<sup>93-96,100,101</sup> were assessed as 'low risk of bias' for incomplete outcome data. All four analysed data on an intention-to-treat (ITT) basis, although Cohen 2004<sup>95,96</sup> used SAS multiple imputation for missing data [release 8.2 (2001); SAS Institute Inc., Cary, NC, USA].

Berliner and Saunders<sup>89</sup> experienced high levels of attrition and reported on around only 50% of those children who completed at least eight sessions and provided data at one of the follow-up assessment points. The statistical checks undertaken by the authors do not attenuate the likelihood of bias. The levels and approach to attrition was also an issue for Cohen 1996,<sup>91,92</sup> King *et al.*<sup>103</sup> and Jabergadheri *et al.*<sup>102</sup>. The impact of missing data was less clear in the studies by Celano *et al.*,<sup>90</sup> Deblinger *et al.*<sup>97,98</sup> and Deblinger *et al.*,<sup>99</sup> and these were judged to be 'unclear'.

### Selective outcome reporting

Both Foa *et al.*<sup>101</sup> and Cohen 2004<sup>95</sup> registered their trials. Foa *et al.*<sup>101</sup> reported findings for the primary outcome listed; there were no secondary outcomes identified on the trial registration (ClinicalTrials.gov identifier NCT02148484). In addition to all outcome measures listed in the trial registration, Cohen *et al.*<sup>95</sup> also report post hoc on changes in child behaviour, but overall we judged this trial to be 'low risk of bias' on this domain (ClinicalTrials.gov identifier NCT00000383).

In the absence of study protocols it is extremely difficult to assess the risk of selective outcome reporting. In general, most other studies appeared to indicate that they were reporting on all predetermined outcomes. In that respect, almost all were assessed as 'low risk of bias'. However, Cohen 1998<sup>93,94</sup> did not report the results for one measure in their report of initial outcomes, but did report outcomes for all time points at 1-year follow-up. Deblinger 2011<sup>100</sup> report only the results of analysis of covariance (ANCOVA) for complete sets of data. These two studies<sup>93,94,100</sup> were therefore judged to be of 'high risk of bias'.

### Other sources of bias

No other potential sources of bias were identified in these studies. In Jaberghaderi *et al.*<sup>102</sup> the therapists delivering the CBT and EMDR were both authors on the paper, but, as each was delivering the therapy in both arms of the trial, we judged this to be of 'low risk of bias'.

### Results: cognitive-behavioural therapy for sexually abused children

We were able to combine data from different studies for eight outcomes, at up to three time points: immediately post intervention, 3–6 months later and at least 1 year later. When studies had more than one treatment group, these were combined for the purposes of meta-analysis.

The results presented here involve only participants included by the study authors in their analyses, many of which excluded participants due to dropout, uncollected data or for reasons they do not report. Each result reported is the post-test score in the intervention group compared with the control group.

## Post-traumatic stress disorder

Six studies<sup>90,93–99,103</sup> examined the impact of CBT on post-traumatic stress using a variety of scales (see *Table 5*). These studies<sup>90,93–99,103</sup> yielded an average reduction of 0.44 SDs based on various child PTSD scales (95% CI 4.43 to 1.53;  $I^2 = 46\%$ ;  $p$ -value for heterogeneity 0.10;  $\tau^2 = 0.05$ ) immediately after treatment, and three of these<sup>93–98</sup> suggested a reduction of 0.38 SDs (95% CI 0.65 to 0.11;  $I^2 = 4\%$ ;  $p$ -value for heterogeneity 0.35;  $\tau^2 = 0.00$ ) after at least 1 year (*Figure 2*).

In our sensitivity analysis we found that over the range of correlations assumed ( $\rho = 0, 0.25, 0.5, 0.75, 1$ ), results for PTSD are robust to whether follow-up measures or change score measures are used. This was the case for both post-test outcomes and 1-year outcomes.

## Depression

Five studies<sup>90,93–98,103</sup> looked at the impact of CBT on depression in children using the CDI. When combined in a meta-analysis, these five studies yielded an average reduction of 2.83 points on the CDI immediately after intervention (95% CI –4.53 to 1.13;  $I^2 = 22\%$ ;  $p$ -value for heterogeneity 0.27;  $\tau^2 = 0.84$ ) (*Figure 3*).

Four of these studies<sup>89,93–98</sup> sustained an average decrease of 1.42 points (95% CI –2.91 to 0.06;  $I^2 = 0\%$ ;  $p = 0.06$ ;  $\tau^2 = 0.0$ ) after at least 1 year (see *Figure 3*). A decrease of 2.9 on the CDI represents something in excess of a modest change in a scale that previous studies<sup>683,684</sup> indicate has a SD of approximately 7. This represents a small to moderate effect size, broadly equivalent to that seen on the anxiety scales in meta-analyses in this review.

In our sensitivity analysis, we found that for both post-test measures and 1-year follow-up measures, the results were closer to ‘no effect’ when using change scores rather than follow-up scores. CIs became wider as the assumed correlation reduced, but even when the correlation is assumed to be 1, the estimated mean difference (MD) is –1.98 for post-test scores with a 95% CI of –4.59 to 0.63, and –0.51 for 1-year follow-up scores with a 95% CI of –3.0 to 2.0.

## Anxiety

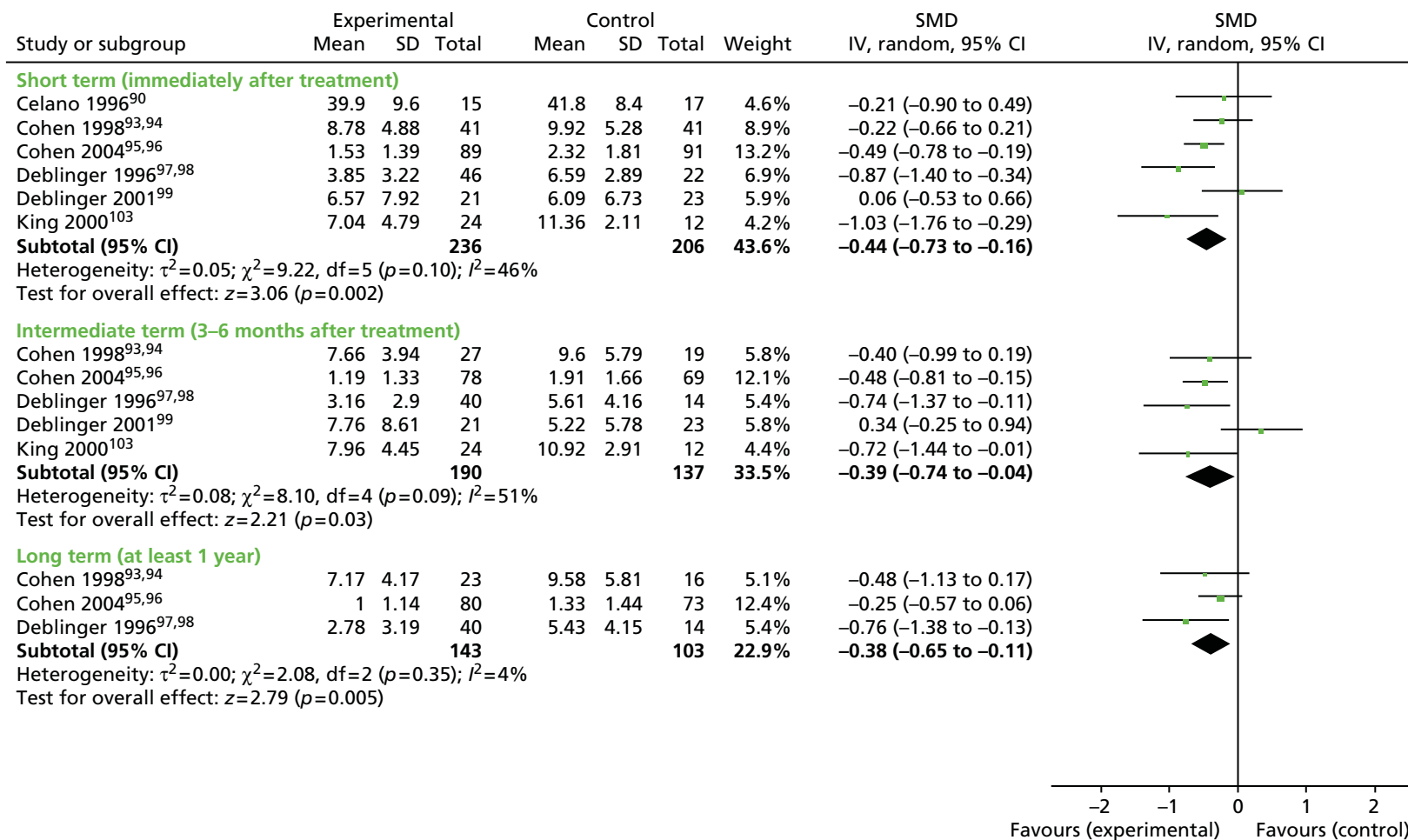
Five studies<sup>89,93–98,103</sup> examined the impact of CBT on anxiety. These yielded an average decrease of 0.23 SDs on various child anxiety scales (95% CI 0.03 to 0.42;  $I^2 = 0\%$ ;  $p$ -value for heterogeneity 0.84;  $\tau^2 = 0.0$ ) immediately after treatment, and four of these<sup>89,93–98</sup> reported a sustained decrease of 0.28 SDs (95% CI –0.52 to –0.04;  $I^2 = 0\%$ ;  $p$ -value for heterogeneity = 0.62;  $\tau^2 = 0.0$ ) after at least 1 year (*Figure 4*).

In our sensitivity analysis, we found that for post-test measures, the results were closer to ‘no effect’ when using change scores rather than follow-up scores. CIs increased as the assumed correlation reduced, but, even when the correlation is assumed to be 1, the estimated SMD is –0.19 with a 95% CI of –0.51 to 0.12. For 1-year follow-up measures, results were robust with similar results using change scores as with follow-up scores, showing no evidence of effect.

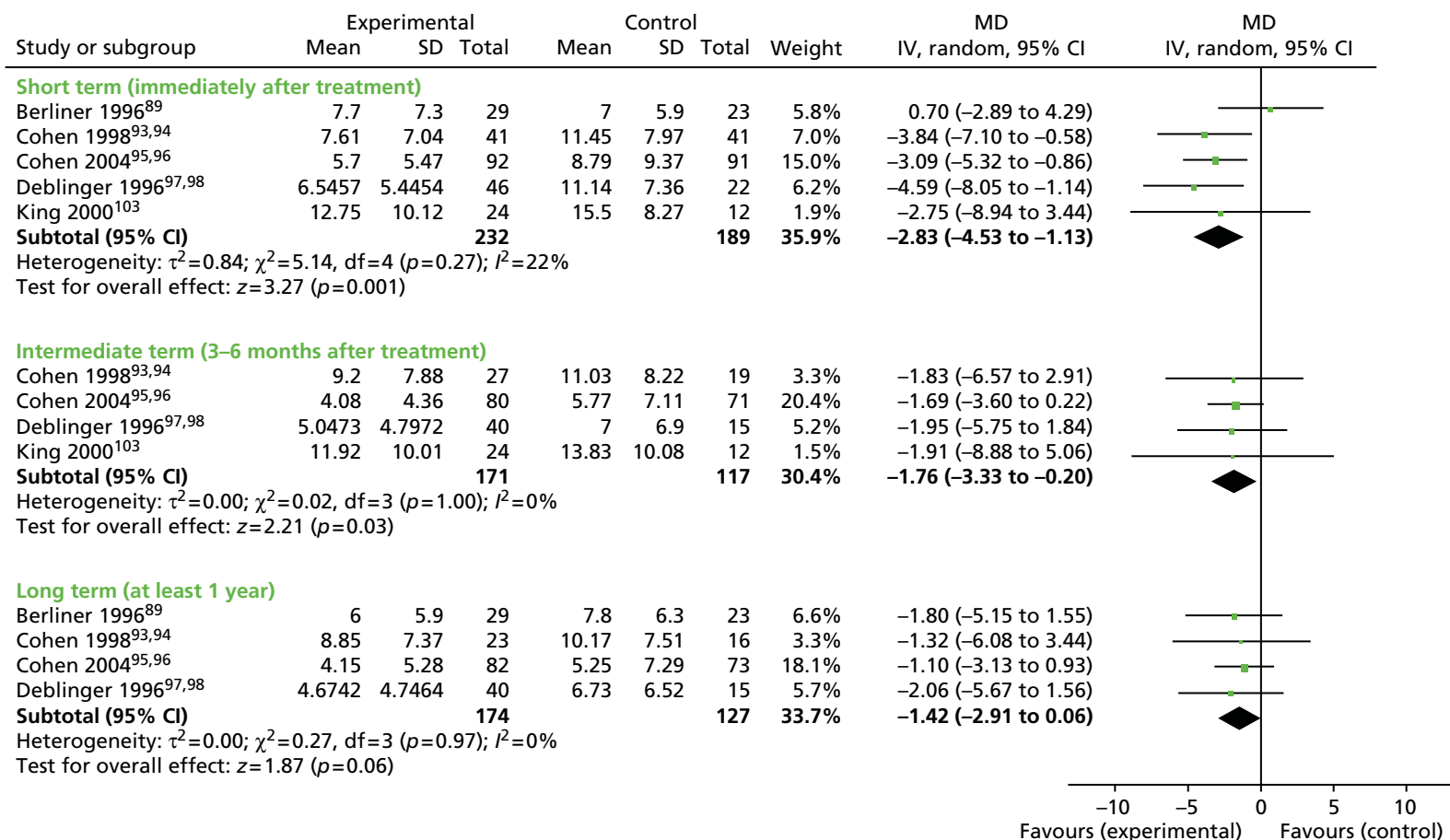
## Sexualised behaviour

Five studies<sup>89,91–96,99</sup> provided conflicting evidence on the effectiveness of CBT in the domain of child behaviour problems, assessed using the CSBI ( $I^2 = 67\%$ ,  $p$ -value for heterogeneity 0.02;  $\tau^2 = 6.81$ ). Two studies<sup>89,99</sup> observed increases of 4.7 and 1.7 points and three studies<sup>91–96</sup> observed decreases, one<sup>91,92</sup> of which was statistically significant. In a meta-analysis, there was no evidence of an effect on average (mean decrease of –0.65 points, 95% CI –3.53 to 2.24 points).

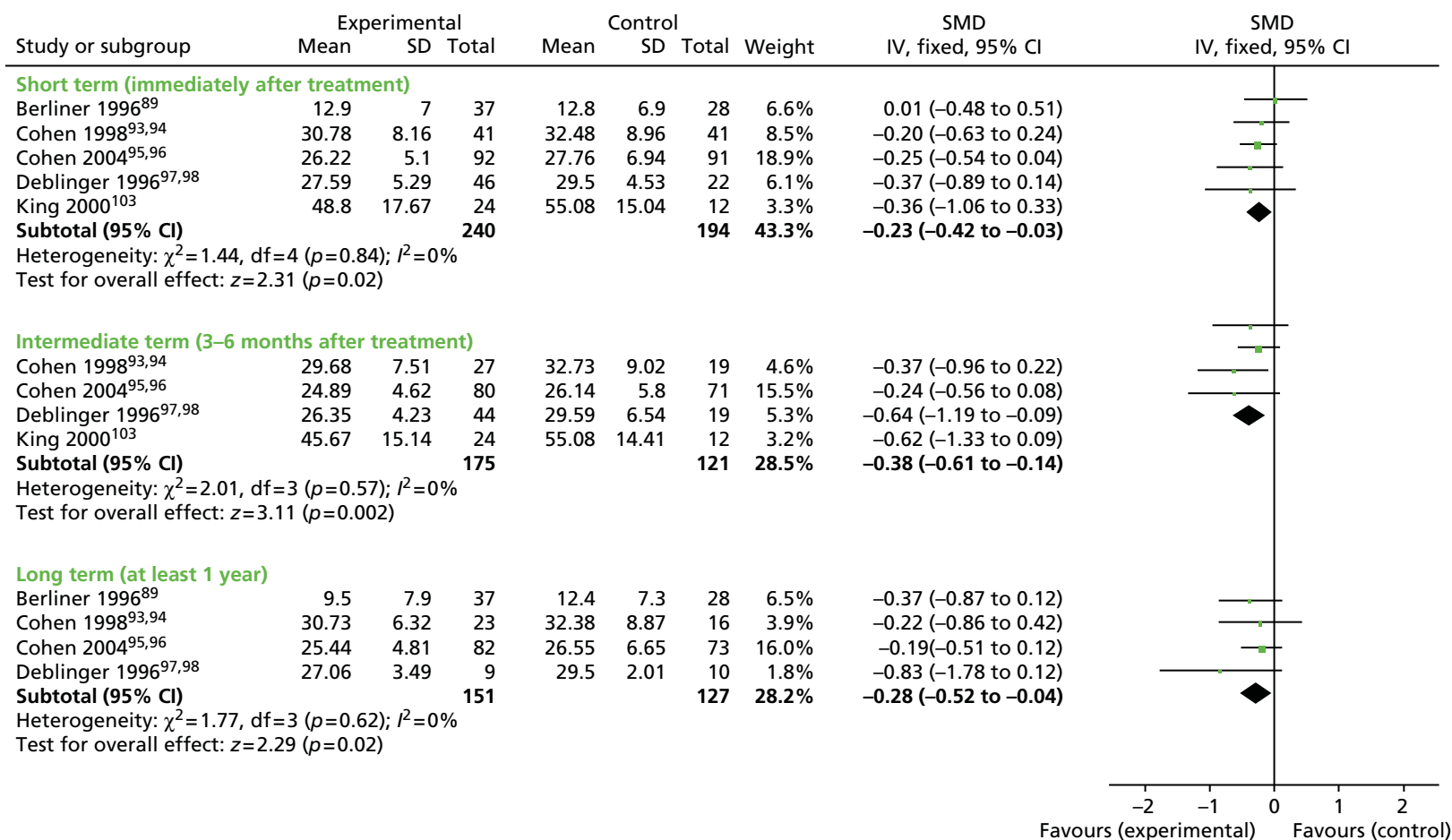
Four studies<sup>89,91–96</sup> provided longer-term data. The first of these observed a much smaller increase than the same study in the short term. Overall, the average effect found at the 3- to 6-month assessment point was similar to that immediately after treatment but was not statistically significant (–0.46 points, 95% CI –5.68 to 4.76 points; *Figure 5*). Note that Cohen 2004<sup>95,96</sup> did not report data for this outcome because it was



**FIGURE 2** Cognitive-behavioural therapy vs. no CBT for PTSD. df, degrees of freedom; IV, instrumental variable.



**FIGURE 3** Cognitive-behavioural therapy vs. no CBT for depression. df, degrees of freedom; IV, instrumental variable.



**FIGURE 4** Cognitive-behavioural therapy vs. no CBT for anxiety. df, degrees of freedom; IV, instrumental variable.

not statistically significant. Although we have not been able to retrieve these data, their inclusion is highly unlikely to change the overall conclusion for this outcome.

### Externalising behaviour (e.g. aggression, 'acting out')

Seven studies<sup>89–98,103</sup> provided data on the CBCL, using the externalising behaviour scale. A meta-analysis of standardised differences in means (owing different scoring systems being used for the scale) did not provide evidence of a beneficial effect on average (decrease of 0.12 SDs, 95% CI –0.40 to 0.17). However, the results were inconsistent ( $I^2 = 58\%$ ;  $p$ -value for heterogeneity 0.03;  $\tau^2 = 0.08$ ), with one study<sup>89</sup> observing a statistically significant increase and one study observing a statistically significant decrease.<sup>97,98</sup>

Only five studies<sup>90–98</sup> provided longer-term data from which no clear picture emerged of either benefit or harm (Figure 6).

### Behaviour management skills of parents

Data from three studies<sup>95–99</sup> provide information on the effects of involving parents in CBT interventions with their children on their ability to manage their children's behaviour. All three studies used the PPQ to assess change. Only two<sup>95,96,99</sup> of these studies reported follow-up data for 1 year post treatment. A meta-analysis of outcome data from these two studies indicates a decrease in mean scores of –0.89 1 year after treatment (95% CI –4.89 to 3.11). The long-term effects were not statistically significant but raise doubt about the maintenance of change shown in the post-treatment results, which favoured CBT (Figure 7).

Two studies<sup>90,95,96</sup> used, respectively, the Parental Reaction to Incest Disclosure Scale and the Parental Support Questionnaire to measure parental belief of their children and support for them. A meta-analysis of standardised differences in means gave a statistically significant increase of 0.3 SDs in favour of CBT (95% CI 0.03 to 0.57) (Figure 8).

Only one study<sup>90</sup> examined parental attributions. In this study,<sup>90</sup> the author reported small, statistically non-significant improvements on four aspects of parental attributions, using the Parental Attribution Scale. Parents who had been involved in the CBT arm of this study<sup>90</sup> were less likely to blame themselves or their child for what had happened, were slightly more optimistic about their child's future than those in the TAU group and more likely to hold the perpetrator responsible. However, the CIs were very wide, crossing the line of no effect.

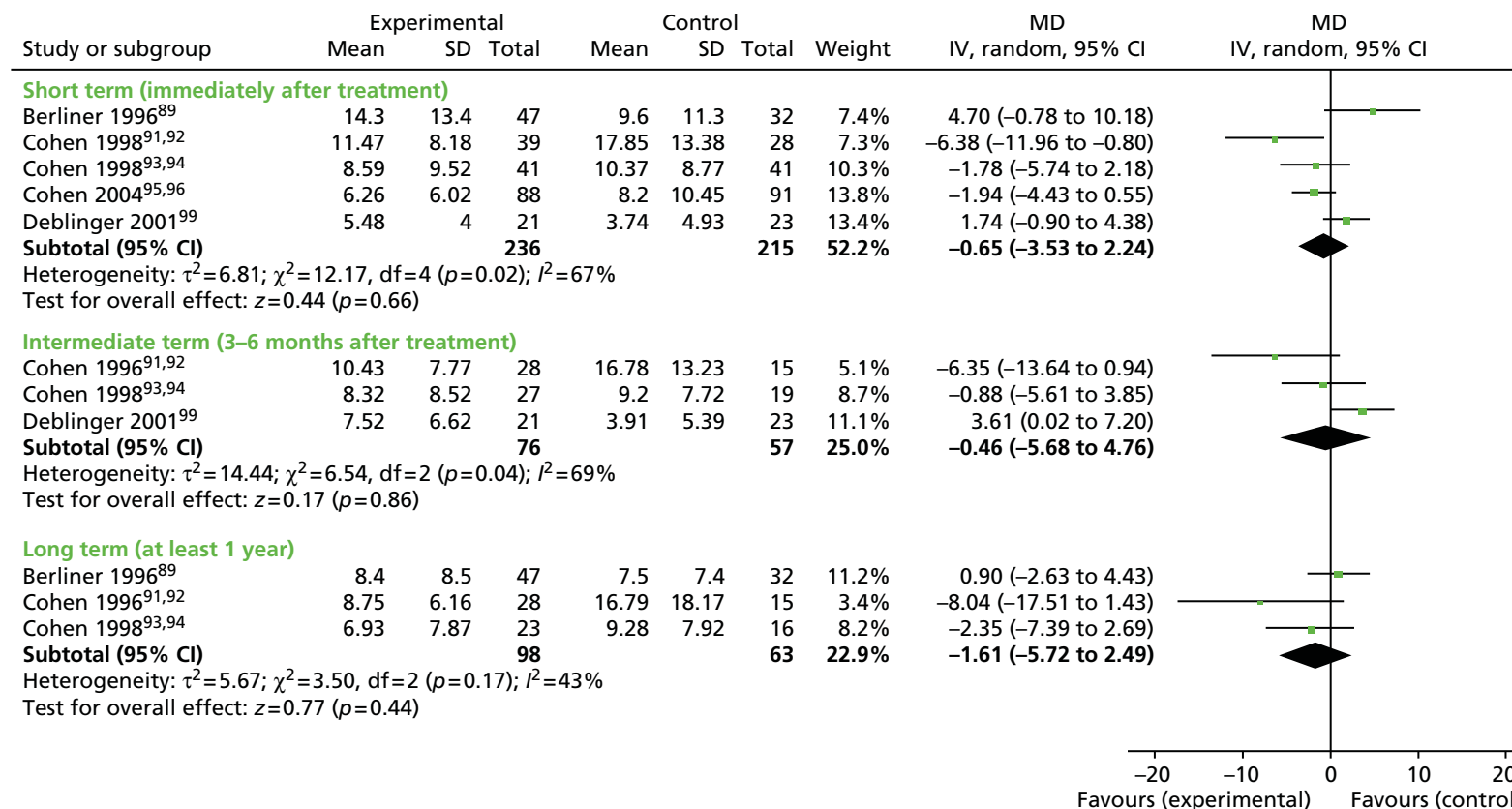
The Parent Emotional Reaction Questionnaire (PERQ) is designed to assess stressful parental emotional reactions to the sexual abuse of their children. Parents are asked to endorse the frequency of specific reactions including fear, sadness, guilt, anger, embarrassment, shame and emotional preoccupation. No psychometric data are currently available for this measure. In the two studies<sup>95,96,99</sup> that used the PERQ we found a decrease of seven points in parents' negative reactions (95% CI 3.8 to 10.1). Cohen 2004<sup>95,96</sup> measured outcomes longer term, and observed a smaller but still statistically significant, decrease of 4.6 points at 1 year.

### Additional results: studies of cognitive-behavioural therapy for sexually abused children

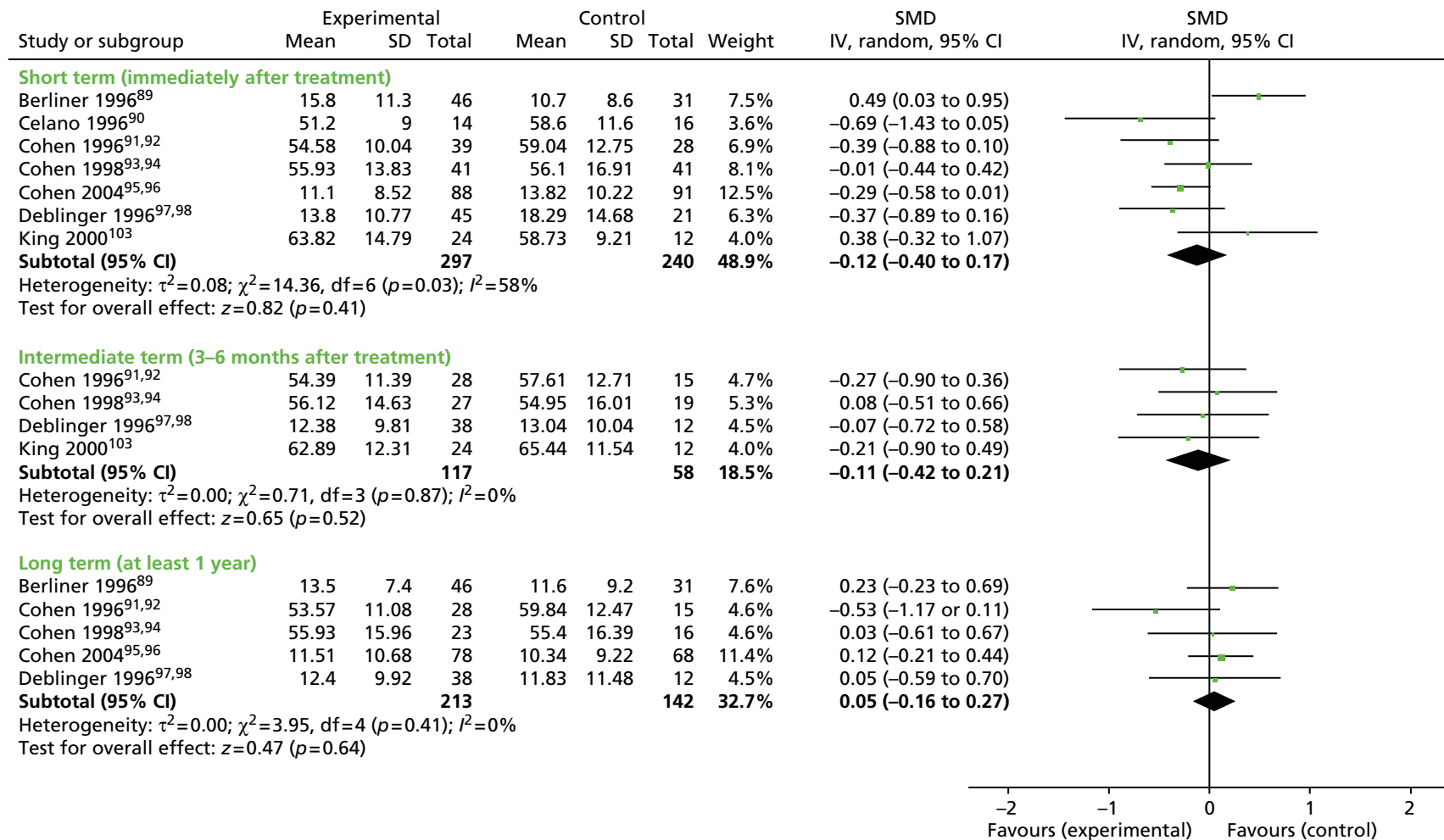
The above meta-analyses incorporate most of the data available from the randomised trials of CBT for children who have been sexually abused. Some studies reported on outcomes that are not covered above, or presented data in ways that could not be incorporated. These are briefly summarised here.

King *et al.*<sup>103</sup> assessed the effectiveness of CBT for improving children's self-efficacy as measured by the (self-report) Coping Questionnaire for Sexually Abused Children (developed by the author) but reported no significant differences between the group receiving CBT and a wait-list control group.

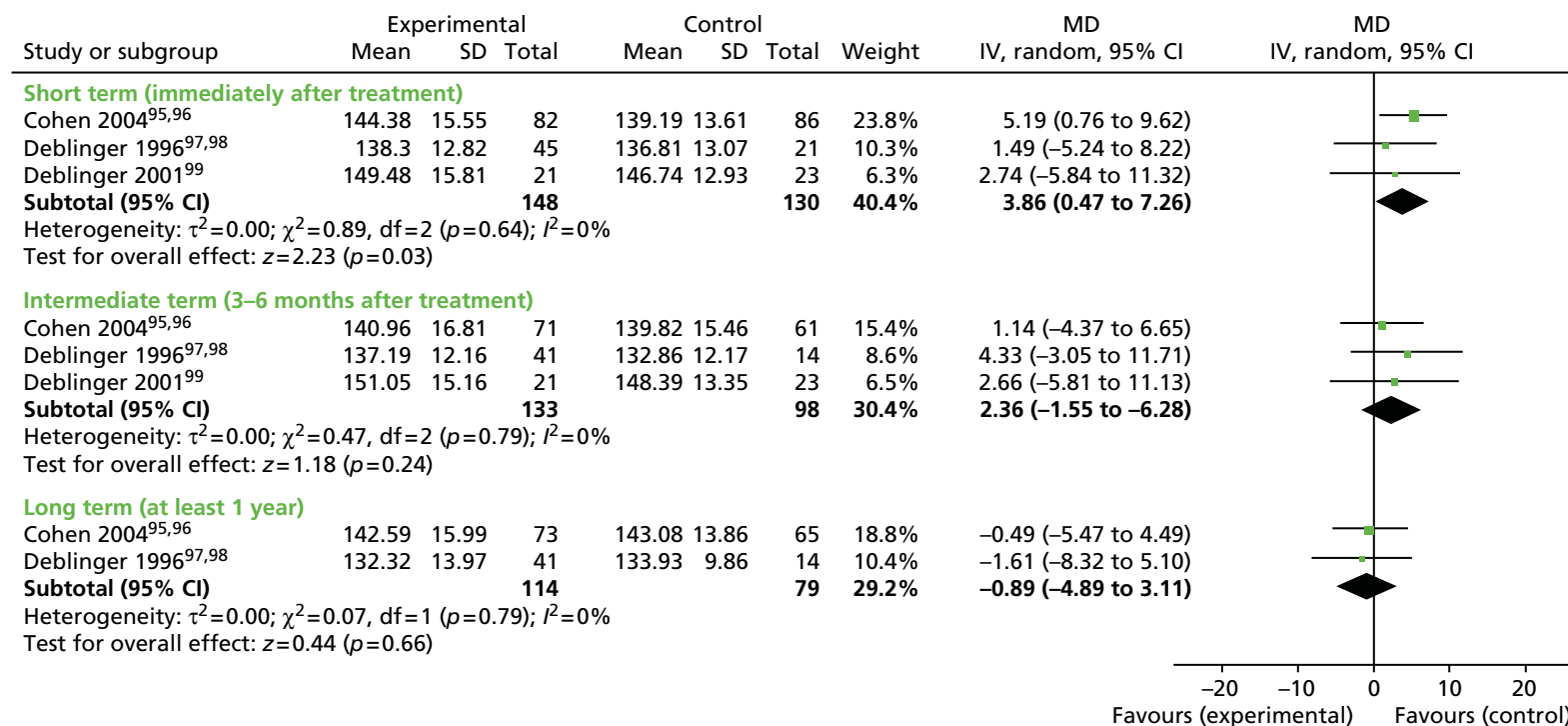
Deblinger 2001<sup>99</sup> reported a significant difference in favour of CBT for the total score on the CBCL [repeated-measures multivariate analysis of variance (MANOVA, time/time × group)]. They commented



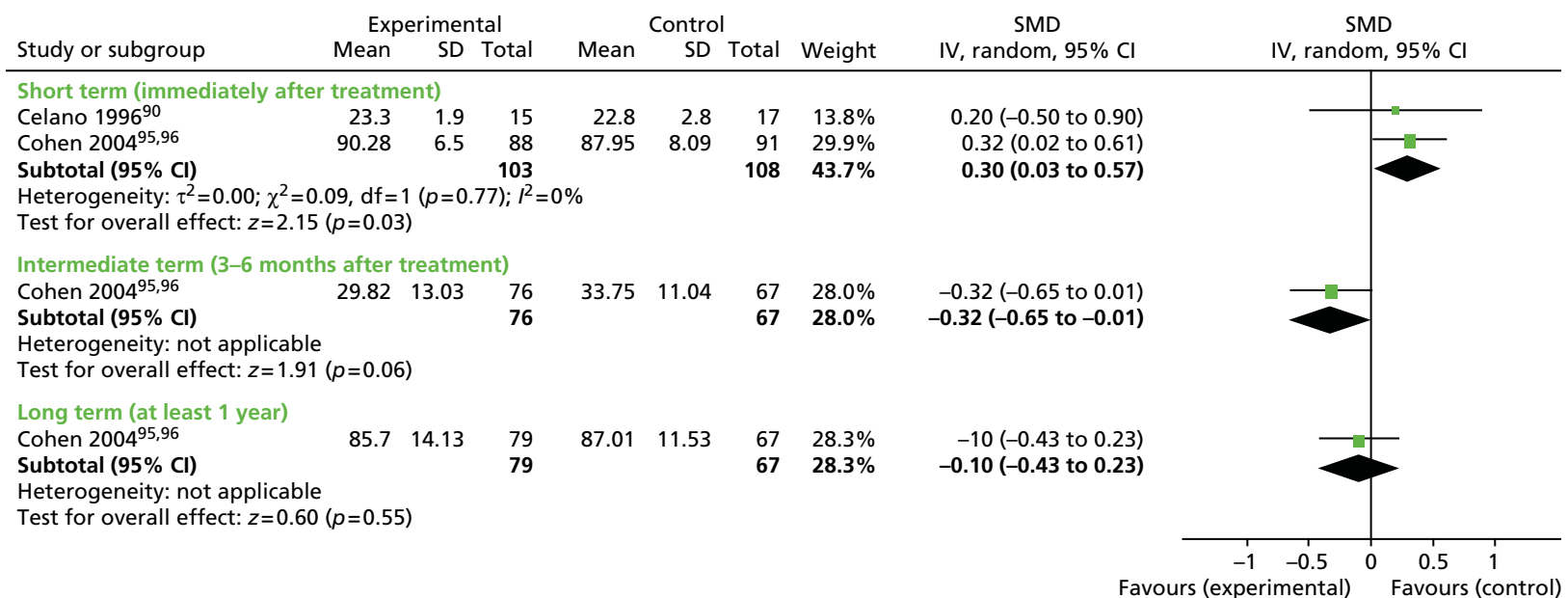
**FIGURE 5** Cognitive-behavioural therapy vs. no CBT for sexualised behaviour. df, degrees of freedom; IV, instrumental variable.



**FIGURE 6** Cognitive-behavioural therapy vs. no CBT for child externalising behaviour. df, degrees of freedom; IV, instrumental variable.



**FIGURE 7** Cognitive-behavioural therapy vs. no CBT for behaviour management skills of parents. df, degrees of freedom; IV, instrumental variable.



**FIGURE 8** Cognitive-behavioural therapy vs. no CBT for parental support to child. df, degrees of freedom; IV, instrumental variable.

that children in neither group were encouraged to talk in detail about their abusive experiences, owing to their young age, which might account for the smaller reductions in PTSD among the CBT group compared with the control group.

Jaberghaderi *et al.*<sup>102</sup> compared the effectiveness of CBT with EMDR, using two outcome measures. The first was a broad-spectrum, self-report questionnaire-based measure of post-traumatic symptoms (rather than PTSD), CROPS and PROPS.<sup>288</sup> The second was a teacher report scale of potential mental disturbance: the Rutter Teacher Scale.<sup>289</sup> For post-traumatic symptoms the authors reported large effect sizes (pre- to post-treatment) for both CBT and EMDR and a moderate effect size for the behavioural measure (the Rutter Scale). No significant differences were found between the two treatments. This was a small study<sup>102</sup> ( $n = 14$ ) with no follow-up and was one of the few studies conducted outside the USA.

Foa *et al.*<sup>101</sup> assessed the impact of prolonged exposure therapy using piecewise linear mixed models (LMMs) for continuous data and generalised LMMs for dichotomous data. The authors reported that those treated with prolonged exposure derived greater benefit than those who received supportive counselling, even when delivered by counsellors who typically delivered that form of therapy. Those who received prolonged exposure demonstrated greater improvements on the PTSD symptom severity scale (primary outcome) and on all secondary outcomes, namely self-reported PTSD severity, depression and global functioning. Treatment differences were maintained at 1-year follow-up.

### **Effectiveness of cognitive-behavioural therapy for children who have been sexually abused**

#### **Summary**

We identified 11 studies of CBT interventions for children and young people who have been sexually abused. Six studies<sup>90–96,99,101</sup> compared CBT with supportive, non-directive therapy and two studies<sup>97,98,103</sup> compared CBT with no-treatment controls (community and wait-list). One study<sup>102</sup> compared CBT with another treatment (EMDR) and two studies<sup>89,90</sup> compared variations of CBT treatments, that is CBT with and without a focus on SIT and a focus on fear and anxiety,<sup>89</sup> or different exposures of CBT with or without a TN component.<sup>100</sup>

For children who have been sexually abused, various adaptations of CBT, some offered individually, some in groups and some including work with parents proved of some benefit in reductions in PTSD, depression and anxiety, which were sustained at 1 year post treatment. One<sup>102</sup> small study reported equal benefit for CBT and EMDR in reducing PTSD symptoms. There was no evidence of benefit of CBT in reducing sexualised and externalising behaviours. Regarding changes in parents, there was evidence of some improvement in parents' management of children's behaviour and support for children, and some change in parents' attributions regarding the abuse. No harms were reported in any study, but no study set out specifically to examine harms.

This evidence is in line with the conclusions of earlier reviews (e.g. Macdonald *et al.*,<sup>685</sup> Harvey and Taylor<sup>686</sup> and de Medeiros Passarela *et al.*<sup>687</sup>), suggesting that these approaches may be beneficial compared with non-directive, supportive therapies, but the evidence base remains limited.

#### **Completeness and applicability**

None of these studies was conducted in the UK, with most undertaken within the USA. However, the profile of participants is clinically comparable to the population of children who might benefit from child and mental health services in the UK, and the therapies evaluated are recognised, and available, in the UK.

#### **Quality of the evidence**

Studies of CBT for children who have been sexually abused could be improved, and would benefit from careful and explicit reporting against Consolidated Standards of Reporting Trials (CONSORT) guidelines.

Of some concern is that the field is somewhat dominated by a small team of US researchers who evaluate a version of CBT that they themselves developed.

### **Economic evidence**

One<sup>612</sup> economic evaluation, carried out in Australia, explored the cost-effectiveness of CBT for children who have been sexually abused. The study<sup>612</sup> used a decision-analytic design to establish the cost-utility of three different treatment strategies for PTSD secondary to childhood sexual abuse, compared with a no-treatment comparator: individual TF-CBT, combined individual TF-CBT plus pharmacotherapy [selective serotonin reuptake inhibitor (SSRI)], and non-directive counselling. Costs and outcomes were modelled for a hypothetical cohort of 10-year-old children diagnosed with PTSD or PTSD plus depression, subsequent to sexual abuse.

The decision model included a decision tree that modelled the costs and benefits of each treatment during the post-treatment and 12-month follow-up period observed in clinical trials, and a subsequent Markov model that estimated the long-term costs and consequences of the alternative treatments over a 30-year period. The economic evaluation was conducted from the perspective of the Australian mental health care system, and costs and benefits were expressed in 2010–11 Australian dollars (A\$) and discounted at a rate of 5% per year.

The model was populated with data obtained from a number of clinical trials and the 2007 Australian Mental Health Survey.<sup>402</sup> Resources included in the model were the cost of therapists' time and the costs of SSRI medication for the combined treatment group. The impact of intervention on the use of other health and social care services ('knock-on' effects) was not included. Resources were valued using national published sources for unit costs. Outcomes were reported in terms of QALYs calculated from the Analysis of Quality of Life (AQoL-4D), a generic preference-based instrument included in the 2007 Australian Mental Health Survey. Data from the survey were selected for children and adolescents with a history of childhood sexual abuse, who also met the criteria for PTSD, depression or PTSD and depression.

The results suggest that all treatments would be considered good value for money compared with no treatment from the perspective of the Australian mental health system (all ICERs < A\$7000 per QALY gained, compared with a stated threshold of A\$50,000 per QALY gained). Non-directive counselling was dominated by TF-CBT (more expensive and less effective) and TF-CBT plus SSRI appears more cost-effective than TF-CBT alone. However, results were sensitive to variation in the clinical effectiveness parameters, and the analysis was limited, particularly by the narrow cost perspective.

## **Cognitive-behavioural therapy: children who have been physically abused**

Three studies<sup>106–109</sup> examined the effectiveness of CBT specifically with children who had experienced physical abuse.

### **Description of studies**

#### **Location**

All three<sup>106–109</sup> studies took place in the USA.

#### **Sample sizes**

Samples sizes at recruitment were 75,<sup>109</sup> 55<sup>107,108</sup> and 12.<sup>106</sup>

## Participants

### Age

The mean ages of children in the studies by Kolko<sup>107,108</sup> and Runyon *et al.*<sup>109</sup> were 8.6 years and 9.88 years, respectively. Adolescents in the LeSure-Lester<sup>106</sup> study were aged 12–16 years.

### Gender and ethnicity

The 12 participants in LeSure-Lester<sup>106</sup> study were African American males, 28 of 36 completers in the Kolko<sup>107,108</sup> study were boys, and, of those who completed at least three sessions of therapy in the Runyon *et al.*<sup>109</sup> study, 28 of 44 were girls.

### Recruitment

In the Runyon *et al.* study<sup>109</sup> all but five of the families in the final sample were referred by child protection service agencies. Those in the Kolko<sup>107,108</sup> study were referred by Child Protective Services (CPS) caseworkers. In the LeSure-Lester study,<sup>106</sup> participants were recruited from a group home where they had been placed by CPS.

### Maltreatment

Participants in all three<sup>106–109</sup> studies had experienced physical abuse or (four cases in the Kolko<sup>107,108</sup>) study severe or frequent forms of physical discipline with a risk of injury.

### Interventions and comparison

Kolko<sup>107,108</sup> evaluated the impact of two interventions: a manualised FT treatment for physically abused children and a manualised CBT intervention for individual children and their parent(s). In the CBT arm, children and parents received therapy from separate therapists, who implemented parallel protocols based on social learning principles that were designed to address cognitive, affective and behavioural problems. Treatment for the children addressed their perceptions of family stress and their environments; training to develop coping and self-control skills; and interpersonal effectiveness. The intervention for parents focused on their views on violence and physical punishment, their attribution style and expectations, self-control and contingency management. There was throughout an emphasis on teaching intrapersonal and interpersonal skills. The FT was based on Belsky's<sup>227</sup> interactional or ecological model approach to child maltreatment. It sought to 'enhance the cooperation and motivation of family members by promoting understanding of coercive behaviour and by teaching the family positive communication skills and how to solve problems together' (p. 326).<sup>227</sup>

The control group received routine community services from providers not associated with the project, as mandated by family service workers. Services were based on an extensive risk assessment and included 'home visits to provide support and information, family skills specialists who taught homemaking and related skills, and parenting information and support groups'<sup>108</sup> plus regular telephone contact from the caseworker (p. 326).

Runyon *et al.*<sup>109</sup> assessed the added value of providing treatment to children [combined parent–child cognitive–behavioural therapy (CPC-CBT)], as well as parents (parent-only CBT). Children in the CPC-CBT arm received an intervention covering psychoeducation; affect regulation; coping skills; cognitive coping; assertiveness skills and anger management; general safety skills; application of skills; development of a personal safety plan; role perspective-taking skills; problem-solving skills; preparing a letter of praise; developing a TN; and agreeing and sharing a joint TN (with parents). In addition to the usual parents' programme (see *Comparisons*), parents in the experimental arm received input on parent training with the child; refinement and rehearsal of personal safety plans with the child; attention to abuse clarification and the development of the joint TN plus coaching in parent–child interactions; behaviour rehearsal of coping skills; parenting skills and safety plan; sharing of TN; and abuse clarification.

The parent-only CBT control arm received an intervention that comprised disclosure of the referral incident, engagement and assessing parents' goals, motivational interviewing and commitment to no violence (two sessions), followed by psychoeducation and an introduction to anger management skills (two sessions), continuation of coping skills (three sessions), review and applications of skills, including ABCs of parent–child interactions, development of personal safety plans (three sessions); review of ABCs of parent–child interactions and integration/generalisation of skills (four sessions) and parent training (parent only, two sessions).

LeSure-Lester<sup>106</sup> provided CBT to groups of two to three participants. The intervention was designed to teach participants the feelings associated with anger and aggression, relaxation and self-talk, and alternative ways of coping. It comprised a three-stage education and training module, beginning with education relaxation techniques. This was followed by education and GE and then education and anger control. The therapist used vignettes (as the basis for discussions) that reflected the participants' natural environments, that is, the residential setting. Participants in the control arm received 'traditional indirect therapy' consisting of open-ended discussions and communications of the participants' self-reports of activities and current events in their daily lives. The therapists were said to have exercised warmth, empathy and genuineness – no specific coping skills were taught.

### **Number and duration of sessions**

Each intervention in the Kolko<sup>107,108</sup> study entailed at least 12 1-hour weekly clinic sessions over a 16-week period, for a total of about 18 hours of service. Those in the routine community services (control) arm received variable amounts of help, ranging from services delivered on a once or twice per week basis for an indefinite period of time, to treatment plans comprising up to 20 hours of home-based service per week for up to 3 months.

In the Runyon *et al.*<sup>109</sup> study, parents in the 'combined intervention' attended 16 2-hour group sessions over a 16- to 20-week period. Groups were initially conducted concurrently for the first hour and 45 minutes, with the last 15 minutes involving joint parent–child sessions based on families' needs. The balance between concurrent and joint time shifted over the course of the intervention so that in sessions 12–16 the joint sessions lasted 60–75 minutes. Parents in the 'Parent only' condition received a similar CBT parenting intervention, but spent more time discussing the implementation of behaviour management strategies. Parents in the 'Combined' arm spent less time on parent skills training and more time preparing their 'clarification letter' (a letter that demonstrated that they took full responsibility for their abuse behaviour) and preparing for, and interacting with, their children in joint sessions. This was one of only a few interventions that included the non-offending parent.

In the LeSure-Lester<sup>106</sup> study, participants in both arms received 26 weeks of traditional indirect therapy, and were then randomised to continue with that therapy or to receive 26 weeks of CBT. Both therapies were delivered for 1 hour, twice per month.

## **Outcomes and measures used in studies of cognitive–behavioural therapy for physically abused children**

### **Post-traumatic stress disorder**

Only Runyon *et al.*<sup>109</sup> assessed the impact of intervention on PTSD, using the KSADS-PL<sup>268</sup> (see *Post-traumatic stress disorder*). This was the primary outcome in this study.<sup>109</sup>

### **Depression**

Kolko<sup>107,108</sup> used the CDI<sup>80</sup> to assess the intervention's impact on depression.

### **Behaviour**

Runyon *et al.*<sup>109</sup> and Kolko<sup>107,108</sup> both used the CBCL<sup>260</sup> to assess change in child behaviour, along with the Child Conflict Index (CCI).<sup>688</sup>

LeSure-Lester<sup>106</sup> used a rating system of behavioural appropriateness developed within the residential setting, and comprising aggression towards peers, towards staff and compliance with house rules (all scored low or high).

### ***Risk of bias: randomised controlled trials of cognitive-behavioural therapy for physically abused children***

#### **Sequence generation**

Kolko<sup>107,108</sup> used a computer-generated procedure based on Efron's biased coin toss and was assessed as low risk of bias. Runyon *et al.*<sup>109</sup> used a computer program to randomly determine the treatment type for each group, and on that basis was deemed low risk of bias. No information was provided by LeSure-Lester<sup>106</sup> and so this study was judged unclear.

#### **Allocation concealment**

The LeSure-Lester study<sup>106</sup> was judged as 'high risk', as the author was both the provider of the intervention and the researcher. The project co-ordinator in the Runyon *et al.*<sup>109</sup> study was blind at pre-treatment so we concluded that allocation was concealed at this point (low risk of bias). Kolko<sup>107,108</sup> provided no information and so was judged unclear risk of bias.

#### **Blinding of participants and personnel**

High risk: participants and personnel were not blinded in any of the three trials.<sup>106–109</sup>

#### **Blinding of outcome assessors**

Runyon *et al.*<sup>109</sup> stated that the project co-ordinator (who conducted all assessments) 'remained blind, to the extent possible, to condition assignment' but it is not clear to what extent this was achieved. The determination of unclear risk of bias was made. Risk of bias was high in the study by LeSure-Lester<sup>106</sup> as outcome data were provided by staff in the residential care home. Kolko<sup>108</sup> reported that '[P]roject staff administering the assessment protocol were unaware of the treatment conditions to which participants were assigned' and was judged low risk of bias, although the same data were self-reported.

#### **Incomplete outcome data**

Attrition in the Kolko<sup>107,108</sup> study was around 6% (one case) in the FT arm, 20% (five cases) in the CBT arm and 17% (two cases) in the routine community services groups. Although these cases did not appear to be different in characteristics, the differential attrition between the two active treatment arms resulted in a judgement of high risk of bias (the reasons for dropout might be related to the intervention). No attrition occurred in the LeSure-Lester<sup>106</sup> study, so this was judged as 'low risk'. The Runyon *et al.*<sup>109</sup> study was judged as 'high risk of bias': 25% children who completed 3 weeks' therapy did not provide data post test, and their pre-test scores were carried forward. Attrition increased at follow-up and the authors present no means or SDs at this assessment point.

#### **Selective outcome reporting**

The LeSure-Lester<sup>106</sup> study was assessed as low risk for selective outcome reporting. This study<sup>106</sup> is small, modest in design and implementation, and data are given on those outcomes that the intervention was seeking to address (using 'home-made' measures). Kolko<sup>107,108</sup> and Runyon *et al.*<sup>109</sup> appear to have reported on all outcomes covered in the methods section, but, in the absence of a published protocol for either study<sup>106</sup> both were assessed as unclear for this domain.

#### **Other sources of bias**

LeSure-Lester's<sup>106</sup> study was compromised by the conflation of roles held by the author, that is, researcher and therapist.

### ***Results: cognitive-behavioural therapy for physically abused children***

Meta-analysis was not possible across these studies,<sup>106–109</sup> which are summarised narratively.

## Post-traumatic stress disorder

The Runyon *et al.*<sup>109</sup> study reported significant pre- to post-improvement on the total number of PTSD symptoms among all children, with the adjusted mean post-test scores for those in the combined CBT parent and CBT child group being significantly lower than those for the parent-only CBT group.

## Child depression

In the Kolko<sup>107,108</sup> study, children's reports on the CDI<sup>80</sup> indicated a significant reduction in severity of depressive symptoms over time [ $\chi^2 = 16.01(3)$ ;  $p < 0.001$ ], but reports were said to be 'generally low and similar across time, indicating no significant group differences'<sup>108</sup> (p. 333).

## Child behaviour

As measured by the Youth Self-Report (YSR) of the CBCL, children in all three groups in the Kolko<sup>107,108</sup> study (CBT, FT and routine services) reported a significant reduction over time in both internalising symptoms [ $\chi^2 = 33.54(3)$ ;  $p < 0.0001$ ] and externalising symptoms [ $\chi^2 = 12.26(3)$ ;  $p < 0.002$ ], with both CBT and FT showing most change on these measures. No effect was found for social competence.

Parent report on the CBCL indicated lower ratings of serious internalising behaviours over time ( $p < 0.07$ ), particularly for the two treatment arms. Parents reported a significant reduction in externalising behaviour over time [ $\chi^2 = 9.53(3)$ ;  $p < 0.02$ ]. Based on an inspection of the means over time, CBT appeared to show the greatest initial change and FT the greatest change at follow-up (1 year) compared with routine community services, which showed minimal change during that period.

A significant interaction was reported on the CCI [ $\chi^2 = 13.12(3)$ ;  $p < 0.04$ ], reflecting the greatest decrease in scores for CBT. This measure (scored by telephone interview with the parent) estimates the presence or absence of common individual behavioural or emotional problems commonly displayed in boys or girls within the previous 24 hours.

Runyon *et al.*<sup>109</sup> reported significant pre- to post-improvement in internalising and externalising scores (CBCL) for the CBT parent-only condition.

LeSurre-Lester<sup>106</sup> reported greater rates of behaviour change from pre-test to post-test for the six adolescents who received CBT. Using the rating system used by staff within the home, these six adolescents demonstrated greater rates of behaviour compliance ( $t = -5.64$ ;  $p < 0.001$ ) and less aggression towards staff ( $t = -4.56$ ;  $p < 0.001$ ) and other residents ( $t = -5.64$ ;  $p < 0.001$ ).

## Child global functioning

The Kolko<sup>107,108</sup> study reported a significant increase in KSADS scores over time for all children in the study, with no group differences. This study<sup>107,108</sup> found no difference between the CBT, FT and control groups in reduction over time on fears related to abuse.

## Family functioning

Kolko<sup>107,108</sup> reported the results of subscales for the Family Environment Scale (FES) and the Family Assessment Device (FAD). Overall, children and parents in the CBT and FT arms reported more improvement over time than those in routine services.

## *The effectiveness of cognitive-behavioural therapy for children who have been physically abused*

## Summary

We identified only three studies<sup>106–109</sup> of CBT interventions for children and young people who have been physically abused. Each focused on children of somewhat different ages, from middle childhood to adolescence. One study<sup>107,108</sup> compared a CBT intervention for children and their parents with systemic FT; one study<sup>109</sup> compared a CBT intervention for parents with one that included a parallel intervention for children,

and the third study<sup>106</sup> compared a small group version of a CBT provided to African American adolescents living in a group home as a direct result of their maltreatment, compared with non-directive group discussions.

Although very different, the three CBT interventions<sup>106–109</sup> shared some common characteristics, namely a focus on children's thoughts, feelings and behaviour. There was a marked psychoeducational component in both the Runyon *et al.*<sup>109</sup> and the LeSure-Lester<sup>106</sup> study, aimed at helping children to recognise and understand the consequences of abuse, and develop appropriate coping and problem-solving skills, including the development of skills to minimise risk of abuse<sup>107,108</sup> or personal safety plans.<sup>109</sup>

The three<sup>106–109</sup> studies are all extremely small and the overall quality is, at best, moderate in relation to risk of bias. Together with the fact that we can summarise the evidence only narratively, considerable caution is required in interpreting the data. All three<sup>106–109</sup> studies report improvement in children's internalising and externalising behaviour problems (common sequelae of physical abuse), but one<sup>109</sup> of the studies found an improvement in externalising behaviour in the parent treatment group only.

The one<sup>109</sup> study examining PTSD reported a reduction in symptoms in all children, with the most significant reduction occurring for those where both parents and children received CBT. Depression, examined in one<sup>109</sup> study, reduced over time in both the experimental and comparison groups.

Both CBT and FT generally outperformed routine community services, resulting in greater reductions in children's externalising behaviour and on child-reported parent-to-child violence and parent-reported child-to-parent violence.

### Completeness and applicability

All three<sup>106–109</sup> studies were conducted in the USA. Two<sup>107–109</sup> studies were concerned with families who had come to the attention of services because of maltreatment, but where the child remained in the home. They aimed to minimise the risk of further physical abuse and to address the adverse consequences of past abuse and current maladaptive parenting. In Kolko<sup>107,108</sup> maltreatment was judged as 'mild/moderate' in 87% cases, although almost half the families had children that had been hit with an object, and 50% had children who had been smacked with an open hand. In the Runyon *et al.*<sup>109</sup> study, 53% families had a substantiated allegation of physical abuse or had acknowledged the use of excessive physical punishment (e.g. 65% had hit their children with an object). Many of the children in these three studies would be subject to a child protection plan in the UK, and in the Runyon *et al.*<sup>109</sup> study (although not in the Kolko<sup>107,108</sup> study) the inclusion criteria required children to have either four PTSD symptoms or an elevated score (T score of  $\geq 65$ ) on at least one externalising behaviour subscale on the CBCL.<sup>260</sup> In this study, siblings were included in the treatment as long as they too could meet these criteria and were a focus of child protection workers' concerns. These studies<sup>106–109</sup> therefore have relevance to the UK context, although they are limited in their scope and the evidence base is sparse.

LeSure-Lester<sup>106</sup> evaluated an intervention that was designed specifically to address the aggressive behaviours of boys who had been removed from the family home as a result of maltreatment. Although the focus on addressing maltreatment-related aggression is highly relevant to the UK context, the study<sup>106</sup> says little about the intervention, and the outcome measures focus on resident-staff interaction (with an emphasis on compliance) and peer-peer violence within the home. Although the intervention is reported to have made a significant impact, the size of the study,<sup>106</sup> plus the absence of measures or time periods to indicate the generalisability or likely maintenance of reported behaviour change, mean that its applicability is limited.

### Quality of the evidence

Studies of CBT for children who have been physically abused are few in number, poorly reported, and overall of limited quality, although poor reporting may account for many of the identified risks of bias.

### Economic evidence

No economic evaluations of CBT were located for children who have been physically abused.

## Cognitive-behavioural therapy: children who have experienced different types of maltreatment

Nine randomised trials of CBT or enhanced CBT interventions were identified<sup>110–112,114–117,120,121</sup> that were designed to address the consequence of maltreatment, irrespective of maltreatment type. The studies were themselves heterogeneous, and fall into four broad categories:

1. interventions to enhance the parenting skills of foster parents and adopters, in order to help them address the particular challenges of parenting children with maltreatment histories<sup>112,114–116</sup>
2. interventions addressing PTSD and associated symptoms in maltreated young people<sup>111,117</sup>
3. risk reduction interventions to reduce human immunodeficiency virus (HIV) and sexually transmitted infections (STIs) among abused and neglected young people<sup>110</sup>
4. studies of EMDR.<sup>120,121</sup>

### Description of studies

#### Location

All but four<sup>111,112,116,120</sup> studies were conducted in the USA. The Rushton *et al.*<sup>116</sup> study was conducted in the UK, the Farkas *et al.*<sup>120</sup> study in Quebec, Canada, the Church *et al.*<sup>111</sup> study in Peru and the Jensen *et al.*<sup>112,113</sup> study in Norway.

#### Sample size

Five<sup>110,111,117,120,121</sup> studies recruited and randomised individual participants who had been maltreated. The Church *et al.*<sup>111</sup> study recruited just 16 participants, whereas the studies by Farkas *et al.*<sup>120</sup> and Scheck *et al.*<sup>121</sup> recruited, respectively, 40 and 60 participants to their studies of EMDR and the Shirk *et al.*<sup>117</sup> study randomised 43 adolescents. Champion and Collins<sup>110</sup> randomised 559 adolescent women.

The Jensen *et al.*<sup>112,113</sup> study randomised 156 parents. (Only 135 parents participated in the study.)

The remaining three studies recruited participant pairs. Rushton *et al.*<sup>116</sup> recruited 38 adoptive families. One study by Linares *et al.*<sup>115</sup> enrolled 94 children, with the intervention targeted at foster parent/biological parent pairs, whereas the other Linares *et al.*<sup>114</sup> study recruited 63 biological/foster parent pairs.

### Participants

#### Age

Three<sup>114–116</sup> studies focused on children aged < 10 years. Children in the Rushton *et al.*<sup>116</sup> study were between 3 years and 7 years 11 months at recruitment; the Linares *et al.*<sup>115</sup> study recruited foster parents caring for children aged 5–8 years, and children in the Linares *et al.*<sup>114</sup> study were aged 3–10 years.

Five<sup>110,111,117,120,121</sup> studies recruited adolescents. The studies by Champion and Collins<sup>110</sup> and Church *et al.*<sup>111</sup> recruited adolescent women aged 14–18 years and 12–17 years, respectively. Shirk *et al.*<sup>117</sup> recruited adolescents aged 13–17 years. The two<sup>120,121</sup> EMDR studies recruited adolescents aged 13–17 years<sup>120</sup> and 16–25 years.<sup>121</sup>

Jensen *et al.*<sup>112,113</sup> recruited the caretakers of children and young people aged 10–18 years.

#### Gender

Six<sup>112,114–117,120</sup> of these studies recruited both male and female children or their carers. Some had a preponderance of one gender, for example the samples in the studies by Shirk *et al.*<sup>117</sup> and Farkas *et al.*<sup>120</sup> were largely female (85% and 74%, respectively). Participants in the Church *et al.*<sup>111</sup> study were all male, whereas in the studies by Champion and Collins<sup>110</sup> and Scheck *et al.*<sup>121</sup> the participants were all female.

### Referrals

The Rushton *et al.*<sup>116</sup> study recruited adoptive parents referred from English local authorities that had high rates of adoption. Adoptors were eligible if at least one of their adopted children scored above a certain threshold on the Strengths and Difficulties Questionnaire (SDQ), completed by either the adoptor or the child's social worker, or both. The Champion and Collins<sup>110</sup> study recruited participants from women seeking health care at a district health clinic.

Participants in the Linares *et al.*<sup>115</sup> study were drawn from community-based mental health services, but it is not clear how they were recruited. Linares *et al.*<sup>114</sup> recruited foster parents from one child welfare agency.

Church *et al.*<sup>111</sup> recruited young men who were resident in a residential treatment refuge (Peru). Adolescents in the Shirk *et al.*<sup>117</sup> study had been referred to an outpatient department in a large, urban mental health centre, and those in Jensen *et al.*<sup>112,113</sup> were children referred to one of eight community clinics via normal referral routes [general practitioner (GP), Child Protection Services] who had experienced a traumatic event and who scored  $\geq 15$  on the Child PTSD Symptom Scale (CPSS).<sup>286</sup>

One<sup>121</sup> of the EMDR studies recruited volunteers from adverts in a range of agencies,<sup>121</sup> whereas the other<sup>120</sup> took referrals only from youth protective services.

### Maltreatment type

In Linares 2006,<sup>114</sup> children had experienced physical abuse or neglect, but (by chance) only neglected children were allocated to the control condition, compared with 71% in the intervention group.

In the Linares 2012,<sup>115</sup> children had officially substantiated histories of child maltreatment: 77% were neglected and 23% were abused either physically (18%) or sexually (5%). Some children experienced more than one form of maltreatment.

Children in the Church *et al.*<sup>111</sup> study had a history of physical, psychological or sexual abuse or neglect/parental abandonment. The majority of participants in the Champion and Collins<sup>110</sup> study (76%) had histories of sexual, physical and emotional abuse. This study<sup>110</sup> recruited women with abuse histories or histories of STIs (because of the over-representation of maltreatment in the histories of adolescents) and was designed to 'provide a study sample of adolescents with both a history of STI and abuse'<sup>110</sup> (p. 142).

Participants in both EMDR studies<sup>120,121</sup> had histories of maltreatment. Most of those in the Farkas *et al.*<sup>120</sup> study had been referred to Youth Protective Services for a variety of forms of parental neglect or abuse, although some were referred for reasons of serious behaviour problems. Most participants had been referred for, or had experienced more than one form of, maltreatment; it was not possible to identify the proportion of participants who had not been maltreated. A total of 90% of participants in the Scheck *et al.*<sup>121</sup> study reported being victims of physical or emotional abuse as a child, and over half of the traumas reported related to traumatic sexual experiences, such as rape or child molestation.

Adolescents in Jensen *et al.*<sup>112,113</sup> had been exposed to a range of traumas, including physical and sexual abuse, and witnessing violence.

### Interventions and comparisons

The interventions in the studies by Rushton *et al.*<sup>116</sup> and Linares *et al.*<sup>114,115</sup> were modified versions of Webster-Stratton's Incredible Years Program (IY).<sup>212</sup>

Linares *et al.*<sup>114</sup> used the manualised, group-based Parents and Children Basic Series Program (IY, Webster-Stratton *et al.*<sup>210</sup>) plus a coparenting intervention delivered on individually to biological and foster parent pair and target child, and which focused on learning about each other, practising open communication and negotiating interparental conflict. Therapists used family systems strategies, such as joining, didactic lesson, re-enactment and restructuring.

Linares 2012<sup>115</sup> used a subset of the 18 IY manualised lessons contained in the Dina Program for Young Children. Modules were Understanding and Detecting Feelings; Detective Wally Teaches Problem-Solving Steps; and Tiny Turtle Teaches Anger Management, plus a lesson developed for the project and designed to promote a sense of belonging to this foster home – My Homes, My Families.

In both<sup>114,115</sup> of these studies, foster carers in the control group received 'usual services'.

Rushton *et al.*<sup>116</sup> used the IY programme as a basis for a cognitive-behavioural programme tailored to the needs of adoptive parents, placing an emphasis on the need to conduct daily play sessions with the child and to help adopters when their child rejects their praise or their rewards. First and last sessions were focused, respectively, on getting to know the parents and introducing the programme, and reviewing progress and ending. Other sessions focused on using positive attention to change behaviour; the value of play for establishing positive relationships; using verbal praise; rewards; learning clear commands and boundaries; using 'ignoring' to reduce inappropriate behaviour; defining for the child the consequences of undesirable behaviour; 'time out' and problem-solving. Adoptive parents in the control group received an educational approach designed by an adoption adviser 'to improve adopters' understanding of the *meaning* of the children's current behaviour and help them see how past and present might be connected'<sup>116</sup> (p. 532), thereby helping adopters to respond more appropriately to challenges.

Church *et al.*<sup>111</sup> provided a brief, single-session exposure therapy entitled emotional freedom techniques (EFT), comprising certain components of CBT and exposure therapy combined with a somatic component, having therapists or participants tap their fingers on prescribed acupuncture points. Those in the control group received no treatment.

Champion and Collins<sup>110</sup> provided a theory-based [AIDS Risk Reduction Model (ARRM)<sup>209</sup>] CBT intervention designed to reduce risk-taking behaviour – Project Image (PI). PI is described as 'grounded in knowledge of the target population's behaviour and culture . . . Emphasis is placed upon understanding and dealing with male-female power relationships in African-and Mexican American culture'<sup>110</sup> (p. 144). The intervention began with a physical examination (for STIs, etc.) followed by an enhanced counselling session (addressing adherence to medication, other treatments, sexual activity, etc.). Intervention participants were then offered two workshop sessions, 1 week apart, followed by group work and further individual counselling. The workshops and group work described have a strong psychoeducational component and a tailored skills component. Control group participants received the physical examination, abuse and enhanced clinical counselling at baseline, plus a follow-up physical examination at the end of the intervention.

Shirk *et al.*<sup>117</sup> evaluated a modified CBT intervention (m-CBT) that combined CBT elements (mood monitoring, cognitive restructuring, relaxation training, activity scheduling and interpersonal problem-solving), with mindfulness-based strategies, such as taking a non-judgemental stance of observing, describing and tolerating trauma-related emotions and cognitions (Linehan *et al.*<sup>689</sup>). The effectiveness of m-CBT was assessed in relation to usual care (UC), in which therapists agreed to use, with control group participants, the treatment strategies and procedures that they regularly used and believed to be effective in their clinical practice).

The EMDR intervention in the Scheck *et al.*<sup>121</sup> study consisted of two treatment sessions of 1 hour, 1 week apart. EMDR followed the standard protocol devised by Shapiro.<sup>690</sup> In this study,<sup>121</sup> EMDR was compared with an active listening intervention.

In Farkas *et al.*<sup>120</sup> study, EMDR was combined with motivation-adaptive skills-trauma resolution (MASTR), aimed at addressing conduct problems (Greenwald<sup>691</sup>), motivational interviewing and a range of cognitive-behavioural training and coping skills development. MASTR is a trauma-focused treatment package that was developed for use with adolescents with conduct problems, which 'addresses treatment obstacles by establishing sense of safety within therapy, encouraging clients to be the agents of their change, improving motivation and guiding them towards progressive successes to their goals'<sup>120</sup> (p. 128).

Participants received 12 weekly sessions of 1.5 hours of MASTR/EMDR therapy. They also continued with other forms of individual (14%), family (14%) and group therapy (29%). In this study of EMDR, Farkas *et al.*<sup>120</sup> used a 'routine care' control group in which participants were exposed to a variety of alternative therapies.

Jensen *et al.*<sup>112</sup> described the TF-CBT programme that they use as a 'trauma specific treatment consisting of psychoeducation, learning relaxation skills, affective modulation skills, cognitive coping skills, working through the TN, cognitive processing, in vivo mastery of trauma reminders, and enhancing safety and future developments, coupled with the parental component'<sup>112</sup> (p. 6). The parental component looked to improve parenting skills and was also used to demonstrate for the parent each treatment component that was provided to the child. Those in the control group received 'the treatment they (TAU Therapists) considered most suitable in each individual case'<sup>112</sup> (p. 6). Almost half of the TAU therapists described their theoretical orientation as psychodynamic, 30% as cognitive behavioural, and around 25% as family/systemic (percentages rounded up). In 35 of the 52 completed TAU cases, parents were involved in some way in more than three sessions of the child's therapy.

## Comparisons

### *Number and duration of treatments*

The IY or IY-based interventions used in the studies by Rushton *et al.*<sup>116</sup> and Linares *et al.*<sup>114,115</sup> were delivered in 12 weekly sessions of 2 hours.

Church *et al.*<sup>111</sup> provided one, 2-hour, single session of brief EFT.

The intervention described by Champion *et al.*<sup>110</sup> comprised one 'extensive' individual session for physical examination and a semistructured, one-on-one interview/enhanced counselling at the outset (1.5–2 hours), followed by two workshop sessions of between 3 and 4 hours, a follow-up visit (for screening, pregnancy testing and STI treatment, if necessary) and three to five sessions of support group work followed by two or more individual sessions.

The intervention evaluated by Shirk *et al.*<sup>117</sup> was designed to provide 12 weekly sessions to be delivered over a 16-week period but adolescents could continue with treatment beyond the 16-week study assessment. The same was true for the TAU group.

The TF-CBT intervention in Jensen *et al.*<sup>112,113</sup> comprised 12–15 individual sessions.

In Scheck *et al.*,<sup>121</sup> EMDR was delivered in two sessions, 1 week apart, and in the Farkas *et al.*<sup>120</sup> study it was provided in 12 weekly sessions (duration unspecified).

Where relevant, the number and duration of comparison treatments was similar to those of the experimental intervention.

## *Outcomes and measures used in studies of cognitive-behavioural therapy for children who have experienced different types of maltreatment*

### **Post-traumatic stress disorder**

Jensen *et al.*<sup>112,113</sup> used two measures of PTSD. The first was the CPSS,<sup>286</sup> a self-report questionnaire developed for children aged 10–18 years, which examines post-traumatic stress symptomatology described in the DSM-IV (criterion B, re-experience; criterion C, avoidance; and criterion D, hyperarousal).<sup>692</sup> The second was the Clinician-Administered PTSD Scale for Children and Adolescents, a structured clinical interview that assesses the frequency and intensity of the 17 DSM-IV-defined PTSD symptoms.<sup>304,305</sup>

Scheck *et al.*<sup>121</sup> and Church *et al.*<sup>111</sup> assessed the impact of intervention using the Impact of Events Scale (IES<sup>279</sup>). Both used the total score; Church *et al.*<sup>111</sup> also report outcomes for the memories and avoidance subscales.

Farkas *et al.*<sup>120</sup> used two measures of PTSD. First, the relevant module of the Diagnostic Interview Schedule for Children (DISC<sup>693</sup>) and, second, the TSCC,<sup>325,328</sup> to assess trauma-related difficulties.

Scheck *et al.*<sup>121</sup> also used the Penn Inventory for Posttraumatic Stress Disorder (PENN<sup>334</sup>), a self-report scale that measures symptom severity.

## Depression

Jensen *et al.*<sup>112,113</sup> used the Mood and Feelings Questionnaire<sup>694</sup> to assess depressive symptoms, as this measures the full range of DSM-IV diagnostic criteria for depressive disorders, and includes items 'reflecting common affective, cognitive, somatic features of childhood depression' (p. 361).

Shirk *et al.*<sup>117</sup> and Scheck *et al.*<sup>121</sup> used, respectively, the Beck Depression Inventory-Second Edition (BDI-II<sup>320</sup>) and the BDI<sup>332</sup> to assess the impact of EMDR on depression.

## Anxiety

Scheck *et al.*<sup>121</sup> used the state subscale of the State-Trait Anxiety Inventory (STAI<sup>333</sup>) to measure the impact of EMDR on anxiety.

Jensen *et al.*<sup>112,113</sup> used the Screen for Child Anxiety Related Disorders (SCARED)<sup>307</sup> to measure anxiety symptoms. SCARED is a self-report questionnaire with 41 items covering five specific anxiety disorders: panic disorder or significant somatic symptoms, generalised anxiety disorder, separation anxiety disorder, social anxiety disorder and school avoidance.

## Behaviour

Rushton *et al.*<sup>116</sup> and Jensen *et al.*<sup>112,113</sup> used the SDQ.<sup>308</sup> Jensen *et al.*<sup>112,113</sup> also used visual analogue scales to assess how far an individual child progressed on emotional distress, misbehaviour and attachment. Rushton *et al.*<sup>116</sup> relied on adopter report, whereas Jensen *et al.*<sup>112,113</sup> used YSR.

In Linares 2012,<sup>115</sup> foster parents completed a six-item measure compiled from the CBCL 5-18 aggression subscale,<sup>294</sup> and classroom teachers completed a seven-item measure compiled from the 38-item Sutter-Eyberg Student Behaviour Inventory-Revised (SESBI-R<sup>311</sup>).

The intervention evaluated in Linares 2006<sup>114</sup> was designed to reduce externalising behaviour, and its effectiveness was assessed using three measures, and drawing on foster parent-report and biological parent-report; the CBCL,<sup>294,309</sup> the Eyberg Child Behavior Inventory-Revised<sup>310</sup> and the SESBI-R.<sup>311</sup>

Farkas *et al.*<sup>120</sup> used the parent version of the CBCL,<sup>269,294</sup> alongside modules of the DISC to measure conduct disorder (CD) and oppositional defiant disorder.

## Risky behaviour

In line with the aim of the intervention, Champion and Collins<sup>110</sup> assessed new incidents of STI as a dichotomous variable (yes, no) at off-site, problem or scheduled follow-up visit at 6 and 21 months.

## Self-control

Linares 2012<sup>115</sup> used a 51-item measure of self-control, developed for this study and administered to foster parent and teacher using parallel versions.

## Self-esteem

Scheck *et al.*<sup>121</sup> examined the impact of EMDR on adolescents' self-concept, using the Tennessee Self-Concept Scale.<sup>335</sup>

## Parent–child relationships

Rushton *et al.*<sup>116</sup> used the Expressions of Feeling Questionnaire<sup>315</sup> to capture the nature and progress of the child's relationship with the new carers.

## *Risk of bias: randomised controlled trials of cognitive–behavioural therapy for children who have experienced different types of maltreatment*

### Sequence generation

We judged three<sup>112,116,121</sup> studies to be at low risk of bias. In the Rushton *et al.*,<sup>116</sup> study adoptive parents were randomised independently by the clinical trials unit using permuted block randomisation. Jensen *et al.*<sup>112,113</sup> state that a computer-generated randomised block procedure was used, and Scheck *et al.*<sup>121</sup> used envelopes filled with papers labelled either EMDR or active listening (AL). These were then shuffled before being numbered 1 through 100. Envelopes were opened (consecutively) during interviews with participants, which took place after the collection of baseline data, thereby identifying to which therapy the participant was allocated.

Linares 2012<sup>115</sup> state that children were consecutively identified, assessed and randomly assigned within agencies, but no further information was provided on sequence generation or allocation concealment.

The studies by Champion and Collins,<sup>110</sup> Church *et al.*,<sup>111</sup> Linares 2006,<sup>114</sup> Farkas *et al.*<sup>120</sup> and Shirk *et al.*<sup>117</sup> provide no information on sequence generation and were judged to be of unclear risk of bias.

### Allocation concealment

None of the RCTs included provided adequate information on allocation concealment, although Rushton *et al.*<sup>116</sup> used a clinical trials unit to randomise participants, so all were judged as being of unclear risk of bias. The remaining eight<sup>110–112,114,115,117,120,121</sup> studies provide no information on allocation concealment and were therefore judged unclear risk of bias.

### Blinding of participants and personnel

We judged all studies<sup>110–112,115–117,120,121</sup> as being of high risk of bias because no participant or personnel were blinded.

### Blinding of outcome assessors

Rushton *et al.*<sup>116</sup> make clear that blinding at follow-up interviews was not possible because involvement in the treatment was the focus of questions. It was therefore assessed as high risk.

Five<sup>110–112,114,115</sup> studies were assessed as low risk. In both studies by Linares *et al.*,<sup>114,115</sup> the authors state that intervention and assessment teams were assembled to keep interviewers blind to group assignment. Church *et al.*<sup>111</sup> state that data were scored off-site and blind to the statistician. Champion and Collins<sup>110</sup> state that group status was revealed only at the end of follow-up interviews.

Jensen *et al.*<sup>112,113</sup> state that the assessments were computer assisted and conducted by an independent clinician who was blinded to the treatment conditions.

Shirk *et al.*<sup>117</sup> state that post-treatment assessments were made by an independent evaluator, but the depression measure used (BDI) relies on self-completion, and so the study was assessed as being of unclear risk of bias.

In both of the EMDR studies<sup>120,121</sup> the authors state that assessors were blind, but the measures used were largely self- and parent-report, so we judged this as being of high risk of bias.

### Incomplete outcome data

There were no missing data in the studies by Church *et al.*,<sup>111</sup> Rushton *et al.*<sup>116</sup> or Linares 2012,<sup>115</sup> which were therefore judged to be of low risk of bias. Linares 2006<sup>114</sup> suffered attrition but reasons for attrition were largely the same (moved, discharged), although more parents in the intervention group refused to provide data post treatment and at follow-up than in the usual services group (eight vs. one). The authors also analysed the data on ITT principles and, overall, we judged the study<sup>114</sup> to be of low risk of bias. Attrition in the Jensen *et al.*<sup>112,113</sup> study was similar across the two arms, and there were no significant differences between the retention group and the attrition group, other than that the attrition group was significantly older than the retention group and the attrition group reported being exposed to significantly higher numbers of different traumatic events. The authors explore reasons for attrition and they are methodical in their analyses, undertaking both ITT analyses and per-protocol analyses, and completed case analyses (defined as those participants who completed at least six sessions). Overall we judged the Jensen *et al.*<sup>112,113</sup> study to be of low risk of bias.

In the Champion *et al.*<sup>110</sup> study, data are presented for only for 318 out of 409 women at 6-month follow-up (78% unadjusted) and 333 women at 12-month follow-up (81% unadjusted). Given the intervention and the participants, this level of attrition is impressively low, but it was deemed sufficiently large to warrant a judgement of high risk of bias.

Farkas *et al.*<sup>120</sup> was also judged high risk of bias, primarily on the grounds of significant attrition. Of 65 adolescents randomised in this study, 15 dropped out by post treatment and a further eight by the 3 months' follow-up. More young people dropped out of the experimental group than control group during treatment (10/33 vs. 5/32); of these, 2 of the 10 dropped out for reasons related to the treatment (refused to discuss their traumas) and two because they ceased to be in the custody of YPS and their families stopped their participation. All but one of the remaining participants dropped out because they 'changed their minds'.

In the Scheck *et al.*<sup>121</sup> study there was considerable attrition post treatment that was not accounted for in the results. We judged this to be high.

Data for 7 out of 43 randomised participants were missing at follow-up in the Shirk *et al.*<sup>117</sup> study [four in m-CBT and three in UC]. Investigation led the authors to conclude that no systematic bias had occurred in attrition, and they conducted their analyses on ITT principles. We therefore assessed this study as low risk of bias.

### Selective outcome reporting

Three<sup>110,112,116</sup> studies were registered with ClinicalTrials.gov: Champion and Collins<sup>110</sup> (NCT01387646); Rushton *et al.*<sup>116</sup> (NCT04448012) and Jensen *et al.*<sup>112,113</sup> (NCT00635752).

Champion and Collins<sup>110</sup> report findings for the primary outcome (STIs at 12 months) but, in the paper identified for this review, have not yet reported on secondary outcomes (substance use, experience of abuse and frequency of unintended pregnancies). Overall, we judged this as 'unclear' risk of bias. The studies by Rushton *et al.*<sup>116</sup> and Jensen *et al.*<sup>112,113</sup> report on all primary and secondary outcomes and were therefore judged as 'low' risk of bias.

In general, the remaining studies appeared to indicate that they were reporting on all predetermined outcomes. However, in the absence of study protocols it is difficult to assess the risk of selective outcome reporting. Therefore, all studies were assessed as 'unclear' risk of bias.

### Other sources of bias

None were identified.

### Results: cognitive-behavioural therapy for children who have experienced different types of maltreatment

No meta-analyses were possible for data from these studies,<sup>110–112,114–117,120,121</sup> the results of which are therefore reported in narrative form.

#### Post-traumatic stress disorder

Jensen *et al.*<sup>112,113</sup> report a mean effect (ITT analyses) of treatment condition on child PTSD (measured by the CPSS) at time 3 (T3), some 7.5 months after treatment began: children in the TF-CBT group scored significantly lower at T3 [mean ( $M$ ) = 11.34, SD 10.52] than participants in the comparison group [ $M$  = 16.87, SD 11.49;  $d$  = 0.51,  $t(154)$  = 3.30;  $p$  = 0.001; with Holm adjustment  $p$  = 0.006]. The authors also report a significant time by group interaction effect ( $F(2)$  = 5.01;  $p$  = 0.007; with Holm adjustment  $p$  = 0.037). Both groups showed reductions in PTSD from pre- to post-therapy assessments, and a main effect of treatment condition on functional impairment such that trauma influenced daily functions significantly less (indicated by higher scores) in the TF-CBT group ( $M$  = 10.33, SD 1.99) than in the TAU group ( $M$  = 9.22, SD 2.09) at the end of therapy [ $d$  = -0.55,  $t(154)$  = -3.32;  $p$  = 0.001; with Holm adjustment  $p$  = 0.006]. They also report a main effect of treatment on time in both groups. Analyses of completed cases yielded similar results.

Statistically significant between-group differences were found by Church *et al.*<sup>111</sup> in favour of the intervention (EFT). One month after pre-test, participants who had received the intervention demonstrated a statistically significant decrease on both the total score for the IES<sup>279</sup> and the two subscales (memories and avoidance). All participants had scored in the clinical range at baseline, and control participants remained in the 'moderate clinical' range post test, in contrast to those in the intervention group, none of whom was in the clinical range post test.

Analyses of PENN post-test scores in the Scheck *et al.*<sup>121</sup> study indicated a significant difference in favour of the EMDR group [ $F(1,55)$  = 6.03;  $p$  = 0.02]. A similar result was found for the IES [ $F(1,57)$  = 9.93;  $p$  = 0.002].

Post treatment, Farkas *et al.*<sup>120</sup> reported significant improvements in the experimental group (MASTR/EMDR) compared with control group participants for PTSD symptoms as measured by DISC [ $F(1,40)$  = 6.05;  $p$  = 0.05]. Significant improvements were also reported for the TSCC<sup>325</sup> (trauma-related difficulties) on each of six subscales: stress, anger, depression, dissociation, anxiety and sexual concerns.<sup>120</sup>

#### Depression

Jensen *et al.*<sup>112,113</sup> found a main effect of treatment condition on children's depressive symptoms, with participants in the TF-CBT group ( $M$  = 14.40, SD 13.67) scoring significantly lower than those in the TAU condition ( $M$  = 22.67, SD 16.24) at T3 [ $d$  = 0.54,  $t(154)$  = 2.79;  $p$  = 0.006; with Holm adjustment  $p$  = 0.018].

Scheck *et al.*<sup>121</sup> reported a significant effect for EMDR on depression [ $F(1,58)$  = 5.39;  $p$  = 0.024].

Shirk *et al.*<sup>117</sup> reported significant reductions over time in BDI depression scores but no between-group differences.

#### Anxiety

Jensen *et al.*<sup>112,113</sup> found no main effect of treatment condition on children's anxiety symptoms. Participants in the TF-CBT group [ $d$  = 0.30,  $t(150)$  = 1.47;  $p$  = 0.114; with Holm correction  $p$  = 0.114]. Analyses of the SCARED subscales found a main effect only for generalised anxiety disorder. Completer analyses produced similar results.

Scheck *et al.*<sup>121</sup> reported a significant effect for EMDR on STATE anxiety [ $F(1,57)$  = 4.89;  $p$  = 0.031].

#### Behaviour

Rushton *et al.*<sup>116</sup> found no significant differences in child problems between the two groups at 6 months' follow-up, although a significant difference ( $p$  < 0.007) was found for 'satisfaction with parenting' in favour of the intervention group (effect size  $d$  = 0.7).

Jensen *et al.*<sup>112,113</sup> found a main effect of treatment condition on the SDQ (interpreted as general mental health problems). Participants in the TF-CBT group had significantly lower scores ( $M = 11.95$ ,  $SD = 6.51$ ) than those in the TAU group ( $M = 14.54$ ,  $SD = 6.12$ ) at the end of therapy [ $d = 0.45$ ,  $t(152) = 2.46$ ;  $p = 0.015$ ; with Holm adjustment  $p = 0.030$ ]. Completer analyses produced similar results.

In Linares 2012,<sup>115</sup> the authors report that physical aggression decreased over time for both groups (IY, UC) but there were no between-group differences. After adjusting for gender, ethnicity, initial diagnosis of attention deficit hyperactivity disorder and study site, children in the UC group showed more improvement than those in the IY training group on foster parent reports of physical aggression. Rates of improvement were highest among children in the UC condition. Teachers reported no differences.

In Linares 2006,<sup>114</sup> intervention children were reported as having lower CBC externalising  $T$  scores [ $F(1,97) = 2.71$ ;  $p = 0.10$ ] and Eyberg Child Behavior Inventory (ECBI) total  $T$  score [ $F(1,94) = 2.30$ ;  $p = 0.13$ ] at follow-up but these were not statistically significant.

Farkas *et al.*<sup>120</sup> reported significant differences on the CBCL<sup>260</sup> in favour of MASTR/EMDR for externalising behaviour [ $F(1,40) = 9.77$ ;  $p = 0.05$ ], but not for internalising behaviour.

### Risky behaviour

Champion 2012<sup>110</sup> reported a significant impact of the intervention, with those who had received the theory-based (ARRM<sup>209</sup>) CBT intervention experiencing fewer infections at intervals of 0–6 months (0% vs. 6.6%;  $p = 0.001$ ), 6–12 months (3.6% vs. 7.8%;  $p = 0.005$ , 95% CI 0.001 to 0.386) and 0–12 months (4.8% vs. 13.2%;  $p = 0.002$ , 95% CI 0.002 to 0.531).

### Self-control

Linares 2012<sup>115</sup> report a main effect in relation to foster care reports of higher levels, and steeper rates of improvement in relation to self-control, in favour of the control group (UC).

### Self-esteem

Scheck *et al.*<sup>121</sup> reported a significant effect of EMDR for the TSCC<sup>335</sup> [ $F(1,57) = 4.573$ ;  $p = 0.04$ ].

### Parent–child relationships

Emotional Freedom Questionnaire (EFQ) scores among control children in the Rushton *et al.* study<sup>116</sup> remained unchanged, whereas they were more positive at all time points for the intervention group; however, these were not significant when controlling for baseline scores.

Although not directly relevant, Linares *et al.*<sup>114</sup> reported a significant difference between the intervention and UC group on coparenting flexibility [ $F(1,104) = 4.14$ ;  $p < 0.05$ ], coparenting problem-solving [ $F(1,102) = 6.38$ ,  $p < 0.01$ ] and coparenting total [ $F(1,97) = 5.13$ ;  $p < 0.05$ ]. This was a key aim of the study<sup>114</sup> and was likely to have a positive impact on the experience of children in foster care.

## Effectiveness of cognitive–behavioural therapy for children who have experienced different types of maltreatment

### Summary

Four<sup>112,114–116</sup> of the nine studies that we identified focused on helping caregivers (including birth parents, adoptive or foster parents) to address the consequences of maltreatment, by enhancing their knowledge and skills and providing support. Unsurprisingly, most of these studies provided services to carers of children aged  $< 10$  years, but one<sup>112</sup> study recruited those caring for older children. The studies compared modifications of the IY parenting programme with either TAU<sup>114</sup> or, in the only UK study,<sup>116</sup> with an educational approach.

The other five<sup>110,111,117,120,121</sup> studies provided services directly to maltreated young people aged > 12 years. They included two<sup>120,121</sup> studies that compared EMDR with alternative treatments (as usual), and three<sup>110,111,117</sup> studies comparing modified forms of CBT or CBT 'plus' with either no treatment, UC or a modified form of UC.

Overall, within the range of different studies included in this section, there was some reduction in symptoms PTSD and depression with treatment. Results regarding improvement in children's behaviour vary between the studies. One<sup>115</sup> study targeted physical aggression and self-control in foster children, and found no differences between children whose foster parents had participated in the IY programme and those who had received UC. Indeed, when appropriate adjustments were made, those in the control group did rather better than those in the experimental group. No differences were found between the behaviour of children whose adoptive parents received a CBT parenting programme based on IY, although these parents were significantly more satisfied with parenting and were less likely to use negative parenting approaches than those in the control group.<sup>116</sup>

Conflicts between foster parents and biological parents contribute to placement instability, and work against reunification. One<sup>114</sup> study examined an intervention designed to improve relationships between parents, foster parents and children, and enhance the consistency of parenting across the two homes. The results of this study were very positive, and have relevance to the UK context.

One<sup>110</sup> study, focusing specifically on risky behaviour by girls, showed reduction in rates of STIs.

It is difficult to draw conclusions about EMDR, as in one<sup>120</sup> study this was a very different intervention to the standard protocol, and it was compared with another treatment arm that was quite intensive.<sup>120</sup>

### Completeness and applicability

Only one study was conducted in the UK,<sup>116</sup> and one study was conducted in Norway.<sup>112</sup> Both studies<sup>112,116</sup> focused on children in a family context, and aimed to improve outcomes for children who had experienced very serious maltreatment. In the UK study, participants were recruited from social welfare agencies that were responsible for supporting adoptive parents. In Norway, the settings were trauma clinics, that is, routine community settings.

Webster-Stratton's IY programme has been endorsed as an evidence-based parenting programme in the UK, and the applications evaluated in three<sup>114-116</sup> of these studies have relevance to the needs of children in foster and adoptive care in the UK. The application of this programme to some of the challenges of fostering maltreated children is highly relevant, but the findings are mixed and the evidence base is limited.

### Quality of the evidence

Most studies are small and there are few of them. Their heterogeneity (in terms of interventions, participants and outcome measures) prevented us from combining data in meta-analyses, and therefore the results from this part of the review should be treated with caution.

Overall, the quality of the evidence relating to studies of CBT for children who have experienced a range of forms of maltreatment is moderate, largely because of the impact of lack of information, which, if available, might demonstrate enhanced quality – or the reverse.

### Economic evidence

One economic evaluation,<sup>613</sup> carried out in the UK, explored the cost-effectiveness of two parenting programmes, including a cognitive-behavioural approach, for adoptive parents. The study<sup>613</sup> used data from the Rushton *et al.*<sup>116</sup> RCT, described above, and compared the two parenting programmes (a cognitive-behavioural approach and an educational approach), which were combined due to small sample sizes ( $n = 19$ ) to services as usual ( $n = 18$ ). The intervention was delivered to adoptive parents of

children who were adopted at between the ages of 3 and 8 years, who were screened for serious behavioural problems early in the placement.

Cost-effectiveness was explored in terms of the primary outcome measure of the study, the SDQ, and, additionally, in terms of parent satisfaction, shown to be more effective in the parenting programmes than service as usual. Resource use included health, social care and specialist educational services, as well as the use of the parenting programmes, which were costed using nationally applicable unit costs. Costs were expressed in 2006–7 pounds sterling (£). No discounting was applied to costs and effects because of the short time horizon of the study, with follow-ups carried out post treatment (approximately 12 weeks after study entry) and 6 months post treatment (approximately 9 months after study entry).

At the 6-month post-treatment follow-up, costs were significantly higher for the parenting programmes and there was no significant difference between the two groups on the SDQ. However, parental satisfaction was significantly higher for the combined parenting programme group. Thus, in terms of the primary clinical outcome, service as usual was found to dominate the parenting programmes (less expensive and no difference in outcomes), whereas for parental satisfaction, the authors report an ICER of £337 per unit improvement in satisfaction. The authors conclude that the parenting programmes may be cost-effective in enhancing parental satisfaction. However, the study<sup>613</sup> was severely limited in a number of important ways, which would caution against such a conclusion. In particular, sample sizes were extremely small and thus the results are unlikely to be adequately powered. In addition, the significant results were based on the only secondary outcome measure to show a significant difference in favour of the intervention, suggestive of a post hoc analysis, and no exploration of uncertainty was undertaken.

## Economic analysis: cognitive-behavioural therapy

Given the effectiveness evidence presented showing promising benefits of CBT for sexually abused children, it was thought appropriate for consideration to be given to the development of a decision-analytic model to more fully explore the cost-effectiveness of CBT in this population. As described above, however, only one relevant economic evaluation of CBT for sexually abused children was located, a decision model based on Australian data with cost data limited to the cost of CBT only, showing cost-effectiveness advantages for CBT. One further economic evaluation of CBT, focusing on children who have experienced different types of maltreatment, was located, but this trial-based study was limited by small sample sizes and showed no economic advantage for CBT in terms of the primary clinical outcome. In the absence of any other better quality UK-based data, a decision model was ruled out.

Instead, we conducted cost-effectiveness analyses of CBT for sexually abused children using PTSD, anxiety and depression outcomes combined with intervention costs, calculated as described in *Chapter 2*. For PTSD and anxiety, we used SMDs. For depression we used CDI scores,<sup>80</sup> reported in five studies. Given the sensitivity of the effectiveness results for some outcomes to the use of change scores, suggesting baseline imbalance, outcome data were calculated using random-effects meta-analyses for mean change from baseline and assuming a correlation between baseline and follow-up of 0.5. Correlation was varied between 0 and 1 in sensitivity analysis but this did not alter the results, so only the results for a correlation of 0.5 are reported. All results are reported for outcomes post treatment (the time point with the greatest amount of data) and at 12-month follow-up (the time point at which the advantage for CBT is the smallest, thus a more conservative approach). Analyses were repeated for all maltreatment types, but this did not alter the results so they are not reported here.

## Results

*Table 11* reports the cost and outcome parameters and the deterministic and probabilistic ICERs for SMD and CDI outcomes. ICERs are the additional cost per unit change in SMD, for PTSD and anxiety, and the additional cost per unit change in CDI score, for depression. In all analyses, the CBT group are associated with higher costs and better effects than the control group. In addition, effectiveness advantages for CBT

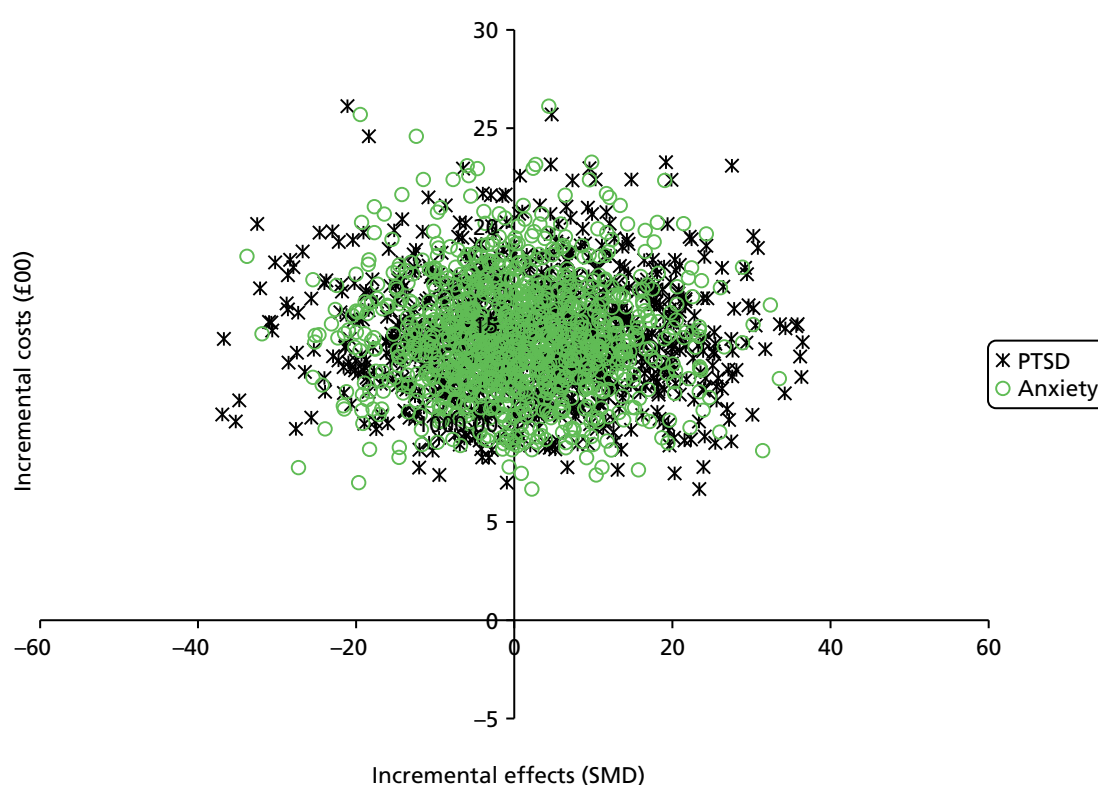
**TABLE 11** Cost and outcome parameters and cost-effectiveness results

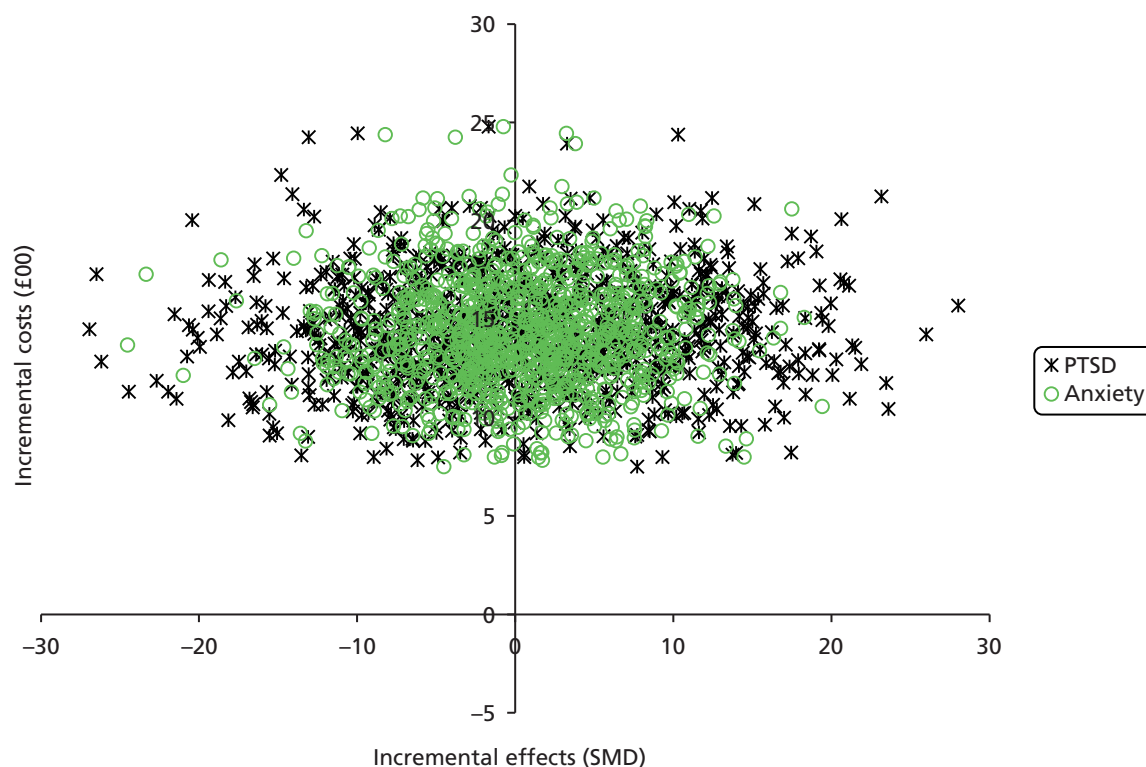
Cost and outcome parameters			ICER (£)	
			Deterministic	Probabilistic
Weighted average cost of CBT (£)		Mean <sup>a</sup> (SD)		
		1433 (320)		
SMD for anxiety outcomes	Post treatment	−0.188 (0.180)	7623	3816
	12-month follow-up	−0.180 (0.560)	7961	4327
SMD for PTSD outcomes	Post treatment	−0.508 (0.263)	2821	752
	12-month follow-up	−0.310 (0.560)	4623	3981
CDI change score differences	Post treatment <sup>a</sup>	−1.844 (1.285)	777	795
	12-month follow-up <sup>a</sup>	−0.208 (1.342)	6890	6329

a To aid interpretation of the cost-effectiveness results, all analyses use absolute values, as negative values favour CBT in each case.

compared with the control group are always greater post treatment than at 12-month follow-up, resulting in larger ICERs at 12-month follow-up (larger expenditure needed to generate a unit improvement in outcome).

For the SMD outcomes, *Figures 9 and 10* show the cost-effectiveness plane for both PTSD and anxiety outcomes, post treatment and at 12-month follow-up, respectively. The cost-effectiveness plane is used to illustrate differences in costs and effects between different strategies, in this case CBT and the control. It consists of four quadrants, for which the x-axis represents the additional level of effectiveness generated by one intervention compared with another and the y-axis represents the additional cost of one

**FIGURE 9** Cost-effectiveness plane for PTSD and anxiety outcomes post treatment.



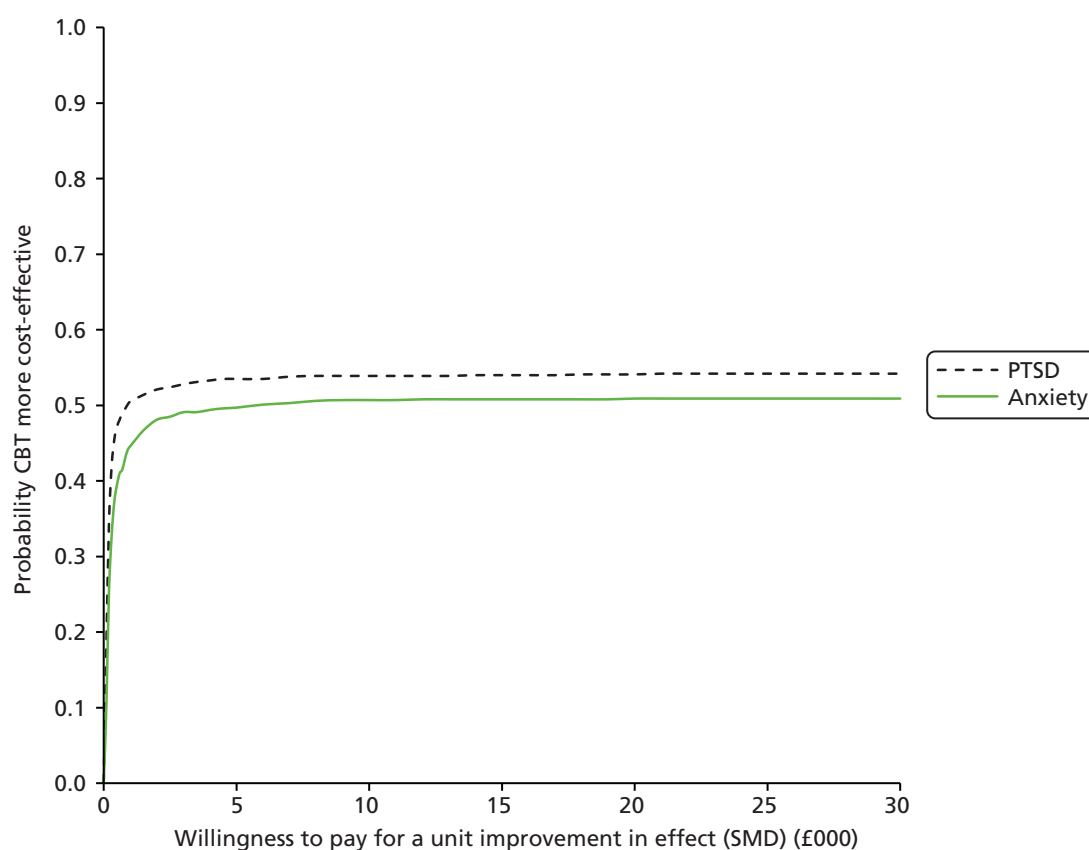
**FIGURE 10** Cost-effectiveness plane for PTSD and anxiety outcomes at 12-month follow-up.

intervention compared with another. The scatter points on the cost-effectiveness plane represent multiple cost and effectiveness pairs generated by the probabilistic sensitivity analysis, but for ease of interpretation, can be viewed as pairs of individuals, one receiving CBT and the other in the control group. Points that fall in the north-west quadrant represent the situation in which CBT is more expensive and less effective and thus dominated by the control group. For those in the south-east quadrant, CBT is more effective and less expensive and thus dominates the control. For those in the north-east quadrant, CBT is more effective but also more expensive, and, for the south-west, CBT is less effective but also less expensive; both of these quadrants involve a trade-off between costs and effects.

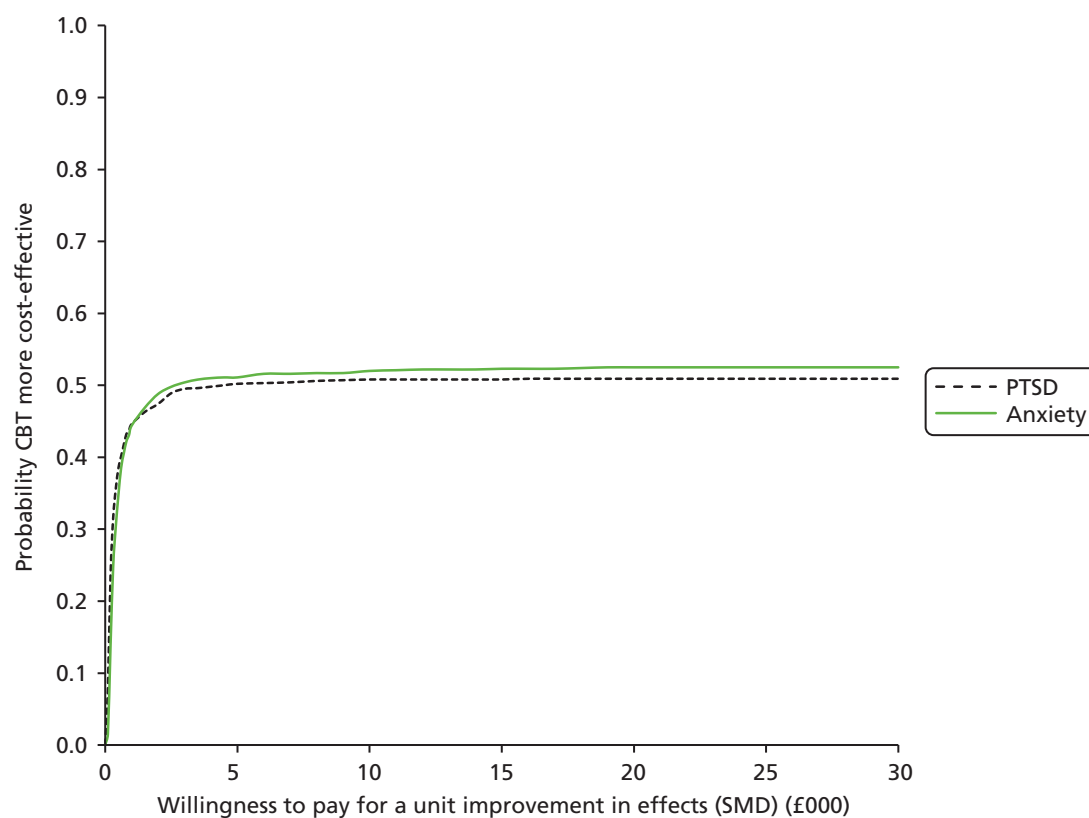
As only the cost of CBT was considered in the current analysis, all points fall above the x-axis (costs higher for the CBT group than the control group). In terms of effects, although the SMD results from the meta-analyses suggest advantages for CBT rather than the comparison, this advantage is no longer evident in the probabilistic analysis (involving assigning probability distributions to costs and effects, as outlined in *Chapter 2*). Instead, differences in effect are relatively equally distributed to both the right of the y-axis (effects better for CBT) and the left (effects better for control).

Associated uncertainty is displayed in the CEACs in *Figures 11 and 12*, which illustrates the probability that CBT is more cost-effective than the control, for different levels of willingness to pay for additional benefits. The CEACs suggest that the probability of CBT being more cost-effective than the control post treatment does not rise much above 50% for PTSD outcomes and remains below 50% for anxiety outcomes post treatment (see *Figure 11*). The results are similar at 12-month follow-up (see *Figure 12*).

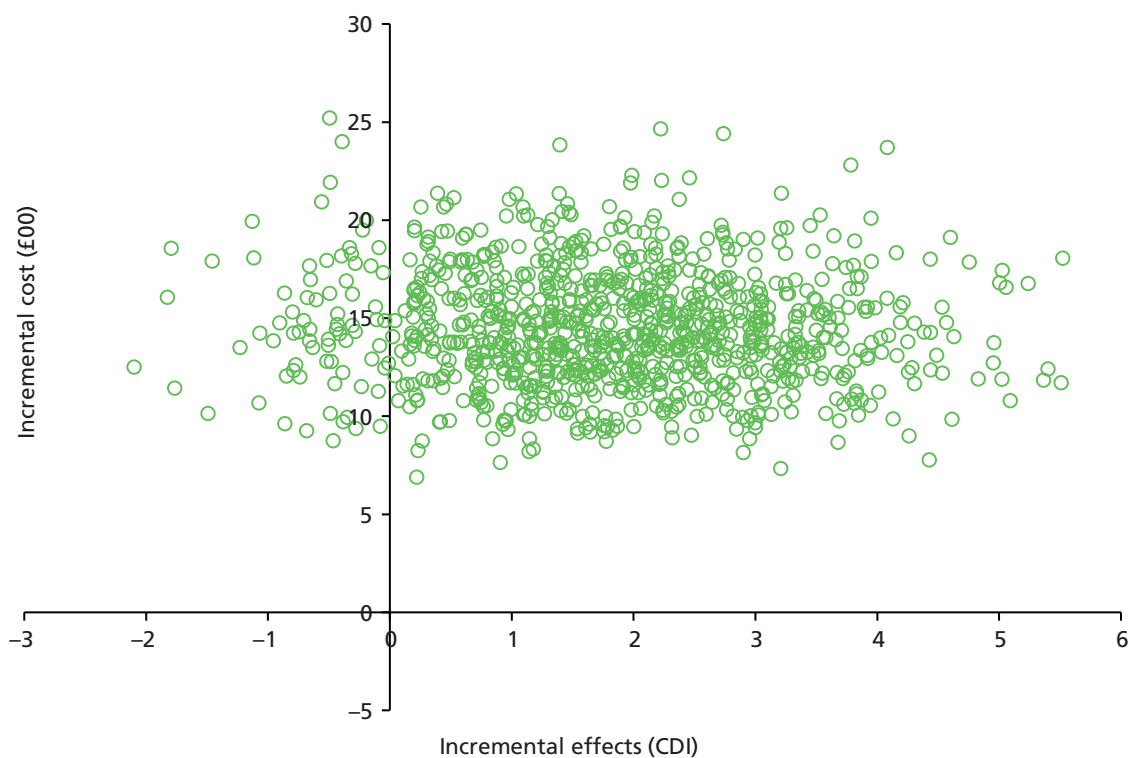
*Figures 13 and 14* show the cost-effectiveness plane for CDI outcomes post treatment and 12-month follow-up, respectively. Again, as only the cost of CBT was considered in the analysis, all points fall above the x-axis (incremental costs higher for the CBT group than the control group). In terms of effects, the results are similar at 12-month follow-up to those for SMD outcomes, showing no clear advantage for CBT compared with the control. The post-treatment results, however, suggest some effectiveness advantage for CBT, with a larger proportion of points falling to the right of the y-axis (effects better for CBT) than the left (effects better for control).



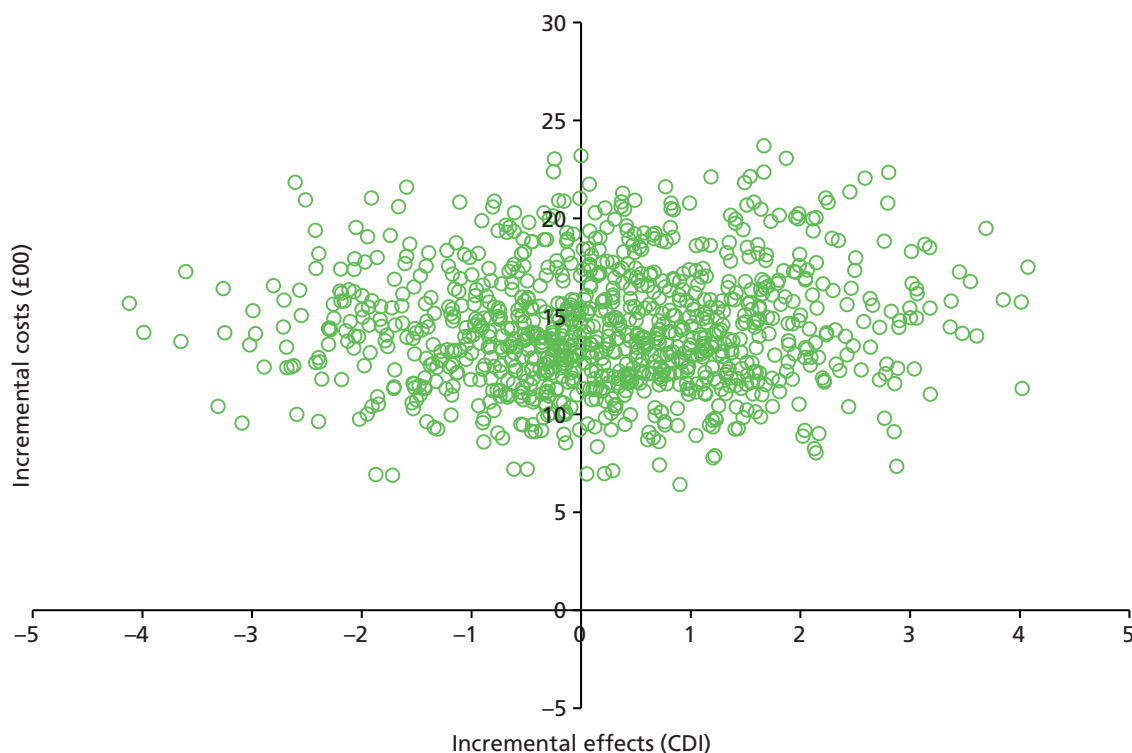
**FIGURE 11** Cost-effectiveness acceptability curves for PTSD and anxiety outcomes post treatment.



**FIGURE 12** Cost-effectiveness acceptability curves for PTSD and anxiety outcomes at 12-month follow-up.

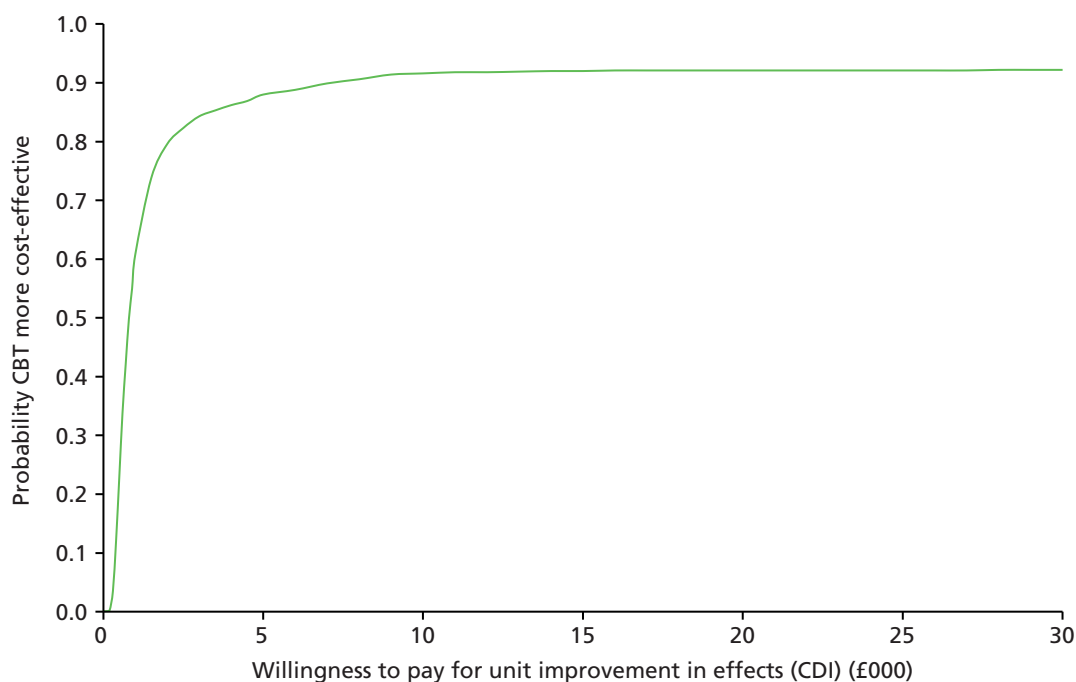


**FIGURE 13** Cost-effectiveness plane for CDI outcomes post treatment.

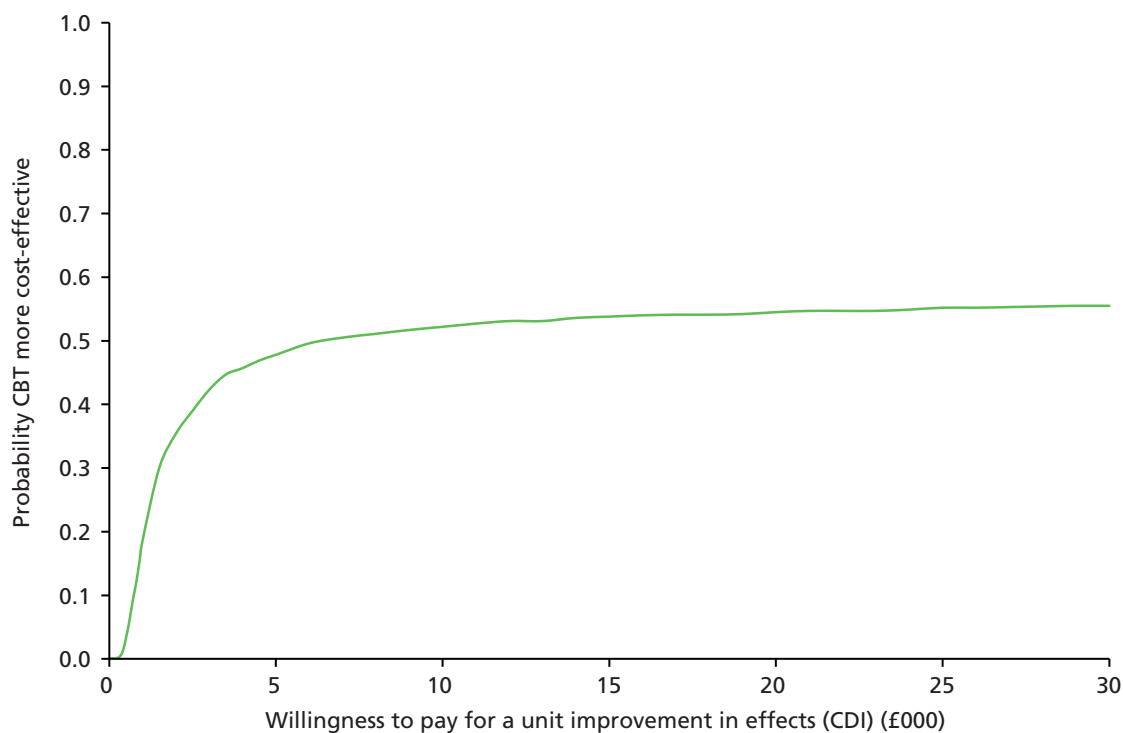


**FIGURE 14** Cost-effectiveness plane for CDI outcomes at 12-month follow-up.

Uncertainty is illustrated by the CEACs reported in *Figures 15* and *16* for post-treatment and follow-up outcomes, respectively. The post-treatment results suggest that the probability of CBT being more cost-effective than the control reaches approximately 90% for willingness-to-pay values of around  $\geq$  £5000. Using the 12-month follow-up data, however, the results are similar to those for SMD outcomes and do not rise much above 50%.



**FIGURE 15** Cost-effectiveness acceptability curve for CDI outcomes post treatment.



**FIGURE 16** Cost-effectiveness acceptability curves for CDI outcomes at 12-month follow-up.

## Relationship-based interventions

Studies covered in this section focus on interventions that seek to improve relationships between children and their parents (RBIs). They include those designed to promote secure child attachment and the positive outcomes associated with that, and parenting interventions designed to improve the quality of parenting of maltreating parents, thereby bringing about positive benefits to children who have already experienced maltreatment.

In total, we identified 15 controlled studies<sup>122–140</sup> that assessed the effectiveness of RBIs. The studies are grouped as follows:

- attachment-orientated interventions<sup>122–135</sup>
- PCIT<sup>136–138</sup>
- parenting interventions.<sup>139,140</sup>

Because of the imbalance of numbers, we are not dealing with each subset of interventions entirely separately, but, where appropriate, we group them for descriptive and reporting purposes. We do not comment on gender in this section, as, by definition, all RBIs address the relationship between parents and their children, irrespective of gender. Details of child gender, where reported, are available in *Chapter 3*.

### Description of studies

#### Study designs

The Becker-Weidman<sup>134,135</sup> study was a COS. The remaining studies<sup>122–133,136–140</sup> were randomised trials.

#### Location

All studies were conducted in the USA<sup>123–129,131–136,140</sup> except for Moss *et al.*<sup>130</sup> (Quebec, Canada), Hughes and Gottlieb<sup>139</sup> (Eastern Canada) and Thomas and Zimmer-Gembeck<sup>137,138</sup> (Australia).

#### Sample sizes

Controlled studies ranged from small to a moderately large sample size; the smallest sample size was 60 (with only 46 ultimately included in the analyses)<sup>125,126</sup> and the largest were 151<sup>137,138</sup> and 210.<sup>131</sup> See *Chapter 3* for further information.

#### Participants

#### Attachment-orientated interventions

**Age** Five of the attachment-orientated studies focused on infants up to 24 months of age. Infants in the Bernard *et al.*<sup>122</sup> study were aged between 1.7 and 21.4 months at enrolment (mean 10.1 months), and those in Dozier *et al.*<sup>125,126</sup> were aged 3.6–39.4 months [note: two papers report the results of this study: one<sup>125</sup> deals with the ‘first 60 children who completed the experimental or control intervention’ (p. 773) and reports on cortisol levels and behaviour problems; the second study<sup>126</sup> reports on ‘the first 46 children who completed the experimental or control intervention’ (p. 5) and reports on attachment behaviours]. In both Cicchetti trials,<sup>123,124</sup> infants had a mean age of just over 13 months. Spieker *et al.*<sup>131</sup> recruited mother–infant dyads, for which the infants were aged 10–24 months.

Four studies recruited older children.<sup>127–130,132,133</sup> Preschoolers in the Toth *et al.*<sup>133</sup> study had a mean age of 48.2 months (SD 6.88); in the Sprang<sup>132</sup> study the mean age was 42.5 months (SD 18.6 months); children in Lieberman 2005<sup>127–129</sup> were aged 3–5 years, and in the Moss *et al.*<sup>130</sup> study they were between 12 and 71 months.

In the Becker-Weidman<sup>134,135</sup> study, children’s ages ranged from 5 to 16 years.

**Referral** In the Dozier *et al.*<sup>125,126</sup> study, foster parents were referred at the time of initial infant placement (presumably by child welfare staff). Consent from both birth parents and foster parents was required. In the Bernard *et al.*<sup>122</sup> study parents were referred by agencies working with Child Protection Services. In the Sprang<sup>132</sup> study parents were referred for a relational intervention following a university-based assessment.

In Cicchetti 2006,<sup>123</sup> a recruitment liaison officer was retained in the Department of Human Services to identify all infants who were known to have been maltreated or who were living in maltreating families with their biological mothers. The same method was used in Cicchetti 2011,<sup>124</sup> Spieker *et al.*<sup>131</sup> and Toth *et al.*<sup>133</sup> Spieker *et al.*<sup>131</sup> used a liaison officer to identify infants of 'an appropriate age who had experienced a court-ordered placement that resulted in a change of primary caregiver with the prior seven weeks' (p. 5). Toth *et al.*<sup>133</sup> used a liaison officer to identify families with a preschool-aged child with a documented history of maltreatment.

Participants in the Lieberman *et al.*<sup>127–129</sup> study were referred to the study by paediatric providers, family resource programmes, child-care providers and child protection workers when there were clinical concerns about the child's behaviour. Those in the Moss *et al.*<sup>130</sup> study were referred by welfare or community services.

Becker-Weidman<sup>134,135</sup> used data from cases closed in 2001 or 2002 in which children had received a diagnosis of reactive attachment disorder and there was a significant history of physical abuse, emotional abuse or neglect, sexual abuse or institutional care. One group comprised 34 children who had received DDP and another group of 30 children who received UC.

### ***Parent–child interaction therapy interventions***

**Age** Children in the PCIT studies were aged 4–12 years in the study by Chaffin *et al.*<sup>136</sup> In the studies conducted by Thomas and Zimmer-Gembeck, all but three of the children in the 2011<sup>137</sup> study were age between 2.5 and 7 years, and in the 2012<sup>138</sup> study the authors report a mean age of 4.57 (SD 1.3) years.

**Referral** In the PCIT trials, referrals came from welfare workers in the Chaffin *et al.*<sup>136</sup> study and from a variety of sources, including self-referral in the Thomas and Zimmer-Gembeck<sup>137,138</sup> studies. Eligibility in the Thomas and Zimmer-Gembeck<sup>137,138</sup> studies depended on being assessed as at high risk for child maltreatment, using a semistructured interview designed to identify proximal risk factors such as high levels of parental distress, aggressive patterns of communication and use of inappropriate discipline strategies.

### ***Parent-focused interventions***

**Age** Children in the parenting-focused interventions were aged 3–8 years<sup>139</sup> and 3–6 years.<sup>140</sup>

**Referral** Eligible families were identified by child protection agency staff as in need of parent training in the Hughes and Gottlieb<sup>139</sup> study. Cases were not necessarily on the Child Abuse Registry. In the study by Valentino *et al.*,<sup>140</sup> families were recruited from the Department of Child Services, which provided families with information from flyers and from individual case workers.

## **Maltreatment**

### ***Attachment-orientated interventions***

In each of the attachment-focused studies, the intervention was directed at a mother–infant dyad. Five<sup>123,125,126,131,132</sup> studies focused on children in out-of-home placements as a result of maltreatment. The remaining five<sup>122,124,127–130,133</sup> studies focused on children living with their biological parents.

Dozier *et al.*<sup>125,126</sup> included young children newly placed in foster care. Apart from children placed at birth, these children would have experienced neglect or abuse prior to placement. In Sprang<sup>132</sup> the children were in foster care, having experienced 'severe maltreatment' (p. 82) with an attachment disorder that threatened

to disrupt the placement. Children in the study by Cicchetti 2006<sup>123</sup> were also in foster care as a result of maltreatment, with disorganised attachment. Spieker *et al.*<sup>131</sup> recruited toddlers who had experienced a recent, court-ordered placement and their caregivers. Children in foster care were participants in the COS.<sup>134,135</sup>

In Cicchetti 2011,<sup>124</sup> infants who were known to have been maltreated or who were living in maltreating families with their biological mothers were identified for recruitment. All forms of maltreatment were included. In the recruited sample, almost 72% of infants had directly experienced abuse and/or neglect during the first year of life: 83% of infants had been neglected and 69% had been emotionally maltreated. None of the infants had been sexually abused. Over half of the infants had experienced more than one type of maltreatment.

In Bernard *et al.*<sup>122</sup> the infants in were in families where there was a risk of out-of-home placement for a variety of reasons, including domestic violence, parental substance use, homelessness and child neglect.

In Moss *et al.*<sup>130</sup> the majority of primary caregivers (72%) had been reported for child neglect: 7% of primary caregivers were reported for physical abuse and 3% of primary caregivers for sexual abuse; 16% of children had been both physically abused and neglected, and 2% of children were both neglected and sexually abused.

Toth *et al.*<sup>133</sup> recruited families with a preschool aged child with a documented history of maltreatment. Almost 60% of the children had experienced more than one form of maltreatment; 21% had experienced neglect; and 14% had experienced emotional maltreatment. Two children had been sexually abused.

Lieberman *et al.*<sup>127–129</sup> recruited child–mother dyads where the child had been exposed to marital violence (confirmed by mother’s report on the Revised Conflict Tactics Scale<sup>398</sup>), when the father figure perpetrating the violence was no longer in the home and there were concerns about the child’s behaviour or mother’s parenting.

### ***Parent–child interaction therapy***

In the Chaffin *et al.*<sup>136</sup> study, children were referred for concerns about physical abuse. In both studies by Thomas and Zimmer-Gembeck,<sup>137,138</sup> families were referred for physical and emotional maltreatment or neglect. Children with a history of sexual abuse were excluded, as PCIT is contraindicated for this form of maltreatment. Parents could self-refer and were accepted if the pre-assessment interview revealed previous experience of a parenting intervention, a high risk of child maltreatment and high levels of child behaviour problems.

### ***Parent-focused interventions***

Mothers in both the Hughes and Gottlieb<sup>139</sup> study and the Valentino *et al.*<sup>140</sup> study were known to Child Protection Services for maltreatment.

## **Interventions and comparisons**

### ***Attachment-orientated interventions***

The included studies<sup>122,125,126,130,132</sup> covered four interventions.

**Attachment and Biobehavioral Catch-up** Dozier *et al.*,<sup>125,126</sup> Sprang<sup>132</sup> and Bernard *et al.*<sup>122</sup> assessed the effectiveness of ABC (see *Appendix 5*). In the Dozier *et al.*<sup>125,126</sup> study, parent trainers were professional social workers or psychologists with at least 5 years’ experience; in the Sprang<sup>132</sup> study, they were social workers, psychiatrists or psychiatric nurse practitioners. Bernard *et al.*<sup>122</sup> used parent trainers who had experience of children and strong interpersonal skills.

Dozier *et al.*<sup>125,126</sup> and Bernard *et al.*<sup>122</sup> compared ABC with an educational intervention borrowed partly from the home visitation component of the early intervention programme developed by Ramey *et al.*,<sup>695,696</sup> which was designed to enhance cognitive and, especially, linguistic development.

Components that involved parental sensitivity to child cues were excluded specifically to keep the interventions distinct.

In Sprang,<sup>132</sup> ABC was compared with a wait-list control in which participants accessed the bi-weekly support group for parents that was also accessed (separately) by the intervention group.

Moss *et al.*<sup>130</sup> assessed the effectiveness of an unnamed short-term attachment intervention designed to promote maternal sensitivity and child attachment. Mothers in both arms of the trial received services as usual (comprising a monthly visit by a child welfare caseworker), but only mothers in the experimental group received the attachment intervention. Bernard *et al.*<sup>122</sup> describe the intervention provided by Moss *et al.*<sup>130</sup> as one based on their own ABC intervention combined with interventions developed by Backermans-Kranenburg *et al.*<sup>219</sup> and Moran *et al.*<sup>220</sup> The intervention was provided in home, using video feedback, by experienced clinicians with at least a bachelor's degree in psychology, who received training from attachment experts.

### Child–Parent Psychotherapy, Pre-school–Parent Psychotherapy and Infant–Parent Psychotherapy

In three studies, Cicchetti *et al.*<sup>123,124,133</sup> evaluated the effectiveness of each age-related version of this therapy with another manualised home-based intervention. Lieberman *et al.*<sup>127–129</sup> also assessed CPP.

Toth *et al.*,<sup>133</sup> Cicchetti 2006<sup>123</sup> and Cicchetti 2011<sup>123</sup> compared CPP with a psychoeducational parenting intervention (PPI), and referred to as psychoeducational home visiting in Toth *et al.*<sup>133</sup> and a management-as-usual group, in which families received services typically available to maltreating families in the community. PPI/psychoeducational home visitation (PHV) was based on the home visiting programme developed by Olds *et al.*,<sup>216–218</sup> augmented by 'a variety of cognitive and behavioural techniques in order to address parenting skill deficits and social-ecological factors, such as limited personal resources, poor social support, and stresses in the home associated with maltreatment' (p. 794). The interventions were provided by trained, master's level therapists, on a weekly basis over the course of 1 year.

Lieberman *et al.*<sup>127–129</sup> compared CPP with individual psychotherapy plus case management.

**Promoting First Relationships** Spieker *et al.*<sup>131</sup> evaluated PFR, a manualised, infant mental health training programme, aimed at early years' professionals. This formed the basis of an intervention programme tailored to the needs of children in care who had experienced disrupted placements. PFR was compared with early education support, a home visiting intervention aimed at connecting families to community resources and suggested activities to promote development.

**Dyadic developmental psychotherapy (see Appendix 5)** Becker-Weidman<sup>134,135</sup> compared DDP with TAU – essentially assessment and, for just over half, another form of treatment.

### Parent–child interaction therapy

In Chaffin *et al.*,<sup>136</sup> a variety of therapists (including basic trainees, experienced trainees and experts) delivered PCIT (see Appendix 5) alone or in enhanced form (i.e. with the addition of services targeting family-specific problems, such as domestic violence, substance abuse or parental depression). Participants in the control group took part in a standard community-based parenting group.

Thomas and Zimmer-Gembeck 2011<sup>137</sup> compared time-variable PCIT (TV/PCIT) with an attention only wait-list control in which parents were contacted weekly for brief conversations regarding family or other concerns for 12 weeks. In TV/PCIT parents are coached during the Child Directed Interaction phase (CDI); see Appendix 5) until mastery criteria were achieved for two consecutive sessions, before moving onto parent-directed interaction (PDI) phase.

Thomas and Zimmer-Gembeck 2012<sup>138</sup> compared standard PCIT (S/PCIT), in which participants received only 12 coaching sessions, regardless of proficiency, with an attention wait-list control. In this study the authors also used their data to compare the effectiveness of S/PCIT with TV/PCIT by drawing on the data available from their earlier trial.

### ***Parent-focused interventions***

The intervention in Valentino *et al.*<sup>140</sup> (reminiscing and emotion training, RET) focused on encouraging parents to engage in elaborative and emotionally supportive reminiscing about positive and negative everyday past events as a means of increasing parental sensitivity and addressing multiple developmental sequelae of maltreatment. Sessions were led by bachelor-level family coaches, and included the use of video feedback and daily homework. In Hughes and Gottlieb,<sup>139</sup> the intervention was the Webster-Stratton IY parenting programme, a standardised, video-based, modelling intervention based on social learning theory and tailored to the developmental needs of families with young children. The group facilitator was the first author of the study. Both Hughes and Gottlieb<sup>139</sup> and Valentino *et al.*<sup>140</sup> compared the experimental intervention to a wait-list control.

### **Number and duration of sessions**

### ***Attachment-orientated interventions***

**Attachment and Biobehavioral Catch-up** In the studies by Dozier *et al.*,<sup>125,126</sup> Bernard *et al.*<sup>122</sup> and Sprang,<sup>132</sup> both interventions (experimental and control) were provided in 10 weekly, hour-long sessions, based on a structured training manual.

### **Child–Parent Psychotherapy, Pre-school–Parent Psychotherapy and Infant–Parent**

**Psychotherapy** Parents receiving both IPP and CPP (see above) in the Cicchetti 2006<sup>123</sup> study received weekly home visits over a 12-month period, with an average of 21 sessions conducted in the IPP group and 25 sessions conducted in the CPP group. In the Cicchetti 2011<sup>124</sup> study, participants in the CPP and IPP arms also received weekly home visits over a 12-month period, with the average number of visits being approximately 46 for the CPP group and 49 for the IPP group.

The CPP intervention in Lieberman *et al.*<sup>127–129</sup> was delivered weekly for 50 weeks, with each session lasting approximately 60 minutes. Most dyads attended a mean of 32 CPP sessions; those receiving individual psychotherapy had, minimally, monthly phone calls from a case manager (who they could also contact if needed) plus information and referral to mental health clinics of their choice. Face-to-face meetings were scheduled when clinically indicated. Most mothers received individual treatment (77%) and 55% of children also received individual treatment.

Recipients of PPP were seen for weekly 60-minute dyadic sessions over a 12-month period. Those receiving PHV received a similar ‘dose’.

In the Moss *et al.*<sup>130</sup> study, the manualised intervention consisted of eight home visits, of approximately 90 minutes, once a week.

**Promoting First Relationships** PFR was delivered in 10 weekly sessions of 60–75 minutes in the home.<sup>131</sup> Those receiving early educational services received 3-monthly 90-minute, in-home sessions delivered by an early education specialist.

**Dyadic developmental psychotherapy** Becker-Weidman<sup>134,135</sup> do not specify frequency or duration of sessions provided to either DDP or the TAU control group.

### ***Parent–child interaction therapy***

As indicated above, in the 2011 Thomas and Zimmer-Gembeck study<sup>137</sup> parents receiving TV/PCIT received as many sessions of CDInt as was necessary to achieve the prescribed mastery criteria, before proceeding to PDI. On average, PCIT participants who completed treatment engaged in a total of 11.8 sessions and five PDI coaching sessions. In Thomas and Zimmer-Gembeck 2012,<sup>138</sup> parents in receipt of S/PCIT received 12 sessions of coaching only, irrespective of whether or not they had reached the mastery threshold for progression from CDInt to PDI.

### Parent-focused interventions

In the Hughes and Gottlieb<sup>139</sup> study, intervention families received 16 1-hour group sessions on a weekly basis. In the Valentino *et al.*<sup>140</sup> study, training comprised four, weekly, in-home training sessions of 1 hour each.

### Outcomes and measures used in studies of relationship-based interventions

#### Attachment

Three<sup>122,123,130</sup> studies assessed the impact of the intervention on attachment using the Ainsworth Strange Situation Procedure.<sup>336</sup>

Dozier *et al.*<sup>125,126</sup> asked foster parents to record infants' behaviour when distressed and in the presence of their primary caregiver using the Parent Attachment Diary (PAD<sup>697</sup>). Spieker *et al.*<sup>131</sup> used the Toddler Attachment Sort-45,<sup>350</sup> a modified version of the Attachment Q-sort<sup>698</sup> to assess children's attachment security, and Becker-Weidman<sup>134,135</sup> used the Randolph Attachment Disorder Questionnaire.<sup>364</sup>

#### Internal working models

Toth *et al.*<sup>133</sup> specifically explored the effectiveness of two developmentally informed preventative interventions on children's internal representations of self, and of self in relation to other, using a narrative story stem task from the MacArthur Story Stem Battery (Bretherton I, Oppenheim D, Buchsbaum H, Emde RN & the MacArthur Narrative Group, University of Wisconsin-Madison, 1990, unpublished).

#### Child behaviour

Six<sup>130-132,134,135,137,138</sup> studies examined the impact of attachment-based interventions on child behaviour, using the CBCL.<sup>260</sup>

In addition to the CBCL,<sup>260</sup> Thomas and Zimmer-Gembeck 2011<sup>137</sup> and 2012<sup>138</sup> assessed the impact of PCIT on child behaviour using the ECBI (parent report),<sup>310</sup> and Spieker *et al.*<sup>131</sup> did so using the Brief Infant Toddler Social and Emotional Assessment (BITSEA<sup>352</sup>) and selected items from the Bayley III Screening Test.<sup>355</sup> Chaffin *et al.*<sup>136</sup> used the Behavior Assessment System for Children.<sup>365</sup>

Hughes and Gottlieb<sup>139</sup> used the Child Autonomy Observational Scale to assess child autonomy. Again, this tool was developed for the study, based on the theoretical underpinnings of Deci and Ryan.<sup>699,700</sup>

Dozier *et al.*<sup>125,126</sup> assessed the impact of the intervention on children's behaviour using the Parent Daily Report (adapted from Chamberlain and Reid<sup>458</sup>).

#### Child stress

Dozier *et al.*<sup>125,126</sup> and Cicchetti *et al.*<sup>124</sup> used analyses of cortisol to assess levels of stress in infant participants.

#### Parent behaviour

The Dyadic Parent-Child Interaction Coding System (DPICS)<sup>701,702</sup> was used by all three PCIT studies,<sup>136-138</sup> although Chaffin *et al.*<sup>136</sup> used the DPICS-II<sup>702</sup> and Thomas and Zimmer-Gembeck<sup>137,138</sup> used the DPICS-III.<sup>701</sup>

Sprang<sup>132</sup> and Thomas and Zimmer-Gembeck<sup>137,138</sup> examined the effect of the intervention on parents' abuse potential using the Child Abuse Potential Inventory (CAPI<sup>366</sup>).

#### Parental stress

Spieker *et al.*,<sup>131</sup> Sprang<sup>132</sup> and Thomas and Zimmer-Gembeck<sup>137,138</sup> assessed the impact of the intervention on parenting stress, using the Parenting Stress Index-Short Form.<sup>342</sup>

#### Maternal sensitivity

The primary caregiver outcome in the Spieker *et al.*<sup>131</sup> study was maternal sensitivity, assessed using a modified score of the Nursing Assessment Teaching Scale,<sup>358</sup> the secondary outcomes being a measure of

parenting support for the child, using the Indicator of Parent–Child Interaction<sup>351</sup> and commitment to the child, assessed by answer to interview questions from This Is My Baby.<sup>359</sup> Moss *et al.*<sup>130</sup> measured maternal sensitivity using the Maternal Sensitivity: Maternal Behaviour Q-Set.<sup>339</sup>

### Parenting behaviour

In the Hughes and Gottlieb<sup>139</sup> study, a scale was developed that reflected the theoretical underpinnings of the study, namely the Parenting Skills Observation Scale (developed by the authors for this study).

### Other

Valentino *et al.*<sup>140</sup> assessed changes in elaborative and emotion-rich reminiscing using video-taped and audio-taped conversations and the Peabody Picture Vocabulary Test<sup>703</sup> to assess parents and children is receptive language.

## Risk of bias: randomised controlled trials of relationship-based interventions

### Sequence generation

All studies, except for Spieker *et al.*<sup>131</sup> and Hughes and Gottlieb,<sup>139</sup> were judged to be ‘unclear’ risk of bias for sequence generation because no information was provided on how the randomisation sequence was generated. Spieker *et al.*<sup>131</sup> and Hughes and Gottlieb<sup>139</sup> were assessed as ‘low’ risk. Spieker<sup>131</sup> stated that they used a computer-generated sequence, blocked by caregiver type. Hughes and Gottlieb<sup>139</sup> referred to a random numbers chart.

### Allocation

All studies<sup>122–140</sup> were judged unclear risk of bias on allocation concealment because of a lack of information.

### Blinding of personnel and participants

All but two<sup>123,125,126</sup> studies were assessed as unclear risk of bias for blinding of participants, predominantly due to lack of information. Dozier *et al.*<sup>125,126</sup> stated that ‘foster parents and birth parents were blind to condition’ and was therefore judged low risk of bias. Cicchetti 2006<sup>123</sup> did not blind participants but this was deemed unlikely to influence outcomes of this study because all participants in this study were infants aged, on average, 13–31 months.

### Blinding of outcome assessors

All studies, except for Sprang,<sup>132</sup> were judged as ‘low risk of bias’ for blinding of outcome assessors because assessors were blinded to the hypotheses, the assignment of participants and/or to the collected data. Thomas and Zimmer-Gembeck 2011<sup>137</sup> did not state that their outcome assessors were blinded, but this trial used the same procedures and outcomes measures as the 2012<sup>138</sup> trial to which it was linked, and in the 2012 study the outcome assessors are said to be ‘blind to treatment condition’. Sprang<sup>132</sup> was assessed as high risk as the authors relied solely on self-completed measures collected by the treatment staff at post test.

### Incomplete outcome data

With the exception of Toth *et al.*,<sup>133</sup> all studies were deemed to be at low risk of bias. Some studies<sup>122,136–138</sup> had no missing data, some studies<sup>127–129,131,132</sup> used a supplementary ITT analysis and the remaining studies<sup>123–126,130,133–135,139,140</sup> conducted analyses of those who dropped out and those who completed treatment, and concluded that they did not differ. The Toth *et al.*<sup>133</sup> study was assessed as ‘unclear’ risk of bias as missing data were not reported and analyses included only participants who completed treatment.

### Selective outcome reporting

Cicchetti 2006<sup>123</sup> was judged as ‘unclear’ risk of bias because, despite prospective registration and a (broad-brush) description of measures relevant to the domains outlined in that protocol, the paper reports only on attachment classifications. Cicchetti 2011<sup>124</sup> was judged as ‘unclear’ risk of selective outcome reporting bias because no means or SDs were presented and only latent growth curve data.

Spieker *et al.*<sup>131</sup> and Lieberman *et al.*<sup>127–129</sup> also registered their trials (ClinicalTrials.gov identifiers NCT00339365 and NCT00187772, respectively). Spieker *et al.*<sup>131</sup> reports on those outcomes listed in the trial registration and was judged as ‘low’ risk of bias on this domain. Lieberman *et al.*<sup>127–129</sup> reports on all primary outcomes and one of two secondary outcomes. Overall we judged this study to be ‘low risk’ of bias on this domain. The secondary outcome not reported on by Lieberman *et al.*<sup>127–129</sup> is child’s cognitive functioning.

All but one<sup>125,126</sup> of the remaining studies were deemed unclear risk of bias, as although they appeared to report on all of those outcomes expected, without access to the original study protocols, we cannot be certain. Dozier *et al.*<sup>125,126</sup> was assessed as ‘high risk of bias’ in light of the fact that two papers reporting the results of this study use different samples and report different outcomes without complete cross-referencing to a statement of all per-protocol outcomes.

### Other sources of bias

No other potential sources of bias were identified in most of the studies. However, Sprang<sup>132</sup> had an unclear risk-of-bias assessment because the authors reported that expectancy effects and trust in instructors may have played a role in the findings. Furthermore, Bernard *et al.*<sup>122</sup> and Dozier *et al.*<sup>125,126</sup> had an additional high risk of bias because the Ainsworth Strange Situation Procedure was used as a measure for participants aged > 24 months, which extends beyond the age range for which it has been validated.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

### **Risk of bias: controlled observational studies of relationship-based interventions**

The quality of the COS of Becker-Weidman<sup>134,135</sup> was variable. No attempt (or no information on any attempt) was made to blind participants or outcome assessors in this study. This study<sup>134,135</sup> provided a clear description of its objectives, the main outcomes to be measured, the characteristics of patients included, the intervention of interest and the potential confounders. Although the main findings were adequately described, the relevant adverse events were not adequately addressed. Characteristics of participants lost to follow-up were adequately described and accounted for. It was not possible to determine whether or not the participants and treatment received were representative of the population of interest. Becker-Weidman<sup>134,135</sup> used appropriate statistical tests and accounted for confounding variables in their analysis.

### **Results: relationship-based interventions**

Given the heterogeneity of the interventions, we report the results as they relate to the three groupings set out above, starting with meta-analyses where available.

### **Attachment-focused interventions**

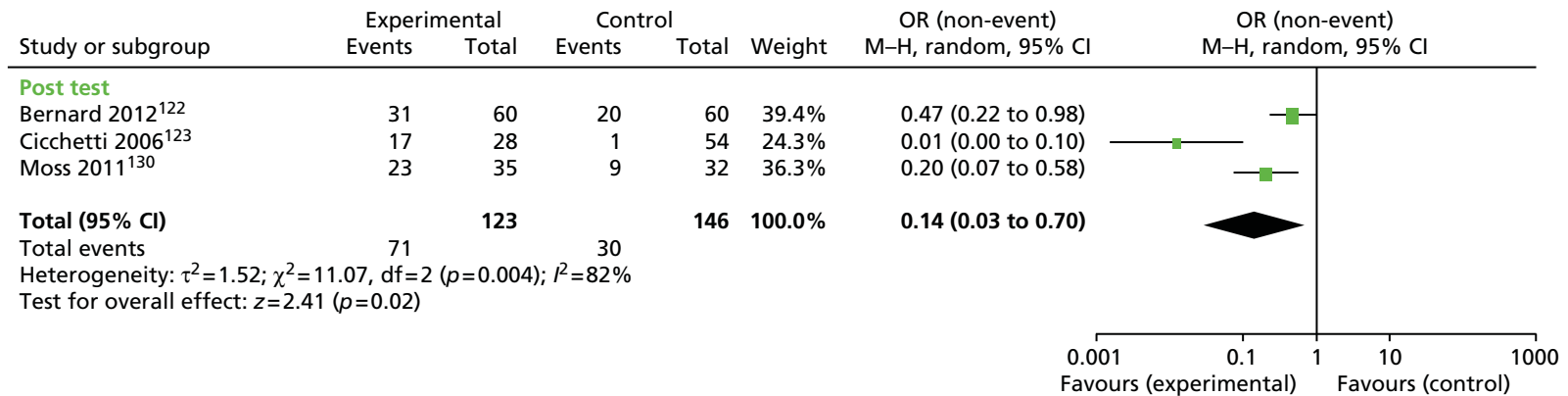
#### **Secure attachment**

Bernard *et al.*,<sup>122</sup> Cicchetti 2006<sup>123</sup> and Moss *et al.*<sup>130</sup> assessed the impact of attachment-based interventions on the security of a child’s attachment as measured by Ainsworth Strange Situation Procedure. The pooled estimate using a random-effects model was 0.14 (SMD) (95% CI 0.03 to 0.70) (*Figure 17*).

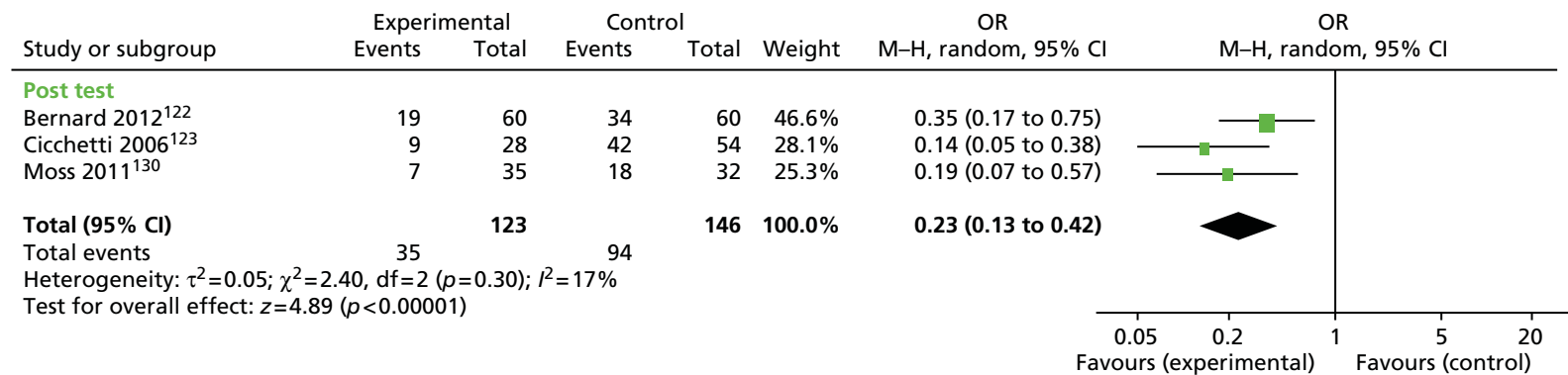
The *P*-statistic indicates that 82% of the variation in the point estimates is due to heterogeneity (*p*-value for heterogeneity = 0.004;  $\tau^2 = 1.52$ ).

#### **Disorganised attachment**

Bernard *et al.*,<sup>122</sup> Cicchetti 2006<sup>123</sup> and Moss *et al.*<sup>130</sup> assessed the impact of attachment-based interventions on a reduction of a child’s disorganised attachment style, as measured by Ainsworth Strange Situation Procedure. The pooled estimate using a random-effects model was 0.23 (SMD) (95% CI 0.13 to 0.42; *p* = 0.00001) (*Figure 18*). The *P*-statistic indicates 17% of the variation in the point estimates is due to heterogeneity (*p*-value for heterogeneity = 0.030;  $\tau^2 = 0.05$ ).



**FIGURE 17** Secure attachment. df, degrees of freedom; M-H, Mantel-Haenszel.



**FIGURE 18** Disorganised attachment. df, degrees of freedom; M-H, Mantel-Haenszel.

### **Avoidant attachment**

Both Cicchetti 2006<sup>123</sup> and Moss *et al.*<sup>130</sup> assessed the impact of attachment-based interventions on a child's avoidant attachment style, as measured by Ainsworth Strange Situation Procedure. The pooled estimate using a random-effects model was 0.90 (SMD) (95% CI 0.13 to 6.37;  $p = 0.09$ ) (Figure 19).

The  $I^2$ -statistic indicates 64% of the variation in the point estimates is due to heterogeneity ( $p$ -value for heterogeneity = 0.09;  $\tau^2 = 1.29$ ).

### **Other attachment measures**

Using an ANCOVA, Spieker *et al.*<sup>131</sup> found no significant differences between intervention and control groups for security of attachment at either post-test or 6-month follow-up (post-test  $F = 0.68$ ,  $d = 0.16$ ;  $p = 0.410$ ; follow-up  $F = 0.12$ ,  $d = -0.13$ ;  $p = 0.746$ ).

Dozier *et al.*<sup>125,126</sup> used an ANCOVA (intervention group by time) and found that children in the treatment group had less attachment avoidance than those in the control group over time [ $F(1,44) = 5.02$ ;  $p < 0.05$ ]. There was no difference for attachment security ( $p > 0.10$ ).

### **Stress**

Cicchetti *et al.*<sup>124</sup> used latent growth curve analysis to examine trajectories of cortisol regulation over time, in an analysis combining data from the experimental and 'other treatment control' groups (i.e. CPP and PPI). The authors found divergences emerging between the three groups (maltreated intervention, maltreated community control and poor, but non-maltreated, comparison), starting half way through the intervention. Contrary to expectation, no differences were found between those maltreated infants in the intervention groups and those in the control group at baseline. Whereas infants in the maltreated group showed a steady decline in morning cortisol levels (which is elevated in normal samples) over the 2-year study period this did not occur for infants in the maltreated intervention group, for whom cortisol levels were normalised (i.e. no different from infants in the non-maltreated comparison group) and remained so at 1-year post-intervention follow-up. A similar change in cortisol secretion was also found by the Dozier *et al.*<sup>125,126</sup> study, for which an ANCOVA (intervention group by time) found that children in the intervention group showed significantly lower overall cortisol levels than the control group over time [ $F(1,46) = 4.55$ ;  $p = 0.04$ ].

### **Additional results**

In the Spieker *et al.*<sup>131</sup> study, child competency improved post test but this was no longer significant at follow-up (post-test:  $F = 4.77$ ,  $d = 0.42$ ,  $p = 0.03$ ; follow-up:  $F = 0.63$ ,  $d = -0.16$ ,  $p = 0.429$ ). Child sleep problems were different between groups at follow-up but with a small effect size ( $d = -0.13$ ;  $p = 0.09$ ).

Toth *et al.*<sup>133</sup> used a general linear model and found that, looking at the interaction of study conditions by time, and three out of six narrative variables showed improvement. The improvement was for maladaptive maternal representations [ $F(3,118) = 3.13$ ;  $p < 0.05$ ], negative self-representation [ $F(3,118) = 4.93$ ,  $p < 0.01$ ] and mother-child relationship expectations [ $F(3,118) = 2.72$ ;  $p < 0.05$ ].

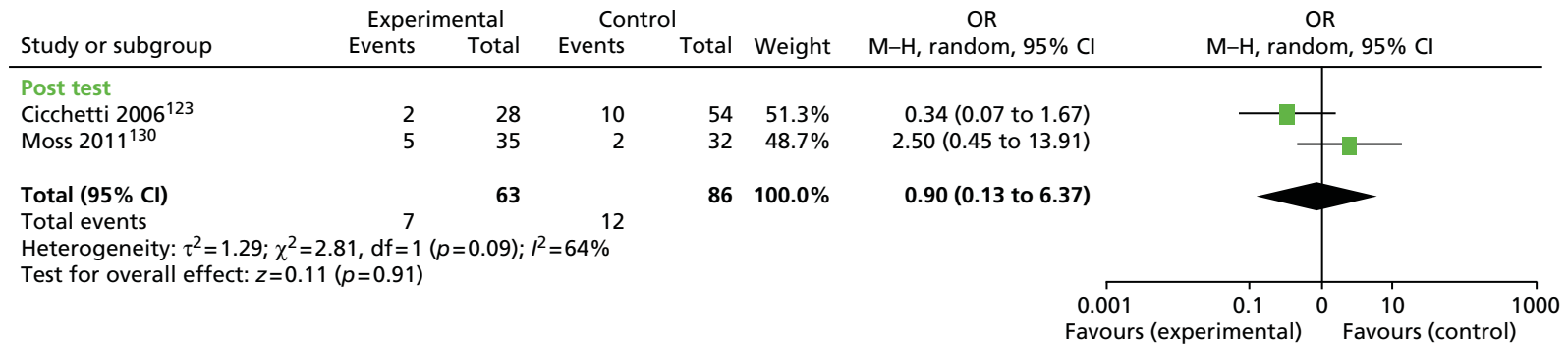
Becker-Weidman<sup>134,135</sup> found that at 4-year follow-up the treatment group had a statistically significantly improvement compared with the control group for security of attachment ( $t = -12.23$ ;  $p < 0.001$ ), withdrawal ( $t = -4.352$ ;  $p < 0.001$ ), social problems ( $t = -2.654$ ;  $p < 0.05$ ), thought problems ( $t = -3.505$ ;  $p < 0.01$ ), attention problems ( $t = -4.239$ ;  $p < 0.001$ ), rule-breaking behaviour ( $t = -6.733$ ,  $p < 0.001$ ) and aggressive behaviour ( $t = -7.104$ ;  $p < 0.001$ ), but not for anxiety/depression ( $t = -1.091$ ;  $p = 0.28$ ).

## **Parent-child interaction therapy**

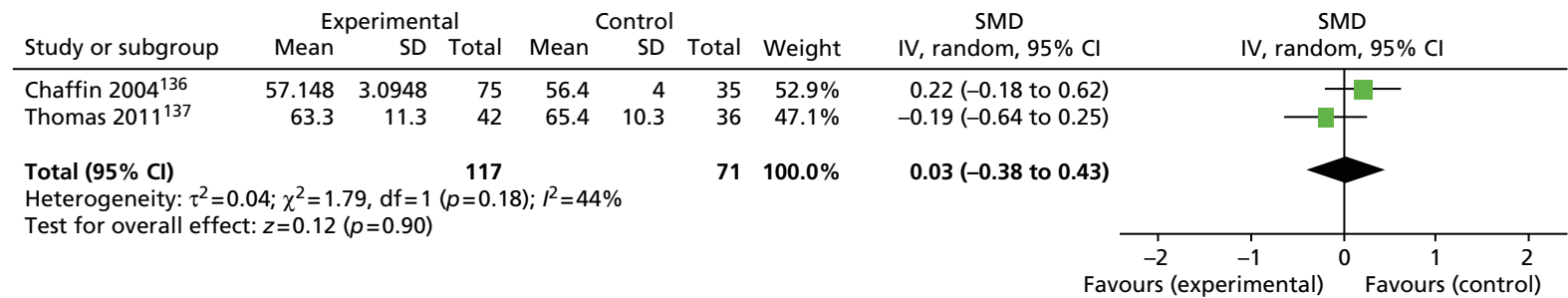
### **Child behaviour (externalising)**

Both Chaffin *et al.*<sup>136</sup> and Thomas and Zimmer-Gembeck 2011<sup>137</sup> and 2012<sup>138</sup> assessed the impact of PCIT on child externalising behaviours (as measured by various scales). Thomas and Zimmer-Gembeck 2012<sup>138</sup> used a control group that overlapped with their 2011 study,<sup>137</sup> and the extent of the overlap was unclear, so we decided only to include the data from their 2011 report of TV/PCIT in the meta-analysis to avoid the problem of double counting.

The pooled estimate, using a random-effects model, was 0.03 (SMD) (95% CI -0.38 to 0.43) (Figure 20). The  $I^2$ -statistic indicates that 44% of the variation in point estimates between the two studies is due to



**FIGURE 19** Avoidant attachment. df, degrees of freedom; M-H, Mantel-Haenszel.



**FIGURE 20** Child externalising behaviour. df, degrees of freedom; IV, instrumental variable.

heterogeneity, making it difficult to draw conclusions about the effect of PCIT on externalising behaviours/symptoms in maltreated children from these two studies. It is perhaps worth noting that Thomas and Zimmer-Gembeck 2012<sup>138</sup> also report significant improvements in the behavior of children whose parents participated in S/PCIT and, in both studies,<sup>137,138</sup> gains were said to be greater for those who completed PCIT.

It is also worth noting that Thomas and Zimmer-Gembeck 2012<sup>138</sup> report a greater improvement in externalising behaviours/symptoms ( $p < 0.001$ ) after treatment with S/PCIT than with wait-list controls. This study also found a greater improvement in externalising behaviours/symptoms ( $p = 0.002$ ) after treatment with S/PCIT than with TV/PCIT.

Thomas and Zimmer-Gembeck 2011<sup>137</sup> and 2012<sup>138</sup> also measured the intensity of behaviour problems using the ECBI.

Thomas 2011<sup>137</sup> found a greater reduction in child behaviour problems ( $p < 0.001$ ) and intensity ( $p < 0.001$ ) after treatment with TV/PCIT than with wait-list controls.

Thomas 2012<sup>138</sup> found a greater reduction in child behaviour problems ( $p < 0.000$ ) and intensity ( $p = 0.019$ ) after treatment with S/PCIT than with wait-list controls.

Thomas 2012<sup>138</sup> also found a greater reduction in child behaviour problems ( $p = 0.001$ ) after treatment with S/PCIT than with TV/PCIT. However, there was no difference between S/PCIT and TV/PCIT for child behavior intensity ( $p = 0.096$ ).

### Parenting interventions

In the study by Valentino *et al.*,<sup>140</sup> children in the intervention group had richer memory recall ( $p < 0.01$ ,  $d = 0.71$ ) and made more emotion references ( $p < 0.001$ ,  $d = 1.35$ ) than control children during conversation with parents but not with experimenters.

Contrary to expectation, there was no effect of the Webster-Stratton IY parent programme on child autonomy in the Hughes and Gottlieb study.<sup>139</sup>

## Effectiveness of relationship-based interventions for maltreated children

### Summary

We identified three groups of RBIs.

The first group of 10<sup>122–135</sup> studies addressed the problems of insecure or disorganised attachments among maltreated children. Of these, four<sup>122,125,126,132</sup> studies evaluated the effectiveness of the short intervention ABC or based on ABC, and four<sup>123,124,127–129,133</sup> studies evaluated an attachment theory informed intervention known as IPP. All were short-term, manualised programmes, and they focused on promoting sensitive and responsive care to children adversely affected by maltreatment, with the focus on the carer–child relationship and patterns of interaction. In only one<sup>134,135</sup> study were children and young people seen by a therapist. In this study,<sup>134,135</sup> the therapy, DDP, is described as a FT treatment based on attachment theory, in which the relationship between therapist and child, caregiver and child, and therapist and caregiver provide the context for treatment. The last<sup>131</sup> study evaluated the impact of training early years professionals.

The body of evidence relating to attachment informed interventions is promising, particularly in relation to ABC and IPP interventions. Meta-analyses of data from three<sup>122,123,130</sup> studies (two ABC, one IPP) indicate significant increases in attachment security and decreases in disorganised attachment. These results are consistent with those reported in studies, the data for which we were unable to combine in these meta-analyses, with some indication that children in the control group evidenced deterioration, that is, more developed disorganised attachment. This suggests that timely interventions may be able to prevent cumulative consequences of maltreatment.

Findings in relation to children's behaviour were mixed, and generally did not reach the level of statistical significance. One<sup>130</sup> study that recruited children with a wide age range (1–5 years) explored the moderating impact of age and found that reductions in child externalising and internalising problems was associated with increasing age in the intervention group, whereas a marginal increase in behaviour problems was found with age for the control group. Such analyses can only be hypothesis generating and, given the size of the study,<sup>130</sup> probably highly speculative. However, the authors note that the maladaptive trajectories for maltreated children increasingly diverge from their non-maltreated peers over time, with the transition to school often being particularly difficult for maltreated children who maintain increasingly socially dysfunctional patterns of aggression and social withdrawal. Therefore, an intervention that has the potential to reduce behaviour problems in preschool children may well be particularly helpful. A similar pattern was noted by Dozier *et al.*<sup>125,126</sup>

Children's stress levels, as measured by cortisol secretion patterns, also improved with attachment-based interventions.

We identified three randomised trials of PCIT. All were concerned with addressing behaviour problems resulting from physical abuse by helping parents change the way they interacted with their children. A meta-analysis of data from measures of child externalising behaviour indicated no effect of PCIT. Chaffin *et al.*<sup>136</sup> say in the discussion that this may be because, in this study, PCIT was evaluated as a parent treatment; the study included children older than those customarily included in PCIT for child behaviour problems. Given the relational context of maltreatment, and the emphasis placed by these authors on the importance of the escalating coercive interactions, this account reads as a 'post hoc' explanation of an unexpected finding. There is some uncertain evidence regarding the potential reduction in child externalising behaviour problems following PCIT. Thomas and Zimmer-Gembeck<sup>137</sup> report a decrease in the severity of behaviour problems of children receiving PCIT, as perceived by parents, but these children evidence no diminution in externalising behaviour as assessed by the CBCL<sup>260</sup> (parent report).

As intended, the RET intervention improved children's memory recall and emotion referencing, with their parents.

### Completeness and applicability

None of these studies was conducted in the UK, but all are concerned with relationship problems that are familiar to mental health professionals and social workers. It is difficult to overstate the importance of secure attachment as a public health issue, and the attachment difficulties that so often result from maltreatment present a cumulative threat to children who experience abuse and neglect. The attachment interventions evaluated are relatively brief, manualised interventions that include techniques and strategies currently in use by many health professionals in the UK, for example video interactive guidance. Given the findings reported, well-conducted trials of these interventions in the UK would be appropriate prior to recommending their widespread adoption.

There is currently no strong evidence to support the use of either PCIT or Webster-Stratton's IY Program as an intervention to address the emotional or behavioural problems of maltreated children, and their impact on improving parenting is clinically questionable.

### Quality of the evidence

Only three<sup>122,125,126,132</sup> of these studies were judged to be of high risk of bias in any of the seven domains assessed, but most were so poorly reported that judgements of unclear risk of bias outnumbered those of low risk. Overall, these studies do better in terms of detection bias (the blinding of outcome assessors) and attrition bias (incomplete outcome data). Six<sup>122–128,132</sup> of these studies were conducted by two American teams, and essentially replicate one another, with variations in the profile of participants. Each team is evaluating an intervention that they have helped to develop. Additional, independent evaluations of both interventions (ABC and IPP) would be helpful, together with better reporting.

### Economic evidence

No economic evaluations of RBIs for children who have been maltreated were located.

## Systemic interventions

This category includes interventions that aim to benefit the child by bringing about change within the family and other systems in which the child's life is embedded. Altogether, we identified eight controlled studies (19 citations) that assessed the effectiveness of systemic interventions. We organised these into the following five subcategories:

1. systemic FT<sup>107,108</sup>
2. multisystemic FT<sup>142–144,147</sup>
3. multigroup FT<sup>148,149</sup>
4. a transtheoretical intervention that integrated family systems, social learning theory and a conflict mediation perspective<sup>141</sup>
5. a family-based programme for the treatment of CSA.<sup>150</sup>

In what follows, we provide descriptive data on the entire group of eight studies,<sup>107,108,141–144,147–149</sup> separating them out only when we describe the types of intervention and the results.

### Description of studies

#### Study design

Of the eight<sup>107,108,141–144,147–150</sup> controlled studies, six<sup>107,108,141–144,148,149</sup> were randomised trials. One was the QEx Bagley and LaChance study<sup>150</sup> and one was a COS.<sup>147</sup>

#### Location

One<sup>150</sup> study was conducted in in Canada. The remainder of the studies<sup>107,108,141–144,148,149</sup> were carried out in the USA.

#### Sample sizes

Sample sizes were generally small. Linares 2015<sup>141</sup> randomised 22 sibling pairs. Meezan and O'Keefe<sup>148,149</sup> and Swenson *et al.*<sup>144</sup> had samples of 81 and 90, respectively, and the remaining RCTs had sample sizes of 30<sup>143</sup>, 43<sup>142</sup> and 55<sup>107,108</sup>, respectively. Bagley and LaChance<sup>150</sup> had a sample size of just 65 (after attrition and exclusions) and Schaeffer *et al.*<sup>147</sup> had a sample size of 25 youth–mother dyads.

#### Participants

##### *Systemic family therapy*

**Age and gender** In the one<sup>107,108</sup> study of systemic FT, the mean age of the children was 8.6 years, and boys accounted for 70% of the children in participating families.

##### *Multisystemic therapy*

**Age** Brunk *et al.*<sup>142</sup> give the mean ages of children in each arm of the study (9.8 years MST, 6.8 years control) but no overall mean age or age range. Schaeffer *et al.*<sup>147</sup> recruited families with children aged 6–17 years. Swenson *et al.*<sup>144</sup> and Danielson *et al.*<sup>143</sup> reported that the mean age of children was around 14 years.

**Gender** In the Danielson *et al.*<sup>143</sup> study, 88% of the teenage victims of sexual abuse were female, and in the Schaeffer *et al.*<sup>147</sup> study 44% were female. Families in the studies by Brunk *et al.*<sup>142</sup> and Swenson *et al.*<sup>144</sup> comprised, respectively, 55% and 44% boys.

### **Multigroup family therapy**

**Age and gender** Meezan and O’Keefe<sup>148,149</sup> recruited families with children of both genders aged 2–11 years.

### **Transtheoretical**

Sibling pairs in the Linares 2015<sup>141</sup> study were between 7.2 and 9.7 years of age, and the authors report no significant between-group differences in sibling configuration, with 26% being both males, 37% both females and 37% mixed gender.

### **Family-based intervention for child sexual abuse**

**Age and gender** Bagley and LaChance<sup>150</sup> targeted only female victims of sexual abuse, with mean ages of 11.2 years and 11.8 years in the experimental and control groups, respectively.

### **Referrals: all systemic interventions**

Linares *et al.*<sup>141</sup> recruited eligible children and foster carers from three participating fostering agencies. Families in the other seven<sup>107,108,142–144,147–150</sup> systemic intervention studies were recruited from CPS or similar governmental agencies. In the study by Danielson *et al.*,<sup>143</sup> families were also referred or recruited from clinics/treatment providers.

### **Maltreatment type**

#### **Systemic family therapy**

Kolko<sup>107,108</sup> recruited families in which children had been physically abused.

#### **Multisystemic therapy**

Participants in the Danielson *et al.*<sup>143</sup> study were sexually assaulted adolescents. Brunk *et al.*<sup>142</sup> and Swenson *et al.*<sup>144</sup> recruited families with problems of physical abuse and neglect (excluding children who had been sexually abused). Schaeffer *et al.*<sup>147</sup> recruited families in which children had been exposed to abuse or neglect (within the previous 180 days) and in which parental substance misuse was confirmed or suspected by CPS.

### **Multigroup family therapy**

Meezan and O’Keefe<sup>148,149</sup> recruited families where there was abuse or neglect, and where sexual abuse was not the primary allegation, as this was deemed to constitute a substantially different dynamic. Two-thirds were referred for physical abuse, 29% experienced severe neglect and in 24% of cases emotional abuse was also alleged. Ten per cent of participants in this study also suffered sexual abuse.

### **Transtheoretical**

Ninety per cent of the children in the Linares *et al.*<sup>141</sup> study were in foster care because of neglect (the other 10% were missing this information on their files).

### **Family based**

Bagley and LaChance<sup>150</sup> recruited families in which female children had been subject to intrafamilial sexual abuse.

### **Sources of maltreatment**

Where specified, the source of maltreatment was within the family, including biological parents, step-parents, or a parent’s cohabiting partner. In Danielson *et al.*<sup>143</sup> the source of maltreatment was not reported.

## Interventions and comparisons

### *Systemic family therapy*

Kolko<sup>107,108</sup> compared a manualised FT treatment for physically abused children to individual child and parent CBT and a control group comprising usual services. The FT was based on Belsky's<sup>227</sup> interactional or ecological model approach to child maltreatment.

### *Multisystemic therapy*

Please see description of MST in *Appendix 5*.

In the Brunk *et al.*<sup>142</sup> study, MST was compared with parent training groups. Families in the control group in the study by Danielson *et al.*<sup>143</sup> received TAU in a specialist clinic utilising evidence-based interventions. Participants who received Multisystematic Therapy for Child Abuse and Neglect (MST-CAN) in Swenson *et al.*<sup>144</sup> were compared with a group who received Enhanced Outpatient Treatment (EOT). EOT comprised the services usually provided by the treatment centre for physically abused young people and their parents (including individual and FT, and referral for other services, including medication); enhanced engagement (including telephone reminders, rescheduling of missed appointments, costs of transport to the Centre); and the parenting programme 'Systematic Training for Effective Parenting of Teens (STEP-TEEN)' – a structured, group-based programme of seven lessons that combines didactic instruction, role-play, videotapes and group discussion to equip parents with the skills needed to understand and communicate with teenagers, to problem-solve, helping parents to accept responsibility for the abuse and encourage co-operation.

### *Multigroup family therapy*

Meezan and O'Keefe<sup>148,149</sup> compared multifamily group therapy (MFGT) with traditional FT. MFGT included elements of family systems theory, structural FT, group therapy, behaviour modification, CBT, reality therapy, parent education, and crisis intervention. The traditional FT was described as drawing on several theoretical frameworks, including structural FT, behaviour modification and cognitive-behavioural strategies.

### *Transtheoretical systemic*

This is the description used by Linares *et al.*<sup>141</sup> to describe a family-focused programme with three components: sibling pair; foster parent; and joint sibling/foster parent. The programme is delivered by two master's level clinicians (one working with the sibling pair, whereas the other delivers the parent sessions to the foster carers); joint sessions taking place at the beginning and end of every session. The content of sibling and parent sessions was largely skills based, with behaviour rehearsal and reinforcement. Homework and between-sessions practice were integral components. In this study<sup>141</sup> the control group received 'usual services' (unspecified).

### *Family-based intervention for child sexual abuse*

The Child Sexual Abuse Treatment Program (CSATP<sup>704</sup>) drew on Maslow's self-actualisation theory and included IT, dyadic therapy (victim-mother, victim-sibling), group therapy (victims), and FT (victim, mother, father and available siblings). The control group consisted of those eligible for treatment but ultimately not referred by CPS, as it was thought the child was less severely affected by the abuse.

## Number and duration of sessions

### *Systemic family therapy*

Both the FT and CBT interventions in the Kolko<sup>107,108</sup> study were provided for at least 12 sessions, of 1 hour, over 16 weeks.

### *Multisystemic therapy*

In the Brunk *et al.*<sup>142</sup> study, MST was delivered in eight, weekly, 1.5-hour sessions. In the Danielson *et al.*<sup>143</sup> study, Risk Reduction through Family Therapy (RRFT) was delivered in 1- to 1.5-hour-long sessions over an average of 34 weeks.

Treatment duration in the studies by Schaeffer *et al.*<sup>147</sup> and Swenson *et al.*<sup>144</sup> was based on family need. In the Swenson *et al.*<sup>144</sup> study, the number and duration of sessions ranged from daily sessions to one or two per week, with an additional 'on-call' 24-hour service for dealing with crises. On average, families availed of 88 hours over 7.6 months (range 2–12 months). In the Schaeffer *et al.*<sup>147</sup> study, participants remained in treatment for an average of 285 days (range 144–365 days) with 92% being judged as having completed treatment.

### **Multigroup family therapy**

Families receiving MGFT met with a four-person clinical team (in groups of three to four families) for a total of around 80 hours over a 34-week period. On average, most families received 20 family-to-family sessions lasting around 2.5 hours each, although this varied considerable across families. No information was available on the amount of traditional FT provided to control participants.

### **Transtheoretical systemic**

The foster family-focused programme in the Linares 2015<sup>141</sup> study was delivered in eight, 90-minute, weekly sessions by two master's level clinicians (one working with the sibling pair, the other delivering the parent sessions to the foster carers), with joint sessions taking place at the beginning and end of every session. No information was available on the quantum of 'usual service' provided to the comparison group.

### **Family-based intervention for child sexual abuse**

The CSATP<sup>150</sup> included an average of 78 hours of IT, 37 hours of dyadic therapy (victim–mother, victim–sibling), 32 hours of group therapy (victims) and 14 hours of FT. No information is available on the usual services provided to the control group.

## **Outcomes and outcome measures: systemic interventions**

Outcomes varied by intervention type and included outcomes related to child functioning and adjustment; externalising behaviours; risky sexual behaviour; substance use; internalising behaviours; and mental health, including anxiety, depression and PTSD.

### **Post-traumatic stress disorder**

Swenson *et al.*<sup>144</sup> and Schaeffer *et al.*<sup>147</sup> both used the TSCC.<sup>378,383</sup> Danielson *et al.*<sup>705</sup> used the University of California Los Angeles PTSD Index for DSM-IV (Adolescent version) (UCLA-A) and Caregiver version.<sup>374</sup>

### **Depression**

Danielson *et al.*<sup>143</sup> and Kolko<sup>107,108</sup> both assessed the impact of intervention on depression using the CDI.<sup>299</sup>

Bagley and LaChance<sup>150</sup> used the Center for Epidemiologic Studies Depression Scale (CES-D<sup>369</sup>).

### **Behaviour problems**

Kolko 1996,<sup>107,108</sup> Swenson *et al.*<sup>144</sup> and Meezan and O'Keefe<sup>148,149</sup> assessed changes in problematic behaviour using various reporting forms and versions of the CBCL YSR.<sup>198,269,706,707</sup> Danielson *et al.*<sup>143</sup> used the Behavior Assessment System for Children-Second Edition<sup>365</sup> and Bagley and LaChance<sup>150</sup> relied on parent, social worker and self-report of problem/delinquent behaviours. Brunk *et al.*<sup>142</sup> used the Behavior Problem Checklist (BPC; Quay and Peterson, University of Miami, Coral Gables, FL, 1975, unpublished).

Kolko<sup>107,108</sup> also assessed child conflict with the CCI<sup>688</sup> and hostility using the Children's Hostility Inventory.<sup>301</sup>

### **Self-esteem**

Bagley and LaChance<sup>150</sup> used the Rosenberg Self-Esteem Scale (RSES no reference provided by the authors).

### **Child functioning**

Kolko 1996<sup>107,108</sup> assessed overall child functioning with the Kiddie Global Assessment Scale (KGAS) (no reference provided by the author) and assessed peer relationships using The Friendship Questionnaire.<sup>300</sup> Meezan and O'Keefe<sup>148,149</sup> used the Children's Action Tendency Scale CAS<sup>385</sup> and the Index of Peer Relations<sup>386</sup>.

### Substance use

Danielson *et al.*<sup>143</sup> used the Time Line Follow Back Interview<sup>376</sup> and urine drug screens to assess the impact of intervention on substance use and risky behaviour.

### Other outcomes measured by studies of systemic interventions

#### *Maltreatment*

Repeat abuse or high-risk parental behaviours were measured by Kolko,<sup>107,108</sup> Swenson *et al.*,<sup>144</sup> and Schaeffer *et al.*<sup>147</sup> Child abuse potential was assessed with the CAPI<sup>366</sup> by Kolko<sup>107,108</sup> (CAPI<sup>366</sup>) and Meezan and O'Keefe<sup>148,149</sup> (CAPI<sup>361,708</sup>). Schaeffer *et al.*<sup>147</sup> also reported out-of home placements.

#### *Parental functioning*

A number of studies assessed the impact of interventions on parental functioning.

Swenson *et al.*<sup>144</sup> report on the impact of MST on parental psychiatric distress using the Brief Symptom Inventory (BSI; Derogatis 1975<sup>380</sup>).

Schaeffer *et al.*<sup>147</sup> used a number of measures to assess the impact of the intervention on 'key risk factors and indices of child maltreatment and maternal substance use'<sup>147</sup> (p. 599). These included the Addiction Severity Index-Fifth Edition,<sup>384</sup> the Beck Depression Inventory-Second Edition (BDI-II<sup>272</sup>) and the Conflict Tactics Scale (CTS<sup>302</sup>). Linares 2015<sup>141</sup> used a modified version of the Child Conflict Index<sup>370</sup> to assess the conflict resolution skills in their study with foster parents.

Meezan and O'Keefe<sup>148,149</sup> incorporated measures of social support (Social Support Index<sup>387</sup>) parental problem solving (Problem-Solving Inventory<sup>388</sup>), attitudes towards child rearing (Adult-Adolescent Parenting Inventory<sup>709</sup>), and knowledge of child development (using a 30-item measure designed for the study).

Brunk *et al.*<sup>142</sup> used the BSI<sup>371</sup> to assess parental functioning.

#### *Family functioning an adjustment*

Kolko,<sup>107,108</sup> Brunk *et al.*<sup>142</sup> and Danielson *et al.*<sup>143</sup> each used the FES (respectively citing<sup>372,375,710</sup>).

Kolko<sup>107,108</sup> also used two additional measures: the FAD<sup>711</sup> and the Conflict Behavior Questionnaire.<sup>226</sup> Meezan and O'Keefe<sup>148,149</sup> used the Family Assessment Form (FAF).<sup>390</sup>

### **Risk of bias: randomised controlled trials of systemic interventions**

Figures 31–32 and Appendix 10 provide a summary of the risk of bias of studies of systemic interventions.

#### **Sequence generation**

Risk of bias in sequence generation was judged low in three trials: Kolko<sup>107,108</sup> used a computer-generated procedure based on Efron's biased coin toss; Swenson *et al.*<sup>144</sup> used a computer-generated table of random numbers; and Danielson *et al.*<sup>143</sup> randomised participants using computerised blocked randomisation.

The remaining RCTs<sup>141,142,148,149</sup> were judged to be 'unclear', as the only information available was that participants were 'randomised'.

#### **Allocation concealment**

None of the RCTs included provided adequate information on allocation concealment and so all were judged as being of unclear risk of bias.

#### **Blinding of participants and personnel**

With the exception of Swenson *et al.*,<sup>144</sup> who stated clearly that participants were not blinded, no study referred to the blinding of participants or personnel. Given the nature of the intervention, it is unlikely that blinding was possible in any of the studies, so we judged these to be high risk of bias.

## Blinding of outcome assessors

Blinding of outcome assessors was carried out in the studies by Brunk *et al.*<sup>142</sup> and Linares *et al.*,<sup>141</sup> so these studies were classed as being of low risk of bias. The use of self- and parent-report measures in the studies by Danielson *et al.*,<sup>143</sup> Meezan 1998<sup>148,149</sup> and Swenson *et al.*<sup>144</sup> resulted in a judgement of 'high risk of bias', and also in Kolko 1996<sup>107,108</sup> in which self-report measures undertaken at the beginning of the FT sessions with the family all present as a potential source of bias.

## Incomplete outcome data

We judged the risk of bias as a result of missing data to be low in three trials.<sup>141,143,144</sup> These trials minimised potential bias by maintaining a high retention rate and clear reporting<sup>144</sup> or using ITT analysis.<sup>141,143</sup> Attrition in Kolko<sup>107,108</sup> was around 6% (one case) in the FT arm, 20% (five cases) in the CBT arm and 17% (two cases) in the routine community services groups. The differential attrition between the two arms resulted in a judgement of high risk of bias (reasons for dropout might be related to the intervention). Brunk *et al.*<sup>142</sup> and Meezan and O'Keefe<sup>148,149</sup> were also judged to be of high risk of bias. Meezan and O'Keefe<sup>148,149</sup> took no account of attrition and analyses were based on available case data, resulting in a judgement of high risk of bias. Dropouts in Brunk *et al.*<sup>142</sup> were evenly distributed across the two arms of the trial, but reasons for drop out are not given, and the authors do not report main effects. We therefore deemed this trial high risk of bias.

## Selective outcome reporting

Three<sup>142,144,148,149</sup> studies were assessed as being of high risk of bias: Swenson *et al.*<sup>144</sup> did not report means and SDs for pre and post measures at each time point, and effect sizes were missing for some measures, leading to high risk of bias; Brunk *et al.*<sup>142</sup> do not report data on main effects or provide post-treatment means, with insufficient data for effect size calculations, and, although stating that they measured child behaviour problems using the BPC (Quay and Peterson, 1975, unpublished), they present no results for this measure. Meezan and O'Keefe<sup>148,149</sup> did not report data for 'non-significant' results, leading to high risk of bias.

Linares 2015<sup>141</sup> was assessed as unclear, as, although there is no evidence that other outcomes were planned and then not reported, there is no published protocol for this study.

The study by Danielson *et al.*<sup>143</sup> was judged to be of 'low risk of bias': the authors report on the primary outcome measure specified in the trial registration (ClinicalTrials.gov NCT00998153) and two of the three secondary measures of PTSD and family environment, but not on risk behaviours as measure by the Youth Risk Behavior Survey.

## Other sources of bias

No other source of bias were identified.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

## Risk of bias: quasi-experimental and controlled observational studies of systemic interventions

The quality of the QEx study<sup>150</sup> and the COS<sup>147</sup> was variable; overall, the quality of the Schaeffer *et al.*<sup>147</sup> study was good and that of the Bagley and LaChance study<sup>150</sup> was adequate. No attempt (or no information on any attempt) was made to blind participants or outcome assessors in either study. Both studies<sup>147,150</sup> provided a clear description of the objectives of the study, the main outcomes to be measured, the characteristics of included participants and the intervention. Distribution of potential confounders was adequately described in the Schaeffer *et al.*<sup>147</sup> study and not described in the Bagley and LaChance<sup>150</sup> study. Both clearly described the main findings and relevant adverse events. Characteristics of patients lost to follow-up were adequately described and accounted for in the analysis in both studies.<sup>147,150</sup> The participants and treatment received in the Schaeffer *et al.* study<sup>147</sup> was representative of the population of interest. Bagley and LaChance<sup>150</sup> appeared to include those children who were more severely affected by the abuse in the treatment group.

In terms of the analysis, Schaeffer *et al.*<sup>147</sup> and Bagley and LaChance<sup>150</sup> used appropriate statistical tests and accounted for confounding variables in their analyses.

### Results: systemic interventions

Meta-analysis was not possible across these studies, which are summarised narratively. Given the heterogeneity across studies, we report the results in the three groupings used above: FT, MST and 'other systemic'.

### Family therapy: results

The following results are those reported by Kolko.<sup>107,108</sup>

#### *Child depression*

Children's reports on the CDI indicated a significant reduction in severity of depressive symptoms over time [ $\chi^2 = 16.01(3)$ ;  $p < 0.001$ ], but there were no significant between-group differences.

#### *Child behaviour*

As measured by the YSR of the CBCL, children in all three groups (CBT, FT and routine services) reported a significant reduction over time in both internalising [ $\chi^2 = 33.54(3)$ ;  $p < 0.0001$ ] and externalising symptoms [ $\chi^2 = 12.26(3)$ ;  $p < 0.002$ ], with both CBT and FT showing most change on these measures. No effect was found for social competence.

Parent report on the CBCL indicated lower ratings of serious internalising behaviours over time ( $p < 0.07$ ) particularly for the two treatment arms. Parents reported a significant reduction in externalising behaviour over time [ $\chi^2 = 9.53(3)$ ;  $p < 0.02$ ]. Based on an inspection of the means over time, CBT appeared to show the greatest initial change and FT the greatest change at follow-up (1 year) compared with routine community services, which showed minimal change during that period.

A significant interaction was reported on the CCI [ $\chi^2 = 13.12(3)$ ;  $p < 0.04$ ] reflecting the greatest decrease in scores for CBT. This measure (scored by telephone interview with the parent) estimates the presence or absence of common individual behavioural or emotional problems displayed in boys or girls within the previous 24 hours.

The authors did not report statistical tests for children's hostility but the presented means and SD indicate that participants receiving FT reported a small decrease in hostility scores over time.

#### *Child global functioning*

Kolko<sup>107,108</sup> reported a significant increase in K-GAS (Global Assessment Scale for Children: Kiddie-GAS) scores over time for all children in the study, with no group differences. There was no difference between the CBT, FT and control groups in reduction over time on fears related to abuse.

#### *Family functioning*

The results of subscales for the FES and the FAD indicate more improvement over time among children and parents in the CBT and FT arms than those in routine services.

### Multisystemic therapy: results

No meta-analysis was possible for MST because of the limited number of studies reporting appropriate data. For these interventions, we report the results for those outcomes that were directly related to children and young people, and not those related to parents, which includes measures of parental substance abuse,<sup>147</sup> parenting stress,<sup>142</sup> parental mental health,<sup>142,144,147</sup> parenting behaviour,<sup>144,147</sup> social support<sup>144</sup> and re-abuse.<sup>144</sup>

#### *Post-traumatic stress disorder*

Danielson *et al.*<sup>143</sup> report that a mixed-effect regression model indicated that MST youth demonstrated a decrease in parent-reported PTSD from baseline to 6-month follow-up. This was significant ( $p < 0.001$ ) and

the decrease was greater than that reported by those in the 'TAU' control group (for the difference;  $p = 0.004$ ). The between-group difference for adolescent-reported PTSD was non-significant, although both groups reported improvement. In this small study,<sup>143</sup> there was considerable baseline inequality and results of this pilot study need to be treated very cautiously.

Swenson *et al.*<sup>144</sup> found a significantly greater improvement in PTSD symptoms in the MST-CAN group, with the number of youth scoring in the clinical range reducing by half (17.8% at baseline to 8.9% 16 months later) compared with enhanced outpatient treatment groups (19% at baseline and 21.4% at 16 months).

Schaeffer *et al.*<sup>147</sup> did not find any change in PTSD or dissociation following treatment with Multisystemic Therapy-Building Stronger Families, but report data for only the treatment group.

### **Depression**

Danielson *et al.*<sup>143</sup> report that a mixed-effect regression model indicated that intervention youth demonstrated a decrease in CDI scores from baseline to 6-month follow-up. This was significant ( $p < 0.001$ ) and the decrease was greater than that reported by those in the 'TAU' control group (for the difference;  $p = 0.008$ ). Baseline inequality augurs caution in interpreting these results. No change was reported by Schaeffer *et al.*<sup>147</sup> for youth depression.

### **Anxiety**

Schaeffer *et al.*<sup>147</sup> reported that youths whose families received the intervention experienced a significant decrease in symptoms of anxiety (medium effect size), as measured by the TSCC. Unfortunately, this study<sup>147</sup> presents data only on pre-post intervention and does not compare this reduction with outcomes for the control group.

### **Child behaviour**

Danielson *et al.*<sup>143</sup> based on their mixed-effects regression model, report improvements from baseline to 6 months' follow-up for internalising behaviour in both intervention and TAU groups, but the experimental group did significantly better ( $p = 0.008$ ). No between-group differences were found for externalising behaviour (improvement occurred in both groups over time).

Swenson *et al.*<sup>144</sup> found statistically significant improvement in parent-reported internalising behaviour in the intervention (MST-CAN) group with no improvement evident in those receiving enhanced outpatient treatment. No differences were found between enhanced outpatient treatment and MST in externalising behaviours (measured by CBCL).

Brunk *et al.*<sup>142</sup> reported measuring child behaviour problems using the BPC (Quay and Peterson, 1975, unpublished), but no results are provided for this measure.

### **Substance use and risky behaviour**

Danielson *et al.*<sup>143</sup> specifically targeted the risk of substance use and mental health problems of sexually assaulted adolescents. The authors conducted a Poisson mixed-effects regression model, which indicated greater reductions in substance use (number of days' use from baseline to 6 months) among experimental youth than in those in the TAU control. No between-group differences were found for risky sexual behaviour (assessed by numbers of sexual partners and/diagnoses of STIs in previous 3 months).

### **Family functioning**

Danielson *et al.*<sup>143</sup> reported improvements in adolescent and parent reports of family cohesion (FES Cohesion scale) and reductions in family conflict (FES Conflict scale).

## Family-based systemic interventions (including transtheoretical): results

### *Depression and self-esteem*

Bagley and LaChance<sup>150</sup> used measures of depression (the CES-D<sup>369</sup>) and self-esteem (RSES<sup>404</sup>) because the authors regarded them as 'valid and reliable measures of psychological vulnerability' (p. 208). Statistically significant gains are reported for adolescents in the intervention compared with those who did not receive the family-based programme.

### *Behaviour*

Bagley and LaChance<sup>150</sup> reported a reduction in problem behaviours among the sexually abused adolescent girls in this study, assessed from parent and social worker reports of at least one incident of delinquency, marked aggression in school, school dropout, suicidal behaviours, running away from home or problem sexual behaviour. Adolescents exhibiting at least one of these behaviours in the treatment group reduced from 48% to 7%. By contrast, a small increase from 33% to 40% was reported for those in the control group. The difference between groups was statistically significant ( $p < 0.05$ ).

Meezan and O'Keefe<sup>148,149</sup> reported improvements for child externalising behaviour, both for those in the intervention group (MFGT) and those in the comparison group (who received FT). The measure used was the CBCL and the difference was not statistically significant.

Physical aggression from older towards younger siblings in the Linares 2015<sup>141</sup> study was reduced in the intervention group ( $p < 0.05$ ) but no between-group differences were found for verbal aggression from older to younger siblings, or verbal and physical aggression from younger to older siblings.

### *Family functioning*

Meezan and O'Keefe<sup>148,149</sup> assessed the impact of intervention on family functioning using a modified version of the FAF (interview). The authors report significant improvements in the experimental group in relation to the amount of support available to them, their parent–child interactions, and the amount of stimulation available to their children. In contrast, the control group showed significant change only in relation to the support available to them. The reports give the reader the impression that the authors are interpreting the data in the most favourable ways possible.

## *Effectiveness of systemic interventions for maltreated children*

### **Summary**

We identified eight<sup>107,108,141–144,147–150</sup> studies that evaluated a heterogeneous group of interventions informed by systems theory and offered to different participants. Four studies evaluated various forms of MST, comparing this with CBT,<sup>142</sup> TAU,<sup>143</sup> enhanced outpatient treatment,<sup>144</sup> and Comprehensive Community Treatment.<sup>147</sup>

Of the remaining four studies, one compared systemic FT with CBT;<sup>107,108</sup> one worked systemically with families in which a young person had been the subject of incestuous abuse;<sup>150</sup> a third used MFGT;<sup>148,149</sup> and the final study<sup>141</sup> described itself as a transtheoretical intervention that focuses on three family subsystems: sibling pairs in foster care, the foster parent, and foster parent/sibling pairs.

All of these interventions included cognitive–behavioural strategies and psychoeducation, but their underlying theories of change were primarily systemic.

The four<sup>142–144,147</sup> MST studies are heterogeneous and the results are variable. Only one<sup>144</sup> study of the three<sup>143,144,147</sup> MST studies assessing the impact of the intervention on PTSD reported a significant benefit in favour of MST. This rather larger study<sup>144</sup> ( $n = 90$ ) halved the percentage of youth scoring in the clinical range for self-reported PTSD symptoms from 18% at baseline to 9% at 16 months post baseline, in contrast with the group receiving enhanced outpatient services, for which the percentage increased from

19% to 21%. Retention in both the treatment and the study<sup>144</sup> was high, and the intervention appears to have been successful at not only addressing the mental health symptoms of participating youth, but also addressing those aspects of parenting associated with maltreatment from both youth and parent perspectives, in particular reducing parental neglect and assault. The other two studies<sup>143,147</sup> found no significant between-group differences in depression or PTSD. Schaeffer *et al.*<sup>147</sup> observe that these young people reported subclinical levels of concern at baseline. Danielson *et al.*<sup>143</sup> (who studied sexually abused children) hypothesise that the absence of effect is, in part, because of the small size of the study and considerable baseline inequality. In this study<sup>143</sup> the primary outcome was substance use risk and mental health problems, and the authors report a significant reduction in substance use and associated risk factors among MST youth compared with TAU.

As indicated earlier, both CBT and FT outperformed routine community services. This early comparative study<sup>107,108</sup> was one of the first to submit FT to rigorous evaluation and the authors note that FT has been less frequently used in the context of child maltreatment than CBT; they recommend further development, including the incorporation of a structured approach to address the parent–child relationship. At the same time, they highlight the need for CBT to give attention to how best to discuss children’s attributions of their victimisation.

There is no strong evidence of benefit to children from multigroup FT with abusive and neglectful families.<sup>148,149</sup> Linares *et al.*<sup>141</sup> report promising, but mixed results of an intervention designed to reduce sibling aggression in foster care, and this small study<sup>141</sup> requires replication before any conclusions can be drawn. However, there is some indication that foster parents can learn strategies to minimise sibling aggression and its adverse effects on psychological child well-being.<sup>712</sup>

### Completeness and applicability

All of these generally very small studies were conducted in North America. MST enjoys a strong evidence base in relation to vulnerable groups such as young offenders, and the extension to abusive and neglectful families suggests that MST-CAN has potential as an effective intervention for families whose behaviour places their children at risk of significant harm. Results of the other MST studies are less persuasive than those of Swenson *et al.*<sup>144</sup> but of particular interest is the QEx study by Schaeffer *et al.*<sup>147</sup> This study<sup>147</sup> examined the impact of an MST intervention for maltreating families in which parental substance abuse was a major issue. Although this study<sup>147</sup> showed a reduction only in child anxiety, given the numbers of children with child protection plans for whom parental substance misuse is a key factor, this intervention is potentially highly relevant, and the authors report an ongoing, large-scale longitudinal randomised trial that will allow the investigation of the programme’s effectiveness with different subgroups, that is, different substance misuse and maltreatment characteristics. MST is a costly intervention, but may be cost advantageous.

### Quality of the evidence

Six<sup>107,108,141–144,148–149</sup> of the included controlled studies were randomised trials, but the majority of risk-of-bias judgements made were ‘unclear’ as a result of poor reporting. The QEx study<sup>147</sup> was judged good overall (but it was a small study), and the COS<sup>147</sup> was judged adequate. Overall, the quality and extent of the evidence for systemic interventions to address the effects of child maltreatment are parsimonious.

### Economic evidence

No economic evaluations of systemic interventions were located for children who have been maltreated.

### Psychoeducation

Psychoeducation forms an important component in a range of different interventions, but those coded as psychoeducational interventions use it as their main focus. They draw heavily on social learning and cognitive theory to conceptualise and address maladaptive patterns of behaviour and beliefs that have developed as the result of exposure to abuse or neglect.

We identified 17<sup>151–168</sup> studies that assessed the effectiveness of psychoeducational interventions.

### Description of studies

#### Study design

Seven<sup>151–157</sup> of the psychoeducational intervention studies were randomised trials. Trowell *et al.*<sup>155</sup> was designed as an other-treatment control study, comparing a psychoeducational group with IT.

Three<sup>158–160</sup> studies used a QEx design and the remaining seven<sup>161–168</sup> studies were COSs.

#### Location

All<sup>151,152,154,156,157</sup> but four<sup>155,158,159,165</sup> of the psychoeducational intervention studies were conducted in North America.

One<sup>155</sup> RCT was conducted in the UK. The remaining six<sup>151,152,154,156,157</sup> randomised trials took place in the USA<sup>151–154</sup> and Canada.<sup>156,157</sup>

Two<sup>159,160</sup> of the three QEx studies were carried out in Canada and the third<sup>158</sup> was conducted in the Netherlands.

The remaining COSs took place in the USA<sup>161,162</sup> Canada<sup>163,164,166–168</sup> and Spain.<sup>165</sup>

#### Sample sizes

All of the randomised trials made use of small to moderate sample sizes, ranging from a total of 42 participants (with only 38 participants completing post-treatment interviews)<sup>156</sup> to 181 participants (with 174 participants completing the follow-up interview).<sup>151</sup>

Of the QEx studies, Noether *et al.*<sup>158</sup> had a large sample size of 253 participants (with 210 participants completing the 12-month follow-up interview); Simoneau *et al.*<sup>159</sup> and Tourigny 2007<sup>160</sup> recruited 49 and 55 participants, respectively.

Sample size in four of the COSs was small, ranging from 27 participants<sup>161</sup> to 42.<sup>166,167</sup> Holland *et al.*<sup>164</sup> and Hébert *et al.*<sup>163</sup> had samples of 66 and 90, respectively, although data were presented for only 88 participants in the Hébert and Tourigny<sup>163</sup> study, and Duffany and Panos<sup>162</sup> recruited a sample of 617.

### Participants

#### Age

Across all studies, the mean age of child participants ranged from 4.95 years<sup>152</sup> to 14.8 years.<sup>166,167</sup> Barth *et al.*<sup>161</sup> recruited the foster parents of children aged 9 years on average.

#### Gender

Four studies focused exclusively on females.<sup>155,160,166–168</sup> Of those with mixed samples, nine<sup>151,154,157,159,161–164</sup> had a sample that was at least 50% female. Five<sup>152,153,156,158,165</sup> studies had a sample that was at least 50% male.

#### Recruitment

Participants from all 17<sup>151–168</sup> studies were recruited from a wide range of mainly government agencies, including child protection agencies,<sup>157,160,166–168</sup> Family Services,<sup>153,164</sup> Family Sexual Abuse Action Centre,<sup>163</sup> Children's Justice Centre,<sup>162</sup> social services agencies,<sup>151,154,156</sup> local residential homes,<sup>165</sup> the authors' own clinics and local agencies<sup>155</sup> and community and shelter outreach centres.<sup>152</sup> Noether *et al.* recruited participants from mothers who participated in a national, 'longitudinal study of women with histories of violence and co-occurring substance use and mental health disorders'<sup>158</sup> (p. 827). We have no information on the recruitment sources for Barth *et al.*<sup>161</sup>

## Maltreatment

Five<sup>151–154,156</sup> of the seven RCTs focused on children who had witnessed or been exposed to IPV. Graham-Bermann *et al.*<sup>151</sup> reported that 30% of the children in this study had also experienced physical harm.

In Noether *et al.*<sup>158</sup> (quasi-experiment), the sample was drawn from a longitudinal study of women with a history of violence, and co-occurring substance use and mental health disorders.

One<sup>155</sup> randomised trial and two quasi-experiments<sup>159,160</sup> focused on sexual abuse, as did five<sup>161–164,166,167</sup> of the COSs.

One<sup>157</sup> randomised trial and two COSs<sup>165,168</sup> focused on children who had experienced physical abuse, emotional abuse, sexual abuse and neglect.

## Interventions and comparisons

All 17<sup>151–168</sup> studies used a group-based format of psychoeducation. Although the interventions were predominantly child focused, one intervention provided training for foster carers.<sup>161</sup> Control group participants in all but two of the psychoeducational studies received either no intervention or management as usual. Overbeek *et al.*<sup>153</sup> made use of a control programme 'Jij hoort erbij' ('You belong'), based on an analysis of non-specific factors used in the specific factors intervention programme. Trowell *et al.*<sup>155</sup> compared group psychoeducation with brief, focused, individual psychoanalytic psychotherapy.

## Psychoeducation for children exposed to intimate partner violence

Graham-Bermann *et al.*<sup>151</sup> described two psychoeducational interventions: one focused solely on children, and one combining a programme for children with a programme for their mothers. The programme is known as Kids Club.<sup>713</sup> The child intervention sought to improve children's knowledge about family violence, influence their attitudes and beliefs about families and family violence; and improve their emotional adjustment and social skills. The intervention for parents aimed at improving their repertoire of parenting and disciplinary skills, enhancing their social and emotional adjustment, thereby reducing the children's behavioural and adjustment difficulties. Howell *et al.*<sup>152</sup> evaluated a preschool version of the combined parent-and-child intervention described by Graham-Bermann *et al.*<sup>151</sup> In this version the children's intervention was designed to promote social competence and the mothers' programme to improve their social and emotional adjustment. In both studies, children were from families through which they had been exposed to IPV.

Overbeek *et al.*<sup>153</sup> developed a child's psychoeducational intervention based on Graham-Bermann's Kids' Club<sup>713</sup> but with some topics amended (e.g. more time spent on identifying, differentiating and dealing with emotions) and added (e.g. secrets, contact with the violent parent, and the future). Traumatic experiences are directly addressed in order to prevent avoidance of the topic and provide children with a sense of mastery. The intervention covered affective modulation, emotion regulation skills, coping and processing, social skills and enhancing future safety and development. Overbeek *et al.*<sup>153</sup> developed parallel parent sessions independently from Kids' Club,<sup>713</sup> for which the focus was on psychoeducation, improving parenting and disciplinary skills, and helping parents accurately interpret children's feelings and behaviour, providing them with emotional support.

In the Sullivan *et al.*<sup>154</sup> study, children attended a psychoeducation group (The Learning Club) in which they learned about safety, feelings and respect for themselves and others. In addition, the mothers and children also had the services of an advocate who helped them to access community resources.

Wagar and Rodway<sup>156</sup> describe the programme as aiming at helping children to modify their responses to past experiences of witnessing violence, to develop problem-solving skills for future encounters, to address interpersonal responsibilities and attitudes regarding behaviours and foster self-esteem.

### *Psychoeducation for children who experienced sexual abuse*

Trowell *et al.*<sup>155</sup> describe psychoeducational group therapy for girls in which sessions were topic based, with information and suggestions given and explained in the group. The relationship between girls and the cotherapist leading the groups was also a focus, being linked with past and current relationships, losses and disruptions. In this intervention, carers also received group-based support.

Hébert and Tourigny<sup>163</sup> evaluated a closed group led by two trained practitioners. The psychoeducational approach used combined a variety of therapeutic activities (e.g. group discussions, personal testimonies and stories, exercises and lectures). Some of the exercises targeted emotional regulation skills and cognitive coping strategies. Sessions included sex education and abuse prevention skills, and practice in social interactions with peers. Parents were invited to accompany the child for the first four sessions, which were used to promote positive child–caregiver interactions, improve communication and reinforce secure relationship. The intervention in Tourigny 2005<sup>166,167</sup> and Tourigny 2007<sup>160</sup> was also a closed group that used broadly the same approach, but without parental involvement. Each session used a similar format and was centred on a specific theme, such as disclosure of the abuse, the cycle of the abuse, consequences of abuse, relationship to the perpetrator, and so on.

Barth *et al.*<sup>161</sup> provided psychoeducational groups for foster parents (both kin and non-kin), designed to provide an understanding of the types of behaviours presented by children who had been sexually abused and how these might best be managed.

The Children's Treatment Program, evaluated by Duffany and Panos,<sup>162</sup> comprised 12 lessons on important topics to the participating children and families, including My Body, Assertiveness, Touches, Who Can You Tell, Fears and Nightmares, and Inner Strength. The groups were open to avoid families having to wait, and siblings were also allowed to attend.

The study by Holland *et al.*<sup>164</sup> evaluated a multimethod intervention for Aboriginal children in the Stó:lō Nation in British Columbia, Canada, who had been sexually abused. The intervention included group work that comprised psychoeducation and social skills training in a closed group format. No other information is provided other information.

The intervention in the study by Simoneau *et al.*<sup>159</sup> was group work, with boys and girls organised by age (6–8 years, 9–13 years). They were accompanied by parents for the first five sessions. Children who missed more than two sessions, were offered entry into the next group. Focus of the groups was to (1) reduce sense of social isolation; (2) improve self-perception; (3) reduce behavioural difficulties; (4) improve the closeness with the caregiver; and (5) reduce or cease feelings of guilt linked to the abuse.

The intervention in the study by Santibáñez<sup>165</sup> is also a multimethod programme that incorporates individual and group work-element focused, plus 'unstructured daily life interventions'. Staff meet weekly to determine which interventions are to be used for the young people both in individual and group sessions, and daily life activities are prepared to encourage wider learning. Specifically, there are weekly activities with the young people tackling self-control and moral development. The self-control sessions are individual and each young person chooses an area to change (e.g. to reduce hitting, increase studying, participate more). Each young person is taught self-control step by step: contingency contract, learning how to self-control, choosing the problem to tackle, defining the behaviour to control or accept, behavioural self-observation, multimodal self-observation, self-evaluation and conclusions about the extent of the problem, questioning oneself about how to proceed, proposing realistic goals for change, learning at least one technique of self-control and how to apply it to another problem. For moral development, weekly group work sessions are held, at which there is discussion about questions that are of importance to each of the young people; friendship, characteristics of good friends, helping others, rules of the home, personal responsibility and losing control.

## Number and duration of interventions

Duration of sessions ranged from 1 to 2 hours each, with sessions lasting 9–20 weeks (most are between 10 and 12 weeks), with the exception of Santibáñez,<sup>165</sup> in which the programme lasted 4 months, and appears to have comprised weekly group and individual sessions plus everyday activities in the residential homes to promote generalisation of learning.

## Outcomes: studies of psychoeducation

### Post-traumatic stress disorder

Four measures of children's post-traumatic stress symptoms were used across the seven<sup>153,155,160,163,166–168</sup> studies assessing this outcome. Four<sup>153,160,166–168</sup> studies used the Trauma Symptom Checklist (TSC). Overbeek *et al.*<sup>153</sup> also used the Trauma Symptom Checklist for Young Children (TSCYC), Hébert and Tourigny<sup>163</sup> used the Children's Impact of Traumatic Events Scale-II (Wolfe, unpublished assessment instrument – available from VV Wolfe, Child and Adolescent Centre, London Health Sciences Centre, London, ON, Canada) and Trowell *et al.*<sup>155</sup> used the 1989 version of Orvaschel's PTSD scale<sup>406</sup> – an extension of the KSADS instrument.<sup>268</sup> The Trauma Symptom Checklist-40 (TSC-40<sup>408</sup>) was used by Wolfe *et al.*<sup>157</sup> to assess symptoms of emotional distress.

### Depression

Hébert and Tourigny<sup>163</sup> assessed the impact of psychoeducation on childhood depression using the CDI.<sup>80</sup> Trowell *et al.*<sup>155</sup> used a shortened version of the KSADS.<sup>268</sup>

### Self-harm

Self-harm was assessed in all three Tourigny studies<sup>160,166–168</sup> using the Self-Injurious Behavior Questionnaire (Sadvosky, unpublished). Holland *et al.*<sup>164</sup> also examined this outcome using administrative data.

### Anxiety

Hébert and Tourigny *et al.*<sup>163</sup> assessed anxiety as an outcome, using the RCMAS.<sup>256</sup> This study also assessed symptoms of dissociation using the Child Dissociative Checklist.<sup>426</sup>

### Behaviour problems

The effect of psychoeducation on children's problem behaviour was examined by seven studies using various versions of the CBCL. The studies by Graham-Bermann *et al.*,<sup>151</sup> Overbeek *et al.*,<sup>153</sup> Hébert and Tourigny<sup>163</sup> and Barth *et al.*<sup>161</sup> used the Parent Report Form, and both studies by Tourigny *et al.*<sup>160,166–168</sup> used the YSR Form.

Two studies assessed delinquency: Tourigny 2005<sup>166,167</sup> used the Criminal and Delinquent Behaviours Questionnaire<sup>714</sup> and Holland *et al.*<sup>164</sup> used administrative data.

Antisocial and criminal behaviour was assessed using the Antisocial and Criminal Behavior Questionnaire<sup>715</sup> in the study conducted by Santibáñez,<sup>165</sup> who also investigated cognitive mediators of aggression using a 20-item Likert-type scale.<sup>427</sup>

Noether *et al.*<sup>158</sup> used mother/carer ratings of the Behavioral and Emotional Rating Scale (BERS<sup>410</sup>) as the measure of the primary outcome measure.

The primary outcome in Duffany and Panos<sup>162</sup> was recidivism (being re-abused or becoming abusers), assessed using the Youth Outcome Questionnaire.<sup>424</sup>

### Self-control

Self-control was assessed in Santibáñez<sup>165</sup> using the Shapiro Control Inventory<sup>428</sup> in its Spanish version.

### Social competence

In the Howell *et al.*<sup>152</sup> study the primary outcome was enhancing social competence in children who had witnessed IPV which they measured using the Social Competence Scale (Conduct Problems Prevention Research Group<sup>395</sup>).

### Self-concept and self-adequacy

Sullivan *et al.*<sup>154</sup> measured changes in the well-being of children who had been exposed to domestic violence using Harter's Self-Perception Profile for Children (SPPC; 8- to 12-year-old version<sup>431</sup>). Hébert and Tourigny<sup>163</sup> used the same measure as part of his larger battery of outcome measures for a group of sexually abused children.

All three Tourigny *et al.*<sup>160,166–168</sup> studies assessed the impact of intervention on coping strategies using a French version of the Ways of Coping Questionnaire.<sup>419</sup> They also deployed four of the five dimensions that make up the Empowerment Scale,<sup>421</sup> namely optimism, self-efficacy, helplessness and justified anger *plus* the French version of the Children's Attributions and Perceptions Scale.<sup>270</sup>

### Sexual behaviour

Barth *et al.*<sup>161</sup> and Holland *et al.*<sup>164</sup> examined the impact of intervention on children's sexual behaviours using the CSBI.<sup>423</sup> Holland *et al.*<sup>164</sup> also used administrative data.

### Relationships

Healthy relationship skills were assessed in the study by Wolfe *et al.*<sup>157</sup> using the Adolescent Interpersonal Competence Questionnaire.<sup>409</sup>

Two studies<sup>151,156</sup> focused on children's attitudes and beliefs about the acceptability of family violence. Graham-Bermann *et al.*<sup>151</sup> assessed change in this outcome using the Attitudes About Family Violence scale,<sup>394</sup> whereas Wagar and Rodway<sup>156</sup> used a Child Witness to Violence Questionnaire (no reference provided) to assess children's knowledge of wife abuse, who children feel are responsible, and their responses and attitudes to anger, their problem-solving abilities related to safety skills.

### Global functioning

Trowell *et al.*<sup>155</sup> measured social, psychological and school functioning using the KGAS (1986 version<sup>405</sup>), based on the Children's Global Assessment Scale (CGAS).<sup>261</sup>

## Risk of bias: randomised controlled trials of psychoeducation

### Sequence generation and allocation concealment

It was not possible to judge whether sequence generation was adequately conducted, as five<sup>153–157</sup> of the seven trials provided no other information other than participants were 'randomly assigned'. These studies were therefore assessed as 'unclear' risk of bias for both sequence generation and allocation concealment.

Graham-Bermann *et al.*<sup>151</sup> and Howell *et al.*<sup>152</sup> both describe a modified, sequential random assignment procedure. In the study by Graham-Bermann *et al.*,<sup>151</sup> the first seven children were assigned to the 'child-only intervention', the next seven children to the 'child plus mother intervention' and the next seven children to the wait-list control. In the Howell *et al.*<sup>152</sup> study, the first five families were allocated to the experimental arm and the next five to the control arm, but the paper said nothing about allocation concealment. Both studies were assessed as 'low risk of bias' for sequence generation and unclear for allocation concealment.

### Blinding of participants and personnel

Trowell *et al.*<sup>155</sup> stated that it was not possible to blind participants. None of the other studies makes any reference to procedures to blind the participants or personnel, and neither is likely to have been

undertaken, given the nature of the intervention. All studies were therefore assessed as 'high risk of bias' for this bias domain.

### Blinding of outcome assessors

Outcome assessors were blinded in Overbeek *et al.*<sup>153</sup> Graham Bermann *et al.*<sup>151</sup> state that baseline interviews were conducted by researchers blind to group assignment and separate from those who provided the intervention; however, with the exception of child attitudes, the study<sup>151</sup> relied solely on mother self-report and we judged this study<sup>151</sup> overall to be of high risk of bias on this domain.

Wagar and Rodway<sup>156</sup> state that group leaders conducted the pre-group interviews and administered the measurement tools, as well as facilitating the groups, and so this study was judged to be of high risk of bias for outcome assessment. Trowell *et al.*<sup>155</sup> state that blinding of assessors was probably compromised because the children and their mothers often mentioned the specific therapy during assessment.

The absence of information on blinding of outcome assessors, together with the use of self-report and parent-reported measures in the studies by Howell *et al.*,<sup>152</sup> Sullivan *et al.*<sup>154</sup> and Wolfe *et al.*,<sup>157</sup> suggest that outcome assessors were not masked in these studies, leading to a judgement of high risk of bias.

### Incomplete outcome data

Three<sup>153–155</sup> of the seven trials sought to minimise potential attrition bias by analysing participants based on 'assigned treatment' rather than 'treatment completed' and so were judged low risk of bias. Graham-Bermann *et al.*<sup>151</sup> identify differential attrition as a cause of concern and this study was accordingly judged high risk of bias, as were the studies by Wagar and Rodway<sup>156</sup> (which lost around 10% of children, all four from the experimental arm) and Wolfe *et al.*<sup>157</sup> (which reported differential attrition of 21% experimental and 11% control and undertook completer-only analyses). Howell *et al.*<sup>152</sup> was also deemed high risk of bias because 21 of the 113 children recruited to the study were missing from the final analyses (seven dropouts in the experimental group and 14 in the control group).

### Selective outcome reporting

Although the studies all differed somewhat in their choice of outcomes, there appears to be no evidence that other outcomes were planned and then omitted from the results. In the absence of study protocols it is extremely difficult to assess the risk of selective outcome reporting. In that respect, almost all were assessed as unclear risk of bias. However, two<sup>156,157</sup> of the included studies failed to report specific means and SDs for their post-intervention results and were therefore judged to be of high risk of bias.

### Other sources of bias

Some other potential sources of bias were noted in two<sup>151,154</sup> of the studies, including a suggestion that the sample was nationally unrepresentative<sup>151</sup> and potential bias associated with paying participants for their continued involvement in the study.<sup>154</sup>

Full details of risk-of-bias assessments for each study can be found in *Figures 33 and 34 in Appendix 10*.

## Quality assessment of quasi-experimental and controlled observational studies of psychoeducation

The quality of the three<sup>158–160</sup> QEx studies and seven<sup>161–168</sup> COSs was variable.

All studies<sup>158–168</sup> provided a clear description of the study objectives, and, except for Holland *et al.*,<sup>164</sup> all gave a clear description of the outcome and adequate descriptions of their participants.

Five<sup>159,162,164,166–168</sup> of the included studies did not give an adequate description of the theoretical basis of their intervention. All of the studies<sup>158–168</sup> at least partially addressed potential confounders in their research, and all provided a clear description of their findings; however, only two studies<sup>165,168</sup> addressed potential

adverse effects. Only two<sup>166–168</sup> of the 10<sup>158–168</sup> studies described the characteristics of patients lost to follow-up. Four<sup>158,160,162,163</sup> of the 10 studies reported probability values for the main outcomes.

It was not possible to determine, for any of the studies, whether or not those who participated, and the staff involved in the study, were representative of the entire population from which they were recruited.

Blinding of participants or outcome assessors was not attempted in five<sup>161,162,164–167</sup> of the studies, and, although it was unclear whether or not it was attempted in the remaining four<sup>158–160,163,168</sup> studies, it seems unlikely that it would have been feasible because of the psychosocial nature of the intervention. Three of the studies<sup>164,166–168</sup> did not recruit patients for intervention groups and controls from the same population.

### Results: psychoeducation

#### Post-traumatic stress

Both Wolfe *et al.*<sup>157</sup> and Overbeek *et al.*<sup>153</sup> assessed the impact of the psychoeducational intervention on children's post-traumatic stress, albeit with two measures (as measured by the TSC-40<sup>408</sup> and the TSCYC,<sup>399</sup> respectively). We were unable to combine these data in a meta-analysis. Based on ITT and completer analyses, Overbeek *et al.*<sup>153</sup> found no differences between children in the experimental and control group; children in both groups improved.

Working with teenagers with histories of child maltreatment, Wolfe *et al.*<sup>157</sup> reported improvements in symptoms of trauma.

Children's PTSD was also assessed by Trowell *et al.*<sup>155</sup> However, unlike the studies by Overbeek *et al.*<sup>153</sup> and Wolfe *et al.*,<sup>157</sup> this study<sup>155</sup> compared two active treatments. In Trowell *et al.*,<sup>155</sup> univariate analyses failed to identify a difference between those receiving group or IT on the PTSD dimension of 'persistent symptoms of increased arousal' used in the study.<sup>405</sup> Following Cohen,<sup>716</sup> the authors used an effect size of 0.5 as a threshold of moderate effect, and undertook no further analyses relating to PTSD symptoms.

Controlling for the impairment score on the KGAS<sup>405</sup> in a multivariate analysis, the authors report a significant effect of IT for 'the re-experiencing of trauma' dimension of PTSD (baseline to 1- and 2-year follow-up, and baseline to exit), and – for the 'persistence/avoidance of stimuli' dimension – at baseline to first-year follow-up. When KGAS is replaced by the baseline score on the same dimensions, the significance of the effects is attenuated.

Children's PTSD symptoms were also assessed in three COSs<sup>163,166–168</sup> and one QEx study.<sup>160</sup> Owing to the high risk of bias in all four of these studies,<sup>160,163,166–168</sup> results were not incorporated into the meta-analyses and are instead presented narratively. Their results indicate that adolescents who were part of the psychoeducational intervention group improved significantly compared with controls on post-traumatic stress scores at both post test<sup>160,163,166,167</sup> and 6-month follow-up.<sup>166,167</sup> A fourth study<sup>168</sup> found no statistically significant differences, although clinical measures suggested improvement for the treatment group compared with the control group.

#### Depression

In the trial conducted by Trowell *et al.*,<sup>155</sup> the between-group differences on the KGAS failed to reach the threshold effect size adopted by the authors of 0.5 (following Cohen<sup>716</sup>). In the one CS<sup>163</sup> that assessed childhood depression, participants in the intervention group demonstrated only marginally fewer symptoms of depression following the intervention.

#### Behavioural problems

Graham-Bermann *et al.*<sup>151</sup> and Overbeek *et al.*<sup>153</sup> assessed the impact of the psychoeducational intervention on child externalising and child internalising behaviours (as measured by the CBCL).

*Externalising behaviours* The pooled estimate using a random-effects model was  $-0.19$  (SMD) (95% CI  $-0.45$  to  $0.06$ ) (Figure 21). The  $I^2$ -statistic indicates 0% of the variation in the point estimates is due to heterogeneity.

*Internalising behaviours* The pooled estimate using a random-effects model was  $-0.00$  (SMD) (95% CI  $-0.25$  to  $0.25$ ;  $p = 0.84$ ) (Figure 22). The  $I^2$ -statistic indicates 0% of the variation in the point estimates is due to heterogeneity.

Children's behavioural problems were also assessed in three<sup>161,163,166–168</sup> COSs and two<sup>158,160</sup> QEx studies.

Four<sup>158,163,164,166,167</sup> of the included studies found that post-test scores on behavioural measures were significantly lower for children who had received a psychoeducational intervention.

One study<sup>160</sup> found that although intervention group participants (all girls) showed a significant decrease in internalising behaviours and social problems, change scores on externalising behaviours problems were not significant. One study<sup>168</sup> found no statistically significant differences for internalising or externalising behaviours. Another study<sup>162</sup> found that approximately one-third (15/47) of the children showed no change, or an insignificant worsening of behavioural and/or emotional symptoms following the intervention, and the last study<sup>161</sup> reported that behaviour in both intervention and control groups worsened in equal measure from the pre-test to the follow-up.

## Other outcomes

### *Self-injurious behaviours*

Self-injurious behaviours were assessed in three<sup>164,166–168</sup> COSs and one<sup>160</sup> QEx study. Three<sup>160,166–168</sup> of the studies demonstrated that children who were part of the intervention group improved significantly compared with control group participants. The fourth study<sup>164</sup> indicated that there was no significant difference between groups for attempted/threatened suicide.

### *Anxiety and symptoms of dissociation*

The same COS<sup>163</sup> reported that participants in the intervention group demonstrated significantly less anxiety following the intervention and marginally fewer symptoms of dissociation.

### *Children's sexual behaviours*

Two<sup>161,164</sup> COSs assessed children's sexual behaviours. Holland *et al.*<sup>164</sup> found no significant effects. Barth *et al.*<sup>161</sup> reported a statistically significant treatment group effect (improvements) for two out of 36 items on the Coping Scales Inventory (CSI): 'looks at people when nude' and 'shy about undressing'.

### *Delinquency*

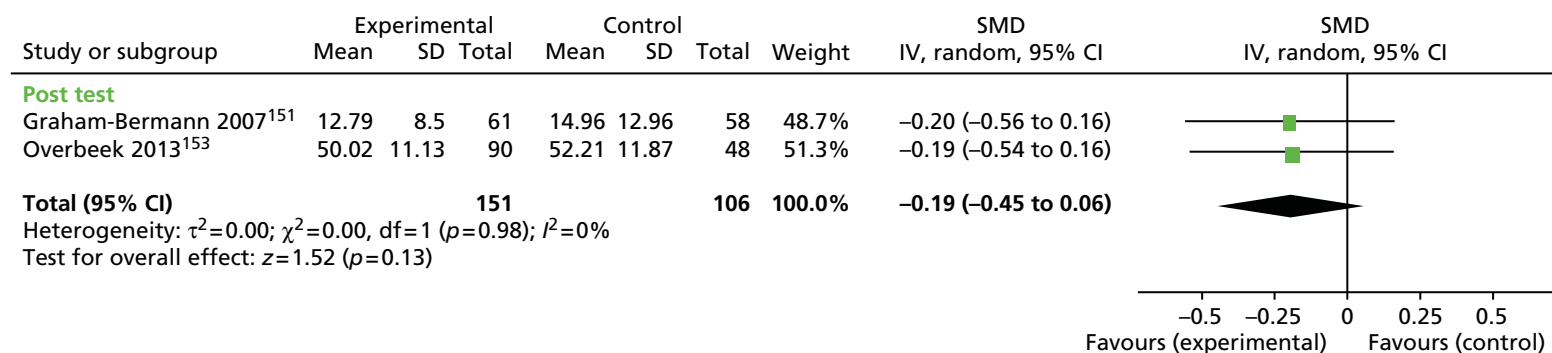
Three<sup>165–167</sup> COSs assessed delinquency and antisocial behaviour. Tourigny 2005<sup>166,167</sup> reported that children in the intervention group had a greater reduction in delinquent behaviours than children in the control group at the 6-month follow-up interview. Holland *et al.*<sup>164</sup> and Santibáñez<sup>165</sup> found no significant differences.

### *Self-control*

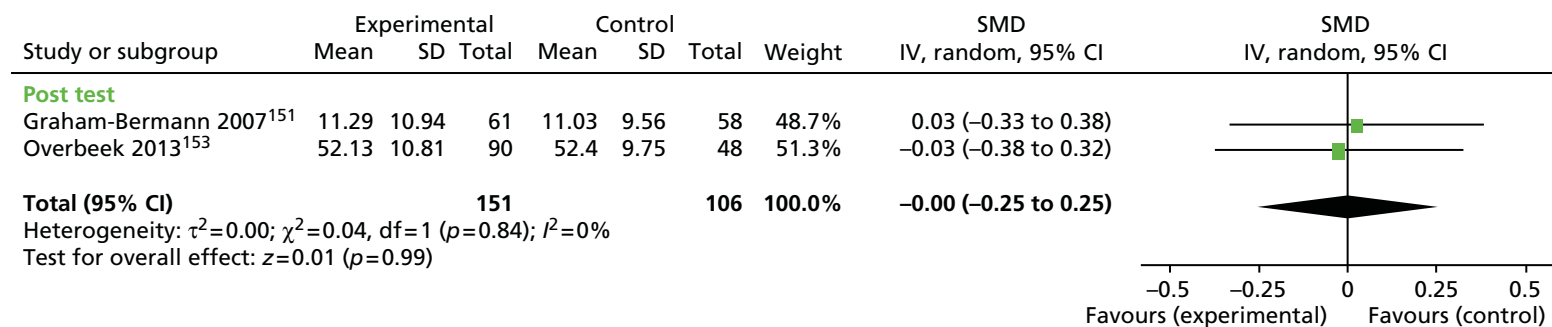
The one<sup>165</sup> study that assessed children's self-control following the intervention found no significant difference between the intervention group and control group – despite finding some significant improvements – compared with control group participants – in levels of moral reasons and some of the factors believed to mediate aggression.

### *Coping strategies*

Coping strategies were assessed in two<sup>166–168</sup> COSs and one<sup>160</sup> QEx study. All three<sup>160,166–168</sup> studies demonstrated that children who were part of the intervention group improved significantly compared with control group participants in abuse-related attributions.



**FIGURE 21** Externalising behaviours. df, degrees of freedom; IV, instrumental variable.



**FIGURE 22** Internalising behaviours. df, degrees of freedom; IV, instrumental variable.

### ***Self-competence***

Children's self-competence was assessed in one COS<sup>163</sup> and one randomised CS.<sup>154</sup> The RCT<sup>154</sup> found that children who received the psychoeducational intervention demonstrated increased self-competence in their 4-month follow-up interview, whereas the self-competence of children in the control group remained relatively unchanged overall. Hébert and Tourigny<sup>163</sup> found no significant difference in adjusted post-test scores for self-competence.

### ***Sense of empowerment***

Children's sense of empowerment was assessed in two COSs<sup>166–168</sup> and one QEx study.<sup>160</sup> In all three studies,<sup>160,166–168</sup> children who were part of the intervention group improved significantly compared with control group participants in abuse-related attributions.

### ***Social competence***

One RCT<sup>152</sup> assessed participant's prosocial skills, finding a significant improvement among children who received the intervention.

### ***Relationships***

In Wolfe *et al.*<sup>157</sup> (RCT) intervention youths did not show the expected growth in healthy relationships skills over time.

Children's attitudes and beliefs about the acceptability of family violence were measured in two randomised trials,<sup>151,156</sup> using different measures (see *Outcomes: studies of psychoeducation*). Graham-Bermann *et al.*<sup>151</sup> found that children who were part of the child and mother intervention made most improvement over time in attitudes about violence compared with those in the child-only and control groups. An ANCOVA of the pre-/post-treatment data by Wagar and Rodway<sup>156</sup> indicated significant differences in children's 'attitudes and responses to anger' and 'sense of responsibility for the parents & for the violence'. There were no significant differences between groups for 'knowledge of safety & support skills'.

## ***Effectiveness of psychoeducational interventions for maltreated children***

### ***Summary***

We identified a large number of studies of psychoeducational interventions including seven<sup>151–157</sup> randomised trials, three<sup>158–160</sup> QEx studies and seven<sup>161–168</sup> COSs. All included or comprised a group-based format, and although the groups used a variety of formats (activities, discussion, etc.) they generally included an educative component (focused on the nature of maltreatment suffered by the children), affect modulation, emotion regulation skills, coping and processing, social skills and addressing future safety.

Although the findings of this heterogeneous body of evidence vary somewhat, there is evidence of effectiveness in relation to symptoms of PTSD.

The evidence for improving children's behaviour is more mixed. On the basis of 'vote counting' most report a positive impact on externalising, internalising, delinquency and antisocial behaviour and self-injurious behaviour. A minority report 'no difference' and Barth *et al.*<sup>161</sup> report a worsening in children's behaviour. Participants in the Barth *et al.*<sup>161</sup> study were foster parents caring for sexually abused children, who rarely implemented the homework tasks required of them during this short intervention but who appreciated the intervention.

Where examined, similar results in favour of psychoeducation were reported for positive changes, such as improvements in coping, enhanced self-competence, social competence and sense of empowerment. Generally, the involvement of parents (often in parallel groups) was found to be helpful.

### Completeness and applicability

All but four of the studies were conducted in North America. Two<sup>153,158</sup> studies were conducted in the Netherlands, one<sup>165</sup> study in Spain and one<sup>155</sup> study in the UK.

Nine<sup>155,159–164,166–168</sup> of the seventeen studies focused on sexually abused children, including the one UK study,<sup>155</sup> which compared the effects of two manualised therapies: an individual psychotherapy and a group therapy that included psychoeducation. Six<sup>151–154,156,158</sup> studies addressed the consequence of witnessing IPV, and two<sup>157,165</sup> studies recruited children who had experienced other forms of maltreatment, including multiple abuse. The studies are broadly relevant to the UK, in terms of participants, settings and transferability of the interventions, but are sometimes limited by the cultural specificity of some interventions (e.g. Holland *et al.*<sup>164</sup>). There is clearly a bias towards evaluating interventions aimed at children who have been sexually abused or exposed to domestic violence, and less evidence about the usefulness of psychoeducational interventions to other groups of maltreated children.

### Quality of the evidence

The seven<sup>151–157</sup> trials of psychoeducation are generally of very poor quality, particularly in relation to detection bias and attrition bias (where only the study by Overbeek *et al.*<sup>153</sup> was judged low risk of bias), and the quality of the quasi-experiments and COSs is variable. All in all, although the trends generally favour psychoeducation, there is a need for well-designed studies of psychoeducational interventions that are carefully designed in respect of their theories of change, carefully implemented, rigorously evaluated against agreed outcomes and outcome measures, and fully reported.

### Economic evidence

One<sup>614</sup> economic study, carried out in the UK, evaluated a group-based psychoeducation intervention for girls who had been sexually abused. The study<sup>614</sup> used data from the Trowell *et al.*<sup>155</sup> RCT, described above, and compared the psychoeducation intervention ( $n = 36$ ) to individual psychotherapy ( $n = 35$ ) for girls aged between 6 and 14 years.

Although described by the authors as a cost-effectiveness study,<sup>614</sup> the economic evaluation should more accurately be classified as cost-consequences analyses, presenting costs and a range of disease-specific outcome measures separately. The study<sup>614</sup> was carried out after the end of the Trowell *et al.*<sup>155</sup> clinical trial, which precluded the prospective collection of resource-use data. As a result, the study<sup>614</sup> was limited to a narrow economic perspective, including only the two interventions that were costed using nationally applicable unit costs and expressed in 1998–9 pounds sterling (£). No discounting was applied, despite a 2-year time horizon. Outcomes measured included psychiatric symptoms, global functioning, measures of PTSD and the experiences of carers.

Outcomes between the two groups were similar for the range of measures of effectiveness and costs were significantly higher for IT than the psychoeducation group therapy. The authors conclude that, with similar outcomes and higher costs, IT is less cost-effective than group therapy. However, they note that the logistics of setting up groups may mean children having to wait until there are sufficient numbers of a similar age before a group can start, resulting in a trade-off between potential savings to be gained from a group format and potential delays to treatment start for traumatised children. In addition, the study<sup>614</sup> was limited in a number of important ways, including the narrow perspective, the lack of a TAU option or other control group, and the failure to formally combine costs and effects or explore uncertainty.

### Group work with children

Five<sup>169–173</sup> studies assessed the effectiveness of therapies that used the group format as an important therapeutic mechanism of change, but which are not described as psychoeducational.

## Description of studies

### Study design

One<sup>169</sup> of the five studies was a randomised trial. The remaining were COSs.<sup>170–173</sup>

### Location of studies

Only one<sup>169</sup> study took place in the UK. Of the COSs, two studies<sup>170,171</sup> took place in Canada and two<sup>172,173</sup> in the USA.

### Sample sizes

All studies had small samples sizes. The COSs<sup>170,171</sup> had sample sizes at baseline, ranging from a total of 12 participants<sup>171</sup> to 70 participants.<sup>170</sup> Monck *et al.*<sup>169</sup> included 47 participants.

### Participants

#### Age

Verleur *et al.*<sup>173</sup> focused on teenagers with an age range of 13–17 years. The other studies focused on younger age groups, with ages ranging from 4 to 13 years.<sup>169–172</sup>

#### Gender

Three studies<sup>170,172,173</sup> focused exclusively on females, and one study<sup>171</sup> focused solely on males. The other study<sup>169</sup> stipulated that the sample was 85% female.

### Recruitment

In four<sup>169–172</sup> studies, participants were recruited from professional child protection agencies. Verleur *et al.*<sup>173</sup> recruited participants from a group treatment centre.

### Maltreatment

All five<sup>169–173</sup> studies recruited children and young people who had been sexually abused. De Luca *et al.*<sup>170</sup> and McGain and McKinzey<sup>172</sup> recruited only girls; Grayston and De Luca<sup>171</sup> recruited only boys and Monck *et al.*<sup>169</sup> recruited both boys and girls, although the sample included mainly girls (85%).

### Interventions and comparisons

In the De Luca *et al.*<sup>170</sup> study, participants in the intervention (sexually abused girls) were compared with girls with no known history of sexual abuse. Control group participants in the remaining studies received either TAU, or were placed on a wait-list control.

In four<sup>170–173</sup> studies, the intervention was described as 'group therapy'. Verleur *et al.*<sup>173</sup> assessed the impact of group-based sexual education combined with group psychotherapy (no further information) led by same-sex (female) therapists. McGain and McKinzey<sup>172</sup> set out the goals of the group-based programme, but do not detail the nature of the therapy/group process, other than to observe that it was 'similar to hundreds of treatment programs provided to children who have been sexually abused'<sup>172</sup> (p. 1168) and to differentiate it from other treatment programmes, such as those that are more behaviourally orientated, brief therapy programmes and crisis intervention programmes. The group intervention for boys in the study by Grayston and De Luca<sup>171</sup> was run by therapists of both genders, supervised by a registered clinical psychologist. Sessions were said to follow 'a consistent four-part format' (described by De Luca and her associates<sup>171</sup>). Behaviour management techniques were used throughout to reduce disruptive behaviour and increase acceptable conduct. At the midpoint, the therapists also implemented a fixed-interval reinforcement schedule to further manage behaviour (described by Hack *et al.*<sup>535</sup>).

Monck *et al.*<sup>169</sup> assessed the effectiveness of a family network treatment programme with or without group treatment.

### Number and duration of sessions

Sessions in Grayston *et al.*<sup>171</sup> and De Luca *et al.*<sup>170</sup> were 90 minutes in duration, and were provided for 12 weeks<sup>171</sup> and between 9 and 12 weeks.<sup>170</sup>

The group work programme evaluated by McGain and McKinze<sup>172</sup> continued weekly for 6 months, with the possibility for children to continue on to another cycle. Some children are reported to have spent between 9 months to 1 year in treatment.

The number of sessions ranged considerably, from 9–12 weekly sessions<sup>170,171</sup> to 6–9 months of weekly sessions.<sup>172,173</sup>

No information was available on the structure of group work in Monck *et al.*<sup>169</sup>

### Outcomes: group work with children

These studies<sup>169–173</sup> had few outcomes in common, and, those that did, used different measures.

#### Depression

Children's depression was assessed in one<sup>169</sup> study, using the CDI.<sup>80</sup>

#### Anxiety

Anxiety was assessed in De Luca *et al.*,<sup>170</sup> using the RCMAS/What I Think and Feel Questionnaire.<sup>293</sup>

#### Behaviour

Problem behaviours were assessed by three<sup>170–172</sup> studies. De Luca *et al.*<sup>170</sup> and Grayston and De Luca<sup>171</sup> both used the CBCL,<sup>257</sup> McGain and McKinze<sup>172</sup> used the Revised Behavior Problem Checklist<sup>438</sup> and the ECBI.<sup>439</sup>

#### Sexual behaviour

Child sexual behaviour was assessed in Grayston and De Luca<sup>171</sup> with the CSBI<sup>259</sup> and in Verleur *et al.*<sup>173</sup> with the Anatomy/Physiology Sexual awareness scale.

#### Self-esteem

Children's self-esteem was assessed by three of the included studies<sup>169,170,173</sup> using the Coopersmith Self-Esteem Inventory (SEI).<sup>436</sup>

### Risk of bias: randomised controlled trials of group work for children

A graphic summary of the risk of bias of the one group work trial is provided in *Figures 35 and 36, Appendix 10*.

#### Sequence generation and allocation concealment

Monck *et al.*<sup>169</sup> stated that 'allocation was made without the direct involvement of the researchers or the clinical team, and was achieved by blind choice of marked cards drawn from an envelope'<sup>169</sup> (p. 12). Judgements of low risk of bias were made for both sequence generation and allocation concealment.

#### Blinding of participants, personnel and outcome assessors

This study<sup>169</sup> did not make any reference to procedures to blind the participants or outcomes assessors. However, because of the nature of the intervention, it is unlikely to have been feasible to blind participants. The use of self-report and parent-reported measures also indicates that it was not possible to blind outcome assessors, suggesting this study<sup>169</sup> had a high risk of bias.

### Incomplete outcome data

This study<sup>169</sup> analysed only the available data of 47 participants. However, there was insufficient information provided in the study<sup>169</sup> regarding how many participants were originally assigned to each group. Therefore, this study<sup>169</sup> was judged to be of unclear risk of bias.

### Selective outcome reporting

There appears to be no evidence that other outcomes were planned and then omitted from the results, but, in the absence of prospective registration, we judged this aspect to be of 'unclear' risk of bias.

### Other sources of bias

No other identical sources of bias were identified in these studies.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

## Quality assessment of quasi-experimental and controlled observational studies of group work for children

The quality of the COSs was low. All five<sup>169–173</sup> studies provided a clear description of the objectives and outcomes in their studies, with the exception of De Luca *et al.*,<sup>170</sup> who did not clearly describe their outcomes. Only two<sup>171,172</sup> studies provided clear descriptions of the characteristics of the patients included in the study,<sup>171,172</sup> and only Grayston and De Luca<sup>171</sup> provided a clear description of the intervention. Neither Grayston and De Luca<sup>171</sup> nor De Luca *et al.*<sup>170</sup> clearly described their main findings. No study adequately addressed potential adverse effects, nor did they report probability values for the main outcomes. Only one study<sup>172</sup> provided information on recruitment of participants, the characteristics of patients lost to follow-up, and the representativeness of the staff (satisfactory). Determinations of the representativeness of others studies were not possible as a result of inadequate information. Blinding of participants and outcome assessors was not attempted in any of the studies.

## Results: group work for children

No meta-analyses were possible for these interventions. There was only one randomised trial<sup>169</sup> and a very heterogeneous group of COSs.

### Depression

Monck *et al.*<sup>169</sup> found no significant difference in depression between children participating in the family network treatment programme with group treatment and those participating in the family network treatment programme alone.

### Anxiety

In the only study to assess anxiety, De Luca *et al.*<sup>170</sup> found that, although anxiety scores for both intervention group (sexually abused) and the comparison group (no sexual abuse) decreased following the intervention, there was no significant difference between the two groups. The authors note that anxiety scores for both groups were low at baseline.

### Self-esteem

The results of analyses in De Luca *et al.*<sup>170</sup> indicated a statistically significant impact of group treatment for self-esteem for those girls who completed therapy. Monck *et al.*<sup>169</sup> found no difference in measures of self-esteem following the intervention tested in the RCT.

### Behavioural problems

Two<sup>170,172</sup> of the three<sup>169,170,172</sup> studies that examined the impact of group therapy on problem behaviour reported post-treatment improvement. Only in De Luca *et al.*<sup>170</sup> were participants followed up for 1 year. In this study,<sup>170</sup> parents reported sustained improvements in internalising and externalising behaviour problems at 9–12 months' follow-up, although this reached statistical significance only for internalising behaviours. However, data were not collected on the behaviour of those in the comparison group.

Grayson and De Luca<sup>171</sup> also found larger changes in pre–post treatment scores for problem behaviours among children in the intervention group, but the between-group differences were not statistically significant.

### Sexual behaviour

Only Grayson and De Luca<sup>171</sup> examined the impact of group therapy on sexual behaviour, finding that, although sexualised behaviour tended to decline following treatment, the changes – as measured by the Child Sexual Abuse Inventory – were not statistically different between treatment and control children. Verleur *et al.*<sup>173</sup> reported that children in the experimental group improve significantly compared with the control group with regards to the measure of sexual awareness used in the study.

### Self-esteem

One<sup>173</sup> study assessed participants' self-esteem following the intervention and found that, although the self-esteem for both intervention and control groups increased, there was a larger increase in the treatment group than the control group.

## Effectiveness of group work interventions for maltreated children

### Summary

We identified just five<sup>169–173</sup> studies of group work (all with sexually abused children), of which only one<sup>169</sup> study was a randomised trial. The trial<sup>169</sup> found no evidence of the effectiveness of adding a group work component to a family network treatment in terms of reducing depression or improving children's self-esteem. For the other studies, the limited information provided about the interventions, combined with heterogeneity in outcomes assessed and measures used, make it impossible to draw conclusions about the effectiveness of therapeutic group work for sexually abused children.

### Completeness and applicability

The trial<sup>169</sup> was conducted in the UK. The remaining four<sup>170–173</sup> studies were conducted in North America. All focused on children who have been sexually abused. As indicated above, the studies provide little information that would allow these interventions to be replicated or to explore possible reasons for differences in reported effects.

### Quality of the evidence

The trial conducted by Monck *et al.*<sup>169</sup> 'scored' well in terms of risk of bias, and was one of the few studies that reported an adequate sequence generation and concealment of allocation. The COSs were judged to be overall of poor quality.

### Economic evidence

No economic evaluations of group work with children who have been maltreated were located.

## Psychotherapy/counselling

In this section, we review those studies that either stated that they were studies of psychotherapy or counselling per se, or that described an eclectic RBI. We deal with these together simply because it was not possible clearly to differentiate between the included studies in relation to the content of the therapies assessed.

Four<sup>155,174,178,179</sup> studies assessed the effectiveness of psychotherapy without clearly describing their theoretical underpinnings. One<sup>178</sup> study explored the value added of group psychotherapy when added to individual psychotherapy. One<sup>155</sup> study is also described in the section on psychoeducation. The other two studies of interventions described as psychotherapy are those of Sullivan<sup>179</sup> and Thun *et al.*<sup>174</sup>

We identified four<sup>175–177,180</sup> studies that assessed the effectiveness of counselling interventions. Two assessed, respectively, the effectiveness of specific techniques for children in foster care, life story work<sup>175</sup> and a mindfulness-based intervention.<sup>176</sup> The other two studies are those of Cadol *et al.*<sup>177</sup> and Downing *et al.*<sup>180</sup>

## Description of studies

### Study design

Four studies were randomised trials.<sup>155,174–176</sup> Cadol *et al.*<sup>177</sup> was a QEx study.

The Downing *et al.*,<sup>180</sup> Sullivan<sup>179</sup> and Nolan *et al.*<sup>178</sup> studies were COSs.

### Location

Nolan *et al.*<sup>178</sup> was conducted in Ireland, and Trowell *et al.*<sup>155</sup> in the UK. The other six studies<sup>174–177,179,180</sup> were conducted in North America.

### Sample sizes

Of the four trials, two were very small. Haight *et al.*<sup>175</sup> was a feasibility study, with a small sample of just 23 randomised participants (15 completers). Thun *et al.*<sup>174</sup> recruited 13 participants, but only 11 participants completed the intervention and follow-up assessments. Reddy *et al.*<sup>176</sup> and Trowell *et al.*<sup>155</sup> randomised 71 and 75 participants, respectively.

Cadol *et al.*<sup>177</sup> recruited 140 participants and Sullivan<sup>179</sup> recruited 72 participants. The remaining COSs were very small. Downing *et al.*<sup>180</sup> had a sample size of 22 participants and Nolan *et al.*<sup>178</sup> had a sample of 38 participants.

### Participants

#### Age

Nolan *et al.*<sup>178</sup> recruited children aged between 6 and 17 years old, and Trowell *et al.*<sup>155</sup> recruited children aged 6–14 years. Thun *et al.*<sup>174</sup> focused on teenage girls aged 16–18 years. Participants were aged 7–14 years in the study by Haight *et al.*,<sup>175</sup> and 13–17 years in the Reddy *et al.*<sup>176</sup> study. Downing *et al.*<sup>180</sup> focused on children aged 6–12 years, and Cadol *et al.*<sup>177</sup> focused on a slightly older population, with a mean age of 17.2 years. In the study by Sullivan<sup>179</sup> participants were deaf children, aged 12–16 years, living in a residential school, who had been sexually abused by either dormitory staff or older pupils. This was the only CS<sup>179</sup> that focused on disabled children.

#### Gender

The majority of children in the Nolan *et al.*<sup>178</sup> study were female (92%). There were more males than females in Cadol *et al.*<sup>177</sup> (69 males, 37 females). In the studies by Downing *et al.*,<sup>180</sup> Haight *et al.*<sup>175</sup> and Reddy *et al.*<sup>176</sup> the samples were more evenly split, with girls being in the majority in Downing *et al.*<sup>180</sup> and Reddy *et al.*<sup>176</sup> and boys being in the majority in the Haight *et al.*<sup>175</sup> study (nine, and six completers). All participants in the Trowell *et al.*<sup>155</sup> study were girls.

#### Referral

Participants in the study by Nolan *et al.*<sup>178</sup> were referred from eight urban and rural services for sexually abused children and adolescents. Those in the study by Trowell *et al.*<sup>155</sup> were recruited from the authors' own clinics and from professionals' agencies in the community.

Haight *et al.*<sup>175</sup> recruited children from Department of Children and Family Services caseworkers. Case managers approached eligible young people in foster care to invite them to participate in the study conducted by Reddy *et al.*<sup>176</sup> Participants in Cadol *et al.*<sup>177</sup> and Downing *et al.*<sup>180</sup> studies were recruited from hospitals and private practitioners. Teenagers in the Thun *et al.*<sup>174</sup> study were referred by the staff

of the military-based programme to which they had signed up to assist them in getting their Graduate Equivalency Degree (having previously dropped out of school).

### Maltreatment

Children in the Haight *et al.*<sup>175</sup> study were in foster care and came from families in which they had experienced multiple forms of abuse, and whose parents misused methamphetamine. In Cadol *et al.*,<sup>177</sup> the children had experienced both physical abuse and neglect. Downing *et al.*<sup>180</sup> recruited children who had experienced sexual abuse. Reddy *et al.*<sup>176</sup> provides no detailed information on maltreatment histories.

Participants in the studies by Trowell *et al.*,<sup>155</sup> Thun *et al.*,<sup>174</sup> Sullivan<sup>179</sup> and Nolan *et al.*<sup>178</sup> had all been subjected to sexual abuse.

### Interventions and comparisons

Nolan *et al.*<sup>178</sup> compared the effectiveness of IT with combined individual and group therapy (IGT). The purpose of these two interventions was to treat the 'psychological sequelae of child sexual abuse'. Both interventions drew on the principles of a broad range of individual and group therapies (psychodynamic, client centred, CBT, etc.) and implementation varied between therapies and across clients. All therapists sought to provide their clients with a supportive therapeutic relationship that would enable them to process the psychological consequences of sexual abuse, and help them to develop the insights and skills needed to prevent further abuse. Those receiving group therapy also had the opportunity to realise that they were not alone in experiencing CSA, to enjoy peer support, and to benefit from peer-to-peer feedback on their experiences and their behaviour. On average, the duration of intervention ranged from 18 to 20 hours. This was the only intervention received by participants in the comparison group (those in the intervention group also received group psychotherapy).

Sullivan<sup>179</sup> compared group psychotherapy developed at the Boys Town National Research Hospital with individual psychotherapy for survivors of abuse. After listing treatment goals, the reader is referred to an earlier paper for further information.<sup>718</sup> Children in the Sullivan<sup>179</sup> study met weekly with their therapist for 2 hours (because of the communication problems and need for signing) for 36 weeks. Control group participants received no treatment.

Thun *et al.*<sup>174</sup> state that the group curriculum 'followed a modified multidimensional model proposed by Lindon and Nourse (1994<sup>544</sup>) that incorporated a skills component, a psychotherapeutic component and an educative component'<sup>174</sup> (p. 8) and, arguably, this study<sup>174</sup> might, with additional information, have been included in the psychoeducational or group treatment grouping. In describing the intervention, Thun *et al.*<sup>174</sup> emphasise the benefits of groups as a means of alleviating feelings of isolation and alienation, and fostering trust. Those in the comparison group had the option to avail of individual counselling, but none did.

The intervention used by Haight *et al.*<sup>175</sup> was 'Life Story Intervention' (LSI), described by the study authors as a narrative and relationship-based mental health intervention. LSI was delivered in and around the children's homes, on a one-to-one basis, by a range of professionals, including teachers, child welfare professionals and counsellors. The intervention was delivered over the course of a series of weekly 1-hour sessions for approximately 7 months. Control group participants were placed on a wait-list and received the intervention at the conclusion of the study.

Reddy *et al.*<sup>176</sup> assessed the impact of Cognitively-Based Compassion Training (CBCT), described by the authors as a type of contemplative practice that is built on mindfulness practice and teaches active contemplation of loving kindness, empathy and compassion towards loved ones, strangers and enemies.<sup>719</sup> It uses a variety of cognitive restructuring and asset-generating practices, with the long-term goal of developing the equanimity of mind that fosters acceptance and understanding of others. Participants were assigned to classes that met twice a week, for 1 hour, for 6 weeks. The control group was a wait-list control.

The interventions used in studies by Cadot *et al.*<sup>177</sup> and Downing *et al.*<sup>180</sup> were described as one-to-one counselling. No information was provided on the duration or number of counselling sessions, other than Downing *et al.*<sup>180</sup> stating that sessions took place 'near-weekly for approximately 1 year'. In Cadot *et al.*<sup>177</sup> children in all arms received developmental testing, regular medical care and co-ordination of services, but only those in the experimental arm received the counselling. Participants in the control group in the Downing *et al.*<sup>180</sup> study received reinforcement treatment (helping parents to focus on positive behaviour).

Trowell *et al.*<sup>155</sup> compared brief, focused, individual psychoanalytic psychotherapy with group psychotherapy (comprising both psychotherapeutic and psychoeducational components).

### Outcomes: psychotherapy/counselling

#### Post-traumatic stress disorder

Trowell *et al.*<sup>155</sup> used the 1982 version of Orvaschel's PTSD scale – an extension of the KSADS instruments.<sup>406</sup> Reddy *et al.*<sup>176</sup> used the Childhood Trauma Questionnaire (CTQ<sup>448</sup>).

Trauma symptoms in Nolan *et al.*<sup>178</sup> were assessed using the TSCC.<sup>260</sup> Specific subscales used included anxiety, depression, anger, post-traumatic stress, dissociation, overt dissociation, fantasy dissociation, sexual concerns, sexual preoccupation and sexual distress.

#### Depression, anxiety, emotional disorder and conduct disorder

Trowell *et al.*<sup>155</sup> used a shortened version of the KSADS.<sup>268</sup> Reddy *et al.*<sup>176</sup> used the Quick Inventory of Depressive Symptomatology–Self-Report<sup>442</sup> to assess depression. Reddy *et al.*<sup>176</sup> also assessed non-suicidal self-injurious behaviour using the Functional Assessment of Self-Mutilation (FASM<sup>443</sup>).

Nolan *et al.*<sup>178</sup> assessed depression using the CDI.<sup>258</sup> Specific subscales used included negative mood, interpersonal difficulties, ineffectiveness, anhedonia and negative self-esteem.

#### Child behaviour

Nolan *et al.*<sup>178</sup> and Sullivan<sup>179</sup> both assessed problem behaviours using the CBCL.<sup>294,418,720</sup> Specific subscales used in Nolan *et al.*<sup>178</sup> included total problems, externalising, internalising, withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behaviour and aggressive behaviour.

Cadot *et al.*<sup>177</sup> assessed cognitive, physical, social, and emotional functioning of their participants using a range of measures, including the Bayley's Scales of Infant Development,<sup>449</sup> Bayley Infant Behavior Record<sup>451</sup> and Child Behavioral Characteristics Questionnaire.

Downing *et al.*<sup>180</sup> used parents' and teachers' behavioural observations to record sleep disturbance, sexual play with other children, enuresis, general misbehaviour and sexual self-stimulation.

#### Anxiety

Reddy *et al.*<sup>176</sup> assessed anxiety with the STAI.<sup>333</sup>

#### Emotional self-regulation

Reddy *et al.*<sup>176</sup> used the Difficulties with Emotion Regulation Scale (DERS<sup>446</sup>) to assess participants' awareness and understanding of emotional experience, acceptance of emotions, ability to modulate emotional arousal and effective action in the presence of intense emotions.

#### Self-efficacy

Reddy *et al.*<sup>176</sup> used the Children's Hope Scale<sup>445</sup> to assess agency and pathways (belief in one's ability to develop successful call planning).

### Self-esteem

Thun *et al.*<sup>174</sup> assessed participants' self-image using four subscales (see *Results: psychotherapy/counselling*) of the Offer Self-Image Questionnaire-Revised (OSIQ-R<sup>440</sup>), a personality test designed to measure self-image of adolescents aged 13–18 years.

### Global functioning

Trowell *et al.*<sup>155</sup> measured social, psychological and school functioning using the KGAS (1986 version) based on the CGAS.<sup>405</sup>

### *Risk of bias: randomised controlled trials of psychotherapy/counselling*

Figures 37 and 38, Appendix 10, present an overview of the risk of bias of RCTs of psychotherapy and counselling.

### Sequence generation and allocation concealment

Thun *et al.*<sup>174</sup> stated that participants were 'randomly assigned' but gave no other information and Trowell *et al.*<sup>155</sup> simply said participants were randomised. Both studies were therefore assessed as 'unclear' for each domain.

Both Reddy *et al.*<sup>176</sup> and Haight *et al.*<sup>175</sup> were assessed as 'unclear' risk of bias for each of these domains. Although Reddy *et al.*<sup>176</sup> state that the study used block randomisation to equalise numbers in each group, no information was provided that shed light on the sequence generation or allocation concealment.

### Blinding of participants and personnel

Owing to the nature of the intervention, neither staff nor participants were likely to have been 'blinded' in the study by Thun *et al.*,<sup>174</sup> and the study was therefore assessed as high risk of bias. In Trowell *et al.*,<sup>155</sup> the authors state it was not possible to blind participants. Haight *et al.*<sup>175</sup> stated that caregivers were not blind whether or not the child was receiving the intervention, and it would not have been possible to blind the children. Both studies were<sup>155,174</sup> were therefore assessed as high risk of bias. The same judgement was made for Reddy *et al.*<sup>176</sup>

### Blinding of outcome assessors

Assessors in Thun *et al.*<sup>174</sup> were a faculty member and selected graduate students from a Marriage and Family Therapy programme at the University of Southern Mississippi but it is not clear whether or not they were blind to experimental conditions. This item was therefore assessed as unclear.

Reddy *et al.*<sup>176</sup> provide no information on the blinding of outcome assessors. Haight *et al.*<sup>175</sup> state that assessments were conducted by master's level professionals who were not serving as the child's community clinician, but it is not clear that they were unaware of the allocation status of the children. Both were therefore assessed as 'unclear'.

Trowell *et al.*<sup>155</sup> state that blinding of assessors was probably compromised because the children and their mother often mentioned the specific therapy during assessment, so was judged high risk of bias.

### Incomplete outcome data

Thun *et al.*<sup>174</sup> analysed only the available data, as two of the six participants randomised to the treatment arm dropped out. Haight *et al.*<sup>175</sup> suffered significant attrition and analysed only the available data. Both studies<sup>174,175</sup> were therefore judged as high risk of bias for incomplete outcome reporting.

No information is provided by Reddy *et al.*<sup>176</sup> other than that caregivers in the wait-list control did not complete, post-treatment, the Inventory of Callous and Unemotional Traits-Parent Report (ICU-P<sup>447</sup>) – one out of six measures of children's psychosocial functioning. This was therefore assessed as unclear risk of bias.

Trowell *et al.*<sup>155</sup> was judged low risk of bias on these grounds.

## Selective outcome reporting

There appears to be no evidence that other outcomes were planned and then omitted from the results from any of these four<sup>174–176</sup> trials. However, in the absence of a published protocol or trial registration, we have judged all four to be of ‘unclear’ risk of bias.

## Other sources of bias

No other potential sources of bias were identified in these studies.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

## Risk of bias: controlled observational studies of psychotherapy/counselling

Nolan *et al.*<sup>178</sup> provided a clear description of the objectives, participants, intervention and outcomes in the study, and addressed potential confounders in their research. The study<sup>178</sup> provided a good description of the characteristics of patients who were lost to follow-up. Statistical tests used were appropriate; however, actual probability values for the main outcomes were not reported.

Cadol *et al.*<sup>177</sup> and Downing *et al.*<sup>180</sup> provided a clear description of the objectives and participants in their studies, but only Downing *et al.*<sup>180</sup> provided a clear description of the outcomes. Only Cadol *et al.*<sup>177</sup> at least partially addressed potential confounders in their research. Although both of these studies<sup>177,180</sup> provided a clear description of their findings, only Cadol *et al.*<sup>177</sup> addressed the potential adverse effect of repeat abuse. Neither study described the characteristics of patients lost to follow-up; only Cadol *et al.*<sup>177</sup> reported probability values for the main outcomes. It was not possible to determine whether or not the participants were asked to participate, or whether those that did, and the staff members involved in the study, were representative of the entire population from which they were recruited. Blinding of participants and of outcome assessors did not appear to be attempted by either study.

Sullivan<sup>179</sup> failed to provide a clear description of the objectives, outcomes and participants in the study. The study<sup>179</sup> did describe the characteristics of patients lost to follow-up, and reported actual probability values for the main outcome, and at least partially addressed potential confounders, but did not address potential adverse effects. It was not possible to determine whether or not participants had been asked to participate, or, whether they, or the staff involved in the study, were representative of the population from which they were recruited.

## Results: psychotherapy/counselling

It was not possible to conduct a meta-analysis for any of the outcomes. We provide a short summary of the findings of each study, given their heterogeneity, their small samples, risk of bias and limited coverage of outcomes of interest.

## Post-traumatic stress disorder

In Trowell *et al.*,<sup>155</sup> univariate analyses failed to identify a difference between those receiving group and those receiving IT on the PTSD dimension of ‘persistent symptoms of increased arousal’ used in the study<sup>405</sup> (data not provided, but the authors, following Cohen *et al.*,<sup>716</sup> used an effect size of 0.5 as a threshold of moderate effect). No further analyses relating to this indicator of PTSD were undertaken.

Controlling for the impairment score on the KGAS<sup>405</sup> in a multivariate analysis, the authors report a significant effect of IT for ‘the re-experiencing of trauma’ dimension of PTSD (baseline to 1- and 2-year follow up, and baseline to exit), and – for the ‘persistence/avoidance of stimuli’ dimension – at baseline to first-year follow-up. When KGAS is replaced by the baseline score on the same dimensions, the significance of the effects is attenuated.

For trauma *symptoms*, assessed by Nolan *et al.*<sup>178</sup> using the TSCC,<sup>325</sup> the only scores to improve were depression ( $p < 0.05$ ) and anger ( $p < 0.01$ ), and these improved for participants in both treatments, with no significant difference between the groups. No changes were detected for anxiety, post-traumatic symptoms, dissociation, overt dissociation, dissociation–fantasy, sexual concerns, sexual preoccupation and sexual distress.

## Depression

In Nolan *et al.*,<sup>178</sup> total depression score ( $p < 0.01$ ), interpersonal problems ( $p < 0.05$ ) and anhedonia ( $p < 0.01$ ) all improved for both interventions, but there was no significant difference between groups. 'Ineffectiveness' was improved only in the combined IGT group ( $p < 0.01$ ). Between-group difference in Trowell *et al.*<sup>155</sup> failed to reach the threshold size of 0.5 adopted by the authors (KGAS).

## Behavioural problems

Results in the study by Haight *et al.*<sup>175</sup> indicate a significant group (experimental or control) by time (pre- or post-test) interaction on child externalising behaviour ( $p < 0.05$ ), but no main effects. Results indicated that although experimental group externalising scores decreased, control group externalising increased over time. There were no other significant group or time effects for internalising behaviour scores or total problem scores.

Sullivan<sup>179</sup> concluded that participants in the intervention group of this COS had significantly fewer behaviour problems than children not receiving individual psychotherapy. For boys, the treatment main effect was statistically significant for 10 of the 12 dependent variables assessed (total CBL; external and internal composite scales; nine CBL subscale scores). For girls, the main effect was significant for 5 of the 11 relevant variables (total CBL; external and internal composite scales; eight subscale scores). The numbers were very small, particularly for girls, and the authors point to a non-significant main effect for girls for the remaining variables.

Nolan *et al.*<sup>178</sup> reported that total CBCL scores were reduced for both of the interventions ( $p < 0.01$ ). In addition, internalising ( $p < 0.01$ ) and externalising scores ( $p < 0.05$ ) were also significantly improved by both interventions. CBCL subscales: withdrawn, somatic complaints, anxious/depressed, social problems, attention problems and aggressive behaviour all improved with both interventions ( $p < 0.01$ ). There was no significant difference between groups. Delinquent behaviour and thought problems remained unchanged. Results from the YSR indicated that there was no significant time or group effect on any YSR scales, indicating that there was no impact of therapy on any of the YSR scales.

Downing *et al.*<sup>180</sup> reported that for the children in the counselling intervention group, parents reported a decrease in sleep disturbance, sexual play with other children, enuresis and general misbehaviour. However, there was no evident decrease in sexual self-stimulation.

Six weeks after the end of treatment, Reddy *et al.*<sup>176</sup> found no differences on any measure of psychosocial functioning following CBCT, although the authors suggest that practice frequency was associated with increased hopefulness and trend for decrease in generalised anxiety.

## Self-image

Thun *et al.*<sup>174</sup> found no significant differences between the two groups on the four subscales of the OSIQ-R (Offer *et al.*<sup>440</sup>) used to measure self-image: impulse control, self-confidence, self-reliance and body image. Negative self-esteem remained unchanged in Nolan *et al.*<sup>178</sup> (as assessed by the CDI).

For Cadol *et al.*<sup>177</sup> results of comparisons of the three experimental groups and control indicate significant differences between the groups in the cognitive, physical, social and emotional areas. However, results also indicated that treatment techniques tested do not significantly affect the developmental performance of the participants.

## Effectiveness of psychotherapy/counselling for maltreated children

### Summary

A relatively small body of evidence was found pertaining to the effectiveness of psychotherapy/counselling interventions. Four<sup>155,174–176</sup> studies were randomised trials, one<sup>177</sup> study was a QEx study and three<sup>178–180</sup> studies were COSs.

Five<sup>155,174,178,180,186</sup> of the eight included studies recruited children who had been sexually abused. The remaining three studies recruited children who had experienced a variety of forms of maltreatment. The interventions were disparate, ranging from life story work with children in foster care, to cognitive-based compassion training – intervention built on mindfulness practice and cognitive restructuring.

Most studies compared psychotherapy with supportive counselling or no treatment, including wait-list controls. Nolan *et al.*<sup>178</sup> compared the effectiveness of IT with combined IGT, and Trowell *et al.*<sup>155</sup> compared individual psychotherapy with a group therapy that combined psychotherapeutic and psychoeducational components.

One study<sup>176</sup> examined six outcome domains to assess the impact of compassion training, only one of which (depression) was examined in another study,<sup>178</sup> which used a different measure. Four<sup>177–180</sup> studies examined child behaviour as an outcome, but again all used different measures and had very different samples. It is therefore not possible, meaningfully, to draw any overall conclusions about the effectiveness of psychotherapy for maltreated children.

### Completeness and applicability

All but Nolan *et al.*<sup>178</sup> and Trowell *et al.*<sup>155</sup> were conducted in the USA. Nolan *et al.*<sup>178</sup> was conducted in Ireland and Trowell *et al.*<sup>155</sup> in the UK. Most of the interventions described have residents with therapies available in the UK, for example one-to-one counselling,<sup>177,180</sup> the therapies provided in Nolan *et al.*<sup>178</sup> for sexually abused girls and the LSI described by Haight *et al.*<sup>175</sup> Given the dominance of counselling and current recommendations to increase access to counselling for troubled children, the dearth of evidence to support the effectiveness of psychotherapy or counselling for maltreated children is of concern.

### Quality of the evidence

Four<sup>174,175,178,180</sup> of the studies, including two<sup>174,175</sup> of the three trials, were extremely small. The trials were poorly reported, with low risk of judgements made only in relation to selective outcome reporting (and this is probably generous). The overall quality of the non-randomised studies was judged to be poor.

### Economic evidence

No economic evaluations of psychotherapy/counselling for children who have been maltreated were located.

## Peer mentoring

We identified two<sup>181,182</sup> studies that assessed the effectiveness of peer-mentoring interventions.

### Description of studies

#### Study design

Both<sup>181,182</sup> studies were randomised trials.

#### Sample sizes

Both<sup>181,182</sup> studies had baseline sample sizes of just 36 and 46 participants, respectively.

#### Location

Both<sup>181,182</sup> studies took place in the USA.

## Participants

### *Age and gender*

The mean age of participants in the two<sup>181,182</sup> studies ranged from 4.3 years to 4.5 years. There were 27 boys to 9 girls in Fantuzzo *et al.*<sup>181</sup> and 8 boys to 12 girls in Fantuzzo *et al.*<sup>182</sup>

### *Recruitment*

Participants were recruited from a Family Centre Day Services Program in Fantuzzo 1988<sup>181</sup> and from local Head Start Centres in Fantuzzo 1996.<sup>182</sup>

### *Maltreatment*

Children in both studies had experienced both physical abuse and neglect.

### *Interventions and comparisons*

The intervention used in both studies<sup>181,182</sup> was resilient peer treatment (RPT), designed to promote the development of social competencies of preschool children in the context of classroom play mediated by a resourceful peer.

In Fantuzzo 1988<sup>181</sup> the control group pairs met in the same setting as the treatment group pairs for the same number of play sessions under identical conditions, except that their peer was instructed to respond positively to social initiations but to refrain from initiating social interactions. In Fantuzzo 1996,<sup>182</sup> control group participants were paired with a classmate of average interactive play ability.

### *Number and duration of sessions*

In both<sup>181,182</sup> studies, sessions lasted 15 minutes each, and were spread out over a 2-month period, with no more than three sessions occurring per week.

### *Outcomes*

*Interactive peer play* was assessed by Fantuzzo 1996<sup>182</sup> using an observational coding system.

*Social skills* were assessed in the Fantuzzo 1996<sup>182</sup> study, using the Social Skills Rating System (SSRS).<sup>379</sup>

*Problem behaviours* were also assessed in Fantuzzo 1996<sup>182</sup> using the SSRS.<sup>379</sup>

*Positive social behaviours* were assessed by Fantuzzo 1988<sup>181</sup> through the use of the same observational coding system, the SSRS.<sup>379</sup>

*Psychological adjustment* was assessed by Fantuzzo 1988<sup>181</sup> using the Preschool Behavior Questionnaire.<sup>455</sup>

*Pre-academic progress* was assessed in Fantuzzo *et al.*<sup>181</sup> using the Brigance Diagnostic Inventory of Early Development.<sup>456</sup>

### ***Risk of bias: randomised controlled trials of peer-mentoring interventions***

The risk of bias across the two<sup>181,182</sup> included trials of peer mentoring is summarised in *Figures 39 and 40* in *Appendix 10*.

### ***Sequence generation and allocation concealment***

Both trials<sup>181,182</sup> stated their participants were 'randomly assigned', but gave no other information on the method of random allocation and allocation concealment. Both were judged 'unclear' risk of bias for each of these domains.

### Blinding of participants and personnel

One<sup>181</sup> study made no reference to procedures to blind participants or personnel, but the other study<sup>182</sup> stated that 'teachers, play supporters and data collectors were not informed of the maltreatment status of the participants throughout the study'<sup>182</sup> (p. 1284). Fantuzzo *et al.*<sup>182</sup> was therefore judged to be of low risk of bias. The other<sup>181</sup> study was assessed as being of unclear risk of bias.

### Blinding of outcome assessors

Both<sup>181,182</sup> studies stated that children were observed by trained raters who were blind to both the assignment of children to conditions and the specific hypotheses of the study, resulting in judgements of low risk of bias.

### Incomplete outcome data

Both<sup>181,182</sup> studies were assessed being of low risk of bias, as both were able to minimise potential attrition bias by analysing participants based on 'assigned treatment' rather than 'treatment completed'.

### Selective outcome reporting

Both<sup>181,182</sup> studies differed in their choice of outcomes, and there appears to be no evidence that other outcomes were planned and then omitted from the results. However, in the absence of a published protocol or trial registration, we categorised these studies<sup>181,182</sup> as 'unclear' risk of bias.

### Other sources of bias

No other potential sources of bias were identified in these studies.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

## Results: peer-mentoring interventions

It was not possible to conduct a meta-analysis for any of the outcomes.

### Interactive peer play

Children assigned to the RPT intervention showed significantly higher levels of interactive play and significantly less solitary play post test than the children in the control condition. No significant group differences were found for the social attention and non-play categories by Fantuzzo 1996.<sup>182</sup>

### Social skills

Children in the RPT group scored significantly higher than those in the control group on the Self-Control subscale and the Interpersonal Skills subscale. However, no significant group differences were found on the Verbal Assertion subscale (Fantuzzo 1996<sup>182</sup>).

In Fantuzzo 1988,<sup>181</sup> results indicated that children in the peer-mentoring group demonstrated significantly increased levels of positive social interaction, whereas levels of social interaction remained the same for the control group.

### Problem behaviours

Children who received the RPT intervention displayed significantly lower levels of both internalising and externalising behaviour problems (Fantuzzo 1996<sup>182</sup>).

In Fantuzzo 1988,<sup>181</sup> results indicated that, post test, the children in the peer group demonstrated either a similar, or a decreased, level of problematic behaviours, whereas control groups seemed to demonstrate an increase in problematic behaviour.

### Preacademic progress

Results indicated that there was no significant group effect for pre-academic progress (Fantuzzo 1988<sup>181</sup>).

## Effectiveness of peer mentoring for maltreated children

### Summary

The two studies of peer mentoring identified in our search were both randomised trials, were both conducted in the USA by the same researcher. The results provide evidence of a range of benefits of peer mentoring for maltreated children, although both studies were small and the follow-up periods were short.

### Completeness and applicability

Evidently this evidence base is limited, but it represents the only rigorous evaluation of therapeutic day care programmes aimed at addressing the needs of neglected or physically abused children. This could be of relevance to the UK, where there is an increasing move to intervene with children in the school setting.

### Quality of the evidence

Compared with most of the included trials, the quality of these peer-mentoring studies is moderately good.

### Economic evidence

No economic evaluations of peer-mentoring for children who have been maltreated were located.

## Intensive service models

Covered in this section are a number of interventions designed to help children in substitute care or children in specialist day-care settings. They fall into three broad categories:

1. treatment foster care<sup>145,183–193</sup>
2. therapeutic residential or day-care services<sup>194–197</sup>
3. co-ordinated care.<sup>198</sup>

In this context, treatment foster care is used to describe a number of intensive interventions targeted at children in foster care, rather than – as is sometimes done – as the name of an intervention. Because of the heterogeneity of these studies,<sup>145,183–198</sup> we discuss each group of studies separately, beginning with treatment foster care.

### Description of studies

#### Study design

Four of the controlled studies were randomised trials.<sup>145,183–191</sup> Fisher *et al.*<sup>192</sup> and Graham *et al.*<sup>193</sup> were COSs. Graham *et al.*<sup>193</sup> used a subsample recruited from the trial conducted by Fisher *et al.*<sup>183–188</sup> Biehal *et al.*<sup>145</sup> embedded a small randomised trial within a QEx case-control study.

#### Location

Five studies<sup>183–193</sup> were conducted in the USA, whereas the study by Biehal *et al.*<sup>145,146</sup> was conducted in the UK.

#### Sample sizes

Three trials<sup>183–191</sup> had moderate baseline sample sizes of 100, 117 and 156 participants, respectively. Sample sizes in the COSs were small, with just 30 participants in the Fisher *et al.*<sup>192</sup> study and 37 participants in the Graham *et al.*<sup>193</sup> study. Biehal *et al.*<sup>145,146</sup> randomised just 34 young people; a further 185 were included in the QEx sample.<sup>145</sup>

## Participants

### Age

For the treatment foster care studies, the mean ages of participants in the RCTs were 5.94 years;<sup>183–188</sup> 11.54 years;<sup>189</sup> and 10.46 years.<sup>190,191</sup> In the study by Biehal *et al.*,<sup>145,146</sup> the young people were aged 10–17 years (although the intended recruitment age range was 11–16 years).

The mean age of participants across the COSs was 2.35 years in the Fisher *et al.*<sup>192</sup> study and 6.11 years in the Graham *et al.*<sup>193</sup> study. In Taiissig *et al.*<sup>190,191</sup> the age range was 9–11 years.

### Gender

Smith *et al.*<sup>189</sup> focused exclusively on females. The remaining studies<sup>145,183–193</sup> had mixed samples that were > 50% male<sup>145,183–192</sup> or 50% female.<sup>193</sup>

### Recruitment

Participants from all studies<sup>145,183–193</sup> were recruited from various child welfare systems. Those in the Taussig *et al.*<sup>190,191</sup> study were in foster care. In the studies of treatment foster care,<sup>190,191</sup> children were either entering or changing foster care placements.

### Maltreatment

All studies<sup>145,183–193</sup> focused on children who had experienced a combination of physical abuse, emotional abuse, sexual abuse and neglect.

### Interventions and comparisons

Control group participants included those who had received RFC in four<sup>183–189,192,193</sup> studies. In the studies by Biehal *et al.*<sup>145,146</sup> and Taussig *et al.*<sup>190,191</sup> they received services as usual.

Four<sup>145,146,183–188,193</sup> studies were of MTFC. MTFC has been described as a community-based, multimodal 'wraparound' intervention for children and young people with challenging behaviour. It makes use of a 'team approach', by which foster parents (and, where applicable, biological parents/future carers) are trained to provide a therapeutic home environment for children. Foster parents received intensive preservice training and post placement they received support and supervision by means of daily telephone contacts, weekly home visits by foster parent consultant, a weekly support group and 24-hour on-call crisis intervention. Children received services from a behaviour specialist. When appropriate, the family therapist worked with the biological family to teach the same parenting skills used by programme foster parents in order to promote generalisation of treatment gains and facilitate reunification.

Three<sup>183–188,192,193</sup> of the four MTFC studies used the Multidimensional Treatment Foster Care Program for Preschoolers (MTFC-P).

Smith *et al.*<sup>189</sup> evaluated the effectiveness of a manualised intervention targeting the prevention of behaviour problems for girls in foster care at the point of transition to middle school. In the summer prior to middle school entry, both foster parents and the girls they were caring for participated in separate six-session, group-based interventions, followed by ongoing training and support to foster carers and girls throughout the first year of middle school. The girls groups focused on 'setting personal goals; establishing and maintaining positive relationships with peers and adults; effective decision-making and problem-solving strategies; developing support systems for reaching goals; and modelling, practising, and reinforcing adaptive behaviours' (p. 271). Foster parents groups were focused on establishing and maintaining stability in the home, preparing the girls for school and preventing early adjustment problems during the transition. They were taught how to use a behavioural reinforcement system modelled after systems used in MTFC.

The intervention evaluated in the Taussig *et al.*<sup>190</sup> trial was called Fostering Healthy Futures (FHF), which the authors describe as a preventative mental health intervention, consisting of two components, specifically a manualised skills group and one-on-one mentoring.

### Number and duration of sessions

In the Biehal *et al.*<sup>145,146</sup> study, the duration of an MTFC placement was intended to be around 9 months, prior to a young person's return to his or her birth family or to an alternative placement. With one exception, young people in the study<sup>145,146</sup> spent between 5 and 11 months in MTFC placements.

In the Taussig *et al.*<sup>190,191</sup> study the skills groups met for approximately 30 weeks for 1.5-hour weekly sessions. The mentoring component of Taussig *et al.*'s<sup>190,191</sup> FHF programme provided 30 weeks of one-on-one mentoring for each child. Mentors spent 2–4 hours of individual time each week with their mentees.

In the Fisher *et al.*<sup>183–188</sup> study, children are said usually to receive services for between 6 and 9 months. Information on number and duration of sessions is unavailable from Fisher *et al.*<sup>192</sup> (other than that reported above). No information on 'dose' was provided by Graham *et al.*<sup>193</sup>

In the Smith *et al.*<sup>189</sup> study, the summer groups comprised six sessions across 3 weeks, followed by weekly 2-hour meetings (foster parent meeting; one-on-one session for girls) throughout the first year of middle school.

### Outcomes: treatment foster care

#### Post-traumatic stress disorder

No study assessed the impact of the intervention on PTSD, but the primary outcome in Taussig *et al.*<sup>190,191</sup> was mental health functioning, measured using two scales from the TSCC,<sup>325</sup> specifically the post-traumatic stress scale, and the dissociation scales (see *Child behaviour*, below).

A multi-informant index of mental health problems was also derived in this study, based on TSCC<sup>325</sup> scores, the internalising scales of the CBCL<sup>269</sup> and the Teacher Report Form (TRF<sup>269</sup>).

#### Salivary cortisol

Children's salivary cortisol levels were used to assess hypothalamic–pituitary–adrenal axis activity in three<sup>183–188,192,193</sup> of the four included studies.

#### Child behaviour

Smith *et al.*<sup>189</sup> assessed children's internalising problems, externalising problems and prosocial behaviour using the Parent Daily Report Checklist.<sup>458</sup> Taussig *et al.*<sup>190,191</sup> used the Internalising scales of the CBCL<sup>269</sup> – Youth Report and TRFs. Data were combined with TSCC<sup>325</sup> scores to create a mental health index (see *Results: treatment foster care*).

As one of two primary outcomes in the RCT, Biehal *et al.*<sup>145,146</sup> used the standardised Health of the Nation Outcome Scales for Children and Adolescents (HoNOSCA<sup>382</sup>) as a measure of emotional and behavioural difficulties. It was selected because it enabled the synthesis of large quantities of data gathered from multiple informants and sources including a range of standardised measure (and which could accommodate variable completeness of information).

Biehal *et al.*<sup>145,146</sup> also used a range of standardised measures, including the CBCL,<sup>257</sup> SDQ<sup>721</sup> and DAWBA-AD.

One of the COSs<sup>192</sup> assessed child behaviours problems using the Early Childhood Inventory (ECI<sup>462</sup>).

## Attachment-related behaviour

Children's attachment-related behaviour towards foster parents was assessed by Fisher *et al.*<sup>183–188</sup> using the PAD.<sup>221</sup>

Biehal *et al.*<sup>145,146</sup> used the Development and Well-Being Assessment-Attachment Disorder (Minnis *et al.*, unpublished manuscript), consisting of 26 items about behaviours associated with the *International Classification of Diseases-Tenth Edition* diagnoses of attachment disorder.

## Children's social functioning

Participants' coping skills were measured in Taussig *et al.*<sup>190,191</sup> using the Positive and Negative Coping scales of the CSI.<sup>459</sup> In this study,<sup>190,191</sup> participants' perceived self-competence was also measured using the social acceptance and global self-worth scales of the SPPC.<sup>413,431</sup>

Biehal *et al.*<sup>145,146</sup> used the CGAS<sup>292</sup> to assess children's general adaptive functioning.

## Permanency

Placement outcomes were assessed by three<sup>145,146,183–188,190,191</sup> studies. Taussig *et al.*<sup>190,191</sup> recorded the number of placement changes over the 18-month study period of the study, whether or not a child had experienced a new placement in a residential treatment centre (RTC) during that time or had attained permanency by 1-year post intervention, plus the types of permanence attained (i.e. adoption or reunification with family). Fisher *et al.*<sup>183–188</sup> recorded the type of permanent placement, and success or failure of a subsequent permanent placement. Biehal *et al.*<sup>145,146</sup> recorded care placement type.

## Quality of life

Taussig *et al.*<sup>190,191</sup> assessed children's quality of life using the Life Satisfaction Survey.<sup>402</sup> Related to quality of life, the authors also recorded children's recent and current use of mental health services and psychotropic medications (based on caregiver and self-report), and their levels of social support, using scores from The People in My Life-Short Form.<sup>460</sup>

## Other

Biehal *et al.*<sup>145,146</sup> also gathered data relating to children's engagement in education and training, including type of provision received.

## Cognitive control

Cognitive control and response monitoring was assessed by Fisher *et al.*<sup>183–188</sup> using a computerised flanker task, which includes red and green circles as stimuli and trial-by-trial performance feedback.<sup>722</sup> We include a brief description, taken from one of the papers, as this outcome measure is not commonplace. A small fixation point was displayed in the centre of a computer screen.

*For each trial, a warning cue is presented for 200 ms before a horizontal row of five 1-in. circles, with the central circle directly above the fixation point, is shown for 700 ms. The task comprises congruent trials, which consist of five red circles or five green circles, and incongruent trials, which consist of a central red circle flanked by green circles or a central green circle flanked by red circles. A 30:70 ratio (congruent trials–incongruent trials) is used. Participants are required to respond within 1100 ms. Performance feedback, which consists of a 1-in. face, is then presented for 1050 ms; a smiling face indicates a correct response and a frowning face indicates an incorrect response. The intertrial interval varies in length from 0 to 500 ms. The 20-min task consists of three blocks of 60 trials each. In the current study, the STIM stimulus presentation system (James Long Company, Caroga Lake, NY) was used to control the task presentation and to record the behavioral and electrophysiological measures for each trial. The children sat approximately 24 in. from a 14 in. computer monitor and held a button box with a red pushbutton and a green pushbutton. Prior to beginning the task, color vision, color familiarity, and comprehension of task terminology were assessed. The children were instructed to press the button that corresponded with*

*the color of the central circle regardless of the color of the flanking circles. They were told to respond quickly and correctly. The children completed eight practice trials to ensure task comprehension.*

*Reproduced with permission from Bruce et al.,<sup>183</sup> p. 5*

## **Risk of bias: randomised trials of Treatment Foster Care models**

### **Sequence generation**

Smith *et al.*<sup>189</sup> stated that a coin flip was used, and for the randomised part of the Biehal *et al.*<sup>145,146</sup> study, the authors state that the randomisation sequence was generated by a computer-generated random numbers. Both were therefore assessed as 'low risk of bias'. Fisher *et al.*<sup>183-188</sup> provide no information on sequence generation, and Taussig *et al.*<sup>190,191</sup> stated that all children were manually randomised, by cohort (five), but provided no further information. Both<sup>183-189</sup> studies were therefore judged unclear risk of bias.

### **Allocation concealment**

No study provided information on allocation concealment, and all were judged unclear risk of bias.

### **Blinding of participants and personnel**

No study made any reference to procedures to blind the participants or personnel, and judgements of high risk of bias were allocated to each.

### **Blinding of outcome assessors**

Smith *et al.*<sup>189</sup> and Fisher *et al.*<sup>183-188</sup> state that research staff and interviewers were blind to participants' group assignment. Biehal *et al.*<sup>145,146</sup> describe the study as single blind, with outcome assessors blind to which arm data belonged (although the assessors were not those who provided/gathered the information). Taussig *et al.*<sup>190,191</sup> attempted to mask independent interviewers to condition but records that some children did spontaneously disclose treatment condition which could not be controlled for. All studies were judged low risk of bias.

### **Incomplete outcome data**

Fisher *et al.*<sup>183-188</sup> was able to minimise potential attrition bias by making use of a full information maximum likelihood estimator in *Mplus* (Muthén & Muthén, Los Angeles, CA, USA) which allows for the inclusion of participants with partial data on dependent variables, and was judged to be of low risk of bias. Smith *et al.*<sup>189</sup> provided insufficient information regarding dropouts and missing data and was judged unclear risk of bias. Taussig *et al.*<sup>190,191</sup> undertook data analyses using ITT principles and the study was judged to be of low risk of bias. Biehal *et al.*<sup>145,146</sup> state that data from the RCT sample was analysed on ITT principles (subject to the availability of outcome data), with imputation for missing data. Although this study<sup>145,146</sup> suffered from differential attrition (12 of the 34 young people randomised to MTFC did not receive it) the data sources meant that only one person was lost to follow-up. Overall, we judged this study to be of low risk of bias for incomplete outcome data.

### **Selective outcome reporting**

Two trials were registered: Taussig *et al.*<sup>190,191</sup> (NCT00809315) and Fisher *et al.*<sup>183-188</sup> (NCT00701194). Both were judged to be of low risk of bias, as the authors report on all outcomes listed in the trial registration (although specific measures were not identified). In the absence of a published protocol, the studies by Biehal *et al.*<sup>145,146</sup> and Smith *et al.*<sup>189</sup> were judged to be 'unclear'.

### **Other sources of bias**

A potential additional bias was noted in Fisher *et al.*<sup>183-188</sup> in which randomisation occurred prior to recruitment into the study, and performance was not assessed prior to the intervention. Therefore, differences between the two groups may have existed prior to the intervention. No other potential sources of bias were identified in this studies.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

### Quality assessment of controlled observational studies of intensive service models

The quality of the two<sup>192,193</sup> COSs was very similar. Both provided a clear description of the objectives of the study, the outcomes, the participants and the interventions. Both addressed potential confounders in their research, and both provided a clear description of their findings. Both studies reported actual probability values for the main outcomes.

However, neither study addressed potential adverse effects, nor described the characteristics of patients lost to follow-up.

It was not possible to determine whether or not participants were asked to participate, or whether or not those who did participate, and the staff members involved in the study were representative of the entire population from which they were recruited for any of the studies. Statistical tests used to assess the main outcomes appeared appropriate. Blinding of participants or outcome assessors was not attempted and it seems unlikely it would have been feasible owing to the psychosocial nature of the intervention.

### Results: treatment foster care

There were no common outcomes recorded across any of the included RCTs. Therefore, it was not possible to conduct a meta-analysis for any of the outcomes.

### Post-traumatic stress disorder

Post-traumatic stress disorder symptomatology was assessed only in the Taussig *et al.*<sup>190,191</sup> study, which reported no significant effect post intervention or 6 months' follow-up. The study<sup>190,191</sup> results indicate that intervention participants had significantly fewer dissociation symptoms than control group participants, as measured by the TSCC at the 6-month follow-up ( $p = 0.02$ ).

### Mental health

Taussig *et al.*<sup>190,191</sup> reported that intervention participants had significantly fewer mental health problems than control group participants at the 6-month follow-up ( $p = 0.003$ ), as measured by the multi-informant index of mental health problems. There was no significant difference between intervention and control participants for recent or current use of psychotropic medications (post test or 6-month follow-up) but there was a significantly lower rate of recent mental health therapy usage at the 6-month follow-up for intervention participants ( $p = 0.04$ ). Intervention participants also had significantly better quality of life at the end of the intervention ( $p = 0.006$ ) but this difference failed to reach significance at 6 months ( $p = 0.38$ ).

### Children's behaviour problems

Smith *et al.*<sup>189</sup> (RCT) indicated that the participants who were part of the MTFC intervention demonstrated significantly lower internalising problems ( $p < 0.01$ ) and lower externalising problems ( $p < 0.01$ ) at 6 months post baseline than the control participants. However, this study<sup>189</sup> found that intervention participants did not have higher prosocial behaviour than the control participants ( $p > 0.05$ ).

Fisher *et al.*<sup>192</sup> (RCT) found that participants who were part of the MTFC intervention demonstrated significantly improved behavioural adjustment scores ( $p < 0.05$ ), as measured by the ECI.

Taussig *et al.*<sup>190,191</sup> reported no significant difference between intervention and control groups for Positive and Negative Coping skills, perceived self-competence, or social support at post test or 6-month follow-up.

In the study by Biehal *et al.*,<sup>145,146</sup> MTFC participants had slightly better outcomes at follow-up than UC, as measured by HoNOSCA (adjusted MD  $-1.04$ , 95% CI  $-6.21$  to  $4.13$ ) but this was not statistically significant ( $p = 0.68$ ).

### Children's attachment-related behaviour

Children's attachment-related behaviour towards foster parents was assessed by Fisher *et al.*,<sup>183–188</sup> and indicated that children in the intervention condition made significant increases in secure attachment behaviour ( $p < 0.05$ ) and significant decreases in avoidant behaviour ( $p < 0.05$ ) compared with children in the RFC condition. However, treatment was not associated with changes in resistant behaviour. No between-group differences were found in the Biehal *et al.*<sup>145,146</sup> study.

### Salivary cortisol

Children's salivary cortisol levels were taken by three of the included studies.<sup>183–188,192,193</sup> Although the results of these studies indicated some improvement over time, including daytime patterns, which showed the salivary cortisol levels of the intervention group becoming closer to the community comparison group of non-maltreated children,<sup>192</sup> and a distinct pattern of change in cortisol slope across the days,<sup>189</sup> none of these results reached statistical significance. Moreover, Fisher *et al.*<sup>183–188</sup> indicated that control group participants showed significantly greater morning-to-evening cortisol level decreases following placement changes than the experimental group ( $p < 0.05$ ), a negative outcome.

### Permanent placement outcomes

Permanent placement outcomes were assessed by the studies of Fisher *et al.*<sup>183–188</sup> and Taussig *et al.*<sup>190,191</sup> In Fisher *et al.*,<sup>183–188</sup> participants in both groups entered permanent placements at approximately equal rates, but the number of placement failures between the two groups was significantly different, with 10% ( $n = 3$ ) failing in the intervention group compared with 36% ( $n = 9$ ) in RFC [ $\chi^2(1) = 5.11$ ;  $p = 0.02$ ]. One child in the RFC group experienced two placement failures (no child had two placement failures in the early intervention fostering group).

In the study by Taussig *et al.*,<sup>190,191</sup> the results indicated a significantly lower rate of placement changes for the intervention group than the control group ( $p = 0.04$ ), and a significantly lower rate of new placements in a RTC ( $p = 0.03$ ). There was also a higher rate of permanency attained for intervention group participants than for the control group participants ( $p = 0.004$ ).

For children whose parents retained parental rights, significantly more intervention youth had reunified at 1 year post intervention than the control youth ( $p < 0.05$ ). Taussig *et al.*<sup>190,191</sup> also report that 26% of intervention children had been adopted 1 year post intervention, compared with 8% of control children, but numbers were too small for conventional statistical tests.

### Children's social functioning

In the study by Biehal *et al.*,<sup>145,146</sup> MTFC participants had slightly better outcomes at follow-up than UC participants (adjusted MD 1.3, 95% CI  $-7.1$  to  $9.7$ ) but this was not statistically significant ( $p = 0.75$ ). Biehal *et al.*<sup>145,146</sup> also found no differences for school engagement or school exclusion.

No between-group differences were found in Taussig *et al.*<sup>190,191</sup> in relation to the Coping Inventory or the Self-Perception Profile.

### Cognitive control and response monitoring

Cognitive control and response monitoring was assessed by Fisher *et al.*<sup>183–188</sup> using a computerised flanker task. There were no group differences on the behavioural measures of cognitive control ( $p > 0.05$ ) or response monitoring ( $p > 0.05$ ). A significant group effect was indicated observed on the electrophysiological measures of response monitoring. Children who received the intervention were significantly more responsive to performance feedback than foster children who received services as usual ( $p < 0.05$ ).

### Economic evidence

Two economic evaluations of intensive service models of care for children who have been maltreated were located in the systematic review (Wood *et al.*<sup>616</sup> and Lynch *et al.*<sup>615</sup>), both carried out in the USA.

Wood *et al.*<sup>616</sup> was a cohort study comparing the costs and outcomes for families receiving a child abuse prevention service ( $n = 26$ ) and families receiving UC ( $n = 24$ ). The intervention was home-based counselling/psychology and the therapists were available 24 hours a day, 7 days a week, for a period of 4–6 weeks, providing practical help, FT and liaison with schools other community services in order to reduce the risk of out-of-home placement.

The evaluation, most accurately described as a cost–consequences analysis, had a 1-year follow-up and took a limited economic perspective, focusing on the service provider and including the cost of the interventions and any out-of-home placements. Outcomes were measured in terms of family functioning and whether or not the children stayed at home. Methods of costing were not outlined.

Children in the families that received the intensive intervention were significantly more likely to remain at home than families receiving UC and costs were significantly lower, as a result of the lower use of placements. However, this study<sup>616</sup> was carried out some years ago and the methods are severely limited, with no random allocation, small sample sizes, failure to report the results for all measures of outcome, lack of incremental analysis and no assessment of uncertainty.

Lynch *et al.*<sup>615</sup> evaluated the net benefit of MTFC-P entering new foster placements. The study<sup>615</sup> used data from the Fisher *et al.*<sup>186</sup> RCT (see subsection *Intensive service models, Description of studies*) and compared MTFC-P ( $n = 57$ ) with RFC ( $n = 60$ ) for children aged between 3 and 5 years.

The evaluation was conducted from a public agency perspective, including health, social care and education. Resources used were valued using nationally applicable published unit costs and were reported in 2008 US dollars (US\$). Outcomes were assessed in terms of the primary measure for the clinical trial – the rate of placement permanency for each group, where permanent placement included reuniting with the biological parent, adoption by a relative or non-relative adoption. Costs and outcomes were assessed over a 24-month period and did not appear to be discounted.

Permanent placement rates were higher for the MTFC-P group than the RFC group, although the difference was not significant. Average total costs were significantly lower for MTFC-P and the incremental average net benefit was positive for all levels of willingness to pay for improvements in outcome, indicating that the value of the benefits of MTFC-P was greater than the costs. The authors conclude that MTFC-P is highly likely to have a positive net benefit for increasing permanent placements in comparison with RFC. Although no agreed level of willingness to pay for increases in placement permanence exists, the authors note that lack of permanent placement is associated with a variety of negative outcomes for young people, and suggest that willingness to pay for reductions in neglect and abuse is high. The study<sup>615</sup> suffers from relatively small sample sizes and the lack of a generic measure of outcome associated with an agreed level of willingness to pay.

## Therapeutic residential and day care services

No controlled studies that assessed the effectiveness of therapeutic residential care interventions were identified. We found three controlled studies<sup>194–197</sup> that assessed the effectiveness of Therapeutic Day Programme interventions, of which only one was a randomised trial.<sup>194</sup> The others<sup>195–197</sup> were COSSs.

### Description of studies

#### Sample sizes

The randomised trial had a sample size of 61 participants at baseline and 35 participants assessed at follow-up. The COSSs<sup>195–197</sup> had sample sizes of 34 and 70 participants, respectively.

## Location

All three therapeutic day programme studies were conducted in the USA.

## Participants

### Age

At recruitment, the mean age of participants in the RCT was 11 months (SD 7 months) for the intervention group and 13 months (SD 8 months) for the control group. Participants were followed up to a mean age of 12 years (SD 7 months) for the intervention group and 13 years (SD 7 months) for the control group.<sup>194</sup> The mean age of participants across the COSs<sup>195–197</sup> ranged from 3 years<sup>195,196</sup> to 4.8 years.<sup>197</sup>

### Gender

All three<sup>194–197</sup> studies recruited both male and female participants, although all had samples that were > 50% male.

### Recruitment

Participants from all three<sup>194–197</sup> studies were recruited from various CPS.

### Maltreatment

All three<sup>194–197</sup> studies recruited children who had experienced a combination of physical abuse and neglect.

### Interventions and comparisons

Two<sup>195–197</sup> of the interventions were identified by the study authors as ‘therapeutic day treatment program’. The third<sup>194</sup> was identified as the Childhaven therapeutic child care program. All three<sup>194–197</sup> studies aimed to improve outcomes for children who had experienced maltreatment.

Control group participants in the included studies received either CPS as usual,<sup>194</sup> no intervention,<sup>195,196</sup> or were part of a wait-list control group.<sup>197</sup>

### Number and duration of sessions/treatment

Limited information was provided by the RCT study<sup>194</sup> regarding the duration and number of treatment sessions.

The therapeutic day-treatment programme<sup>195–197</sup> was described as a classroom-based therapy lasting 6 hours per day, 5 days per week, for approximately 8–9 months.

## Outcomes

### Behaviour problems

Moore *et al.*<sup>194</sup> used all three report forms (caregivers, teachers and youth report) of the CBCL<sup>269,294,418</sup> to assess the impact of intervention on children’s behaviour.

Moore *et al.*<sup>194</sup> also measured drug and alcohol use with the Winters Personal Experience Screening Questionnaire<sup>723</sup>: participants’ involvement in the legal system, using juvenile court files, and – using school files – their involvement in special classes, their grades, special help, disciplinary actions, suspensions, or expulsions.

### Child development

Children’s developmental progress was measured in both of the COSs<sup>195–197</sup> using the Early Intervention Developmental Profile.<sup>465,466</sup> This test assesses five subscales, including perception/fine motor, cognition, gross motor, social/emotional and language development.

## Child self-concept

Children's self-concept was measured using the Perceived Competence and Social Acceptance Scale<sup>467</sup> in Culp 1991<sup>197</sup> and the SPPC<sup>401</sup> in the Moore *et al.*<sup>194</sup>

## Risk of bias: randomised trial

### Sequence generation and allocation concealment

In the absence of information about sequence generation or allocation concealment, a judgement of unclear risk of bias was made in relation to Moore *et al.*<sup>194</sup>

### Blinding of participants and personnel

No information was provided on the blinding of participants or personnel, and the study<sup>194</sup> was judged as being of high risk, as neither is likely to have been feasible.

### Blinding of outcome assessors

Interviewers were initially blind to group assignment, but caregivers did have the opportunity to mention their treatment experiences, which is likely to have indicated group assignment. A judgement of high risk of bias was therefore made.

### Incomplete outcome data

There is a high risk of bias related to incomplete outcomes data, as this study<sup>194</sup> analysed only available case data.

### Selective outcome reporting

There is no evidence that other outcomes were planned and then omitted from the results, but, in the absence of trial registration or a published protocol, we judged Moore *et al.*<sup>194</sup> as being 'unclear'. See *Appendix 10*.

## Quality assessment of controlled observational studies

The quality of the two COSs was variable. Both provided a clear description of the objectives of the study, the outcomes, the participants, the interventions and the findings. Only Culp 1991<sup>197</sup> addressed potential confounders in the research. Neither study addressed potential adverse effects, nor did they describe the characteristics of patients lost to follow-up. Only Culp 1991<sup>197</sup> reported actual probability values for the main outcomes. It was not possible to determine whether the subjects asked to participate, the subjects who did participate, and the staff members involved in the study were representative of the entire population from which they were recruited for any of the studies. Statistical tests used to assess the main outcomes appeared appropriate. Blinding of participants or outcome assessors was not attempted and it seems unlikely it would have been feasible owing to the psychosocial nature of the intervention.

## Results: therapeutic day care

It was not possible to conduct a meta-analysis for any of the outcomes, as only one relevant randomised trial was found.

## Children's problem behaviour

Moore *et al.*<sup>194</sup> found that for the CBCL (YSR), more children in the control group than in the intervention group scored in the clinical range, but this difference reached significance only for the aggressive behaviour subscale ( $p < 0.05$ ). However, teachers perceived a higher rate of problems for children in the intervention group, although these differences failed to reach significance.

This study<sup>194</sup> found that a significantly higher percentage of control youths showed drug and alcohol use ( $p < 0.05$ ). Furthermore, control group youths were first arrested at a significantly younger age than intervention youths ( $p < 0.01$ ). There was no significant difference between groups for delinquency records

or delinquency episodes and no significant difference for property crime. However, control youths were arrested significantly more often for serious/violent crimes than intervention group youths ( $p < 0.05$ ).

This study<sup>194</sup> found no significant difference between groups for special classes, grades and special help. Although there was a higher rate of disciplinary actions, suspensions or expulsions for control group participants, this difference reached significance only for disciplinary actions for fighting ( $p < 0.05$ ).

### Children's developmental progress

Culp 1987<sup>195,196</sup> measured children's developmental progress on all five subscales of the EIDP, and found that children who were enrolled in the day-treatment programme scored significantly higher than control children on perception/fine motor skills ( $p < 0.001$ ), cognition ( $p < 0.001$ ), gross motor skills ( $p < 0.01$ ), social/emotional ( $p < 0.001$ ) and language development ( $p < 0.05$ ). Culp 1991<sup>197</sup> found similar results for perception/fine motor ( $p = 0.05$ ), cognition ( $p = 0.01$ ) and social/emotional ( $p = 0.01$ ). However, this study<sup>197</sup> found no significant difference for gross motor skills ( $p = 0.07$ ).

### Children's self-concept

Children's self-concept was measured by Moore *et al.*<sup>194</sup> (RCT) and Culp 1991<sup>197</sup> (COS). Culp 1991<sup>197</sup> found children receiving the intervention scored significantly better in cognitive competence ( $p = 0.05$ ), physical competence ( $p = 0.01$ ) and maternal acceptance ( $p = 0.02$ ). However, there was no significant group effect for peer acceptance ( $p = 0.59$ ). Likewise, in the Moore *et al.*<sup>194</sup> study, results indicate that intervention youths rated themselves higher than control youths on the Social Acceptance Scale [ $F(1,32) = 3.8$ ;  $p < 0.07$ ].

### Economic evidence

No economic evaluations of therapeutic residential or day-care services for children who have been maltreated were located.

## Co-ordinated care

We identified just one example of co-ordinated care evaluated with a CS.<sup>198</sup>

### Description of studies

#### Study design and location

The study was a randomised trial<sup>198</sup> that took place in the USA.

#### Sample size

This study<sup>198</sup> recruited 45 families with 72 children.

#### Participants

Children ranged from birth to 17 years old, with a relatively even split of males and females (47% male, 53% female). Participants were recruited from the Department of Social Services.

#### Maltreatment

Children had experienced multiple forms of abuse, including physical abuse, sexual abuse, emotional abuse and neglect.

#### Intervention and comparisons

This interagency intervention established a partnership between one private provider and three state agencies that served maltreated children who were compulsorily removed to out-of-home care, named the 'Charleston Collaborative Project', which aimed to:

1. reduce risk factors to promote child safety and child functioning and caregiving functioning, thereby allowing return of children to their families in a timely fashion

2. provide cost savings by delivering effective and focused interventions at the time children enter care to reduce both the number of children requiring more intensive and costly services and the length of time children remain in state custody
3. improve service system efficiency by co-ordinating care.

These goals were to be achieved by creating a single point of entry and a 'seamless system for providing services'.<sup>198</sup> The providers of Charleston Collaborative Project included an assessment worker, a therapist and a service co-ordinator. Control group participants in this study received TAU.

## Outcomes

The primary outcome included in this study<sup>198</sup> was Child Functioning, as measured by either CBCL-Parent Form<sup>198</sup> or the Denver II for infants and toddlers (Frankenburg *et al.*<sup>468</sup>).

## *Risk of bias: randomised controlled trial of co-ordinated care*

### Sequence generation

Low: participants were randomly assigned using a table of random numbers.

### Allocation concealment

Unclear: inadequate information provided.

### Blinding of participants and personnel

High: the study<sup>198</sup> did not discuss this issue, but blinding these parties is not possible in such an intervention.

### Blinding of outcome assessors

High: some data were collected from the child's caseworker, and the study<sup>198</sup> does not indicate that the researcher who interviewed family members or caseworkers was blind to allocation status of families.

### Incomplete outcome data

Low: only available data were analysed but attrition was low (42/45 families were retained at last data collection point, and no family dropped out of treatment).

### Selective outcome reporting

Unclear: there appears to be no evidence that other outcomes were planned and then omitted from the results. However, the study<sup>198</sup> did not provide post intervention means for any of the outcomes, only latent growth curve data.

### Other sources of bias

Unclear: where multiple children in one family were abused, one child was randomly selected for inclusion in the analyses of child functioning. No further details were provided.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

## *Results: co-ordinated care*

Although this study<sup>198</sup> found total behaviour problems (as measured by the CBCL) to decrease significantly for both intervention and control groups, there was no significant difference between the two groups for any of the measures post test.

## The effectiveness of intensive service models

### Summary

There is growing evidence for the effectiveness of MTFC for children who have experienced one or more of physical, emotional, sexual abuse and neglect. The evidence suggests that MTFC can exert a positive influence on children's internalising and externalising problems, and may be able to improve children's emotional self-regulation (as measured by saliva cortisol), but more evidence is required. The study by Fisher *et al.*<sup>183–188</sup> suggests that MTSC may increase a child's chances of a successful permanent placement for children in out-of-home care. MTSC children in this study<sup>198</sup> also made significant increases in secure attachment behaviour towards foster carers and significant decreases in avoidant behaviour when compared with children in RFC.

Although included within the group of TFC studies, the intervention evaluated by Taussig *et al.*<sup>190,191</sup> is more accurately described as enhanced foster care, in contrast with the MTFC examined in the other three studies. Overall, the findings by Taussig *et al.*<sup>190,191</sup> provide limited support for the effectiveness of the mentoring and skills group intervention evaluated in improving children's mental health. Taussig *et al.*<sup>190,191</sup> reports a lower rate of placement changes and lower rates of new placements in RTCs for children who participated in the mentoring and skills group.

The results of Moore's evaluation<sup>194</sup> of the Childhaven Therapeutic Early Intervention suggest some improvement in children's self-concept, in reduced drug and alcohol use and age at first arrest, and in self-reported levels of aggression. However, the evidence is limited, and no differences were found for other measures (e.g. school performance) to support its effectiveness. In contrast, the two studies by Culp *et al.*<sup>195–197</sup> suggest that therapeutic day care of the kind provided can improve children's development across a variety of domains and also (perhaps as a consequence) improve their self-concept.

There is no evidence for the effectiveness of the model of co-ordinated care assessed by Swenson *et al.*<sup>198</sup>

### Completeness and applicability

All<sup>183–196</sup> but one<sup>145</sup> of the studies were conducted in the USA. The UK study<sup>145</sup> was a replication of MTFC. This study,<sup>145</sup> conducted in difficult circumstances, failed to reproduce the results reported from the USA studies, but this may be due to design and implementation features (not necessarily the responsibility of the research team) and the quality of the comparison group: MTFC was compared with routine services in the UK, compared with limited provision of custodial care in the USA. The evidence from Fisher *et al.*,<sup>183–188</sup> although limited, suggests that intensive fostering support such as that provided in MTFC might well be able to improve the success rates for permanent placements following foster care, although this also needs to be tested in locations in which the profile of provision is closer to that of the UK than the USA.

### Quality of the evidence

Overall, the quality of the evidence from trials is moderate.

### Economic evidence

One economic evaluation,<sup>198</sup> carried out in the USA, explored the costs and outcomes of a co-ordinated model of care, the Charleston Collaborative Project, for maltreated children. The paper is also reported in the effectiveness section above, as it is a combined effectiveness and economic paper. The study used a RCT design to compare the collaborative model of care ( $n = 48$ ) to UC ( $n = 24$ ) for maltreated children aged between 1 and 16 years.

The paper presents costs and outcomes separately, so would best be described as a cost-consequences analysis. Participants were followed up post treatment and 3 months post treatment. Effects included caregiver and child psychosocial functioning. Costs focused on the interventions under consideration, out-of-home placements and health services. Costs are reported in US dollars but the financial year applied was not reported.

Despite the collaborative project being more expensive than UC, total costs were lower as a result of lower placement and other service-use costs. Statistical analyses were not reported for all cost categories or total costs, so it is unclear if this difference is significant. The authors note that much of the difference in out-of-home placement costs was due to two young people in the UC group, which, given very small sample sizes (total  $n = 39$  for cost data), may be the result of chance. The authors caution against drawing any firm conclusions from the cost data. Outcomes were similar across the two groups and as no formal economic evaluation, combining costs and outcomes, was undertaken no clear conclusion can be drawn.

## Activity-based therapies

We identified six studies<sup>199–204</sup> that assessed the effectiveness of interventions that engaged the child in activity-based interventions, grouped as follows:

- arts therapy interventions<sup>199,200</sup>
- play/activity interventions<sup>201–203</sup>
- animal therapy.<sup>204</sup>

Proponents of these therapies would possibly emphasise the differences between them, as opposed to the similarities. For this reason, we provide a ‘grouped but differentiated’ account of the descriptive elements of the studies (designs, sample sizes, etc.) and separate accounts of the findings of the included studies.

## Description of studies

### Study design

#### *Arts therapy*

Both Brillantes-Evangelista<sup>199</sup> and Pretorius and Pfeifer<sup>200</sup> were QEx studies.

#### *Play therapy*

One of the three studies of play therapy was a randomised trial<sup>202</sup> and one a quasi-experimental study.<sup>203</sup> The third was a COS.<sup>201</sup>

#### *Animal therapy*

The only study of animal therapy<sup>204</sup> was a COS.

### Location

#### *Arts therapy*

Pretorius and Pfeifer<sup>200</sup> took place in South Africa and Brillantes-Evangelista<sup>199</sup> was conducted in the Philippines.

#### *Play therapy*

The Udwin<sup>203</sup> study (QEx) was conducted in the UK. The other two<sup>201,202</sup> studies took place in the USA.

#### *Animal therapy*

The Dietz *et al.*<sup>204</sup> study took place in the USA.

### Sample sizes

#### *Arts therapy*

Pretorius and Pfeifer<sup>200</sup> and Brillantes-Evangelista<sup>199</sup> recruited samples of just 25 and 33 participants, respectively.

**Play therapy**

Both the RCT<sup>203</sup> and QEx study<sup>202</sup> were very small, with samples of just 34<sup>203</sup> and 38.<sup>202</sup> The COS<sup>201</sup> had a somewhat larger sample of 88 participants.

**Animal therapy**

Dietz *et al.*<sup>204</sup> recruited 153 participants.

**Participants****Arts therapy**

Pretorius and Pfeifer<sup>200</sup> recruited girls aged 8–11 years. Brillantes-Evangelista<sup>199</sup> focused on a slightly older population of both girls and boys (64% female), aged 13–18 years. Participants in both<sup>199,200</sup> studies were recruited from either children's homes<sup>200</sup> or shelters for abused children.<sup>199</sup>

**Play therapy**

The QEx study<sup>203</sup> focused on younger children, aged 3–6 years. The remaining studies<sup>201,202</sup> focused, respectively, on populations with age ranges of 8–17 years<sup>202</sup> and 12–21 years.<sup>201</sup> Although the COS<sup>201</sup> focused solely on girls, the remaining two<sup>202,203</sup> studies focused on a fairly equal numbers of males and females.

Participants in the studies by McDonald and Howe<sup>202</sup> and D'Andrea *et al.*<sup>201</sup> were recruited from residential facilities. No information was provided by Udwin<sup>203</sup> on how participants were recruited.

**Animal therapy**

Dietz *et al.*<sup>204</sup> focused on children and adolescents aged 7–17 years, the majority of whom (94%) were female. Participants were recruited from CPS, law enforcement, the county district attorney's office, and the local children's hospital.

**Maltreatment****Arts therapy**

One study<sup>200</sup> focused on girls who had been sexually abused, whereas the other study<sup>199</sup> focused on children who had experienced both physical and sexual abuse.

**Play therapy**

There was limited information regarding the specific types of maltreatment across all three play therapy studies.<sup>201–203</sup> The children were identified as having been 'abused',<sup>202</sup> as having experienced 'parental neglect and/or abuse',<sup>203</sup> or a mixture of 'physical abuse, sexual abuse, or neglect'.<sup>201</sup>

**Animal therapy**

The intervention in Dietz *et al.*<sup>204</sup> was directed at children who had experienced sexual abuse.

**Intervention and comparison****Arts therapy**

This intervention used in Pretorius and Pfeifer<sup>200</sup> was a structured group art therapy programme, aimed at reducing depression, anxiety, sexual trauma and low self-esteem. Brillantes-Evangelista<sup>199</sup> had two experimental groups: (1) a visual arts group and (2) a poetry group. Both studies included a 'no treatment' control group.

**Play therapy**

The intervention used in the RCT<sup>202</sup> was a challenge/initiative programme that aimed to enhance self-concept using co-operative and adventure games. The QEx study<sup>203</sup> assessed the effects of imaginative

play training. The COS<sup>201</sup> assessed the impact of a sports-based intervention called 'Do the Good' (DtG), which was designed using trauma-informed treatment principles. Control group participants across all three play therapy studies<sup>201–203</sup> received some form of active comparison, including playing other games with the same researcher but with no debriefing,<sup>202</sup> engaging in a variety of activities unrelated to make-believe<sup>203</sup> and structured activities part of participant's TAU routine.<sup>201</sup>

### ***Animal therapy***

Dietz *et al.*<sup>204</sup> used canine animal-assisted therapy (AAT). Two forms of treatment were compared with a 'no treatment control'. The treatments were an 'AAT with therapeutic stories' group and an 'AAT without therapeutic stories' group.

## **Frequency and duration of sessions**

### ***Arts therapy***

Both<sup>199,200</sup> art therapy studies aimed at alleviating depression and PTSD and provided treatment over the course of eight weekly sessions.

### ***Play therapy***

All three play therapy interventions used a group-based approach, the duration of which ranged from 30 minutes<sup>203</sup> to 60 minutes.<sup>201,202</sup>

### ***Animal therapy***

Both treatments were provided in 12 weekly sessions.

## **Outcomes: activity-based interventions**

## **Post-traumatic stress disorder**

### ***Arts therapy***

Trauma was assessed by Pretorius and Pfeifer<sup>200</sup> (Art therapy) using the TSCC.<sup>473</sup> Brillantes-Evangelista<sup>199</sup> used CROPS (as cited in Coroner and Fischer<sup>472</sup>).

### ***Animal therapy***

Dietz *et al.*<sup>204</sup> also assessed the impact of animal therapy on trauma symptoms using the TSCC.<sup>325</sup>

## **Depression**

Depression was assessed in Pretorius and Pfeifer<sup>200</sup> using both the TSCC<sup>473</sup> and human figure drawing (HFD<sup>474</sup>). It was also assessed in Brillantes-Evangelista<sup>199</sup> using the Self-Rating Depression Scale (as cited in Coroner and Fischer<sup>472</sup>).

## **Anxiety**

Anxiety was assessed in Pretorius and Pfeifer<sup>200</sup> using the TSCC.<sup>473</sup>

## **Behaviour**

### ***Play therapy***

D'Andrea *et al.*<sup>201</sup> assessed participants' behaviour by recording need for (1) physical restraints in programmes and (2) use of time-outs in programmes. This study<sup>201</sup> also assessed participants' internalising behaviours, externalising behaviours and total behaviours using the CBCL.<sup>724</sup>

## Self-concept

### *Play therapy*

McDonald and Howe<sup>202</sup> assessed participants' self-concept using the Piers–Harris Children's Self-Concept Scale.<sup>475</sup> Items on this subscale can be clustered into six groups: (1) behaviour, (2) school, (3) physical appearance, (4) anxiety, (5) popularity and (6) happiness.

## Children's imaginary play

### *Play therapy*

Udwin<sup>203</sup> assessed dimensions of children's imaginative play by recording observations of (1) imagination, (2) positive affect, (3) concentration, (4) aggression, (5) peer interaction, (6) adult interaction, (7) peer co-operation, and (8) adult co-operation. Udwin *et al.*<sup>203</sup> also assessed participant's fantasy predisposition, using Guilford's Unusual Uses Test<sup>477</sup> and a storytelling task using Children's Apperception Test.<sup>478</sup>

## *Risk of bias: randomised controlled trial of play therapy*

### Sequence generation and allocation concealment

Unclear risk: McDonald and Howe<sup>202</sup> simply stated that participants were 'randomly assigned' but gave no other information on the method of random allocation or allocation concealment.

### Blinding of participants, personnel and outcome assessors

High risk: McDonald and Howe<sup>202</sup> made no reference to procedures to blind the participants or personnel (unlikely to have been feasible) or to outcomes assessors. The study<sup>202</sup> was judged high risk of bias on each domain (participants and personnel, and outcome assessors).

### Incomplete outcome data

Low risk: there is nothing to suggest that outcome data were incomplete for this study.

### Selective outcome reporting

Unclear risk: there is no evidence that outcomes were planned and then omitted from the results, but we have only the paper to rely on, and it is an older paper.

### Other sources of bias

The same researcher was the 'recreation leader' for both groups, leading to a judgement of high risk of bias.

Summary details of the risk-of-bias assessments of these trials can be found in *Appendix 10*.

## *Quality assessment of quasi-experimental and controlled observational studies of activity-based interventions*

### Arts therapy

The quality of the two<sup>199,200</sup> QEx studies was very similar. Both studies provided a clear description of the objectives, intervention and outcomes in the study, although neither study adequately described their participants. Neither study addressed potential confounders in their research. Although both studies provided a clear description of their findings, neither addressed potential adverse effects. Both studies failed to describe the characteristics of patients lost to follow-up. Statistical tests used were appropriate and both studies reported actual probability values for the main outcomes. It was not possible to determine whether or not the subjects asked to participate, or whether or not those who did participate, or the staff members involved in the study, were representative of the population from which they were recruited. Blinding of participants and of outcome assessors did not appear to have been attempted by either study.

## Play therapy

The quality of the QEx study<sup>203</sup> and COS<sup>201</sup> was variable. Both studies provided a clear description of the objectives, participants and outcomes in the study. Both studies only partially addressed potential confounders in their research. Although both studies provided a clear description of their findings, neither study addressed potential adverse effects. Both studies failed to describe the characteristics of patients lost to follow-up, and only one study<sup>203</sup> reported actual probability values for the main outcomes. It was not possible to determine whether the subjects asked to participate, the subjects who did participate, and the staff members involved in the study, were representative of the entire population from which they were recruited for any of the studies. Blinding of participants and of outcome assessors did not appear to have been attempted by either study.

## Animal therapy

The quality of Dietz *et al.*<sup>204</sup> was variable. The study provided a clear description of the objectives, participants, intervention and outcomes, and addressed potential confounders. But, despite providing a clear description of findings, the study failed to address potential adverse effects. The study also failed to describe the characteristics of patients lost to follow-up. Statistical tests used were appropriate and actual probability values for the main outcomes were reported. It was not possible to determine whether the subjects asked to participate, the subjects who did participate, and the staff members involved in the study were representative of the entire population from which they were recruited for any of the studies. Blinding of participants and of outcome assessors did not appear to have been attempted.

## Results: activity-based interventions

It was not possible to conduct a meta-analysis for any of the outcomes, as only one RCT was identified.

## Post-traumatic stress disorder

### Arts therapy

In the study by Pretorius and Pfeifer,<sup>200</sup> no statistically significant difference was found between the intervention and control group for trauma as measured by the TSCC or the HFD. In the Brillantes-Evangelista<sup>199</sup> study, trauma scores decreased for both intervention groups and increased for the control group, but this change reached statistical significance only for the visual arts group ( $p = 0.011$ ).

### Animal therapy

The scores for the children in the animal therapy (dogs) with stories group decreased significantly more than the animal therapy (dogs) without stories group for all of the subscales of the TSCC, except sexual concerns ( $p < 0.001$ ). This included subscales of anxiety, depression, anger, PTSD and dissociation. In addition, the animal therapy without stories group decreased significantly more than the no animal therapy (dogs) group ( $p < 0.001$ ).

In the sexual concerns group, children in the animal therapy (dogs) with stories group had scores that decreased significantly more than those in either the no animal therapy or animal therapy (dogs) without stories groups ( $p < 0.001$ ).

## Depression

### Arts therapy

Although the intervention group participants demonstrated a greater improvement in depression across both<sup>199,200</sup> studies, this difference reached statistical significance only in the Pretorius and Pfeifer<sup>200</sup> study ( $p = 0.001$ ) when measured by the HFD. The scores on the TSCC failed to reach statistical significance in Pretorius and Pfeifer.<sup>200</sup>

In the study by Brillantes-Evangelista<sup>199</sup> the improvement in scores reached statistical significance only for the poetry intervention group ( $p = 0.0445$ ). Improvement in scores for the visual arts intervention group and the control group failed to reach statistical significance.

## Anxiety

### *Arts therapy*

Pretorius and Pfeifer<sup>200</sup> found no statistically significant difference between groups for anxiety as measured by the TSCC, although the experimental group evidenced statistically significantly lower post-test scores than the control group on anxiety ( $p = 0.000$ ) as measured by the HFD.

## *Effectiveness of activity-based interventions*

### Summary

We were able to identify only two<sup>199,200</sup> studies of art therapy, two<sup>201,203</sup> studies of play therapy and one<sup>204</sup> study of an animal therapy. One<sup>202</sup> of these was a randomised trial, three<sup>199,200,203</sup> were QEx and two<sup>203,204</sup> were COSs. The outcomes targeted in these studies were heterogeneous, as were the interventions, making it extremely difficult to draw conclusions about their effectiveness. The small samples in these studies and the generally poor quality exacerbate this problem.

### Completeness and applicability

Given the popularity of activity-based therapies in the UK and elsewhere, it is striking that we were able to identify so few studies. Even more striking is the absence of rigorous studies of music therapy, which appears to be extremely popular in the treatment of traumatised children, particularly young children.

### Quality of the evidence

The quality of the RCT<sup>202</sup> was generally poor, as was that of the QEx studies<sup>199,200,203</sup> and COSs.<sup>201,204</sup>

### *Economic evidence*

No economic evaluations of activity-based therapies for children who have been maltreated were located.

# Chapter 5 Acceptability

## Introduction

In this chapter we present evidence on the acceptability of therapeutic interventions to maltreated children, their families and other carers. The chapter draws on three sources of evidence:

1. data from studies that are designed to investigate factors associated with treatment engagement and dropout, and data from outcome studies that provide information on these issues, irrespective of study design
2. data from qualitative studies designed to investigate the experiences of children and young people, their carers and service providers
3. the views of members of our Young People's Advisory Groups, and our PAG.

The issue of acceptability was addressed in a variety of ways in these included studies, and the heterogeneity in the methods of data collection used was further complicated by overall study quality. We used a systematic approach to reviewing the evidence about acceptability, first summarising the available data on treatment engagement and completion then summarising qualitative evidence on the views and experiences of children and young people, their carers and those providing the interventions. The available studies varied considerably in number, design and quality for each group of interventions (CBT, relationship-based, etc.), with the result that sometimes there is only a very thin evidence base, sometimes the evidence is largely sourced from carers or service providers and sometimes there are data from a range of sources.

We consider some of the key issues in defining acceptability, particularly in relation to quantitative data on engagement and dropout. We then consider the information on acceptability in relation to studies of particular interventions and groups of interventions. We present the views of children and young people about what they want from professionals, and examine the synergies, discrepancies and gaps in the findings from the published literature. On the basis of the evidence as a whole, we identify some of the key messages which, we believe, raise some important issues about the acceptability of service provision to this group of young people, and which are relevant to the development of effective and cost-effective service provision.

## Overview of included studies

Please refer to *Chapter 2* for details of the search strategy and approach taken to this area of the review. Seventy-three studies (see *Table 12*) were identified that addressed the issue of intervention acceptability. Thematic analysis of the qualitative data was conducted and discussed by members of the research team. Analysis of the data and identification of key themes was simultaneously deductive (based on key research questions for this review) and inductive (emerging from the reported data). *Table 12* lists the studies, and provides an overview of the information available within each that relate to particular aspects of acceptability.

There is considerable difficulty making any meaningful comparisons across the different therapeutic approaches, given the diverse range of research methodologies and treatment modalities investigated. However, a brief summary of the nature and quality of the data (by intervention group) is presented in *Appendix 13*, and a more detailed description of each study is available in *Appendix 14*.

TABLE 12 Summary of acceptability

Intervention type	Study	Children – satisfaction	Caregiver – satisfaction	Clinician – satisfaction	Profile of completers/ attriters	Therapy difficult but worthwhile	Caregivers' shared experience	Early termination	Parent–therapist tension	Secondary impact of abuse	Client–therapist relationship	Parent–child tension	Gender	Race	Practical considerations	Resources	Quality assessment
CBT	<sup>a</sup> Barker 2005 <sup>481</sup>																
	Buschbacher 2002 <sup>629</sup>																
	<sup>a</sup> Chasson 2008 <sup>482</sup>				✓												
	Chasson 2013 <sup>630</sup>				✓												
	Eslinger 2014 <sup>631</sup>				✓												
	Fraynt 2014 <sup>632</sup>				✓												
	<sup>a</sup> Hubel 2014 <sup>492</sup>																
	<sup>a</sup> Kolko 1996 <sup>107</sup>																
	<sup>a</sup> Lange 2010 <sup>497</sup>				✓												
	McPherson 2012 <sup>633</sup>				✓												
	<sup>a</sup> Salloum 2014 <sup>504</sup>																
	San Diego 2011 <sup>680</sup>																
	<sup>a</sup> Silovsky 2007 <sup>505</sup>																
	<sup>a</sup> Smith 2008 <sup>506</sup>																
Relationship-based	Cross 2013 <sup>634</sup>				✓												
	Ducharme 2000 <sup>510</sup>				✓												
	<sup>a</sup> Golding 2004 <sup>511</sup>																
	<sup>a</sup> Osofsky 2007 <sup>515</sup>				✓												
	Powell 2010 <sup>662</sup>																
	Sudbery 2010 <sup>663</sup>																
	Taban 2001 <sup>635</sup>																
	Timmer 2004 <sup>656</sup>																

Intervention type	Study	Children – satisfaction	Caregiver – satisfaction	Clinician – satisfaction	Profile of completers/ attriters	Therapy difficult but worthwhile	Caregivers' shared experience	Early termination	Parent–therapist tension	Gender	Race	Practical considerations	Resources	Quality assessment
Systemic	Conran 1993 <sup>621</sup>	Yellow				Green		Red						Red
	Costa 2009 <sup>678</sup>					Green		Red	Red					Green
	<sup>a</sup> Danielson 2010 <sup>526</sup>							Yellow						Yellow
	Tiersland 2006 <sup>627</sup>													Red
	<sup>a</sup> Woodworth 1991 <sup>333</sup>												Red	Red
Psychoeducation	<sup>a</sup> Barth 1994 <sup>161</sup>													Green
	Boisvert 2008 <sup>658</sup>				✓									Yellow
	<sup>a</sup> Hyde 1995 <sup>4538</sup>					Yellow	Green							Green
	Rushon 2000 <sup>664</sup>													Yellow
	Ashby 1987 <sup>686</sup>													Green
Group therapy	Baker 2001 <sup>627</sup>											Green		Yellow
	<sup>a</sup> De Luca 1995 <sup>170</sup>													Yellow
	Grayston 1996 <sup>659</sup>													Yellow
	Gustafsson 1995 <sup>676</sup>							Yellow						Yellow
	<sup>a</sup> Monck 1996 <sup>169</sup>													Yellow
	Nelson-Gardell 2001 <sup>638</sup>													Yellow
	Peled 1992 <sup>659</sup>													Green

continued

**TABLE 12** Summary of acceptability (continued)

[illegible]

Intervention type	Study	Children – satisfaction	Caregiver – satisfaction	Clinician – satisfaction	Profile of completers/ attriters	Therapy difficult but worthwhile	Caregivers' shared experience	Early termination	Parent–therapist tension	Secondary impact of abuse	Client–therapist relationship	Parent–child tension	Gender	Race	Practical considerations	Resources	Quality assessment
Intensive service models	Biehal 2012 <sup>145</sup>	Yellow	Green	Red							Green	Red				Red	Green
	Cunningham 2009 <sup>649</sup>																
	Gallagher 2012 <sup>666</sup>							Yellow								Red	
	Laan 2001 <sup>671</sup>		Green		✓												
	Leenarts 2013 <sup>672</sup>				✓												
	Shennum 1995 <sup>650</sup>	Yellow		Green		Green					Yellow						
	Staines 2011 <sup>667</sup>		Green	Green											Red		
Activity-based therapies	West 2014 <sup>651</sup>	Green															Yellow
	Bannister 1996 <sup>658</sup>	Green	Green					Yellow									
	Burgon 2011 <sup>669</sup>			Green							Green						Green
	Gilbert 1988 <sup>652</sup>	Green	Green	Green					Green	Green					Red		
	Hill 2009 <sup>670</sup>		Green	Green					Green	Green						Red	
General relevance	Mishna 2012 <sup>661</sup>			Green					Green							Red	Green
	Koverola 2007 <sup>653</sup>	Green	Green		✓			Yellow									
	Murphy 2014 <sup>654</sup>				✓												
	Risser 2013 <sup>655</sup>				✓												Green
a Studies that were also included in the review of effectiveness studies.																	

## Defining acceptability

What makes a treatment acceptable? For cancer patients, treatment may be experienced as highly unpleasant, requiring major disruptions to daily life, and with evident adverse effects for the individual and their family. Nonetheless, the treatment may be considered acceptable if there are few alternatives. The 'costs' to the individual, and those close to them, may be outweighed by the anticipated benefits.

For maltreated children and their carers, the costs and benefits may seem very different. Children may initially present with no problems, either emotionally or behaviourally, rendering the apparent cost of pursuing or accepting services as unnecessary or unnecessarily high, especially if one of the 'costs' of therapy is reliving or retelling experiences that are deeply personal, distressing and often traumatic. Even when the need for therapy is evident, it may not be easy to persuade either the child or caregivers to accept help, or to continue accepting help until problems are sufficiently ameliorated, if not resolved.

Possibly one of the most significant issues is that acceptability is rarely considered from the standpoint of the child or young person. Most of the quantitative studies examining engagement with treatment do so in relation to child or caregiver characteristics (e.g. maltreatment type, behaviour, age or mental health) but rarely from the perspective of the child. Among the qualitative studies, most examine issues from the perspectives of children's caregivers.

### *What young people said*

At the outset of this study, our consultations with young people focused on three issues: the outcomes they considered important from therapy; what they felt made it easier to ask for help, or easier to get it; and what they felt made it harder. We described the methodology in *Chapter 2*. The two groups with whom we consulted approached the Q-sort task (used to facilitate discussion) in rather different ways, but all took it very seriously (see *Appendix 15*).

### Outcomes that matter

In relation to the outcomes they felt were important for maltreated children, one of the two groups felt that 18 of the 25 outcomes listed on the Q-sort cards were too specific to particular problems (such as anger or eating disorder) and would entail inappropriate generalisations, so they removed them. In this group, this left only seven outcomes to discuss, to which the young people themselves added an eighth. Despite differences in approach, there were clear similarities in the views of both groups. The items ranked most highly across the two groups were as follows:

Helping the person to:

- learn skills to handle life's ups and downs (group 1)
- understand what being 'treated badly' is, and learning to recognise when things are *not* OK (group 2)
- learn ways to keep themselves safe (e.g. knowing when to report something and to whom to report it) (group 2)
- feel safe (groups 1 and 2)
- 'bounce back' if things in their life go wrong (groups 1 and 2).

### Asking for, and receiving, help

The young people also viewed individuality as central to understanding what things might be important in making it easier for someone to ask for help, or might make some forms of help more acceptable than others. For example, two of the cards in the Q-sort were 'person was still living with their family' and 'the person was no longer living with their family'. The young people pointed out, quite appropriately, that it was not easy to rank these cards one against the other because their importance would depend on whether the young person had experienced maltreatment within the family or outside it. One of the things that they emphasised in their discussions was the importance of choice, both in relation to starting and ending a service or therapy. Young people in one of the groups were unanimous in the view that the most

important factor for a young person was the opportunity to meet a professional beforehand and to decide whether or not they would be happy to begin getting help from them. Furthermore, the group wanted the format of this preliminary meeting to be determined by the young person themselves, because some might want an opportunity to meet a potential therapist informally (e.g. meeting for a cup of coffee) without any mention of the therapy, whereas others might prefer a formal discussion of what to expect from the intervention. Clearly these alternatives are not mutually exclusive, but reflect different concerns. The opportunity to meet someone informally speaks to a concern about the likely quality of the therapeutic relationship. It may also be a proxy for choice and commitment, both of which may increase the likelihood of someone engaging with therapy, or staying with a course of treatment. A formal discussion of expectations can provide an opportunity to allay anxieties, to negotiate boundaries and to make an informed decision about the acceptability of *what* the therapist is offering.

Other things that mattered to young people included confidentiality (accessing help in ways that maintained their confidentiality) and trust in the help-giver. Making their own decisions about whether or not to get help, or at least being involved in that decision (rather than these decisions being taken by their parents or carers) was also ranked highly, along with not feeling judged or criticised – and, perhaps surprisingly, not having to worry about paying for the service. Clearly, many of these issues are of most relevance to older children and young people, such as those in the advisory groups, but, in terms of engagement with therapeutic services, they are probably salient to children of most age groups.

### Things that get in the way

One group found it particularly difficult to identify a single factor that they regarded as *the most significant* barrier to young people accessing therapy. This group identified two things that they thought might deter young people from seeking help. The first was a worry that their situation was too complicated for anyone to be able to help with, and the second was that some children might think that those offering help would not believe them. Other factors identified were as follows.

The person does not:

- want to be seen as having mental health problems (group 1)
- know who to ask about getting help (group 2)
- think they need any help (group 1)
- trust the people/services offering help (group 2)
- think that the help available will work for them (group 1).

This is a percipient list from these groups of young people. Children whose families have been engaged with social services for reasons of maltreatment, some of whom may have been removed from home as a consequence, may well have ambivalent feelings about public services. It is not unusual for children to feel responsible for a family break-up, and some are blamed by their parents for the involvement of Child Protection Services. Together, these point to the importance of services anticipating, and addressing, feelings of stigma and concerns about the likely effectiveness of services, and ensuring that those who need help know where and how to access it. The barriers that can be created by parents who prevent children from accessing services was also identified as an issue.

Most of these concerns or issues surface in the studies included in our acceptability review, although few have been systematically investigated. We return to these issues after following a review of the included studies.

## Cognitive-behavioural interventions

Fourteen<sup>107,108,481,482,492,497,504–506,629–633,680</sup> studies addressed issues relating to the acceptability of a range of cognitive/behavioural interventions. Details can be found in *Table 13*.

**TABLE 13** Acceptability of cognitive/behavioural interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Barker 2005 <sup>481</sup>  UK	<p><i>The Sunrise Project</i></p> <p><b>P</b> Children aged 4–18 (mean 9.2) years, with histories of physical, emotional, sexual abuse and neglect; 45% female</p> <p><b>I</b> Individual CBT approach, 1–25 sessions of 1 hour; emphasis on psychoeducation (older children) and therapeutic play plus age-appropriate psychoeducation for younger children</p> <p><b>C</b> N/A</p> <p><b>O</b> Pre-post changes in therapist's rating of HoNOSCA scores<sup>382</sup></p>	14/67 children seen by project and/or their parents; five social services staff	Interviews	Summary overview	<p><i>Parent views</i></p> <ul style="list-style-type: none"> <li>• Parents had a clear understanding and expectations of therapy at outset</li> <li>• Most helpful: child having someone neutral to talk to and reassurance about their role as a parent</li> <li>• Least helpful: difficulty articulating what was less helpful, some felt that ending of therapy was premature</li> </ul> <p><i>Children's views</i></p> <ul style="list-style-type: none"> <li>• Children had difficulty saying what was most and least helpful</li> <li>• Mixed views about timing of therapy termination</li> </ul> <p><i>Social services staff view</i></p> <ul style="list-style-type: none"> <li>• Overwhelmingly positive but concerns were raised about reliance on single worker and funding insecurity</li> </ul>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Buschbacher 2002 <sup>629</sup> USA	<p><i>Individualised Support Project</i></p> <p><b>P</b> Physically abused and neglected male in foster care, aged 2.5 years</p> <p><b>I</b> Family-centred, communication-based approach to challenging behaviour. 1- to 2-hour sessions, increasing to 3 hours</p> <p><b>C</b> N/A</p> <p><b>O</b> Improved child behaviour</p>	<i>n</i> = 1	Interviews with foster parent and two staff members of three-person team		<p><i>Foster/adoptive parent's views</i></p> <ul style="list-style-type: none"> <li>Mother felt like an equal member of the team</li> <li>Intervention improved quality of life for the family</li> </ul> <p><i>Staff views</i></p> <ul style="list-style-type: none"> <li>Such a comprehensive approach is needed to deal with challenging behaviour</li> <li>Team approach was viewed positively by all</li> <li>Parents should be regarded as partners in the assessment and intervention process</li> <li>Limited time and resources were a source of frustration</li> </ul>
Chasson 2008 <sup>482</sup> USA	<p><i>Individual Exposure-based CBT</i></p> <p><b>P</b> Child victims or covictims of trauma: sexual or physical abuse, witness to murder/sexual assault; aged 5–19 (mean 10.88, SD 5.3) years</p> <p>68% female; 31% Hispanic, 30% African American, 29% Caucasian, 9% Other</p> <p><b>I</b> 20 × 1-hour sessions of TF-CBT</p> <p><b>C</b> N/A</p> <p><b>O</b> Avoidance, intrusive thoughts, (IES<sup>279</sup>), depression (CDI<sup>258</sup>)</p>	<i>n</i> = 99	Withdrawal metrics	Multiple regression analysis	<p>Dropout was defined as failing to complete the PTAP</p> <ul style="list-style-type: none"> <li>41% children dropped out without completing PTAP; on average, these children attended nearly 15 sessions fewer than those who did not terminate prematurely</li> <li>Mean number of attended sessions: <ul style="list-style-type: none"> <li>Dropouts: <i>M</i> = 5.05 (SD 6.02)</li> <li>Completers: <i>M</i> = 19.66 (SD 8.47)</li> <li>All: <i>M</i> = 13.61 (SD 10.43)</li> </ul> </li> </ul> <p>Higher severity of intrusion and depression measured just before termination correlated with fewer treatment sessions. Immediate distress may be related to dropout</p>

continued

**TABLE 13** Acceptability of cognitive/behavioural interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Chasson 2013 <sup>630</sup> USA	<p><i>Individual Exposure-based CBT</i></p> <p><b>P</b> Child victims or covictims of trauma: sexual or physical abuse, witness to murder/sexual assault. Aged 5–19 (mean 11.03, SD 3.6) years</p> <p>63% female; 34% Hispanic, 28% African American, 29% Caucasian, 9% Other</p> <p><b>I</b> 20 × 1-hour sessions of TF-CBT</p> <p><b>C</b> N/A</p> <p><b>O</b> Avoidance, intrusive thoughts, depression</p>	<p><i>n</i> = 134</p> <p>(99 from Chasson 2008<sup>482</sup>)</p>	Withdrawal metrics	Regression analysis of trauma characteristics as predictors of attrition	<p>In this study, premature treatment termination defined in terms of number of accumulated sessions</p> <p>Participants more likely to terminate treatment prematurely were those who had:</p> <ul style="list-style-type: none"> <li>• been abused by an older child rather than by a parental figure</li> <li>• not experienced a life threatening/physical injury</li> <li>• experienced a single traumatic incident rather than multiple</li> </ul> <p>Conclusions: certain trauma characteristics may be important to identify children at risk of dropout</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Eslinger 2014 <sup>631</sup> USA	<p><i>Individual TF-CBT</i></p> <p><b>P</b> Children who were sexually, physically and emotionally abused, or neglected (75%), or who experienced death of a caretaker (9%), catastrophic event or terrorism (16%); aged 5–19 (<math>M = 9.7</math>, <math>SD 4.5</math>) years</p> <p>57% female; 84% Caucasian</p> <p><b>I</b> 20 × 1-hour sessions of TF-CBT</p> <p><b>C</b> PCIT</p> <p><b>O</b> child behaviour (CBCL<sup>297,349</sup>); PTSD (TSCC-A,<sup>325</sup>); parenting stress (PSI<sup>725</sup>)</p>	$n = 115$	Baseline, post treatment and 3 months	Multinomial logistic regression of predictors of dropout	<p>Three levels of treatment attendance: early dropout, moderate dose of treatment and full completion (see p. 125)</p> <ul style="list-style-type: none"> <li>• Early dropout 32% (<math>n = 26</math>)</li> <li>• Moderate dose 23% (<math>n = 27</math>)</li> <li>• Full completion 54% (<math>n = 62</math>)</li> </ul> <p><i>Findings</i></p> <ul style="list-style-type: none"> <li>• Living with biological/adoptive parents increases risk of dropout</li> <li>• As caregiver's age increases by 1 year, the odds that a child and caregiver will fully complete increases by 11%</li> </ul> <p>As child age increases by 1 year, the odds of fully completing decreases by 20%<sup>a</sup></p> <p>For every year of increase in caregiver's age, the odds of receiving a moderate dose of treatment increases by 10%</p> <p>For every point rise in PTS score the odds that a child and caregiver will receive a moderate does increases by 4%</p>

continued

**TABLE 13** Acceptability of cognitive/behavioural interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Fraynt 2014 <sup>632</sup>  USA	<p><i>Individual, group and/or family</i></p> <p><b>P</b> Physically and sexually abused children aged 2–18 (<i>M</i> = 12; <i>SD</i> 3.5) years; 49.3% female; 100% African American or Latino</p> <p><b>I</b> Trauma-focused treatment in a mental health agency; average number of sessions = 34 (<i>SD</i> 32.8)</p> <p><b>C</b> N/A</p> <p><b>O</b> Treatment engagement</p>	<i>n</i> = 562	Factors predicting treatment engagement	Binominal regression; multinomial logistic regression	African American children had significantly shorter trauma-informed treatment duration and higher rates of premature termination than Spanish-speaking Latino children, even when accounting for other variables associated with treatment duration and completion (e.g. child's age, level of functional impairment, and receipt of group and field services)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Hubel 2014 <sup>492</sup>  USA	<p><b>P</b> Sexually abused children aged 6–12 (<math>M = 10</math>; <math>SD\ 1.63</math>) years; 77% female; 80% Caucasian and their non-offending parents</p> <p><b>I</b> 12 × 90 minutes of parallel group CBT to explore and cope with feelings about abuse and empower against future victimisation</p> <p><b>C</b> N/A</p> <p><b>O</b> CHILD: depression (CDI<sup>430</sup>), anxiety (RCMAS<sup>256</sup>), loneliness (CLQ,<sup>726</sup>), impact of trauma (CITES-R,<sup>414</sup>), fear of victimisation (CFRV<sup>255</sup> + Wolfe and Wolfe 1986, unpublished)</p>	$n = 99$ ; $n = 67$ analysed	Child and parent client evaluation form (six-point Likert scale, 6 = extremely unfavourable)		<p><i>Child scores</i></p> <p>Satisfaction with group therapists:</p> <ul style="list-style-type: none"> <li>Warm and understanding (<math>M = 2.72</math>, <math>SD\ 0.61</math>)</li> <li>Knew what they were talking about (<math>M = 2.92</math>, <math>SD\ 0.28</math>)</li> </ul> <p>Group topics:</p> <ul style="list-style-type: none"> <li>Were important to me (<math>M = 2.81</math>, <math>SD\ 0.47</math>)</li> </ul> <p>Overall group content:</p> <ul style="list-style-type: none"> <li>Like coming to group (<math>M = 2.83</math>, <math>SD\ 0.045</math>)</li> </ul> <p><i>Caregiver scores</i></p> <p>Satisfaction with group environment:</p> <ul style="list-style-type: none"> <li>Pleasantness of therapy rooms (<math>M = 1.61</math>, <math>SD\ 0.76</math>)</li> <li>Supportiveness of therapists (<math>M = 1.35</math>, <math>SD\ 0.061</math>)</li> <li>Relevance of treatment content (<math>M = 1.77</math>, <math>SD\ 0.76</math>)</li> <li>Overall impact of therapy on child (<math>M = 2.10</math>, <math>SD\ 0.94</math>)</li> </ul>

continued

**TABLE 13** Acceptability of cognitive/behavioural interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Kolko 1996 <sup>107,108</sup> USA	<p><b>I</b> Individual CBT</p> <p><b>P</b> Physically abused children; mean age = 8.6 (SD 2.2) years; 28% female</p> <p><b>I</b> 12 × 1 hours of CBT</p> <p><b>C</b> FT and TAU</p> <p><b>O</b> Child to parent violence, child externalising behaviour, parental distress and child abuse risk; family conflict and cohesion (see <i>Chapter 4</i>)</p>	<i>n</i> = 25 CBT, <i>n</i> = 18 FT, <i>n</i> = 12 control	<p>Treatment expectancy (five-point Likert scale)</p> <p>Brief phone call to each parent between sessions 3 and 5 to determine initial treatment satisfaction</p> <p>Post-treatment 10-item CEI</p>		<p><i>Treatment status and satisfaction</i></p> <ul style="list-style-type: none"> <li>Initial treatment mean ratings for CBT and FT moderate to high</li> <li>Ratings for all 10 items (CBT) and five items (FT) children were all &gt; 4.0</li> <li>CBT rated higher in: interest in material; learned that session; confidence that therapist could minimise abuse potential</li> </ul> <p><i>Consumer satisfaction ratings (CEI)</i></p> <ul style="list-style-type: none"> <li>Moderate to high acceptability</li> <li>Parents reported high levels of acceptability and satisfaction</li> </ul>
Lange 2010 <sup>497</sup> The Netherlands	<p><b>I</b> Therapist-assisted web-based treatment</p> <p><b>P</b> Sexually abused children aged 14–25 (<i>M</i> = 20, SD 3.5) years</p> <p><b>I</b> Web-based treatment based on CBT for PTSD in adults comprising 11 virtual contacts over 8 weeks</p> <p><b>C</b> N/A – baseline controlled</p> <p><b>O</b> Impact of events (IES, Dutch adaptation<sup>727</sup>); depression (subscale of SCL-90-R<sup>728,729</sup>); client satisfaction plus routine outcome monitoring</p>	Sampling via advertisement and online application <i>n</i> = 24	<p>Client satisfaction: general, with treatment and with therapists; interviews plus 10-point rating scale (1 = high)</p> <p>Attrition</p>		<p><i>Quantitative findings</i></p> <ul style="list-style-type: none"> <li>Non-participation: pre-treatment withdrawal was high (77%); younger age group had higher rates of pre-treatment withdrawal, age 14–15 years = 87%</li> <li>Treatment dropout was low (17%)</li> </ul> <p>Improvement during treatment showed significantly higher effects than during the placebo period (net effect sizes 0.5–1.6)</p> <p><i>Qualitative findings</i></p> <ul style="list-style-type: none"> <li>22% missed face-to-face contact but were highly satisfied with their therapists</li> <li>91% would recommend treatment to others</li> </ul>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
McPherson 2012 <sup>633</sup> USA	<p><b>FSP</b></p> <p><b>P</b> Sexually abused children aged 3–16 years. 74% female</p> <p><b>I</b> Trauma-focused counselling including individual treatment, group therapy and/or FT; TF-CBT most common treatment model used</p> <p><b>C</b> N/A</p> <p><b>O</b> Linkage to mental health services plus patient-achieved goals (retrospective chart review)</p>	<i>n</i> = 254	Treatment completion	Univariate analysis and multivariate logistic regression models	<ul style="list-style-type: none"> <li>Enrolment in public insurance (Medicaid) and referral to ongoing therapy services were associated with successful linkage to mental health treatment</li> <li>Children more likely to complete therapy if caregiver participated</li> <li>Having only one child victim per household, referral for ongoing therapy services and caregiver's participation in therapy services were associated with treatment completion</li> <li>Having Medicaid and one child victim were not significant in the multiple regression model</li> </ul>
Salloum 2014 <sup>504</sup> USA	<p><b>Stepped Care TF-CBT</b></p> <p><b>P</b> Physically and sexually abused children aged 3–7 (<i>M</i> = 4.7, <i>SD</i> 0.87) years; 22.2% female; 77.8% Caucasian</p> <p><b>I</b> Step 1: 3 × 1-hour parent-led sessions; if insufficient, therapy moves to 9 × 1.5-hour sessions led by therapist</p> <p><b>C</b> N/A</p> <p><b>O</b> Children: PTSD (DIPA<sup>730</sup> + TSCYC-PTS<sup>731</sup>); severity of psychopathology (CGI-Severity<sup>732</sup>); treatment improvement rating (CGI-I)<sup>733</sup></p>	<i>n</i> = 6	Parents completed:	<ul style="list-style-type: none"> <li>Expectancy Rating Form;</li> <li>Client Satisfaction Questionnaire</li> <li>Treatment costs calculated with the Time Tracking System</li> </ul>	<p><i>Parent acceptability</i></p> <ul style="list-style-type: none"> <li>Expectations for successful treatment were high</li> <li>Parental expectations were higher for parents completing step 1 than non-completers. Treatment satisfaction scores were high (above 29) for 5/6 parents</li> <li>At mid-assessment, mean satisfaction scores were 28 (<i>SD</i> 7.45), post-assessment <i>M</i> = 31.50 (<i>SD</i> 1.00)</li> <li>Only one parent was uncomfortable ending treatment</li> </ul>

continued

**TABLE 13** Acceptability of cognitive/behavioural interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
San Diego 2011 <sup>680</sup>	<i>TF-CBT</i>	5/6 referred adolescents participated	Participants' journals; therapy notes and interviews	IPA	<ul style="list-style-type: none"> <li>Recovery is non-linear in nature</li> <li>Analyses revealed an initial resistance towards therapy, finding it difficult to re-experience traumatic events and struggle with negative emotions. In the early weeks they did not think therapy would help, but this changed as therapy progressed</li> </ul>
The Philippines	<p><b>P</b> Sexually abused female children aged 16–18 years</p> <p><b>I</b> 15 × 1–2 hours sessions of TF-CBT</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	Referrals came from College Dean and students in General Psychiatry & Personality Department			<p>Therapeutic changes reported include establishing a sense of self-control; self-renewal; meaning-making; and social reconnection</p>
Silovsky 2007 <sup>505</sup> USA	<p><i>Treatment for Preschool Children with Sexual Behaviour Problems</i></p> <p><b>P</b> Sexually abused children aged 3–7 (<i>M</i> = 4.9, <i>SD</i> 1.1) years; 58% F and the non-offending parent</p> <p><b>I</b> 12 × 90-minute parallel group sessions followed by a conjoint session for parents and child. Treatment protocol uses behavioural, cognitive–behavioural and psychoeducational approaches</p> <p><b>C</b> N/A</p> <p><b>O</b> Children: sexual behaviour (CSBI-3<sup>734</sup>); behaviour problems and social competence (CBCL,<sup>294</sup> Parents; stress (PSI<sup>471</sup>)</p>	<i>n</i> = 85	CSBP Preschool Group Satisfaction and Social Validity Questionnaire (CSBP-PGSQ). Fata <i>et al.</i> 1989, unpublished measure		<ul style="list-style-type: none"> <li>Caregivers recommended continuing all aspects of the group</li> <li>Knowledge after treatment significantly greater than before [<i>t</i>(34) = −11.65; <i>p</i> &lt; 0.05]</li> <li>Quality of topics rated 'very useful'</li> </ul> <p>Average satisfaction rating on seven-point scale was 6.35</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Smith 2008 <sup>506</sup>  Australia	<p><b>SAS-CBT</b></p> <p><b>P</b> Sexually abused children aged 11–16 (<math>M = 14</math>) years and non-offending guardians; 66% female</p> <p><b>I</b> 12 × 1.5-hour weekly of SAS-CBT conducted for adolescents and guardians in parallel.</p> <p><b>C</b> N/A</p> <p><b>O</b> Trauma (TSCC<sup>258</sup>); depression (CDI<sup>258</sup>)</p> <p>12 weekly sessions</p>	$n = 6$	Client Satisfaction Questionnaire		<p><i>Adolescents</i></p> <p>All adolescents attended every therapy session apart from one dropout</p> <p>Adolescent Satisfaction Questionnaire scores indicated that 4/5 strongly agreed that the programme was of high quality, it helped them make progress, it met their needs, they would recommend it and it would help them to deal more effectively with trauma</p> <p>Adolescents felt understood by therapists and free to express thoughts and feelings related to abuse</p> <p><i>Guardians</i></p> <ul style="list-style-type: none"> <li>3/6 parents/guardians dropped out midway; all reasons were based on other commitments and they continued to support the adolescents by bringing them to and from therapy</li> </ul>
<p>CEI, Child Evaluation Inventory; CFRV, CITES Fear of Victimisation; CLQ, Child Loneliness Questionnaire; CSBI-3, Child Sexual Behavior Inventory-3; CSBP, Children with Sexual Behavior Problems; DIPA, Diagnostic Infant and Preschool Assessment; FSP, Family Support Program; IPA, interpretative phenomenological analysis; N/A, not applicable; PICO, participants, intervention, outcomes, comparisons; PSI, Parenting Stress Index; PTAP, post-treatment assessment packet; SCL-90-R, Symptom Checklist-90-Revised.</p> <p>a Article misrepresents odds as likelihoods and miscalculates the odds for child's age. The abstract also misreports the multinomial logistical regression of table 2 as showing a significant effect for child's externalising behaviour. Table 2 clearly shows these effects to be insignificant in both models (<math>p = 0.52</math> in one and <math>p = 0.44</math> in the other).</p>					

## Description of studies

### Study design

One<sup>107,108</sup> of the included studies was a randomised trial. The rest were uncontrolled studies.

### Sample sizes

Sample sizes varied. They included a single case<sup>629</sup> and four<sup>497,504,506,680</sup> studies with very small samples of six<sup>504,506,680</sup> and 25.<sup>497</sup> Five<sup>107,108,481,482,492,505</sup> studies had samples numbering between 50 and 100, and four studies<sup>630–633</sup> had samples of > 100. McPherson *et al.*<sup>633</sup> recruited 254. Fraynt *et al.*<sup>632</sup> had the largest sample of 562 children, but was a study based on data from a core data set in the USA.

### Location

These were mostly US based (nine<sup>107,108,482,492,504,505,629–633</sup> studies), with two Australasian studies (Australia,<sup>506</sup> Philippines<sup>680</sup>), two European studies (UK,<sup>481</sup> The Netherlands<sup>497</sup>) and one South African study.<sup>200</sup>

### Participants

The age ranges of children varied from 2.5 years to 25 years. Six<sup>492,497,504,505,633,680</sup> studies reported on interventions that were solely treating children for sexual abuse history. Kolko 1996<sup>107,108</sup> focused solely on children who had been physically abused. The other studies recruited children who had experienced one or more types of maltreatment.

### Interventions

Interventions covered individual, group- or family-based therapy. Lange and Ruwaard<sup>497</sup> explored the impact and acceptability of a web-based version of cognitive/behavioural approaches with no face-to-face contact at all between therapist and client.

The number of sessions ranged from 8 to 34, with most interventions lasting 12 sessions (eight studies);<sup>107,108,481,492,497,504–506,632,680</sup> three<sup>629,631,633</sup> studies did not specify the length of treatment. Interventions in the two Chasson *et al.*<sup>482,630</sup> studies comprised 20 sessions.

Fraynt *et al.*<sup>632</sup> reported variable attendance rates which differed in relation to ethnicity, the focus of treatment (family treatment vs. no family treatment), group treatment compared with no group treatment, and location of treatment (office vs. community).

### Characteristics of those who complete treatment

Pre-treatment withdrawal was the main focus of the study<sup>497</sup> reported by Lange and Ruwaard.

Four<sup>482,630,631,633</sup> studies focused on treatment compliance. Factors predicting treatment engagement were analysed in the Fraynt *et al.*<sup>632</sup> study.

### Pre-treatment withdrawal

Lange and Ruwaard<sup>497</sup> set out to explore the effects of an online treatment for young victims of sexual abuse. In light of significant pre-treatment withdrawal in an earlier uncontrolled study, the authors introduced a number of measures that they hoped would reduce this in the context of a controlled (within-subject baseline-controlled) study. In common with other online treatment studies, the previous study had experienced a pre-treatment withdrawal rate of 90%.

In Lange and Ruwaard<sup>497</sup> there remained a high level (77%) of pre-treatment withdrawal (82 out of 106 applicants not excluded by the research team), despite the steps taken to minimise it, namely no randomisation, parental consent required only for children of < 16 years rather than < 18 years (Dutch law for RCTs of new interventions), raising the upper age level for participants from 18 to 25 years, and providing the alternative of a structured interview by 'chat' if they were reticent to answer screening questions on the telephone.

Data available to the researchers indicated that pre-treatment withdrawal was strongly correlated with biographic questions, suggesting that anonymity may be an important factor, although whether for treatment or as an artefact of the study is not clear. The lowest pre-treatment withdrawal was among the oldest group, among which 46% (19/41) of those aged  $\geq 18$  years started treatment. All but one of the eight adolescents aged 14–15 years (and who required parental consent) withdrew, and 12 of the 16 young people aged 16–17 years withdrew (75%). Once engaged in treatment, there were few subsequent dropouts. The authors conclude that ‘fear of losing anonymity is important for both young and old participants, whereas the fear of needing parental consent is more or less decisive for younger age groups’<sup>497</sup> ( $\leq 16$  years). Once engaged in treatment, there were few subsequent dropouts.

These findings need to be interpreted against the context of a very small study. One of the recommendations of the authors is to change the intervention from a therapist-led online treatment to a wholly ‘self-help’ model, which may resolve the anxieties about loss of anonymity, while not dealing with some of the legal dilemmas associated with professional accountability and so on.

### Treatment engagement

Fraynt *et al.*<sup>632</sup> used regression analysis to investigate factors associated with treatment engagement in trauma-informed therapies. The paper<sup>632</sup> includes no detailed description of the therapies offered these children, but the interventions they identify as trauma-informed interventions include TF-CBT, cognitive-behavioural intervention for trauma in schools, CPP, and EMDR therapy.

Although the study<sup>632</sup> is set in the USA, its findings raise potentially important issues for the successful engagement of children and young people in therapy within the UK. Fraynt *et al.*<sup>632</sup> found that age, functional impairment and the receipt of group and community-based (as opposed to office-based) services were correlated with increased engagement. Younger children who received more group sessions, and children who received services in places other than the office, were more likely to engage in treatment, as were children with more functional impairments, although children with more impairments were also more likely to be deemed by their therapist to have dropped out of treatment involuntarily.

When these things were controlled for, ethnicity remained a significant predictor of engagement, with Spanish-speaking Latino clients being most engaged in treatment (an average of 34 sessions) and African American clients being least engaged (an average of 25 sessions). The authors hypothesise that because of their language preference, Spanish-speaking Latinos may be more likely to get a therapist of the same cultural background to themselves, which may enhance treatment engagement compared with African American families. Furthermore, they hypothesise that the latter may be less engaged in treatment because they may mistrust or have had negative experiences of mental health treatment services (p. 72). These findings underline the importance of addressing language and culture in the context of mental health services. They also highlight the importance of ensuring that services communicate relevance and sensitivity to families from minority ethnic groups, and to all families who may have found engagement with Child Protection Services itself a traumatic experience, leaving them reluctant to seek help or engage with available treatment.

### Treatment completion

Regression analyses were used in four<sup>482,630,631,633</sup> studies to examine treatment completion. Caregivers’ perceptions of the severity of abuse appear to be a common theme relating to treatment completion. Chasson *et al.*<sup>482</sup> reported that higher levels of depressive symptoms and feelings of intrusion during treatment were associated with dropout from TF-CBT. In a later study,<sup>630</sup> in which they analysed data from the same group of children augmented with additional cases, the authors found that children who had been abused by another child (not by a parental/adult figure), or had experienced a single event and had not suffered a life-threatening or serious injury, were more likely to drop out than those children exposed to multiple, physical injurious abuse by an adult.

Eslinger *et al.*<sup>631</sup> found that the odds of dropout were greater for children with younger parents. The authors also found a relationship between age and dropout, with the odds of dropout being greater for older children. Children in foster care were more likely to complete treatment than those living with biological or adoptive parents, although the authors augur some caution as the parents in this study were more likely to be younger than foster carers. When children's and parents' scores were high for PTSD (which the authors interpret as 'acknowledgement') then the odds of children completing at least a moderate 'dose' of treatment were improved. Children who were the only victim in the family were also more likely to complete at least a moderate dose if their caregivers were involved in the treatment process. McPherson *et al.*<sup>633</sup> also found that caregiver involvement was positively associated with treatment completion and achievement of mental health treatment goals among a sample of sexually abused children who were referred to a hospital-based children's centre that provided assessment and therapy. This issue of how seriously the abuse is viewed will be discussed in more detail.

## Acceptability

### Children's views

Four<sup>107,108,492,497,506</sup> studies used data from rating scales to quantify children's satisfaction levels. Scores indicated moderate to high levels of satisfaction, both with therapists and with CBT interventions. When studies also reported caregiver ratings, children's reported levels of satisfaction were lower than those of their parents.

Lange and Ruwaard<sup>497</sup> asked participants about their satisfaction with treatment in general and also specific aspects of treatment. Their participants rated the therapeutic alliance, and were asked questions about the nature of the online contact, whether or not they missed face-to-face contact with their therapists, and how they perceived the effectiveness of treatment. Participants generally expressed satisfaction with their online treatment, and, although 22% did miss face-to-face contact, all were highly satisfied with their therapists, and all but 2 of the 23 said that they would recommend the treatment to others. Significantly, although all modules were well received, the module that focused on the exposure was most highly rated.

This study<sup>497</sup> (which used baselines as a source of historical control) found a steep drop in scores on the IES<sup>279</sup> during the control phase, which Lange and Ruwaard,<sup>497</sup> attributed to an effect of screening (which asked questions that required participants to focus on their trauma and current situations). They hypothesise that, in combination with the psychoeducation and expectation of treatment, this might have resulted in increases of awareness and hope.

The studies by Smith and Kelly<sup>506</sup> and Kolko<sup>107,108</sup> used questionnaires to assess perceptions of treatment acceptability and treatment expectations. Four of the five participants in the Smith and Kelly study<sup>506</sup> agreed that the programme was of high quality, it met their needs and they would recommend it to others. Children and parents in the study by Kolko<sup>107,108</sup> were asked to rate the overall acceptability of the key components of the interventions allocated to them. At the end of treatment children completed the 10-item Child Evaluation Inventory (CEI<sup>301</sup>). Mean ratings suggested moderate to high acceptability of treatment at the outset of treatment, with all but one item scoring a mean rating of > 3 (out of 5). Ratings tended to be higher than those for FT in relation to participants interested in the material learned that session (4.6 vs. 3.8) and confidence that therapists could help minimise abuse potential (4.2 vs. 2.8).

The mean ratings for children's responses on the CEI suggest moderate to high acceptability (25.1 for CBT, 22.6 for FT) and utility (15.1 for CBT, 14.0 for FT).

Barker and Place<sup>481</sup> and San Diego<sup>680</sup> report qualitative data on children's and young people's views of their treatment. Most of the children were generally positive about the experience, but Barker and Place<sup>481</sup> described the children as having some difficulty in articulating what they found most and least useful about the therapy. The analyses of the progress of five young women through the course of therapy by San Diego<sup>680</sup> illustrated the women's reluctance at the start of treatment, initial loathing of re-experiencing trauma and being unsure that therapy would help, but becoming more positive as therapy progressed.

## Caregivers' views

Six<sup>107,108,481,492,504,505,629</sup> studies reported caregivers' views of treatment and provided both qualitative and quantitative data, using a range of data collection methods, from qualitative interviews to focus groups and evaluation forms. Details are provided in *Table 13*.

All used rating scales to collect data on satisfaction, and some on caregiver treatment expectancy. In five<sup>107,108,481,504,505,629</sup> of these studies, parents were recruited by a convenience sample, as parents of children involved in treatment; it is unclear how the caregiver sample was selected in the Project Safe programme.<sup>492</sup>

Parents rated treatment satisfaction as 'high' in all studies that used treatment rating scales.<sup>107,108,492,504,505</sup> The sample sizes in these studies varied from 6<sup>504</sup> to 85.<sup>41</sup> Some parents in the Barker and Place<sup>481</sup> study felt that the CBT intervention had ended sooner than expected.

Two<sup>481,629</sup> studies presented qualitative findings from interviews with parents and carers. Both studies<sup>481,629</sup> reported positive experiences of the interventions, including a clear understanding of treatment aims and their expectations for the therapy, appreciating having someone neutral to whom their child could talk;<sup>481</sup> Buschbacher's single-case study<sup>629</sup> found that the mother felt part of the therapeutic team that treated her son, although this study is particularly vulnerable to bias, as it was effectively (as its title indicates) a testimonial sought from a selected parent by a clinical team, one of whom conducted the interviews. The quantitative evidence presented supports the positive reports from the qualitative data.

In the Kolko<sup>107,108</sup> study, parents were telephoned between the third and the first treatment sessions and asked to answer 10 questions using a five-point Likert scale (e.g. how much did the counsellor listen to you?, how much do you like your counsellor?). At the end of treatment they completed a 16-item consumer satisfaction questionnaire. Responses indicated high levels of acceptability with both treatments (53.8 for CBT, 50.9 for FT) and overall satisfaction (27.7 for CBT, 27.4 for FT).

## Staff views

Qualitative evidence of staff views was also presented by Barker and Place<sup>481</sup> and Buschbacher and Place,<sup>629</sup> both of whom report positive findings. However, in both studies,<sup>481,629</sup> staff expressed concerns about resource constraints, or strain, that was felt to threaten the viability of the service. The Sunrise Project<sup>481</sup> relied on one worker, and staff referring children to the project worried about the security of this post, the overall lack of resources and the lack of potential to increase capacity. Concerns about capacity were also raised by Buschbacher.<sup>629</sup>

The importance of parents and caregivers in securing successful outcomes in therapy was generally recognised in all studies, and is a recurring theme that will be discussed in more detail.

## Summary: acceptability of cognitive-behavioural therapy interventions

Cognitive-behavioural interventions appear to be broadly acceptable to both children and caregivers, but the studies reviewed raise some issues for consideration.

Trauma exposure (by a number of means) is a central component of most CBT interventions. Although its proponents would argue that this is a significant factor in its effectiveness, there is some evidence that this aspect of CBT might be correlated with treatment dropout, and it is clearly something that parents and caregivers are anxious about. It suggests that therapist should perhaps be more mindful of the potential impact of traumatic reactions to exposure and take steps to ensure that therapy does not impose more of a demand on children and young people than they can tolerate. A guiding principle of early desensitisation interventions was to ensure that no patient left a session without experiencing 'coping'.

Although generally 'one-study stories', the evidence suggests that the location of therapy should perhaps receive more consideration than is usual. Most services are offered in clinics or hospitals, but it is possible

that if services were to be offered in the home then this might be more acceptable to some children and families. The same study<sup>632</sup> that found an advantage for community-based treatments among ethnically diverse, urban children in the USA also found that children who participated in group treatments were more likely to complete treatment. Groups may address some of the anxieties that children feel about engaging in therapy (although of course they may engender some of their own fears).

Most CBT interventions include an element of psychoeducation, and it is notable that Lange and Ruwaard<sup>497</sup> reported a steep decrease in scores on the IES,<sup>279</sup> which the authors attribute to an unplanned consequence of screening, which comprised a combination of exposure and learning about abuse and its consequences. As well as reinforcing the potential of online interventions, this finding suggests that engagement in treatment might be enhanced by investing time in explaining the treatment rationale to potential patients.

Although a modest study that highlights significant challenges with engagement, Lange and Ruwaard<sup>497</sup> indicate the potential for developing web-based CBT interventions, at least for specific sequelae of sexual abuse. Given the role of these media in young people's lives, this might be an important delivery mode for further consideration. However, it raises complex issues around confidentiality and anonymity, and the ethical obligations placed on therapists.

## Relationship-based interventions

Eight<sup>510,511,515,634,635,656,662,663</sup> studies were included that reported RBIs. One<sup>656</sup> study described PCIT, and three<sup>510,511,635</sup> studies were concerned with parent training interventions. Two<sup>515,663</sup> studies were of attachment-based interventions. Although not strictly attachment-based interventions, we consider two<sup>634,662</sup> other studies under this heading. Powell and Cheshire<sup>662</sup> explored the benefits of massage by 'non-offending' parents for children who had been sexually abused; we include it in this group because it aims to improve bonding and communication. Cross *et al.*<sup>634</sup> analysed data on study and intervention retention in a multisite evaluation of projects providing services to children exposed to violence, two-thirds of whom received interventions focused on dyadic therapy or FT.<sup>735</sup>

## Attachment-based interventions

Details of these studies can be found in *Table 14*.

### Description of studies

#### Location

The studies by Cross *et al.*<sup>634</sup> and Osofsky *et al.*<sup>515</sup> were set in the USA, whereas the studies by Sudbery *et al.*<sup>663</sup> and Powell and Cheshire<sup>662</sup> were undertaken in the UK.

#### Study designs

The four<sup>515,634,662,663</sup> studies vary widely in design.

Cross *et al.*<sup>634</sup> used data from a multiyear, multisite, national evaluation of 15 sites providing services to children exposed to violence. They examined retention at 6 months post baseline, using logistic regression to analyse the characteristics of those retained in treatment.

Osofsky *et al.*<sup>515</sup> report on a multisite study of a pilot infant mental health programme. Interviews were used to obtain caregivers' and therapists' qualitative impressions of treatment.

The Sudbery *et al.*<sup>663</sup> study is the only study of the three that presents children's views of the intervention. As well as a focus group, semistructured interviews and survey methodology, case file analysis and

**TABLE 14** Acceptability of attachment-based interventions

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Findings
Cross 2013 <sup>634</sup> USA	<p><i>Safe Start Promising Approaches (SSPA)</i></p> <p><b>P</b> Maltreated children aged 1–17 (50% 3–7) years; mean age of retained group = 5.56 (SD 3.03) years, mean age of not-retained group = 4.99 (2.81) years</p> <p>Retained 53.3% female</p> <p>Not retained 50.7% female</p> <p><b>I</b> CPP, one-to-one and group</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 1085; 60% retained	<p>Predictors of study retention defined as follows:</p> <ul style="list-style-type: none"> <li>Families enrolled in the study, completed baseline assessment but did not provide data at 6-month follow-up – not retained</li> <li>Families who provided data for both time points – retained</li> </ul>	<p>Single predictors of study retention – logistic regression</p> <p>Multivariate predictors of study retention – multivariate regression remodelling</p>	<p>Children more likely to be retained in the study were those:</p> <ul style="list-style-type: none"> <li>with older caregivers</li> <li>who were older</li> <li>who reported more maltreatment</li> <li>who were assigned to the intervention</li> </ul> <p>Among those who were assigned to the intervention group, those who received any services as part of Safe Start Promising Approaches were more likely to be retained in the study at 6 months</p> <p>Caregivers of intervention and comparison children were more likely to be retained if they :</p> <ul style="list-style-type: none"> <li>rated their own physical health as poor or fair</li> <li>reported more maltreatment of the child</li> <li>were assigned to the intervention group</li> </ul>

continued

**TABLE 14** Acceptability of attachment-based interventions (*continued*)

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Findings
Osofsky 2007 <sup>515</sup> USA	<p><b>CPP</b></p> <p><b>P</b> High risk parents at risk of maltreating or had maltreated their children aged 2–52 months at intake (<math>M = 27</math>, <math>SD\ 10.91</math> months); 35% female</p> <p><b>I</b> Number of treatment sessions ranged from 8 to 92 (<math>M = 27</math>)</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 346$ children, $n = 57$ dyads	Caregivers' and therapists' qualitative impressions of treatment		<p>Caregivers:</p> <ul style="list-style-type: none"> <li>generally rated the programme positively</li> <li>indicated improvement in family functioning from 76%–96%</li> <li>gave a variety of reasons for not starting or completing treatment, including: <ul style="list-style-type: none"> <li>inconvenient location (<math>n = 14</math>)</li> <li>caregiver's rights terminated (<math>n = 6</math>)</li> <li>family could not be contacted (<math>n = 4</math>)</li> <li>caregiver incarcerated (<math>n = 3</math>)</li> <li>caregiver did not co-operate (<math>n = 2</math>)</li> <li>caregiver's location unknown (<math>n = 2</math>)</li> <li>case closed and treatment not mandated (<math>n = 2</math>)</li> <li>transportation not available and school-based treatment was not possible (<math>n = 1</math>)</li> <li>caregiver died (<math>n = 1</math>)</li> <li>reason unknown (<math>n = 23</math>)</li> </ul> </li> </ul> <p>Therapists:</p> <ul style="list-style-type: none"> <li>reported positive outcomes</li> <li>noted that therapy provided additional opportunity for early detection of developmental delay</li> <li>helped mothers to realise the need for, and establishing, support systems</li> </ul>

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Findings
Sudbery 2010 <sup>663</sup> UK	<p><i>Attachment and 'holding' therapy</i></p> <p><b>P</b> Children aged 6–21 years who experienced multiple abuse</p> <p><b>I</b> Therapy using 'holding' techniques</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 45 children	<p>Individual and group interviews with current and former residents in residential care</p> <p>Interviews with employees and company directors; content analysis of files and organisational documents; survey of parents, social workers and children</p>		<ul style="list-style-type: none"> <li>Overall, the young people valued therapy as an opportunity to be listened to and to talk</li> <li>Some children continued to experience difficulties establishing and maintaining caring relationships, including at follow-up</li> <li>There was mixed evidence presented about the acceptability of holding therapy for both young people and parents</li> </ul>
Powell 2010 <sup>662</sup> UK	<p><i>MOSAC Massage</i></p> <p><b>P</b> Sexually abused children and their mothers and one grandmother; age range 5–18 years, 80% female</p> <p><b>I</b> Nine sessions using massage to help address problems associated with children's sexual abuse</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 5 children, <i>n</i> = 4 mothers and 1 grandmother attended one-to-one sessions with children (one mother attended with two children)	Semistructured qualitative interviews		<p>At follow-up, all mothers were happy with the practical considerations of the programme, most found it easy to learn and aimed to continue at home. They also felt less isolated meeting similar mothers</p> <p>Difficulties:</p> <ul style="list-style-type: none"> <li>practical difficulties related to travelling</li> <li>contrary wishes of older children</li> </ul>
N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.					

organisational documentation were used, and two members of the research team were embedded within the organisation as participant observers.

The Powell and Cheshire<sup>662</sup> study was a pilot evaluation that used qualitative methods.

### Sample sizes

Pooling data from 15 sites, the sample in the Cross *et al.*<sup>634</sup> study was 1085. Osofsky *et al.*<sup>515</sup> recruited 75 mother–child dyads: 25 from each of three sites. The sample size in the Sudbury *et al.*<sup>663</sup> study is difficult to ascertain, but the authors appear to have scrutinised the files of 113 children, conducted a focus group of eight young people and interviewed a further four. Powell and Cheshire<sup>662</sup> conducted semistructured interviews with four mothers and one grandmother.

### Participants

Cross *et al.*<sup>634</sup> reported an age range of 1–17 years, with the majority of participants aged between 3 and 7 years. Children in the Osofsky *et al.*<sup>515</sup> study were maltreated young children aged < 5 years, or young children at risk of maltreatment. Their mean age was 20.19 months (SD 10.91 months).

Sudbery *et al.*<sup>663</sup> report on an older population with an age range of between 6 and 19 years, using purposive sampling to achieve a demographic mix of participants. Powell and Cheshire<sup>662</sup> conducted interviews with four non-abusing mothers and a grandmother of children aged 5–18 years who had been sexually abused.

### Interventions

Services in the Cross *et al.*<sup>634</sup> study differed across sites but all provided therapy to children, caregivers or both. Eight of the 15 sites provided a form of CPP,<sup>129</sup> often in addition to other services. Detailed information of the interventions is not reported but the reader is referred to other sources of information.

Osofsky *et al.*<sup>515</sup> describe a model of intervention designed to identify families with children at risk and provide clinical evaluation and treatment, with a view to enhancing children's development. The treatment provided was CPP.

Sudbery *et al.*<sup>663</sup> were focused on the holding therapy techniques used in a therapeutic residential setting for children, all of whom had been assessed as experiencing disordered attachment, some with an attachment disorder diagnosis.

The MOSAC Massage Programme (MMP) aims to equip mothers with simple massage routines that will 'enable them to relax and calm their child, reintroduce positive touch in a safe environment, enable bonding/rebuilding of the mother-child relationship and work towards replacing memories of touch as fearful, painful, and distressing with memories of touch as loving, nurturing, and trusting'.<sup>662</sup>

### Characteristics of treatment completers

Cross *et al.*<sup>634</sup> examined five different predictors of *study* retention: demographics; violence exposure; child mental health; caregiver demographics; and engagement in intervention. Using logistic regression, they found, as in other studies, that those with older caregivers and those reporting higher levels of maltreatment were more likely to be retained. Physical health also had a relationship with retention, with those who rated their health as 'poor' or 'fair' also being more likely to maintain treatment. However, this study<sup>634</sup> did not set out to examine treatment retention and thus the methodology falls somewhat short of exploring the factors related to treatment completion comprehensively, including motivation to change.

Osofsky *et al.*<sup>515</sup> reported that, of 129 child–caregiver pairs referred over 3 years, 75 were non-compliant from the outset or dropped out of treatment. Some families were court ordered and others were referred by child welfare or primary care providers. The authors observe that attrition is not surprising in samples in which substance abuse, parental mental illness or low functioning and homelessness are common. Of the

57 dyads that completed treatment, mother's age at intake and maternal education (completed high school) were significantly correlated with treatment completion.

## Acceptability

### *Children's views*

In the Sudbery *et al.*<sup>663</sup> study, children reported feeling safer in this setting than they had done in previous placements (many had experienced multiple placements over a short period of time). The use of restraint was sometimes seen as important, to keep everyone safe. Some children found it difficult to develop secure attachments with staff. The data are, however, very limited. The sample is unlikely to be representative, and the study<sup>663</sup> was poorly designed and executed, and fewer children participated than indicated interest in doing so.

### *Caregivers' views*

In the Osofsky *et al.*<sup>515</sup> study, 45% of participants who completed treatment also completed a satisfaction survey, including one participant who did not comply with treatment and one who was still in treatment. On investigation, the only factor correlated with survey completion was programme site (site 1, 72%; site 2, 58%; and site 3, 28%). Parents were asked eight questions about the effectiveness of the programme and their satisfaction with the intervention. Those who responded were extremely positive. It is not made clear whether these questions were asked face to face or anonymously, which may have an impact on responses; it is also unclear whether or not those who did not complete the survey (56%) did not do so because of dissatisfaction with the programme. The differential completion across the three sites may also suggest variation in delivery.

Sudbery *et al.*<sup>663</sup> briefly mention parents' views of holding therapy as mixed, but no data are reported. Powell and Cheshire<sup>662</sup> report that mothers were generally happy with the practical aspects of MMP. They appreciated the ground rules that were established for the group sessions that preceded massage and the safeguards taken to protect the vulnerability of participants, for example no clothes removed. One of the five carers felt that because her children were teenagers it was difficult to get them to 10 sessions (*they* did not want to spend time with their mother).

### *Staff views*

Therapists involved in the infant mental health programme<sup>515</sup> noted positive outcomes in both caregiver–child interactions and other treatment outcomes, for example assistance with the early identification of possible developmental delays and subsequent follow-up with primary care, and helping mothers to understand and establish support systems around them. An additional positive outcome that may be associated with the intervention was that no further reports of abuse or neglect were reported during treatment and up to post assessment, and there was a major reduction in reports during the first 3 years of the pilot. Although Sudbery *et al.*<sup>663</sup> interviewed staff, this evidence is not presented in any detail in the paper.

## **Parent–child interaction therapy**

Only one<sup>656</sup> study addressed the acceptability of PCIT (*Table 15*).

## **Location**

The study<sup>656</sup> was conducted in the USA.

## **Study design and sample size**

Timmer *et al.*<sup>656</sup> used social exchange theory as a framework within which to examine foster parents' perceptions of their foster children, their relationships with them and their own functioning, comparing the views of 102 kin and 157 non-kin foster carers. The rationale for the study<sup>656</sup> was that such perceptions might impact on the investment that foster carers make in their foster children, all of whom had been referred to PCIT on account of their behaviour problems.

**TABLE 15** Acceptability of PCIT

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Timmer 2004 <sup>656</sup>	PCIT	102 kin foster carers, 157 non-kin foster carers	Treatment completion		Treatment completers – 13.6 sessions (SD 7.4)
USA	<p><b>P</b> Foster carers of children aged 2–8 (<math>M = 4.4</math>) years, who experienced multiple maltreatment; 36% children female; 95% foster carers female; 33% Caucasian</p> <p><b>I</b> PCIT</p> <p><b>C</b> N/A</p> <p><b>O</b> Child behaviour (CBCL<sup>297,736</sup> ECBI<sup>311,737</sup>); caregiver stress (PSI<sup>297,725,736</sup>); caregiver depression (SCL-90-R<sup>705</sup>); child abuse potential (CAPI<sup>366</sup>)</p>				<p>Early termination – 7.1 sessions (SD 6.7)</p> <p>54.9% of kin foster carers completed treatment, 36.9% of non-kin foster carers completed</p> <p><math>\chi^2(1, n = 259) = 8.09</math>; <math>p &lt; 0.01</math></p> <p>Non-kin foster carers were more likely to report externalising behaviour in of their foster child</p>
N/A, not applicable; PICO, participants, intervention, outcomes, comparisons; PSI, Parenting Stress Index; SCL-90-R, Symptom Checklist-90-Revised.					

## Participants

The children were aged 2–8 years ( $M = 4.37$  years) and were victims of multiple maltreatment. The majority were male (64%), cared for by women (95%) and one-third were Caucasian.

## Intervention

The study<sup>656</sup> report contains no detailed description of the intervention, but provides a brief outline of standard PCIT, that is, a two-phase therapy that begins with a focus on enhancing the parent–child relationships (CDIrl) followed by a focus on enhancing child compliance (PDI). Both phases (which each last around 7–10 sessions) begin with a didactic component followed by therapist coaching, conducted by a ‘bug in the ear’ from a separate observation room.

## Characteristics of treatment completers

Treatment completion and withdrawal metrics were reported. Dyads were considered to have completed treatment if they had mastered the relationship enhancement element of the programme, and could demonstrate sustained child’s compliance to commands and successful discipline approaches. If dyads did not attend treatment after the initial session, or if a parent chose to terminate therapy before the treatment goals had been met, then these were considered as early terminators. The average number of treatment sessions to treatment completion was 13.6 (SD 7.4). The average number of coaching sessions for dyads terminating early was 7.1 (SD 6.7). There were few demographic differences between the kin and non-kin carer groups.

Kin foster carers were significantly more likely to complete treatment than non-kin carers: 54.9% of kin carers completed treatment, compared with 36.9% non-kin carers completed [ $\chi^2(1, n = 259) = 8.09$ ;  $p < 0.01$ ].

Of the 145 foster carers who terminated treatment early, approximately two-thirds of kin and non-kin carers left treatment during phase 1 (CDirl). Of the rest, around half terminated treatment during the second phase (parent directed) and half never started. Of the early terminations, 40% were as a result of Child Welfare Services moving the child to a pre-adoptive home (more likely to happen in non-kin care settings). Some 43% were initiated by caregivers. In almost 28% of cases termination was triggered by the therapist and an 11% early treatment termination was categorised as ended by 'other' (not specified).

The results of binary logistic regressions suggest that kin caregivers with clinical levels of parental distress were more likely to stay in treatment than non-kin foster carers or kin caregivers scoring in the normal range on this indicator, although this effect was only marginally significant ( $p < 0.06$ ). From their analyses the authors conclude that 'parental distress' explains some of the differences in overall attrition between kin and non-kin caregivers, and hypothesise that kin caregivers' distress reflects their frustration and helplessness in the face of their foster children's behavioural challenges and may motivate them to seek and continue with treatment.

Given that this was a study of foster parents, the authors note their concern about the relationship between elevated scores on the CAPI and early termination. If so, then this is yet another study that suggests that those who need help most are those who are least likely to access help or complete treatment. Similarly, those foster parents who avoided completing the Parenting Stress Index (PSI) were also more likely to leave treatment early, perhaps because they interpreted this as a measure of their mental health rather than that of their child, and therefore as a threat.

### Parent training interventions

Three<sup>510,511,635</sup> studies presented data for parent training interventions. Details are shown in *Table 16*.

#### Location

Two<sup>510,635</sup> of the studies were based in the USA and one<sup>511</sup> in the UK.

#### Study design

The study by Ducharme *et al.*<sup>510</sup> was a multiple baseline study of the effects of an intervention to help parents manage oppositional behaviour. The Golding and Picken<sup>511</sup> study was a qualitative evaluation of two forms of group work. The Taban and Lutzker<sup>635</sup> study was a study of parental satisfaction and acceptability of a parent training programme, exploring parental preference for different models of training.

#### Sample sizes

Sample sizes were small, with just 15 children from nine families in the Ducharme *et al.*<sup>510</sup> study and 44 children and 41 carers in the Golding and Picken<sup>511</sup> study. In the study by Taban and Lutzker<sup>635</sup> data were collected from the 31 parents provided with parent training in Project SafeCare.

#### Participants

Children in the Taban and Lutzker<sup>635</sup> study ranged in age from birth to 5 years old ( $M = 4.9$  years). The studies by Ducharme *et al.*<sup>510</sup> and Golding and Picken<sup>511</sup> examined an older population aged between 3 and 12 years, and the foster carers in the Golding and Picken<sup>511</sup> study were caring for school-aged children.

Participants in the Taban and Lutzker<sup>635</sup> study were drawn mainly from the Latino population (68%). Golding and Picken<sup>511</sup> suggest that the children fostered by their participants were white British (like the carers). No information is provided by Ducharme *et al.*<sup>510</sup>

Children had been victims of physical abuse and witnessed domestic violence in the Ducharme *et al.*<sup>510</sup> study, and victims of physical abuse and neglect in the Golding and Picken<sup>511</sup> study. Eighty per cent of those who received the parent interaction training in Taban and Lutzker<sup>635</sup> were from a sample of maltreated children referred by the Department of Child and Family Services.

**TABLE 16** Acceptability of parent training interventions

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Ducharme 2000 <sup>510</sup> USA	<p><i>Group Parent Training</i></p> <p><b>P</b> Children aged 3–10 years who experienced physical abuse and witnessed domestic violence and their mothers</p> <p><b>I</b> Two group and then individual (parent–child) sessions of errorless compliance therapy</p> <p><b>C</b> Multiple baseline controls</p> <p><b>O</b> Compliance (event recording plus Compliance Probability Checklist)</p>	<p><i>n</i> = 28 parents</p> <p><i>n</i> = 15 children from <i>n</i> = 9 families</p>	<i>n</i> = 8 mothers completed a satisfaction questionnaire (scale 0–5, 5 most positive)		<p>Mean satisfaction with:</p> <ul style="list-style-type: none"> <li>the programme = 4.4</li> <li>the therapist = 4.8</li> </ul> <p>Mothers rated their children significantly more cooperative with requests after treatment</p> <p><i>n</i> = 13 families dropped out citing severe stressors: child apprehension; commitment to psychiatric unit; suicidal ideation; father refused treatment</p>
Golding 2004 <sup>511</sup> UK	<p><i>Parent Training</i></p> <p><b>P</b> Foster parents of children aged 5–15 years, who experienced abuse or neglect and who had challenging behaviour; 43% female</p> <p><b>I</b> 18 × 2-hour, monthly sessions of Fostering Attachments</p> <p><b>C</b> IY plus psychoeducational component</p> <p><b>O</b> SDQ;<sup>721</sup> Knowledge Quiz, Symptom checklist (attachment group only)</p>	<i>n</i> = 44 children, <i>n</i> = 41 foster carers	Participant satisfaction questionnaire, qualitative evaluation, group facilitator feedback		<p><i>Parent Training Group</i></p> <ul style="list-style-type: none"> <li>84% found it very helpful</li> <li>55% increased their understanding</li> <li>48% increased their confidence</li> </ul> <p><i>Fostering Attachments:</i></p> <ul style="list-style-type: none"> <li>60% found it very helpful</li> <li>50% increased their understanding</li> <li>50% increased their confidence</li> </ul> <p><i>Group facilitator feedback</i></p> <ul style="list-style-type: none"> <li>many of the foster carers had their own histories of abuse and neglect</li> <li>attendance was good, with a high degree of participation</li> <li>video vignettes were the least popular</li> </ul>

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Taban 2001 <sup>635</sup>  USA	<p><b>P</b> Project SafeCare</p> <p>Parents of children from birth to 5 (<math>M = 4.9</math>) years, who experienced multiple abuse; 64% Latino, 28% Caucasian, 7% African American</p> <p><b>I</b> Eco-behavioural programme (partial replication of Project 12-Ways); 15 sessions, three areas of intervention: home safety; infant and child health care; bonding and stimulation</p> <p><b>C</b> N/A</p> <p><b>O</b> Not covered in this paper, but covered in other reports</p>	<p><math>n = 45</math> families health training, <math>n = 37</math> home accident prevention; <math>n = 31</math> PCIT</p>	Three social validity questionnaires developed specifically for the study		<p><i>Positive</i></p> <ul style="list-style-type: none"> <li>• Provided them with useful information and skills</li> <li>• Felt more confident</li> <li>• Improved interaction with their children</li> <li>• Enjoyed spending time with their children more</li> <li>• Would recommend to others</li> <li>• Good training procedures and materials</li> <li>• Staff behaviour, conduct and training rated highly</li> <li>• Counsellors were friendly, helpful and knowledgeable and not too intrusive or critical</li> </ul>
N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.					

## Intervention

Golding and Picken's<sup>511</sup> study compared two parent training interventions for foster carers. The first was based around the IY programme, with an additional psychoeducational component. This was compared with an intervention designed to develop emotional understanding and give skills in providing empathetic discipline, entitled *Fostering Attachments*. The IY intervention was delivered in 2-hour sessions over 9 weeks. *Fostering Attachments* was delivered in monthly, 2-hour sessions over an 18-month period.

In the Ducharme *et al.*<sup>510</sup> study, parents were taught 'errorless compliance training' in a five-session group format. Errorless compliance training is designed to improve children's compliance while minimising non-compliance and associated risks of confrontation. The study<sup>510</sup> reported generalised improvements in compliance that were maintained at 6 months' follow-up.

Project SafeCare was a 15-session programme that targeted home safety, infant and child health care, bonding and stimulation, and which included a parent-child interaction training component that was offered to those parents who needed it.<sup>635</sup>

## Characteristics of treatment completers

Only Ducharme *et al.*<sup>510</sup> addressed the issue of treatment completion. However, in this small study<sup>510</sup> the focus was on attrition, which in this study was significant: 13 children out of 28 children failed to complete treatment. Reasons for attrition were attributed to severe stressors for the child, including child apprehension, commitment to psychiatric unit and suicide ideation. In one case, the father refused treatment.

## Acceptability

All three<sup>510,511,635</sup> studies used a parent satisfaction questionnaire, which we have used as an indicator of acceptability. The views of children were not reported in any of the studies. Golding and Picken<sup>511</sup> concede that limited evaluation was built in to the research design because it was not a formal research study.

## Caregivers' views

Using a five-point rating scale, mothers in the Ducharme *et al.*<sup>510</sup> study indicated a high degree of satisfaction with the intervention and therapist, and rated their children as being significantly more co-operative after treatment. However, as indicated above, almost half of the original sample did not complete treatment. Foster parents receiving the IY parent training intervention were more satisfied than those having the *Fostering Attachments* intervention in the study by Golding and Picken,<sup>511</sup> with 84% saying that they found the programme to be very helpful, compared with 60% in the fostering attachment group. Only half of each intervention group stated that they had some increase in their understanding and confidence.

Participants in the study by Taban and Lutzker<sup>635</sup> also reported positive feedback; parents reported high levels of satisfaction and training procedures and also rated staff highly. There are some limitations using these non-standardised measures.

## Staff views

Group facilitator feedback was described by Golding and Picken<sup>511</sup>. Facilitators stated that attendance had been good, with a high degree of participation. They emphasised the importance of trainers having a sound understanding of the needs of looked-after children. Many of the foster carers in the *Fostering Attachments* group spoke about their own histories of abuse and neglect, probably because of the focus of the intervention and the duration (over 18 months), and this also required skilful handling.

## Summary: acceptability of relationship-based interventions

There is a surprising lack of evidence about the acceptability of RBIs. The one<sup>515</sup> study that specifically explored treatment dropout and failure to engage with an attachment-orientated treatment found that mothers who had completed high school were most likely to complete treatment. The authors also estimate that every hour of treatment required around 10 hours of 'engagement' effort, including 'frequent telephone calls, home visits, child care visits, and other efforts to build a trusting relationships

with the parent'.<sup>515</sup> They note that 'cooperation, collaboration, and communication with foster care workers was essential, both to retain parents and children in the program and help with engagement activities'<sup>515</sup> (p.18). Notwithstanding these efforts, 72 of the 129 child–caregiver dyads referred to the programme being evaluated, refused to engage or dropped out of treatment. These dyads were either referred from child welfare/primary care providers or were court ordered to attend. This is of some concern: the typical profile of children for whom a child protection plan is in place in the UK.

One issue of concern identified by Timmer *et al.*<sup>656</sup> (not for the first time) is that kin foster carers lack much-needed support in managing the challenging behaviour of the children whom they are fostering.

The parent training interventions in the included studies were generally welcomed by parents/caregivers, with the exception of the Ducharme *et al.*<sup>510</sup> study. Here, although attrition was significant, it was attributable to events outside the intervention, such as the child's admission to a psychiatric unit. One father refused treatment and, although it would be a mistake to generalise from this study,<sup>510</sup> it is the case that few studies of interventions even mention the involvement of fathers.

## Systemic interventions

Five<sup>526,533,621,673,678</sup> very different studies addressed issues of the acceptability of systemic interventions. Details of these studies can be found in *Table 17*.

### Description of studies

#### Study design

The five<sup>526,533,621,673,678</sup> studies examined family or multisystemic therapies. The Conran and Love<sup>621</sup> study was a case study, the Costa *et al.*<sup>678</sup> study was an action research project, and the studies by Danielson *et al.*<sup>526</sup> Tjersland *et al.*<sup>673</sup> and Woodworth<sup>533</sup> were uncontrolled studies (see *Table 17*).

#### Sample sizes

The FT/MST interventions all had small sample sizes, ranging from a single case<sup>621</sup> or samples of just eight<sup>678</sup> and 10 families.<sup>526</sup> The sample of Woodworth<sup>533</sup> comprised 22 families completing treatment; Tjersland *et al.*<sup>673</sup> had the largest sample of 31 families.

#### Location

The studies by Conran and Love,<sup>621</sup> Danielson *et al.*<sup>526</sup> and Woodworth<sup>533</sup> were US based, whereas the Costa *et al.*<sup>678</sup> study was set in Brazil and the Tjersland *et al.*<sup>673</sup> study was conducted in Norway.

#### Participants

Interventions in all five<sup>526,533,621,673,678</sup> studies were directed at victims of sexual abuse. Danielson *et al.*'s<sup>526</sup> sample had comorbid substance misuse. Woodworth *et al.*'s programme<sup>533</sup> was for victims of incest. Participants in the Tjersland *et al.*<sup>673</sup> study were referred by agencies concerned that a child aged < 18 years was being sexually abused by a family member. Participants in the Costa *et al.*<sup>678</sup> study were extremely socially excluded, drawn from a population of settlement/dump dwellers with a high level of mobility.

Only Danielson *et al.*<sup>526</sup> reported the age of participants (mean 15.0 years, SD 1.7 years).

#### Intervention

Conran and Love<sup>621</sup> did not provide any information about the FT intervention provided in the single case. Costa *et al.*<sup>678</sup> briefly describes a Multifamilial Group Therapy intervention and Danielson *et al.*<sup>526</sup> reported on RRFT, which was a combination of individual therapy and FT. RRFT was delivered by a university-based clinic and consisted of weekly 60–90 sessions over 14–34 weeks ( $M = 24$  weeks, SD 8.0 weeks);

**TABLE 17** Acceptability of family/systemic interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Conran 1993 <sup>621</sup>	<i>FT</i>	<i>n</i> = 2, mother and daughter	Child's experience of intervention, interview transcribed		Child did not feel forced into talking
USA	<b>P</b> Single case of a sexually abused girl				Uncomfortable using two-way mirror at first
	<b>I</b> FT unspecified				Ambivalent about use of group approach
	<b>C</b> N/A				Child suggested therapist being more 'child-like' in approach – using jokes, tricks and games
	<b>O</b> N/A				
Costa 2009 <sup>678</sup>	<i>Multifamilial Group Sessions</i>	<i>n</i> = 28; <i>n</i> = 8 families interviewed	Benefits and limits of psychosocial interventions – parents/adolescents questionnaire, children's drawings, evaluation of the effects of conversations and actions in families	Qualitative epistemology	Families as a whole feel unprotected and vulnerable to other violence
Brazil	<b>P</b> Action research of participation of extremely socially excluded families (living in settlements); sexual abuse				Group therapy and shared experiences made it easier to talk
	<b>I</b> Not specified				More sessions were required
	<b>C</b> N/A				Involving other social institutions to support the family's welfare and help to prepare them for humiliating process of police and court process
	<b>O</b> N/A				

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Danielson 2010 <sup>526</sup>  USA	<p><b>RRFT</b></p> <p><b>P</b> Sexual abuse and comorbid substance abuse: mean age = 15.0 (SD 1.7, range 13–17) years; 100% female; 40% Caucasian, 40% African American, 10% Hispanic</p> <p><b>I</b> Individual therapy and FT; 14–34 × 90-minute sessions; mean number of sessions = 24 (SD 8.0)</p> <p><b>C</b> N/A</p> <p><b>O</b> Substance use; UCLA-A PTSD<sup>374</sup> CDI (Kovacs M, 1983, unpublished manuscript); FES-Con-A; FES-Con-C; FES-Coh-A; FES-Coh-C, post, 3-month and 6-month follow-up<sup>375</sup></p>	<p><math>n = 10</math></p> <p>Treatment completers five out of seven sessions (<math>n = 9</math> completed all seven sessions, <math>n = 1</math> completed five sessions)</p>	<p>3–6 months post treatment</p> <p>Participants rated their satisfaction with each component of RRFT on a scale of 1–5, with 5 being the most positive rating</p>		<p>90% of participants completed ratings on the utility of RRFT components (rating scale of 1–5, 5 most positive):</p> <p>psychoeducation (<math>M = 3.89</math>, SD 0.93)</p> <p>Coping/family communication (<math>M = 4.78</math>, SD 0.44)</p> <p>Substance abuse (<math>M = 4.56</math>, SD 0.73)</p> <p>PTSD (<math>M = 4.33</math>, SD 1.11)</p> <p>Healthy dating/sexual decision-making (<math>M = 4.78</math>, SD 0.44)</p> <p>Sexual victimisation risk reduction (<math>M = 4.44</math>, SD 0.42)</p>
continued					

**TABLE 17** Acceptability of family/systemic interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Tjersland 2006 <sup>673</sup> Norway	<p><i>Eclectic</i> – FT based on crisis and narrative theory</p> <p><b>P</b> Sexual abuse allegations; age range 3–16 years; 75% female</p> <p><b>I</b> FT based on crisis and narrative theory, which may involve confronting alleged perpetrators of CSA; ≥ 6 sessions (<i>M</i> = 20)</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 23 families, <i>n</i> = 32 children	Data collected from therapeutic session observation and follow-up interviews with mothers, children and alleged perpetrators	Descriptive coding developed by two therapists, independently rated to verify categorisation	<p><i>Children</i></p> <p>Majority were reluctant to discuss abuse – at follow-up reasons were given why: threatened by abuser; fear of upsetting mother; fear of not being believed</p> <p>The children in 21 families had symptoms at start of treatment – this was reduced to three families at end</p> <p>In 18 cases, mental health improved. Children from four families still had severe symptoms</p> <p>Children reported positive comments and, from observations of child/therapists exchanges, these were rated as positive, playful and talkative</p> <p><i>Caregivers</i></p> <p>Mother participated in most sessions. Reluctant to discuss abuse in case it had not happened. Felt vulnerable to how therapists perceived them. Majority of mothers described help positively – felt they understood their children better and valued contributions from team</p> <p><i>Alleged perpetrator</i></p> <p>For those who engaged in the process, it was described as a relief to talk to someone in a non-judgemental setting. Those who were discontented with the process felt that the mother had formed a coalition with the therapist</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Woodworth 1991 <sup>533</sup> USA	<p><b>P</b> Sexual abuse; mean age 14.5 years; typically female; 100% Caucasian</p> <p><b>I</b> Multiple Family Incest Treatment Program – group therapy for multiple families with multiple therapists; peer groups also for men, women, couples and children; all family members also offered IT, couple therapy and individual FT</p> <p><b>C</b> N/A</p> <p><b>O</b> Interviews and questionnaire covering personal/family adjustment, friendship, employment and education client satisfaction</p>	<p><math>n = 22</math>;</p> <p><math>n = 16</math> interviewed, <math>n = 5</math> refused, <math>n = 1</math> could not be found</p>	<p><math>n = 40</math> interviews with <math>n = 13</math> incest victims, <math>n = 12</math> offenders, <math>n = 2</math> siblings</p>		<p>75% of victims and 83% of mothers considered intervention personally helpful</p> <p>Clients appreciated the support received from each other and their counsellors</p> <p>Two clients complained that counsellors left too soon</p> <p>Mothers favoured more direct confrontation of perpetrators</p> <p>Respondents recommended more use of smaller groups</p> <p>88% of siblings refused to participate: mothers often refused for non-victim children; siblings were clinically hard to reach and less convinced that therapy had benefits</p>
FES-Coh-A, Family Environment Scale-Cohesion-Adolescent Report; FES-Coh-C, Family Environment Scale-Cohesion-Caregiver Report; FES-Con-A, Family Environment Scale-Conflict Scale-Adolescent Report; FES-Con-C, Family Environment Scale-Conflict-Caregiver Report; N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.					

participants were recruited through the university-based urban clinic, which specialises in adult/child trauma. The FT for suspected familial sexual abuse<sup>673</sup> was delivered by one therapist, with a second therapist observing and reflecting on every session. It was anticipated that each family would be at crisis point at the start of treatment and this informed the development of the programme: narrative therapy techniques and relationship-building were used and could include confronting alleged perpetrators. The Multiple Family Incest Treatment Program<sup>533</sup> provided support and therapy for all family members and included sibling support as one of its priorities, a group that they found particularly hard to reach.

## Acceptability

### Children's views

Conran 1993<sup>621</sup> reports qualitative findings from a transcribed interview with the single female participant. Although not feeling forced to talk to the therapist, she said she found the two-way mirror uncomfortable at the start of treatment, but got used to it once treatment was established. She preferred IT and was ambivalent about group therapy. She also suggested that the therapist should take a more 'child-like' approach, by introducing games, jokes or tricks to engage the young person.

Costa *et al.*<sup>678</sup> describe young people's feelings of shame, anxiety, fear and pain and sadness; group therapy with other children with shared experience made it easier for the young people to talk about their problems.

The study by Danielson *et al.*<sup>526</sup> was the only one to report results from a treatment satisfaction measure. Out of a total of 10 participants, nine completed ratings on the perceptions of the usefulness of treatment components: psychoeducation; coping/family communication; substance abuse; PTSD; healthy dating/sexual decision-making; and sexual revictimisation risk reduction. Each domain was rated positively. A total of 90% of participants completed all seven sessions; one participant ended treatment after five sessions.

Tjersland *et al.*<sup>673</sup> collected data through observations from therapist sessions and follow-up interviews with children, mothers and alleged perpetrators of sexual abuse. In most cases, the abuse had not been substantiated at that time, and the majority of children were reluctant to discuss the abuse at follow-up interview. The reasons given for this reluctance included the following: they had been threatened by the abuser; they were afraid of upsetting their mother; and they feared not being believed. The majority of children displaying symptoms at the start of treatment had made progress by the end. Children expressed generally positive comments, and therapy observations reported positive exchanges between child and therapist.

Data were collected using interviews with 13 incest victims, 12 offenders and two siblings in the Woodworth<sup>533</sup> study. Overall, three-quarters of victims found the group therapy to be helpful. The most commonly appreciated aspect of the groups was mutual support and the support provided by the counsellors. Two clients complained that counsellors left too soon. This may have been as a result of the use of interns to provide therapy (with shorter tenure), resulting in a negative impact on children who had formed bonds with them. Out of the 26 siblings, only three agreed to participate in the therapy. Reasons given for this 88% refusal rate were that mothers often refuse on behalf of non-victim children or that siblings were less convinced that therapy had benefits for them.

### Caregivers' views

Parents in the study by Costa *et al.*<sup>678</sup> described how they felt their families were unprotected and vulnerable to further violence. Some expressed fears for their child's future sexuality, including concern that the sexual abuse would negatively impact on the child's sexuality (homosexuality) and how they might interact physically (i.e. sexually) with other children. The mothers in this action research study valued the group therapy with other families because it created an opportunity for them to talk to other women with similar experiences, but there was some criticism that treatment ended prematurely. Financial constraints impacted adversely on parents' access to support – for most of the families the male perpetrator (and primary earner) had been removed from the home.

Tjersland *et al.*<sup>673</sup> reported the conflicting interests expressed by participant mothers about treatment: they wanted help for their child but were concerned about revisiting the abuse by getting their child to talk about it. Concern for the alleged perpetrator was also observed: fear of criminal prosecution or negative reactions to the allegations; this was particularly relevant if an immediate family member (husband or son) had been implicated in the abuse. Some mothers felt vulnerable to being perceived negatively by the therapist because of their implicit role in the abuse, or acting in an over-protective way. In client satisfaction ratings, mothers were generally very contented with the treatment. In the Woodworth<sup>533</sup> study, 83% of mothers found the group therapy to be helpful but they also favoured more direct confrontation with perpetrators and smaller group work.

Mothers were generally satisfied with the therapy received in the study by Woodworth 1991,<sup>533</sup> with 83% feeling that it had helped them personally. Three-quarters of respondents in this study<sup>533</sup> considered that the multiple-family group (several families meeting together for therapy) had been helpful. Comments indicated that some respondents thought that the group needed more guidance from the facilitators, and that offenders should have been confronted more, and some thought that the group was too large.

### Staff views

Staff involved in the Costa *et al.*<sup>678</sup> study recognised the limitations of the intervention in providing protection to vulnerable young people living in a potentially dangerous environment. They stressed the need for a wider network of support for these socially excluded families, ranging from the extended family of parents, grandparents to the social institutions responsible for their care and supervision during the investigation of child abuse. The process of dealing with criminal justice system can be humiliating and may have implications for the wider family network, by witnessing ongoing contact with the police, hospital staff, forensic teams and court officials.

### Alleged perpetrators

Alleged perpetrators in the Tjersland *et al.*<sup>673</sup> study were confronted about the abuse during treatment, one-third of whom were unaware of the suspicions prior to therapy starting. Reactions to the allegations presented elicited three different kinds of response: confirmation of the abuse; abuse was denied and the alleged perpetrator withdrew from the mother and child; and abuse was denied but the alleged perpetrator tried to maintain contact with the family. Six of the alleged perpetrators rated the treatment positively, and valued the objective role of the therapist. Those who were critical of the therapy ( $n = 2$ , an additional  $n = 2$  were both contented and discontented) were unhappy that they had not been involved from the start and felt that the therapists had formed a coalition with the mother. At the end of treatment, conflicts associated with the question of abuse had been clearly reduced in 20 cases; three families were still facing significant conflict, with two cases brought to court.

In the Woodworth<sup>533</sup> study, the offenders were by far the most positive in their satisfaction with the programme, with 88% saying that they were 'strongly satisfied' and 83% describing the therapy as 'very helpful' to them personally.

### Summary: acceptability of systemic interventions

The heterogeneity of these five<sup>526,533,621,673,678</sup> studies makes it very difficult draw out clear messages. Generally, participants appear to find these interventions acceptable, with the exception of a high refusal rate amongst siblings in the intervention studied by Woodworth.<sup>533</sup> This was a multiple family incest treatment programme and it is perhaps unsurprising that siblings who had not experienced maltreatment would be unenthusiastic at participating in an intervention that exposed their family difficulties to strangers. Participants in the Tjersland *et al.*<sup>673</sup> study reinforced the concerns of young people in the advisory group of this study<sup>673</sup> about the potential adverse consequences of disclosing or sharing their experiences. Mothers in this study<sup>673</sup> were also apprehensive about the negative consequences of therapy: they wanted help for their child but did not want them retraumatised, and they were worried about the consequences for family members when these were implicated in abuse. The potential value of group work for children is evident in several of these studies.

## Psychoeducation

Four<sup>161,538,658,664</sup> studies considered issues relevant to the acceptability of psychoeducation interventions. See *Table 18*.

### Description of studies

#### Study design

The study by Hyde *et al.*<sup>538</sup> was related to a randomised trial.<sup>169</sup> Although the carers in the Rushton and Miles<sup>664</sup> study were not randomised, the study was part of a trial in which the sexually abused adolescent girls for whom they cared were randomised, and the carers offered either a carers' group or individual support.<sup>116</sup> The study by Barth *et al.*<sup>161</sup> was a COS with a control group. The Boisvert *et al.*<sup>658</sup> study was an uncontrolled study, designed to investigate attrition rates amongst sexually abused children who were referred to mental health services.

#### Sample sizes

The total sample in the Barth *et al.*<sup>161</sup> study was 27, with 15 foster carers assigned to the intervention group. Hyde *et al.*<sup>538</sup> had a sample of 47 adolescents and their families and Rushton *et al.*<sup>658</sup> had a sample of 65 carers. Boisvert *et al.*<sup>658</sup> analysed data relating to 116 adolescents.

#### Location

The study by Boisvert *et al.*<sup>658</sup> was based in Canada, whereas the Barth *et al.*<sup>161</sup> study was based in the USA. The studies by Hyde *et al.*<sup>538</sup> and Rushton *et al.*<sup>664</sup> were conducted in the UK.

#### Participants and maltreatment

All participants had a history of sexual abuse. Participants in the Hyde *et al.*<sup>538</sup> study were the youngest, ranging from 4 to 16 years. Both Barth *et al.*<sup>161</sup> and Boisvert *et al.*<sup>658</sup> report data relating to adolescents aged 12–17 years. Although Rushton *et al.*'s<sup>664</sup> study was focused on carers, the children in the original trial were aged 6–14 years at recruitment.

Ethnicity was reported for the participants in the Barth *et al.*<sup>161</sup> study (69% black people). Carers and mothers in the Rushton *et al.*<sup>664</sup> study were largely white and UK born (75%), with another 10% being African Caribbean and 7% Mediterranean.

The studies by Barth *et al.*<sup>161</sup> and Hyde *et al.*<sup>538</sup> had a predominantly female sample. The Boisvert *et al.*<sup>647</sup> study did not provide any data on gender.

#### Interventions

All of the interventions were group based, although Barth *et al.*<sup>161</sup> also included some individual work, and Rushton *et al.*<sup>664</sup> compared group-based support with individual support. Hyde *et al.*<sup>538</sup> also incorporated some family network meetings.

Groups typically ran for at least 8 weeks and, for some young people, groups ran for around 20 weeks.<sup>538,647</sup> In the Rushton *et al.*<sup>664</sup> study, treatment was planned for 30 weekly sessions for the girls, and the work with carers lasted for the same duration, but the authors note that it was not uniform because of limited resources. Birth and adoptive parents were usually seen weekly; foster carers were usually seen fortnightly.

### Characteristics of treatment completers

In the study by Boisvert *et al.*,<sup>647</sup> those who had attended 15 sessions were considered to have completed treatment; non-completers attended no more than four sessions. There was a 19.8% dropout rate. Higher dropout was associated with higher levels of sexual abuse impact, behavioural difficulties, social difficulties and delinquency. There were no family characteristic differences between treatment completers and non-completers.

TABLE 18 Acceptability of psychoeducation interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Barth 1994 <sup>161</sup> USA	<p><b>P</b> Foster parents of sexually abused children (mean age 8.2 years); 87% female; 69% black; 18% Caucasian; 13% Latino</p> <p><b>I</b> 11 structured group sessions with homework</p> <p><b>C</b> N/A</p> <p><b>O</b> Child behaviour (CBCL<sup>257</sup> and CSI<sup>423</sup>)</p>	<i>n</i> = 15	Brief client satisfaction survey		<p>High levels of endorsement, overall group ratings:</p> <ul style="list-style-type: none"> <li>• excellent 42%</li> <li>• very good 58%</li> </ul> <p><i>Practical considerations</i></p> <p>Providing child care encouraged them to come and made them feel appreciated</p> <p>Travel expenses helped – foster carers are often financially burdened</p>
Boisvert 2008 <sup>658</sup> Canada	<p><b>P</b> Foster parents of sexually abused children aged 12–17 (<i>M</i> = 14.63) years</p> <p><b>I</b> 8–22 × 2-hour sessions of group-based psychoeducation</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 116	Dropout (defined as someone who agrees to therapy and participates in at least one session and stops before the half-way point without therapist approval or an agreement that treatment is finished)	Univariate and multivariate analyses exploring relationships between dropout and sexual abuse, individual and family characteristics	<p>19.8% did not complete treatment</p> <p>Higher dropout was associated with higher levels of:</p> <ul style="list-style-type: none"> <li>• impact of sexual abuse<sup>419,420</sup></li> <li>• behavioural difficulties<sup>418</sup></li> <li>• social difficulties<sup>419,420</sup></li> <li>• delinquency<sup>418</sup></li> </ul> <p>There were no family characteristic differences between completers and non-completers</p>

continued

**TABLE 18** Acceptability of psychoeducation interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Hyde 1995 <sup>538</sup> UK	<p><b>P</b> Sexually abused children aged 4–16 years; 85% female</p> <p><b>I</b> Family network PLUS age-group for children, stratified by age; single-sex groups for abused teenage girls; separate groups for teenage boy perpetrators, adult perpetrators, caretakers and couples in which a partner was an abuser</p> <p><b>C</b> Family network treatment</p> <p><b>O Children: All</b> – Health and behaviour (20-item maternal report/interview<sup>738</sup>) ; Teacher's Behaviour Checklist<sup>289</sup>)</p> <p><b>Children 8–16 years:</b> Self-esteem (SPCC/A<sup>401,432</sup>); Depression (CDI<sup>430</sup>); Health and behaviour (12-item self-report/interview<sup>738</sup>)</p> <p><b>Children 6–7 years:</b> Pictorial Scale of Perceived Competence and Social Acceptance for children (PSPCSA<sup>467</sup>); Family Relationships (FRT<sup>739</sup>)</p> <p><b>Mothers:</b> Self-esteem (ICHSEQ<sup>435</sup>); psychiatric state (GHQ<sup>740</sup>)</p>		Interview and rating		<p><i>Positive</i></p> <p>71% of children and all of the mothers felt that meeting others with similar experiences was positive</p> <p>78% of children rated the programme highly for preventing further abuse</p> <p>65% found it useful for guilt resolution</p> <p>41% better understood origins of abuse</p> <p><i>Negative</i></p> <p>&lt; 50% of children felt positive talking about abuse</p> <p>62% of mothers felt positive</p> <p>Mothers rated helpfulness of treatment lower than children</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Rushton 2000 <sup>664</sup> UK	<p><b>P</b> Sexually abused children; 75% of mothers and 70% of foster mothers were white British</p> <p><b>I</b> Psychoeducational Group Therapy (girls) plus carer support</p> <p><b>C</b> Focused individual therapy (girls) plus carer support</p> <p><b>O</b> Girls: KSADS,<sup>405</sup> CGAS,<sup>261</sup> carers: interview schedules designed for the study</p>	<i>n</i> = 58; <i>n</i> = 46 mothers, <i>n</i> = 19 foster/adoptive mothers; 14 carers attended a total of three groups	Carer interviews: 1- and 2-year follow-up; follow-up interviews with carers' workers 1 year after start of treatment		<p>Carers rated the intervention largely positively: 30% found it very beneficial, 48% beneficial</p> <p>Mothers who were in a relationship with the abuser were more likely to have negative/mixed views of treatment. Those who reported positively on help for themselves attended on average 8.8 months; those who had mixed/negative views attended for less than half this time (4.3 months)</p> <p>Foster carers/adoptive mothers attended for longer (9.2 months) but birth mothers reported higher levels of satisfaction</p> <p>Most caregivers reported continued improvement of children at both 1- and 2-year follow-up</p> <p>Would have liked longer period of treatment and ongoing support available to help deal with isolation and stigma</p>
GHQ, General Health Questionnaire; ICHSEQ, Institute of Child Health – Self-Esteem Questionnaire N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.					

### Acceptability

Two<sup>161,538</sup> studies collected data on the acceptability of the intervention using client questionnaires. Hyde *et al.*<sup>538</sup> supplemented questionnaire data with data from interviews. Rushton *et al.*<sup>664</sup> gathered data from foster carers, using two established schedules at baseline and follow-up (1 and 2 years). Boisvert *et al.*<sup>647</sup> presented a profile of treatment completers.

### Children's views

The rating scale used to measure participant satisfaction is not described in Hyde 1995<sup>538</sup> but, as indicated above, ratings were supplemented with qualitative interviews. Feedback was generally positive, but fewer than half the children were positive about talking about the abuse or felt that, as a result of the group work, they understood the origins of the abuse any better. Seventy-eight per cent said that they did find it useful for preventing further abuse and dealing with feelings of guilt. The helpfulness of treatment was generally rated higher by children than by their mothers.

Children in this study<sup>538</sup> generally welcomed the opportunity provided by the groups to meet with others with similar experiences, but not all, and less than half of those interviewed felt positively about talking about the abuse.

Neither the Boisvert *et al.*<sup>658</sup> study nor the Rushton *et al.*<sup>664</sup> study report the views of children.

### Caregivers' views

A brief client satisfaction questionnaire was given to foster parents in the study by Barth *et al.*<sup>161</sup> and the programme received high levels of endorsement for the group, but the length and intensity of the intervention were insufficient to observe any measurable changes of effectiveness.

Rushton *et al.*<sup>664</sup> report that most carers were positive about the support provided to them (30% 'very beneficial', 48% 'beneficial'). Mothers who were still in a relationship with the abuser were more likely to have negative or mixed views of the help provided to them and their daughter. Analyses indicate that those who reported positively on the help provided to them attended for an average of 8.8 months compared with those who had a mixed negative response, who attended just half of this time (4.3 months). This might mean that mothers who were not helped dropped out sooner, or that those who attended fewer sessions (perhaps for different reasons) did not receive enough help to find it beneficial. The authors note that both foster carers and adopters attended for significantly longer periods (*M* 9.2 months) than the birth parents (*M* 6.1 months), although, when levels of satisfaction were explored, birth mothers appeared to benefit more than foster carers, but the difference was not significant; few respondents said they received little benefit and foster carers were few in number.

The authors hypothesise that 'mothers who clearly valued the support provided would probably have benefited from an independent professional listening to their difficulties and dealing with feelings such as guilt and anxiety'<sup>664</sup> (p. 425), which, in turn, may have prevented deterioration in their relationships with their children. This study<sup>664</sup> was primarily designed to examine the relationship between kinds of support to carers and outcomes for children hence the rather speculative reflections on what the help meant to carers themselves.

### Summary: acceptability of psychoeducational Interventions

The available evidence presents a rather tenuous and fragmented picture of the acceptability of psychoeducational interventions. The one<sup>658</sup> study to explore attrition identified severity of sexual abuse impact and behavioural problems as associated with dropout, but this was just one study, with a modest sample size, providing psychoeducation in a group format.

Where solicited, feedback from children and caregiver was generally positive with the exception of participants who were still in a relationship with the alleged perpetrator. The authors of this study<sup>664</sup>

speculate that mothers who valued the support provided might have benefited from further, personalised support. Again, there is support for the value of group work for children who have experienced sexual abuse.

## Group work with children

Seven<sup>169–171,636,637,639,676</sup> studies explored the acceptability of children/young persons' group interventions. For details, see *Table 19*.

### Description of studies

#### Study design

All but two<sup>171,636,637,639,676</sup> studies were uncontrolled studies. The De Luca *et al.*<sup>170</sup> study was a COS, and the Monck *et al.*<sup>169</sup> study was a quasi-randomised trial.

#### Sample sizes

Sample sizes were all small, ranging respectively from just six and nine, respectively, in the studies by Grayston and De Luca<sup>171</sup> and Ashby *et al.*,<sup>636</sup> to a sample of 95 in the study by Monck *et al.*<sup>169</sup>

#### Location

Three<sup>636,637,639</sup> studies were based in North America and two<sup>170,171</sup> in Canada. The study by Gustafsson 1995<sup>676</sup> was conducted in Sweden, and the Monck *et al.*<sup>169</sup> study was UK based.

#### Participants

Interventions were delivered to children as young as 3 years, and up to 20 years. In five<sup>169–171,636,637</sup> studies, all of the children had been sexually abused. Children in the Peled and Edleson<sup>639</sup> were in treatment as a result of witnessing domestic violence. The participants in the study by Gustafsson 1995<sup>676</sup> had suffered physical abuse, parental alcohol misuse and had witnessed domestic violence.

In two<sup>170,636</sup> studies the participants were sexually abused girls and in the study by Grayston and De Luca<sup>171</sup> the participants were sexually abused boys. The remaining four<sup>169,639,676</sup> studies had mixed gender groups. Ashby *et al.*<sup>636</sup> describe a population that was 100% American Indian, referred by tribal social services.

#### Intervention

Interventions comprised group activities (including art activities/circle time), abuse prevention skills, family reunification therapy and psychotherapeutic approaches. Interventions were delivered in group settings for children with similar abuse histories or, as in one study,<sup>637</sup> a sibling/victim group setting.

In four<sup>170,171,636,639</sup> studies treatment lasted between 10 and 12 weeks. Treatment in Monck *et al.*<sup>169</sup> could last up to 12 months. No information was available in the remaining two studies.<sup>63,637</sup>

### Acceptability

Four<sup>169,171,636,637</sup> studies used questionnaires or rating scales to measure satisfaction.

Baker *et al.*<sup>637</sup> reported findings from telephone surveys, used to interview treatment completers, drawing on four different group evaluations conducted in 1997, 1998 and 2000. Ashby *et al.*<sup>636</sup> augmented data from children with data from school counsellor reports. Gustafsson *et al.*<sup>676</sup> interviewed group therapists using semistructured schedules and De Luca *et al.*<sup>170</sup> collected data using child report measures and a social validation scale. Peled and Edelson<sup>639</sup> used interviews and group observations.

**TABLE 19** Acceptability of group work for children

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Ashby 1987 <sup>636</sup> USA	<p><i>Group Treatment Program</i></p> <p><b>P</b> Sexually abused girls aged referred by tribal social services; 100% American Indian</p> <p><b>I</b> 10 × 2-hour sessions led by an female Indian therapist</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 9	Acceptability and usefulness evaluation rating on numerical scale – midway and final group; school counsellor reports		<p>Programme rated on average 9.8, on a scale of 1 (poor) to 11 (outstanding)</p> <p>Indian talking circle was rated as most useful</p> <p>Data from school reports saw positive behaviour change in 70% of participants</p>
Baker 2001 <sup>637</sup> USA	<p><i>Family Learning Program</i></p> <p><b>P</b> Sexually abused children aged 3–18 years</p> <p><b>I</b> Individual, group (sibling) and family programme, including child abuse prevention skills and reunification therapy if required</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 5–14	Satisfaction ratings; evaluations conducted in 1997, 1998 and 2000; four group evaluations and follow-up telephone survey of <i>n</i> = 7 terminated clients		<p>Satisfaction ratings generally high</p> <p>Reasons for including siblings in treatment:</p> <ul style="list-style-type: none"> <li>• High risk of being abused too</li> <li>• Need to understand abuse and overcome blame</li> <li>• May feel resentful if left out of process</li> <li>• Help deal with feelings of jealousy</li> <li>• Deal with perpetrator being removed</li> <li>• Practical – no child-care issues</li> </ul> <p><i>Organisational considerations</i></p> <p>Additional resources required</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
De Luca 1995 <sup>170</sup> Canada	<p><i>Children's Group</i></p> <p><b>P</b> Sexually abused girls, age range 7–12 years;</p> <p><b>I</b> Circle time and activities designed to address issues around sexual abuse, groups of six to eight children</p> <p>90 minutes × 9–12 weeks</p> <p><b>C</b> Group of girls with no abuse history</p> <p><b>O</b> SEI<sup>436</sup>, RCMAS<sup>293</sup>, CBLC<sup>257</sup></p>	<i>n</i> = 35 intervention, <i>n</i> = 35 control	Child-report measures		<p><i>Positive</i></p> <p>Children liked group members, leaders and activities</p> <p>Group helped children deal with issues, 'taught me how to say yes, no and who to tell and taught me that abuse was not my fault'</p> <p>Parent feedback was generally positive</p> <p><i>Negative</i></p> <p>Disliked some group members/ disagreements</p> <p>Frightened by puppets and idea that abuse might recur</p> <p>Some parents would have liked to observe the group and receive more feedback</p>
continued					

**TABLE 19** Acceptability of group work for children (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Grayston 1996 <sup>171</sup> Canada	<p><b>P</b> Sexually abused boys aged 8–10 years</p> <p><b>I</b> 12 × 90-minute weekly group sessions</p> <p><b>C</b> Wait-list</p> <p><b>O</b> CBCL,<sup>707</sup> CSBI;<sup>259</sup> frequency counts of up to three problem behaviours identified by caregivers</p>	<i>n</i> = 6	Child feedback and parent feedback questionnaires		<p>Most parents and children found intervention helpful</p> <p>All children enjoyed attending the programme</p> <p>Children liked feeling safe and were satisfied with the group and level of parental involvement</p> <p>Half of parents suggested more feedback would be helpful</p>
Gustafsson 1995 <sup>676</sup> Sweden	<p><i>Psycho-pedagogical Group Therapy</i></p> <p><b>P</b> Physical abuse and domestic violence witnesses, children of alcoholics; age range 5–20 years, 53% F</p> <p><b>I</b> Based on Alcoholics Anonymous family systems theory, weekly group meeting</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 19	Semistructured interviews with group therapists		<p>Working with the whole family diminished dropout rate</p> <p>Children of alcoholics need specific help – group work was sometimes difficult because children had relational problems and were fearful of discussing parent's abuse</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Monck 1996 <sup>169</sup>  UK	<p><i>Family Network Treatment Programme</i></p> <p><b>P</b> Sexual abuse; 85% female</p> <p><b>I</b> Family treatment meeting every 4–6 weeks; group treatment by age ranging from 6 to 8 weeks (mixed gender groups for ages 6–10 years, parents, perpetrators) to 20 weeks for adolescent girls</p> <p><b>C</b> Family treatment only</p> <p><b>O</b> Children: CDI;<sup>430</sup> SPPC/A;<sup>431</sup> FSC-R<sup>433</sup>, CBCL<sup>294</sup></p> <p>Parents: GHQ<sup>434</sup>, ASEP<sup>435</sup></p>	<i>n</i> = 47	Participant rating		<p>Children rated the programme</p> <p><i>Positive</i></p> <p>Therapist's interview style, gender, feeling understood</p> <p>Meeting others with similar experiences</p> <p>Talking to the abuser</p> <p>Most helpful: preventing further abuse; raising self-esteem; offering understanding and resolving guilt</p> <p><i>Negative</i></p> <p>Talking to a parent or family about the abuse</p> <p><i>Mixed/no effects</i></p> <p>Relations with current family; enabling further disclosures; planning for the future; understanding the origins of abuse</p> <p>Mothers found it helpful preventing further abuse, offering support and dealing with their role in the abuse</p> <p>It was rated unhelpful/no effect for accepting the abuse has happened; discovery of future abuse; resolving own guilt; relating to family; future planning; relating to perpetrator; understanding origins of abuse; relating to managing abused child</p>
					continued

**TABLE 19** Acceptability of group work for children (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Peled 1992 <sup>639</sup> USA	<p><i>Support and education</i></p> <p><b>P</b> Children aged 4–12 years who had witnessed domestic violence, four children also physically abused; one sexually abused. 60% female; 73% white, 27% mixed race</p> <p><b>I</b> 1 hour x 10 weeks, children's group and concurrent therapy group for adults</p> <p>1 hour x one final family group session</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 30	Interviews with <i>n</i> = 16 mothers, <i>n</i> = 5 fathers, <i>n</i> = 4 group leaders, <i>n</i> = 30 children; observations of one group		Findings highlighted four major group goals: 'breaking the secret' of abuse in the children's families; learning to protect oneself; having a positive experience; and strengthening self-esteem. Under a positive experience, children described needing to feel safe in the group and their negative expectations of the group, which improved over time
ASEP, Adult Self-Esteem Profile; GHQ, General Health Questionnaire; N/A, not applicable; PICO, participants, intervention, outcomes, comparisons; SPPC/A, Self-Perception Profiles for Children and Adolescents.					

## Children's views

Using a child feedback questionnaire, Grayston and De Luca<sup>171</sup> found that most children found the group helpful, enjoyed attending, liked feeling safe and were satisfied with the level of parental involvement. They had no suggestions for changes. No objective measures were used to assess satisfaction levels, and this is a limitation of this study.<sup>171</sup>

Participants in the studies by Ashby *et al.*,<sup>636</sup> Monck *et al.*<sup>169</sup> and De Luca *et al.*<sup>170</sup> rated the programmes positively. On a scale of 1–11 (11 = outstanding), the group treatment programme in the Ashby *et al.*<sup>636</sup> study scored 9.8 on average. Data from school counsellor reports saw positive behaviour change in school for 70% of participants. Children rated therapists highly in the Monck *et al.*<sup>169</sup> study and valued meeting others with similar experiences; they also valued being able to talk to their abuser. Some reported negative feelings about talking about the abuse, their family and the hospital location of the therapy. The majority felt that it was helpful in preventing further abuse, raising their self-esteem, understanding and feelings of guilt surrounding the abuse. There was mixed effects for relations with their family, planning for the future and understanding the origins of the abuse. The children in the De Luca *et al.*<sup>170</sup> study also reported similar positive and negative responses, plus some elements that frightened them, for example using puppets and the idea that abuse could recur.

Child-reported benefits of treatment identified in the study by Peled and Edleson<sup>639</sup> included self-protection and strengthening self-esteem.

## Caregivers' views

Parents surveyed in the study by Baker *et al.*<sup>637</sup> viewed the sibling group intervention positively, and, in the 2000 survey, parents' mean score rating was 1.9 (on a scale of 1 to 4, with '4' = unsatisfactory). Parents felt that their children had learnt how to deal with inappropriate advances (score 1.5) but helping the child to cope with stress was rated less positively (score 2.8).

Monck *et al.*<sup>169</sup> also report mothers rating the prevention of further abuse as helpful, but the intervention fared less well when trying to deal with issues including understanding why and accepting abuse has happened, resolving guilt relating to the family and managing the abused child. In the De Luca *et al.*<sup>170</sup> study, parents believed that the children liked feeling understood and having somewhere to talk about the abuse and someone to talk to, but would have liked to have received more feedback or observe the treatment.

## Staff views

The importance of involving siblings in treatment is discussed by Baker *et al.*<sup>637</sup> – siblings have a high risk of being abused too and often there are unresolved feelings of anger, jealousy and guilt, particularly if a family member is the perpetrator. On a purely practical level, involving all family members enables therapy to happen as no child-care issues arise. Sibling therapy also adds to the costs of the treatment, which may not be covered by the provider; it also has implications for rooms, materials and staffing.

## Summary: acceptability of group work interventions

Generally, evidence for the acceptability of group-based interventions for maltreated children is very positive. Although, superficially, group work may appear to be a very efficient way of providing therapy, it requires a great deal of planning, special training and resources. Generally, these issues are not considered in one-off studies of this intervention, although the lack of attention to such issues is not unique to group work.

## Counselling/psychotherapy interventions

Fourteen<sup>175,176,638,640–646,657,674,677,679</sup> studies addressed issues of the acceptability of counselling interventions.

Four<sup>647,648,665,675</sup> studies did so for psychotherapy interventions. In reality, there appears to be little difference between these two groups of interventions, other than how the authors describe them.

## Counselling interventions

Details of the 14 studies of counselling interventions can be found in *Table 20*.

### Study design

The study reported by Haight *et al.*<sup>175</sup> was a randomised trial.

Baginsky<sup>640</sup> conducted a review of the pattern of provision in the UK, the Netherlands and Italy and the reaction of young people who had or had not received services. The literature review was followed by interviews (both face to face and telephone), group discussions, questionnaires and letters to collect additional data.

Deb and Mukherjee<sup>679</sup> used purposive sampling from four randomly selected shelters across Kolkata, India, and sourced a non-abused control group from local schools, which were also randomly selected. Both qualitative and quantitative data collection were used.

The other studies<sup>176,638,641–643,645,646,674,677</sup> were uncontrolled designs, each using a purposive sample of those engaged in treatment. The studies by Fowler *et al.*<sup>641,642</sup> examined the acceptability of counsellor gender for treatment for sexual abuse. Kilcrease-Fleming *et al.*<sup>643</sup> also investigated counsellor gender using a standardised rating scale of video-taped interviews analysing differences in verbalisation between male and female counsellors. Porter *et al.*<sup>645</sup> used the Client Behavior System verbalisation measure to assess gender differences in counsellors. Thompson *et al.*<sup>646</sup> used two semistructured interview guides to interview both mothers and youths. Scott<sup>677</sup> also conducted in-depth interviews with parents. Nelson-Gardell<sup>638</sup> conducted focus groups. Overlien's<sup>674</sup> investigation of counselling provision in women's refuges used a grounded theory approach to conduct face-to-face interviews while using age-appropriate schedules. Reddy *et al.*<sup>176</sup> relied on qualitative post-treatment feedback to assess intervention acceptability.

Kolko *et al.*<sup>644</sup> conducted quantitative analyses to predict service use and Haskett *et al.*<sup>657</sup> used regression analysis to investigate treatment entry.

### Sample sizes

Sample size varied. Haight *et al.*<sup>175</sup> recruited 17 children from 10 families, and Scott<sup>677</sup> recruited 15 children from 12 families. Nelson-Gardell<sup>638</sup> recruited 34 participants, and four<sup>641,643,645,674</sup> studies had samples of around 50. The largest study<sup>640</sup> had 130 participants. The studies by Fowler and Wagner,<sup>642</sup> Haskett *et al.*,<sup>657</sup> Reddy *et al.*,<sup>176</sup> Kolko *et al.*<sup>644</sup> and Deb and Mukherjee<sup>679</sup> all had between 70 and 100 participants.

### Location

Most of the studies were USA based. One<sup>677</sup> was set in Australia, one<sup>679</sup> in India and another in Norway.<sup>674</sup> Baginsky<sup>640</sup> examined counselling provision for young people across three nations: the UK, the Netherlands and Italy.

### Participants

All studies focused on participants with a sexual abuse history, apart from Overlien,<sup>674</sup> who examined physically abused children who had witnessed domestic violence. The sample in Kolko *et al.*<sup>644</sup> had also been subjected to neglect, and those in the studies by Haight *et al.*<sup>175</sup> and Reddy *et al.*<sup>176</sup> had been exposed to a range of abuse and neglect. Baginsky<sup>640</sup> did not specify type of abuse, but sexual abuse recovery was included in the findings; therefore, an assumption has been made that at least part of the sample had been sexually abused.

### Interventions

Four<sup>644,674,677,679</sup> studies reported on IGT – concurrent with individual counselling. The group therapy included counselling with other sexually abused girls,<sup>679</sup> family members<sup>644,677</sup> and play therapy within a women's refuge setting.<sup>674</sup>

TABLE 20 Acceptability of counselling interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Baginsky 2001 <sup>640</sup>  Italy, the Netherlands and UK	Looks at pattern of provision in three countries and the reaction of young people who had or had not received services	<i>n</i> = 130	Italy: <i>n</i> = 36 telephone interviews  The Netherlands: <i>n</i> = 25 face to face, letters, telephone and questionnaires  UK: <i>n</i> = 41 face-to-face group and parent interviews	Summary overview	<i>Provision</i>  Not enough support available  Range of provision required for variety of needs  Provision at local and national level needs to be mapped and made available to young people, parents and professionals  Multiprofessional interventions and co-ordination required  Open-door policy if clients need to return to counselling  <i>Sexual abuse</i>  Not enough awareness of damage of sexual abuse  Schools have a role to play in prevention and harm reduction
Fowler 1992 <sup>641</sup>  USA	<b>P</b> Sexual abuse; mean age 11.83 (SD 3.17) years; 100% female  <b>I</b> Counselling  <b>C</b> N/A  <b>O</b> Comfort ratings of male vs. female examiner	<i>n</i> = 35	Seven-point Likert scale		<i>n</i> = 19 were examined by a male counsellor, <i>n</i> = 16 by a female counsellor  Pre-consultation: <i>n</i> = 25 preferred a female, <i>n</i> = 7 had no preference, <i>n</i> = 3 preferred a male  Post-examination: No significant differences in ratings of comfort with examiner [ $\chi^2(2,35) = 0.50$ ; $p > 0.77$ ]

continued

**TABLE 20** Acceptability of counselling interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Fowler 1993 <sup>642</sup> USA	<p><b>P</b> Sexually abused; age range 1–17 (<math>M=8.24</math>) years; 83% female; 77% Caucasian, 22.5% African American</p> <p><b>I</b> Psychoeducationally based individual counselling; 50 minutes × six sessions</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 20$	Pre- and post-treatment preference for male or female counsellor		<p>Pre treatment, all participants stated a preference for female counsellor</p> <p>Post treatment, 3/10 (30%) of the girls treated by male counsellors reported a preference for male counsellors</p> <p>10/10 (100%) of the girls treated by female counsellors continued to indicated a preference for female counsellors</p>
Haight 2010 <sup>175</sup> USA	<p><b>P</b> Physical, emotional, sexual abuse and neglect – children of methamphetamine-misusing parents placed in foster care; age range 7–14 (<math>M=9.6</math>) years; 60% male; 100% Caucasian</p> <p><b>I</b> 7-month, LSI 1 hour per week</p> <p><b>C</b> Wait-list</p> <p><b>O</b> CBLC<sup>297</sup>; PPVT-III<sup>441</sup></p>	<p><math>n = 15</math> children from <math>n = 12</math> families</p>	Views from children, caregivers and community clinicians; field notes	Emic coding	<p><i>Children's views:</i></p> <ul style="list-style-type: none"> <li>Most children characterised their experiences as enjoyable, although some found it difficult to talk at first</li> <li>Many felt that therapy was terminated too early</li> </ul> <p><i>Caregivers' views</i></p> <ul style="list-style-type: none"> <li>Would like intervention to be longer</li> <li>Valued non-clinical setting</li> </ul> <p><i>Clinicians' views</i></p> <ul style="list-style-type: none"> <li>Also valued non-office setting, seeing children in home/leisure settings was helpful but also created potential problems with professional boundaries including issues of confidentiality</li> <li>Clinicians requested further training in narrative therapy</li> </ul>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Haskett 1991 <sup>657</sup> USA	<p><b>P</b> Sexual abuse; mean age 8.24 (range 1–17) years; 83% female; 77% white, 22.5% African American</p> <p><b>I</b> Long-term counselling</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 129 children referred for counselling in a 6-month period	Factors associated with treatment entry		<p>Factors associated with successful treatment entry</p> <p>Attendees: <i>n</i> = 84, mean age 8.5 years</p> <p>Non-attendees: <i>n</i> = 45, mean age 7.7 years</p> <p>Higher percentage of males than females attended</p> <p>Higher percentage of Caucasians attended</p> <p>Attendees and non-attendees did not differ in parental educational level, marital status or SES</p> <p>Children in homes with telephones more likely to attend first session and if mothers felt entire family required counselling</p> <p>Referrals to private centres more likely to attend first session</p>
Kilcrease-Fleming 1992 <sup>643</sup> USA	<p><b>P</b> Sexually abused; age range 7–17 years, 100% female</p> <p><b>I</b> Six sessions of individual counselling</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 20; <i>n</i> = 18 videos analysed	Three counselling process rating scales of videotaped interviews		<p>MANOVA results found no significant differences in counsellor gender; however, a significantly higher verbalisation by female counsellors than their clients was observed</p> <p>Conclude that female victims do not necessarily need to be treated by female counsellors</p>

continued

**TABLE 20** Acceptability of counselling interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Kolko 1999 <sup>644</sup> USA	<p><b>P</b> Neglect, maltreatment, physical and sexual abuse; mean age 11.6 (SD 5.29) years; 62% female; 54% African American, 38% Caucasian, 8% biracial</p> <p><b>I</b> Various individual and group counselling treatments</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 86	<p>Children and parents completed an evaluation of the level of perceived service needs, motivation and interests, goals or expectations and obstacles; interviewed at study intake and 4–8 months after initial service</p> <p>Services used</p> <p>Prediction of total service involvement:</p> <p>Child: CBCL<sup>269</sup></p> <p>Parent: CANIS<sup>432</sup></p> <p>BSI<sup>741</sup></p> <p>CAP<sup>366</sup></p> <p>Family: SOCSS<sup>742</sup></p> <p>FES<sup>710</sup></p> <p>CTS<sup>743</sup></p> <p>CLEI<sup>744</sup></p>	Predictors of service use computed using Pearson correlations or chi-squared tests	<p>Variables associated with overall service involvement:</p> <ul style="list-style-type: none"> <li>• child race</li> <li>• child anxiety</li> <li>• parental distress on the BSI</li> <li>• parental childhood abuse history</li> </ul> <p>Caucasian children with lower levels of anxiety and parents with heightened distress, with more abusive experiences as children, received more services. Race, parental distress and low child anxiety predicted number of services at post-service assessment</p> <p>Children perceived to have a high level of motivation to participate in services. Children identified parent factors as the largest obstacle to treatment completion. Sexually abused children were more likely to have received services at post-service assessment</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Nelson-Gardell 2001 <sup>638</sup> USA	<p><b>P</b> Sexual abuse; age range 10–18 (<math>M = 13.7</math>) years; 100% female; 70% white, 21% black, 9% other race or ethnicity</p> <p><b>I</b> Not specified</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 34$ ; five focus groups	Focus group methodology to address the issues of interest	Thematic analysis	<p>Four themes emerged:</p> <ul style="list-style-type: none"> <li>being believed about the abuse defines help and support – those who believed were defined as helpers; those who did not believe were not helpful or, in fact, harmful</li> <li>talking about what happened helps but can be difficult</li> <li>talking about feelings helps – fear of future negative consequences if feelings ‘not let out’</li> <li>group helps (but no-one wanted to go at the start) – shared experiences and understanding</li> </ul>
Overlien 2011 <sup>674</sup> Norway	<p><b>P</b> Physically abused children, aged 4–18 years, in women’s refuges; 73% female; mostly non-Norwegian ethnicity</p> <p><b>I</b> Life in refuge, including unspecified counselling</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 50$ women’s refuges directors, $n = 22$ children	Face-to-face interviews, age-appropriate schedules	Grounded theory approach	<p>Counselling valued and considered helpful by most children</p> <p>Play/leisure time was an important element of intervention, as well as the physical safety of the environment as real life and school routine activities can be disrupted by move</p> <p>Some language difficulties, as majority of population are immigrants</p>
Porter 1996 <sup>645</sup> USA	<p><b>P</b> Sexually abused; mean age 12.65 (<math>SD\ 2.79</math>) years; 100% female; 63% Caucasian, 37% African American</p> <p><b>I</b> Six sessions of psychoeducation-based individual counselling; 10 male, 8 female Caucasian counsellors;</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 27$	Client Behavior System <sup>745</sup> – verbalisation measure		Girls were rated as verbalising more resistance in response to sexual abuse questions regardless of the sex of the counsellor. Verbalisation may be more influenced by the type of question than the gender of the counsellor

continued

**TABLE 20** Acceptability of counselling interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Reddy 2013 <sup>176</sup> USA	<p><b>P</b> Children aged 13–17 years, subject to physical, emotional and sexual abuse or neglect; 65% female; 89% African American</p> <p><b>I</b> Cognitive Based Compassion Training</p> <p><b>C</b> Wait-list</p> <p><b>O</b> CBCL,<sup>297</sup> QUIDS-SR,<sup>442</sup> STAI-T,<sup>333</sup> FASM,<sup>443</sup> SQFI,<sup>444</sup> DERS,<sup>446</sup> ICU-P,<sup>447</sup> CTQ,<sup>448</sup> cortisol and C-reactive protein levels</p>	<i>n</i> = 70	Qualitative post-treatment feedback		<p>62% found the programme to be very helpful; 30% a little helpful</p> <p>Frequency of thinking about CBCT principles or lessons outside class? 41% a lot, 46% once in a while</p> <p>87% would recommend to friends</p> <p>Like programme to be offered in schools? 40% yes, 46% not sure, 14% no</p> <p>Programme length? 60% just right, 27% too many, 11% not enough</p> <p>Participants felt moderately connected to their classmates (<i>M</i> = 6.86, <i>SD</i> 2.49)</p> <p>Participants felt more strongly connected to their instructors (<i>M</i> = 7.14, <i>SD</i> 2.07)</p>
Scott 1996 <sup>677</sup> Australia	<p><b>P</b> 80% sexually abused; age range 15 months to 10 years</p> <p><b>I</b> Individual and group counselling</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 10 families ( <i>n</i> = 17 children)	In-depth interviews with parents		<p>Mixed views about value of child expressing painful feelings</p> <p>Parent/professional tension – alienated and ambivalent about professional's role, plus personal guilt and distress</p> <p>Contamination of normal sexuality in family and fear of future sexual/relationship problems</p> <p>Disintegration of social network support and impact on parental relations. Propose holistic approach to supporting child, which includes immediate and wider family</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Deb 2011 <sup>679</sup> India	<p><b>P</b> Sexually abused children rescued from red-light areas; aged 13–18 years, 100% female</p> <p><b>I</b> Basic support services plus individual and group counselling in rehabilitation homes; 2–3 months' duration with weekly-plus counselling</p> <p><b>C</b> Non-abused comparison group</p> <p><b>O</b> The Adjustment Inventory (Paul 1995)<sup>746</sup></p>	<p><math>n = 120</math></p> <p>Purposive sampling from four randomly selected shelters (one government run, three private)</p> <p>Non-abused control group from local schools</p>	Quantitative and qualitative data	Desruptive statistics and t-tests	58.3% found counselling beneficial, 41.7% found it 'non-facilitative'
Thompson 2011 <sup>646</sup> USA	<p><b>P</b> 55% had a history of child abuse or neglect; mean age of youth 15.20 (SD 1.38) years, mean age of mothers 41.1 (SD 6.16) years; 65% female youth</p> <p><b>I</b> Various mental health services</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 40$	Semistructured interviews developed to elicit information about mothers and youth experiences and satisfaction with mental health services		<p><i>Mothers' views</i></p> <p>48% generally satisfied</p> <p>21% dissatisfied – feeling service providers were not invested or interested in them</p> <p>40% both satisfied and dissatisfied – felt that some counsellors did not act professionally</p> <p><i>Youth views</i></p> <p>52.4% were satisfied, liked being able to talk to someone, learn to deal with anger</p> <p>23.8% were dissatisfied – medicating was seen as a short cut, relationship with counsellor also important</p>
N/A, not applicable; PICO, participants, intervention, outcomes, comparisons; PPVT-III, Peabody Picture Vocabulary Test-Third Edition; SES, socioeconomic status; SNACR, Service Needs & Concerns Report.					

Five<sup>640–643,645,657</sup> studies examined individual counselling, four of which specifically analysed counsellor gender preferences pre and post treatment.<sup>641–643,645</sup> Haskett *et al.*<sup>657</sup> examined factors associated with successful treatment entry for long-term counselling and, last, Baginsky<sup>640</sup> reviewed varied counselling provision in Europe.

Counselling for sexually abused girls in Kolkata<sup>679</sup> was based around basic support services, as many of these girls had been living on the streets and had been sexually exploited; provision included nutrition, safety and security, education and training, and medical care, as well as counselling. The intervention lasted between 2 and 3 months, and individual and group counselling were delivered on a weekly basis, with more if required.

Participants in the study by Nelson-Gardell<sup>638</sup> had received therapy from a range of counsellors, the details of whom are not provided. In this study<sup>638</sup> the researchers wanted to know what and whom the participants had found helpful in recovery.

Fowler and Wagner,<sup>642</sup> Kilcrease-Fleming *et al.*<sup>643</sup> and Porter *et al.*<sup>645</sup> all report a psychoeducation/psychological treatment programme, which lasted for six sessions. Adolescents in the study by Reddy *et al.*<sup>176</sup> were provided with CBCT. Haight *et al.*<sup>175</sup> describe the LSI for children who were living with parental methamphetamine misuse.

Haskett *et al.*<sup>657</sup> describe the intervention as 'long-term counselling'. Additional content of counselling intervention is not described in detail.

Young people in the study by Thompson *et al.*<sup>646</sup> received a range of individual and group-based counselling services in a range of service settings. The families of these participants also received a range of other counselling services, as well as – for some – FT, drug counselling and inpatient services (mothers).

### Characteristics of treatment completers

Only two studies<sup>644,657</sup> examined the characteristics of those who remained in therapy or dropped out.

Haskett *et al.*<sup>657</sup> presented factors associated with successful treatment entry for long-term counselling in a convenience sample. A higher percentage of males attended, as did a higher percentage of white Americans, but attenders and non-attenders did not differ in parental education level, marital status or socioeconomic status (SES). Children in homes with telephones were more likely to attend the first session, as were those referred to a private centre. When mothers felt that the entire family needed counselling, attendance was also more likely.

In the study by Kolko *et al.*,<sup>644</sup> children and parents were interviewed at study intake and at 4–8 months after receiving an initial service. Potential predictors of service use were computed using Pearson's correlations or chi-squared tests to determine the relationships between several key clinical characteristics. Four variables were found to be significant, and these were used to perform multiple regression analyses. Four variables predicted the number of services received at intake: white American children with lower levels of anxiety and parents with heightened distress and with more abusive experiences when they themselves were children received more services at intake. Three of these variables also predicted number of services at post-service assessment: white American child, parental distress and low child anxiety.

## Acceptability

### Children's views

Highlighting issues raised by the young people they surveyed, Baginsky<sup>640</sup> concluded that not enough support was available, and greater awareness was needed of the damage inflicted by sexual abuse. Young people also stressed the need for open-door policies for clients to return for help if necessary.

Another conclusion of those surveyed was that schools have a greater role to play in prevention through protective education and better sexual education.

Four<sup>641–643,645</sup> studies considered counsellor gender preference using rating scales (including verbalisation measures and counselling process rating scales) and statement of counsellor gender preference pre and post intervention. The all-female samples in the studies by Fowler *et al.*<sup>641,642</sup> and Porter 1996<sup>645</sup> expressed a preference for a female counsellor pre treatment: 71%, 100% and 100%, respectively. However, only Fowler and Wagner<sup>642</sup> re-tested gender preference post treatment and found that 30% of girls treated by a male stated a preference for a male counsellor, while 100% of girls treated by a female stated a preference for a female counsellor.

The studies by Kilcrease-Fleming *et al.*<sup>643</sup> and Porter *et al.*<sup>645</sup> examined client behaviour during a counselling session. Kilcrease-Fleming *et al.*<sup>643</sup> collected data at the initial counselling session using three different counselling process rating scales, which were scored by observers. Data were gathered on verbalisation frequency, overall participation, willingness to return and disclosures made during the session. MANOVA results found no significant differences in counsellor gender; however, a significantly higher verbalisation rate was observed in female counsellors than in their clients. Kilcrease-Fleming *et al.*<sup>643</sup> conclude that female victims do not necessarily need to be treated by female counsellors. Porter *et al.*<sup>645</sup> found that the type of questions asked may influence verbalisation, regardless of counsellor gender; girls in this study were found to be more resistant to questions about sexual abuse than other types.

Fifty-eight per cent of the sample in the study by Deb and Mukherjee<sup>679</sup> said they found counselling beneficial, although some caveats were made about the limitations of the study design and the potential for sensitive data to be suppressed. The qualitative summary findings in Overlien<sup>674</sup> conclude that, with very few exceptions, counselling was valued and considered helpful by the children interviewed. Using a grounded theory approach, children identified the play element of the therapy as important, creating a safe and fun place to play with other children.

Kolko *et al.*<sup>644</sup> reported some barriers to successful treatment participation. In this study, the young people interviewed identified parental factors as among the largest obstacles to accessing therapy, including 'parent was too busy to attend' and 'parent does not think counselling will help'. Children acknowledged greater obstacles to parental treatment than parents.

Most children in the study by Reddy *et al.*<sup>176</sup> found the programme to be helpful and 87% said they would recommend the intervention to others. They were less enamoured of undertaking homework tasks and opinion was split about the desirability of offering the programme within schools. They reported that their alliances with instructors were stronger than those with their peers. Similarly, the children participating in the LSI described by Haight *et al.*<sup>175</sup> mostly characterised the experience as enjoyable, particularly the relationships that they had developed with the community clinicians. Most found having someone to talk to helpful, but they also expressed anxiety at the early stages of the treatment, particularly talking about their experiences.

Nelson-Gardell<sup>638</sup> identified four important themes, of which 'being believed' was considered to be so important by the focus group participants that they conflated it with 'being helped'. The other three themes were that talking about what happened is not easy but it helps; talking about feelings helps and – although no one had wanted to go to a therapy group – the groups help. Concern was expressed that if the abuse was *not* talked about, it would impact on them negatively in the future. In brief, group therapy was found to be difficult but useful.

### Caregivers' views

In the study by Kolko *et al.*,<sup>644</sup> caregivers rated the severity of family problems higher than children did, and stressed the importance of targeting behaviour and competence as treatment goals.

Scott<sup>677</sup> used in-depth interviews with parents to explore family counselling. Parents expressed mixed views about the value of talking about painful feelings and many worried about their children having to relive the experiences through therapy, although other parents felt that this was helpful. Managing parents' expectations was also raised as an issue: therapy was referred to by some parents as a cathartic process, but children may not see it in the same way or wish to talk. There were also some tensions highlighted in the parent–therapist relationship.

- Some parents had high levels of anxiety but felt unable to discuss these with the therapist because they were unaware of what was being discussed with their child.
- As discussed previously, issues of parental guilt that the abuse was able to happen – once this issue was addressed, it became easier to talk about.
- Some parents felt ambivalent about the therapist's 'authority'; counselling for some families was compulsory; once social services were involved, things were taken out of their control.

Scott<sup>677</sup> also reports concerns about the impact of secondary abuse. Parents worried about the contamination of normal sexuality in the home, particularly at bath times and getting dressed/undressed. The potential threat to masculinity in fathers was also raised, and some parents expressed anxiety about their child's future sexual adjustment. Scott<sup>677</sup> suggests that female social workers are often unaware of fathers' concerns, which can lead to further tension between the professional and the family. In their study of family group therapy, Costa *et al.*<sup>678</sup> highlighted similar concerns amongst parents regarding their child's future sexuality, with some parents afraid that the sexual abuse would result in homosexuality or lead to inappropriate sexual behaviour with other children.

Secondary abuse also impacted on families' extended social networks; views of the wider family and local community became coloured by a significant mistrust of adults; this, in turn, put additional pressure on their marital relationships. Investigations by social services and police also attached considerable stigma, which, in turn, negatively impacted on the immediate social support networks of family and friends. Scott<sup>677</sup> recommends that the wider family unit is included in the disclosure and subsequent intervention.

Caregiver perspectives were sought in the study by Haight *et al.*<sup>175</sup> using open-ended questionnaires. Like the children, their views were largely positive, with the relationship between their child and the community clinician considered to one of the most beneficial elements of the programme. Caregivers also recommended that the treatment length should have been extended.

### **Staff views**

Baginsky<sup>640</sup> suggests that provision needs to be mapped at both local and national level and made available to young people, parents and other professionals, and that a multiprofessional response is also required.

Kolko *et al.*<sup>644</sup> found that sexually abused children were more likely to receive child-directed treatment and physically abusive families were more likely to receive in-home crisis services, such as family preservation. At post-service assessment, sexually abused children were more likely to have received services – Kolko *et al.*<sup>644</sup> attribute this to caseworker perceptions that the sexually abused were at greater risk.

In their interviews, directors of 50 of the 51 women's shelters in Norway stressed the value of normal and fun activities within the shelter environment.<sup>674</sup> They saw this as especially important when normal family life has been shattered. Scott<sup>677</sup> highlighted that professional staff were sometimes unaware of some of the therapist–parent tensions emerging from compulsory counselling.

The clinician field notes analysed in the study by Haight *et al.*<sup>175</sup> describe the positive benefits of the non-clinical setting, but also suggest some difficulties in maintaining professional boundaries within a community setting while working with vulnerable children. Confidentiality was inevitably breached at times, when clinicians were made aware of risk factors facing these children.

## Psychotherapy interventions

Details of these studies<sup>647,648,665,675</sup> and the interventions can be found in *Table 21*.

### Study design

All studies<sup>647,648,665,675</sup> were uncontrolled. In the study by Horowitz *et al.*<sup>647</sup> the data analysed were collected as part of a longitudinal study of the psychobiological effects of CSA (Putnam and Trickett, 1987–1988<sup>748</sup>). The studies by Davies *et al.*<sup>665</sup> and Jensen *et al.*<sup>675</sup> used qualitative methodologies, and Lippert *et al.*<sup>648</sup> reviewed case records with additional qualitative data collection.

### Sample sizes

There were just four participants in the Davies *et al.*<sup>665</sup> study and 15 in the Jensen *et al.*<sup>675</sup> study. The other studies<sup>647,648</sup> had sample sizes of 81 participants<sup>647</sup> and 101 participants,<sup>648</sup> respectively.

### Location

The studies by Horowitz *et al.*<sup>647</sup> and Lippert *et al.*<sup>648</sup> were US-based studies, the Davies *et al.*<sup>665</sup> study was a UK study and the Jensen *et al.*<sup>675</sup> study was set in Norway.

### Participants

Sexual abuse history was the maltreatment experienced by children in three<sup>647,648,675</sup> studies, and in the Davies *et al.*<sup>665</sup> study the four participants had been neglected/abused. The sample was 100% female in the studies by Jensen *et al.*<sup>675</sup> and Davies *et al.*<sup>665</sup> whereas in the study by Horowitz *et al.*<sup>647</sup> 60% of participants were female. Lippert *et al.*<sup>648</sup> did not present a gender breakdown. Forty per cent of the participants in the study by Horowitz *et al.*<sup>647</sup> were described as non-white and the entire sample in the Jensen *et al.*<sup>675</sup> study was of Norwegian ethnic origin.

### Intervention

Davies *et al.*<sup>665</sup> and Jensen *et al.*<sup>675</sup> describe individual psychotherapy, but details of intervention delivery are not reported in the studies by Horowitz *et al.*<sup>647</sup> or Lippert *et al.*<sup>648</sup> Children in the Davies *et al.*<sup>665</sup> study had been in receipt of psychotherapy for between 4 months and 3.5 years, and in the Jensen *et al.*<sup>675</sup> study weekly sessions were provided for a mean of 7.5 weeks.

### Characteristics of treatment completers

Horowitz *et al.*<sup>647</sup> reported that non-minority children received more therapy. Abuse variables were found to be powerful predictors of the total number of therapy sessions, and earlier onset predicted more sessions. Children who experienced higher levels of psychopathological disturbance also received more treatment. Family functioning did not predict level of treatment in the model.

Lippert *et al.*<sup>648</sup> profiled those who failed to participate in treatment: 46% of the sample of 101 did not begin therapy and 54% had at least one therapy session (therapy initiators). Initiators of therapy were less likely to be ethnically black (33%) than decliners (50%), and were more likely to have been subject to maternal neglect (24%) than decliners (4%). Decliners were those whose first appointments were twice as long from the initial forensic interview following abuse report. Caregivers who declined treatment reported lower scores on the Self-Report Family Inventory (SFI) conflict, competence and expressiveness scales. Reasons for declining included 'work conflict' (50%); 'inaccessible venue' (40%); 'child was symptom free' (15%); 'caregiver was busy' (15%); and 'caregiver wanted to forget about abuse or let their child forget' (15%).

### Acceptability

Interviews exploring children's experiences of therapy were conducted in the study by Davies *et al.*<sup>665</sup> Jensen *et al.*<sup>675</sup> interviewed children and their caregivers, separately, at two different points in time: just after the last therapy session and 1 year later. Lippert *et al.*<sup>648</sup> relied on parents' accounts, and presented a profile of non-participation and data from case record reviews. Horowitz *et al.*<sup>647</sup> collected data from therapists' reports and ran multiple regression analyses to examine the correlates of therapy usage.

**TABLE 21** Acceptability of psychotherapy interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Davies 2009 <sup>665</sup> UK	<p><b>P</b> Neglect/abuse; age range 8–10 years; 100% female</p> <p><b>I</b> Individual psychotherapy lasting between 4 months and 3.5 years</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 4$	<p>Children:</p> <p>Single interview of their experiences of participation in therapy, using age-appropriate methodologies</p> <p>Carers:</p> <p>Interview</p>	IPA	<p>Children valued feeling able to make their own contributions to therapy; rated importance of non-verbal communication; saw therapists as attachment figures</p> <p><i>Practical considerations</i></p> <p>The waiting room was important as it gave time with familiar others; increase level of contact; recommend that physical facilities could be improved</p>
Horowitz 1997 <sup>647</sup> USA	<p><b>P</b> Sexually abused children; aged 6–16 years; 100% female; 40% minority ethnic</p> <p><b>I</b> Psychotherapy including individual and group or FT</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	$n = 81$	<p>Therapy experiences gathered from parents</p>	Regression analyses	<p>Abuse variables were powerful predictors of total sessions of therapy: earlier onset predicted more sessions; child psychopathology – more disturbance was associated with more treatment; family functioning did not predict treatment</p> <p>Non-minority subjects received more therapy than minority subjects, who were typically older, of lower SES and age at onset of abuse was later</p>
Jensen 2010 <sup>675</sup> Norway	<p><b>P</b> Sexual abuse; mean age = 8.3 years; 64% female</p> <p><b>I</b> 3 to 17 (<math>M = 7.5</math>) weekly sessions of individual psychotherapy</p> <p><b>C</b> N/A</p> <p><b>O</b> CBCL<sup>294</sup></p>	$n = 15$	<p>Video-taped therapy sessions</p> <p>Separate interviews with children and their carers at the end of therapy and 7 years later</p>	Content analysis, guided by Bordin's conceptualisation of the working alliance	<p>Negotiation of goals depended on children's caregiver. No child could articulate therapy goals at onset but could articulate gradually gained understanding of the purpose of therapy</p> <p>Therapists need to build a positive bond with caregivers, as this relationship may be a reference point for children in interpreting their own relationship with the therapist</p>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Lippert 2008 <sup>648</sup> USA	<p><b>P</b> Sexually abused children aged 3–17 years</p> <p><b>I</b> Psychotherapy based at an urban Child Advocacy Centre</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 101	<p>Case record review</p> <p>Caregiver interviews (<i>n</i> = 45) including ‘perceptions related to therapy’, including the ECBI<sup>311</sup> and SFI<sup>747</sup></p>		<p>54% had at least one therapy session, 47% did not begin therapy</p> <p><i>Initiators of therapy</i></p> <p>Less likely to be black (33%) than decliners (50%)</p> <p>More likely to report maternal neglect (24%) than decliners (4%)</p> <p>Closer in time to forensic interview</p> <p>Caregivers who declined scored lower on measures of conflict, competence and expressiveness</p> <p><i>Reasons for declining</i></p> <p>Work conflict (50%)</p> <p>DCAC was inaccessible (40%)</p> <p>Child was symptom free (15%)</p> <p>Caregiver was busy (15%)</p> <p>Caregiver wanted to forget abuse or let child forget (15%)</p>
DCAC, Dallas Children’s Advocacy Center; N/A, not applicable; PICO, participants, intervention, outcomes, comparisons; SFI, Self-Report Family Inventory.					

### **Children's views**

Davies *et al.*<sup>665</sup> used a range of age-appropriate methodologies to garner children's experiences of psychotherapy. This was an extremely small sample size (just four), but the children interviewed valued feeling able to make their own contributions to therapy, and they appeared to view their therapists as attachment figures. The importance of non-verbal communication was stressed. Physical space was also raised as an issue: children stated that the waiting room environment was important as it became a familiar place, but they also felt that it could have been improved. There were no measures of therapy outcome in this study.<sup>665</sup> Jensen *et al.*<sup>675</sup> was designed to explore therapy goals and whether or not these were achieved. Of the 15 children interviewed, none had therapy goals at the outset, and expectations of therapy were low, but, through the course of treatment, a better understanding of the therapy was gained. The play therapy element was also recognised as being enjoyable.

### **Caregivers' views**

Jensen *et al.*<sup>675</sup> reports mothers' fears of feeling condemned by the therapist, and anxiety that they were losing control over the situation. Three aspects were identified as being important in developing a positive bond with the therapist: the therapists' personal qualities (in contrast to parents identifying qualifications as the most important); the collaborative process between therapist and caregiver (identified as the gatekeeper); and developing a systemic three-way relationship between therapist, child and parent.

### **Staff views**

In the study by Jensen *et al.*,<sup>675</sup> the parent is described as the 'gatekeeper' who enables the child to participate in therapy, and the importance of this three-way relationship is stressed.

### **Summary: acceptability of psychotherapy/counselling interventions**

From the available evidence, we know very little about the factors that predict the engagement of children with counselling or psychotherapy, or what differentiates those who complete therapy from those who do not.

Generally, children and caregivers are positive about counselling and psychotherapy and the therapists delivering them. However, it is largely from these studies that parents' and caregivers' concerns about 'knowing what is happening in therapy' emerge.

There is no strong evidence to suggest that children have marked gender preferences for counsellors, but it would be a mistake to draw conclusions from this particular set of studies, none of which is very rigorous, and most of which are very small. Those studies emphasise the importance of addressing caregivers' concerns about the wider impact of sexual abuse on family functioning.

As with all interventions considered in this review, most of the studies were undertaken outside the UK, and there is a need to determine the views of children and young people within the UK.

## **Peer mentoring**

One<sup>660</sup> study provided acceptability evidence for peer mentoring (*Table 22*).

### **Overview of this study**

This was a qualitative study,<sup>660</sup> undertaken in Canada, with a sample of 24 families with 26 children.

### **Participants**

Participants had experienced sexual abuse and were aged between 14 and 21 years.

### **Intervention**

The 'Peer Support Program for Parents and Youths' was led by parents and young people, and was delivered on a 12-week cycle but with open-ended membership. It brought to implement and change

**TABLE 22** Acceptability of peer-mentoring interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Alaggia 1999 <sup>660</sup>	PSP	24 families, 26 children	Interviewed a sample of parents, youths and professionals	Summary overview	<i>Parent feedback</i>
Canada	<p><b>P</b> Sexually abused young people aged 14–21 years</p> <p><b>I</b> Parent- and youth-led peer support groups, 12-week cycle with open-ended membership</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>				<p>Respectful, sensitive staff</p> <p>Outreach service was unique; group gave them coping strategies and they felt that they were not alone</p> <p><i>Youth feedback</i></p> <p>Enthusiastic endorsement</p> <p>Outreach and staff availability highly rated</p> <p>One-to-one support most important, group work less so</p> <p><i>Professional feedback</i></p> <p>PSP fills gaps in services</p> <p>No other agency provides similar support</p>
PICO, participants, intervention, outcomes, comparisons; PSP, Peer Support Programme.					

existing *normal* treatment service and was targeted at families that did not benefit from mainstream support or services. Specialising in child sex abuse issues, the group offered flexible delivery and outreach support, and also offered practical advice with legal procedures and child welfare.

### Acceptability

A sample of parents, youths and professionals were interviewed to collect data.

#### Children's views

Young people 'enthusiastically endorsed' (p. 70) provision and found the outreach service to be very helpful. Staff were available by phone during evenings, which was valued. One-to-one support was considered to be the most important element and the youth-led support group was less favourably viewed.

#### Caregivers' views

Parents found staff to be respectful and sensitive and identified the outreach service as unique. Parents felt that the parent-led group gave them information and coping strategies and appreciated hearing that they were not alone.

#### Staff views

Staff felt that the group filled services gaps and that no other agency provided similar support.

### Summary: acceptability of peer-mentoring interventions

The evidence base for the effectiveness of peer mentoring is relatively slim (see *Chapter 4*) but these interventions receive a strong endorsement from children and carers.

## Intensive service models

Eight studies provided information relevant to the acceptability of a variety of intensive service provision for maltreated children, details of which can be found in *Table 23* (see also *Table 24*).

*Residential treatment* Five<sup>649–651,666,671</sup> studies described residential facilities that provided care for maltreated young people with behavioural and conduct problems. West *et al.*<sup>651</sup> examined the views of young people about a trauma-informed alternative to traditional school policies in a residential care setting, so we include that study<sup>651</sup> in this section.

*Enhanced fostering* Three<sup>145,146,667,671</sup> studies reported on enhanced foster care interventions carers.

No study explored the acceptability of, or satisfaction with, therapeutic day care services.

### Therapeutic residential care

Details of the five<sup>649–651,666,672</sup> studies exploring different types of therapeutic residential care interventions can be found in *Table 23*.

#### Location

One<sup>672</sup> study was based in the Netherlands and three in the USA.<sup>649–651</sup> The Gallagher and Green<sup>666</sup> study was undertaken in the UK.

#### Study design

Cunningham *et al.*<sup>649</sup> described the development of a measure of youth engagement that was suitable for use with young people in RTCs. In collaboration with staff from two RTCs, the research team established a programme logic model, which they used to develop a multidimensional measure of engagement, adapting items from existing measures of readiness to change and the therapeutic alliance. The tools were then piloted drawing on data from interviews with young people at four time points, interviews with primary caregivers at the first and last time points, questionnaires to the school, clinical and residential members of the young people's treatment teams, and data from the client's case files and school records. Confirmatory factor analysis using maximum likelihood estimation was the primary analytic method used for analysis, and informed subsequent modifications of the measure.

Leenarts *et al.*<sup>672</sup> examined motivation for change among girls in compulsory residential care, using a range of standardised measures of child maltreatment, trauma and treatment motivation, which they analysed in relation to motivation for treatment, using multiple linear regression analyses, and treatment dropout, using logistic regression.

Both Shennum and Carlo<sup>650</sup> and Gallagher and Green<sup>666</sup> used semistructured interviews. Both interviewed children who had previously lived in therapeutic residential care; the sample in the Shennum and Carlo study<sup>650</sup> included some children still resident at the time of interview.

West *et al.*<sup>651</sup> used focus groups to explore the views of young people in a school that they attended under court order.

#### Sample sizes

A total of 154 adolescent girls participated in the Leenarts *et al.*<sup>672</sup> study and 130 young people were interviewed on four occasions by the researchers in the study by Cunningham *et al.*<sup>649</sup> Shennum and

**TABLE 23** Acceptability of therapeutic residential care interventions

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Findings
Cunningham 2009 <sup>649</sup>  USA	<p><i>Therapeutic residential care</i></p> <p><b>P</b> Young people in need of supervision (PINS), with a mean age of 15.5 (SD 1.1) years; 45% female, 38% white, 35% African American</p> <p><b>I</b> Therapeutic residential care, average length of stay 88 months</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 130	<p><i>Action research</i></p> <p>44 semistructured interviews with RTC staff</p> <p>Interviews with primary caregiver (T1<sup>a</sup> and T4<sup>a</sup>)</p> <p>School, clinical and residential treatment team questionnaires (T2<sup>a</sup> and T3<sup>a</sup>)</p> <p>Data from client case files</p>	Inductive thematic coding; confirmatory factor analysis	<p>Engaging youth required continual efforts – type of engagement varies and can be unstable</p> <p>The authors conclude that engagement needs to be measured at multiple time points across treatment</p> <p>Staff qualities of client-centred communication and the use of positive reinforcement were strongly correlated with the composite measure of engagement</p>
Leenarts 2013 <sup>672</sup>  The Netherlands	<p><i>Compulsory residential treatment</i></p> <p><b>P</b> Severely traumatised female children aged 12–19 years</p> <p><b>I</b> Stapstenen stabilisation training psychoeducation and non-exposure CBT</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 154		<p>Multiple linear regression for treatment motivation</p> <p>logistic regression to identify possible predictors for dropout</p>	<p>Age and ethnicity associated with motivation for treatment; non-Dutch ethnicity and younger age had significantly higher levels of distress</p> <p>Emotional abuse predicted motivation for treatment more strongly than other types of maltreatment. The study found no significant prediction for (time to) dropout</p>

continued

**TABLE 23** Acceptability of therapeutic residential care interventions (*continued*)

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Findings
Gallagher 2012 <sup>666</sup>	<i>Therapeutic children's homes</i>	Target $n = 34$	Semistructured interviews covering three domains:	Summary overview	<i>Positive</i>
UK	<p><b>P</b> 8 facilities, each with three to five children aged 16–22 years, subject to multiple maltreatment; 63% female; 94% white</p> <p><b>I</b> Therapeutic parenting, formal therapy sessions, life story work</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	Achieved $n = 16$	<ul style="list-style-type: none"> <li>life in the TCH</li> <li>life outside</li> <li>life after</li> </ul>		<ul style="list-style-type: none"> <li>forming a positive relationship with an adult</li> <li>better behaviour with long-term positive outcomes</li> <li>life story work and play therapy helpful</li> <li>leisure time bonding</li> </ul> <p><i>Negative</i></p> <ul style="list-style-type: none"> <li>mixed views on therapy</li> <li>difficulty having friends from outside</li> <li>preparation for moving on – mixed experiences</li> <li>guilt leaving others behind</li> <li>relationships with staff – not feeling loved, losing contact post intervention</li> <li>not understanding/experiencing normal family life</li> <li>resource intensive, high cost</li> </ul>
Shennum 1995 <sup>650</sup>	<i>Therapeutic residential care</i>	$n = 80$	Interviews with children, 58 of whom were interviewed after discharge	Summary overview	<i>Positive</i>
USA	<p><b>P</b> Neglected or abused children with comorbid depression, anxiety, attention deficit, CD; mean age 11.8 (SD 2) years; 32.5% female</p> <p><b>I</b> 1.5–2 years</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>		<p>Onsite observations; including video and audio tapes</p> <p>Interviews with staff</p>		<ul style="list-style-type: none"> <li>most found formal therapeutic one-to-one sessions helpful</li> <li>talking about family was most meaningful</li> <li>therapists viewed positively</li> <li>70% rated the milieu therapy behaviour point system as good</li> </ul> <p><i>Negative</i></p> <ul style="list-style-type: none"> <li>20% reported negative experiences – therapist was too busy, felt forced to talk</li> <li>30% saw milieu therapy as means for staff to control clients</li> <li>60% disliked behaviour management</li> <li>only 20% felt that relationship with staff was good</li> <li>30% found it difficult living with a large group of children</li> </ul>

Study/location	PICO	Sample size; response rate	Data collection – acceptability	Analysis method	Findings
West 2014 <sup>651</sup> USA	<p><i>Modified curriculum and 'Monarch Room'</i></p> <p><b>P</b> Abused and neglected court-involved girls attending a residential school; age range 14–18 years; 100% female; 23% white, 69% black, 8% other</p> <p><b>I</b> Trauma-informed alternative to traditional school discipline policies and 'Monarch Room' intervention designed to develop problem-solving, emotional regulation and sensorimotor activities to de-escalate problem behaviour</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 39	Focus group	Thematic analysis	<p>Six focus groups were conducted to help understand the lived experiences of trauma-exposed students and how this impedes classroom learning</p> <p>There were 16 total behaviours identified by the students as behaviours displayed in the classroom or school group</p> <p>Students also identified 23 probable causes for those behaviours and provided 20 recommendations for improving policies and practices in schools</p> <p>Student data were used to build the trauma-informed training intervention for school staff</p>

N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.

a T1 – 4 weeks after admission; T2 – midpoint in treatment; T3 – immediately prior to discharge; T4 – 4 months post discharge.

Carlo<sup>650</sup> recruited a sample of 80 young people and Gallagher and Green<sup>666</sup> achieved a sample of just 16. Thirty-nine girls participated in focus groups in the study by West *et al.*<sup>651</sup>

## Participants

Characteristically, the children served by these interventions were described as 'unfosterable' or difficult to place, because of behavioural issues or physical and psychological conditions and/or disability.

The young people in the study by Gallagher and Green<sup>666</sup> had experienced severe sexual, physical and emotional abuse and neglect, by one or more members of their family, and sometimes others, which had left them with significant problems of attachment. Previous placements had broken down, often because of challenging (including sexualised) behaviour. Some had experienced subsequent maltreatment in foster care.

Shennum and Carlo<sup>650</sup> described residential facilities that were providing care for maltreated young people who were also presenting with behavioural and conduct problems.

Young people in the study by Cunningham *et al.*<sup>649</sup> had a somewhat different profile in that the majority were in residential care ('congregate foster care') as the result of being in need of supervision (53%), and it is not entirely clear whether or not they had a history of maltreatment. A further 38% were adjudicated delinquents and 9% had been referred for reasons including abuse, neglect and special educational needs. It is possible that – with additional information – this study<sup>649</sup> would fail to meet our inclusion criteria in respect of participants.

Those in the Leenarts *et al.*<sup>672</sup> study were in compulsory residential treatment facilities. All had experienced prior traumas, and their histories were characterised by several out-of-home placements (60%), homelessness (30%), police contact of family members (45%) and histories of physical or psychological problems of family members (62%).

The girls in the West *et al.*<sup>651</sup> study were maltreated girls who were involved in the criminal justice system.

## Interventions

The therapeutic residential settings ranged from a compulsory treatment facility for severely traumatised girls<sup>651,672</sup> through residential treatment<sup>649,650</sup> to a small domestic-style setting described as a Therapeutic Children's Home,<sup>666</sup> where children lived in 'families' of three or four children with two adult staff acting in loco parentis. In this setting, the therapeutic model comprised three components: therapeutic parenting (to address attachment issues and a secure base), formal therapy sessions (based on play and expressive arts) and life story work.

The larger residential facilities provided a range of individual and group therapies as well as education. Typically, the environment was structured in ways designed to promote prosocial and to adaptive behaviour.<sup>649,650,672</sup>

The treatment setting in West 2014<sup>651</sup> was a residential school, which offered a modified training curriculum (*The Heart of Teaching and Learning: Compassion, Resiliency and Academic Success*) and a 'Monarch Room' facility, which promoted emotion regulation and skills to de-escalate problem situations through problem-solving techniques, talk therapy and sensorimotor activities, and avoid student suspensions and expulsions, which are recognised as counterproductive.

## Characteristics of treatment completers

One<sup>649</sup> study specifically examined factors associated with engagement, but does not provide relevant data, as the study concerned the development of a measure appropriate to residential treatment settings. We discuss the issues raised by Cunningham *et al.*<sup>649</sup> in our concluding discussion. One<sup>672</sup> study explored the factors associated with treatment engagement and dropout, and, given the risks associated with

running away from residential care, this study – although conducted in the Netherlands – addresses an important UK-wide issue.

Leenarts *et al.*<sup>672</sup> report that several demographic variables predicted motivation for treatment, as assessed by the Nijmegen Motivation List 2 (NML-2<sup>749</sup>). The 34 items in this self-report questionnaire ask respondents to answer using a five-point Likert-type scale, ranging from one ('not at all applicable') to five ('highly applicable'). The NML-2 generates three subscales: (1) *preparedness* to engage in treatment, (2) *level of distress* and (3) *doubt* about treatment. Data on dropout consisted of a total of five possible outcomes: 'client left: runaway'; 'judge did not extend stay', 'transfer to another facility', 'regular termination: end treatment' and 'stay not terminated: adolescent is still a resident'. Girls who terminated their stay by running away were identified as dropouts, that is, those who ran away and stayed away for > 14 days and, as a result, were discharged from the facility. In this study,<sup>672</sup> 23 girls (15%) ended their first uninterrupted stay by dropping out. One girl was transferred to another facility but dropped out after return, resulting in a total number of girls dropping out of 24. Girls with a non-Dutch ethnic background and a younger age reported significantly higher levels of distress and were more likely to engage in treatment.

Level of distress was predicted by a history of out-of-home placements when considering demographics only, and predicted doubt about treatment when considering demographics and childhood maltreatment. The authors point out that out-of-home placements and separating children from their parents may adversely affect their functioning. Out-of-home placements no longer predicted level of distress and doubt once emotional abuse, anxiety, depression and dissociation were taken into account. The authors conclude that the relationship between out-of-home placements and motivation is mediated by emotional abuse and trauma-related symptoms.

Emotional abuse was the type of maltreatment most strongly correlated with motivation to engage with treatment. Girls who reported internalising symptoms (anxiety, depression) were more likely to experience high levels of distress than those with fewer such problems. Girls with dissociative symptoms were more likely to have doubts about treatment. Adolescents are generally more willing to change their internalising problems than their externalising problems, and the authors point out that dropping out of treatment by running away may be attributable to externalising symptoms and antisocial behaviour. They go on to suggest that this is perhaps why the study<sup>672</sup> did not find a significant association between dropout and a history of child maltreatment. The authors suggest that as dropout often occurs when adolescents are on leave from residential care; future research should investigate whether or not going on leave adversely affects girls' motivation for treatment and also the relationship between motivation to change and motivation for treatment.

## Acceptability

Three<sup>650,651,666</sup> of these five<sup>649–651,666,672</sup> studies specifically explored the view of children and young people.

## Children's views

From the qualitative evidence, young people in the study by Gallagher and Green<sup>666</sup> valued the therapeutic home-like setting provided, but pointed to limits on the extent to which it felt like a real family home; for example, friends had difficulty calling in if they had not been officially vetted. Participants stressed the need for developing a special relationship with an adult, so that they felt 'loved', and that within the constraints of the working environment this was sometimes difficult. They liked the life story work. There was also some evidence of poorly managed transitions, with little or no preparation for leaving care. This intervention is costly and there is currently an absence of robust effectiveness data to support its use.

Therapists were considered helpful and, in the most part, viewed positively by young people in another residential setting,<sup>650</sup> but, here too, there were negative views reported: 20% felt that their therapist was too busy to deal with them; 30% disliked the milieu of therapy, as they considered it to be a means of

controlling young people; and 60% disliked the behaviour management approach. Only 20% of the sample felt that they had a good relationship with the staff.

The six focus groups convened in the study by West *et al.*<sup>651</sup> were used to understand the lived experiences of students who had difficulties with their own externalising behaviour and that of others. The girls, over half of whom had a history of maltreatment (just under half were placed for reasons of delinquency), attended a school that aimed to 'treat, heal, and educate its students by following a school discipline system that incorporates the students' treatment goals and strategies . . . [and which emphasises] . . . reducing student disciplinary issues by providing an effective social-emotional learning environment'<sup>651</sup> (p. 60). Students were asked to identify behaviours that they saw in themselves or others (displayed in the classroom or in the school grounds) and describe the kinds of experiences that led to these behaviours and to say what advice they would give to teachers working with students like themselves. The girls identified 16 behaviours and 23 likely causes. They made 20 recommendations for improving policies and practices in schools. The authors observe that these respondents were very aware of their behaviour and that of their fellow students. They were able to identify triggers from past experience that they felt resulted in highly charged emotional and behavioural reactions that are common among those who have experienced complex trauma. The kinds of linkages that students made included unwanted or unexpected touch, raised voices and references to relatives, as well as triggers unique to particular individuals. They conclude that schools need more trauma-informed teaching practices in order to manage these behaviours.

### Enhanced foster care

Details of the three<sup>145,146,667,671</sup> studies of enhanced foster care can be found in *Table 24*.

No study explored the acceptability of, or satisfaction with, therapeutic day care services.

### Location

The studies by Staines *et al.*<sup>667</sup> and Biehal *et al.*<sup>145,146</sup> were conducted in the UK. The Laan *et al.*<sup>671</sup> study was undertaken in the Netherlands.

### Study design

Staines *et al.*<sup>667</sup> used a prospective, repeated-measures design to investigate the supports and services provided to children and carers in an Independent Fostering Agency (IFA), and the relationship between these and children's progress and placement outcomes over a 12-month period. They used questionnaires to obtain data from carers, children and social workers, at two time points (at the start of a placement and 1 year later). The included paper reports the views of foster parents.

Biehal *et al.*<sup>145,146</sup> undertook a small randomised trial of the effectiveness of MTFC, embedded in a larger, observational QEx case-control study (see *Chapter 4* for details of the RCT).

Laan *et al.*<sup>671</sup> used data from case notes, together with data from a questionnaire completed by foster carers, to explore the characteristics of children included in an enhanced fostering programme, the content of counselling provided within the service, placement outcomes, and relationships between children's characteristics and placement outcomes.

### Sample size

The achieved sample in the study by Biehal *et al.*<sup>145,146</sup> was 219 participants (with 34 participants in the RCT). Laan *et al.*<sup>671</sup> examined case files for 78 children, and secured questionnaire data from 64 of the 78 foster parents. Staines *et al.*<sup>667</sup> received completed questionnaires from 49% (221) of the IFA foster carers and 66% of the IFA social workers (299) at time 1 – when child was first placed. At time 2 – either 1 year following the start of the placement or when the placement ended, the team secured completed questionnaires from 50% (227) of foster carers and 69% (312) of the IFA social workers. For only 138 placements at time 1 and 80 placements at time 2, were completed questionnaires received from both IFA social workers and foster carers

TABLE 24 Acceptability of enhanced foster care interventions

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Biehal 2012 <sup>145,146</sup>	MTFC-A	N = 219; two arms:	Quantitative and qualitative evidence; postal questionnaires, face-to-face interviews, telephone interviews, reports and parent records	Bivariate and multivariate analyses of qualitative data. Thematic analyses of qualitative data	<i>Children's views</i> <ul style="list-style-type: none"> <li>Children reported many positive views of the programme and, in particular, the points and levels system</li> <li>Some children disliked the rewards programme and this may have influenced placement stability and outcome</li> </ul>
UK	<p><b>P</b> Care sample: multiple maltreatment; ages 7–17 (mean 13.06) years; 46% female</p> <p><b>I</b> Wrap-around multimodal intervention for children in care aimed at reinforcing positive behaviour</p> <p><b>C</b> TAU</p> <p><b>O</b> Placement stability; CGAS,<sup>479</sup> CBLC,<sup>257</sup> DAWBA-RAD</p>	<p>RCT, n = 34 (experimental MTFC, n = 20; control TAU, n = 14)</p> <p>Observational arm: MTFC, n = 92; comparison, n = 93</p> <p>Qualitative purposively sampled case studies n = 20</p>		In-depth case study analyses	<i>Caregiver views</i> <ul style="list-style-type: none"> <li>Caregivers felt extremely supported to deliver the programme and felt in most cases that it was very successful</li> <li>Children who did not benefit from the programme may have been unable to engage with the programme, may have experienced negative influences from their birth family or had emotional problems that the programme was not primarily focused on treating</li> </ul>
Laan 2001 <sup>671</sup>	<i>Project Intensieve Pleegzorg</i>	n = 78	Case notes and questionnaire data	Analysis of questionnaire data; thematic analysis of case notes	74% of children remained with their foster family 2 years after the counselling
The Netherlands	<p><b>P</b> Foster parents caring for abused and neglected children; mean length in placement = 5.2 years; comorbid: learning disabled – 32% mild, 22% moderate, 4% severe, 3% profound; physically disabled or disease 37%; 'deviant conduct behaviour' 80%</p> <p><b>I</b> Intensive foster care</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>				<p>Foster care is more likely to end prematurely for girls, children with psychiatric problems and for children who had experienced neglect or sexual abuse in their biological family</p> <p><i>Foster parent views</i></p> <ul style="list-style-type: none"> <li>82% were satisfied with the counselling, 10% ambivalent, 8% found it not helpful</li> <li>emotional support most important aspect (72%) compared with informational (14%) or instrumental support (8%)</li> <li>79% of foster parents judged the placement as successful</li> </ul>

continued

**TABLE 24** Acceptability of enhanced foster care interventions (*continued*)

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Staines 2011 <sup>667</sup>	<i>Therapeutic Team Parenting</i>	<i>n</i> = 450	Questionnaires – foster parents and social workers; at placement start and 1 year on	Summary overview	<i>Foster carer views</i>
UK	<p><b>P</b> Physically, sexually and emotionally abused and neglected children aged 5–14 (<i>M</i> = 12) years, in foster care; 44% female; 87% white; 77% difficult behaviour, 26% school excludes, 20% in trouble with police</p> <p><b>I</b> Intensive foster care</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	Demographic information for: 299 children; 177 foster carers fostering 221 children			<ul style="list-style-type: none"> <li>77% said placement was going very well after 12 months; 20% quite well</li> <li>97% felt that they were important part of the team and that their views were taken seriously</li> </ul> <p><i>Social worker views</i></p> <ul style="list-style-type: none"> <li>Many rated process highly, including pre-placement planning (but local authority not always prepared)</li> <li>17% felt placement was unsuccessful – primarily due to lengthy decision-making at local authority level causing delays</li> <li>Funding was considered a major problem, having a negative impact on the child</li> </ul>
MTFC-A, Multidimensional Treatment Foster Care for Adolescents; N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.					

## Participants

Respondents in the study by Laan *et al.*<sup>671</sup> were foster parents looking after learning disabled children with challenging behaviour. It was the only study<sup>671</sup> of disabled children identified. Participants in the study by Biehal *et al.*<sup>145,146</sup> were children and young people in foster care, aged 10–17 years, who were showing complex or severe emotional difficulties or challenging behaviours, and whose placements were unstable, at risk of breakdown, or not meeting their assessed needs. Children in the study by Staines *et al.*<sup>667</sup> were aged 5–14 years, who had been in a placement and provided by the IFA participating in the study for > 1 year. All of the children had been maltreated, with most having experienced more than one form of abuse.

## Interventions

Biehal *et al.*<sup>145,146</sup> evaluated Multidimensional Treatment Foster Care for Adolescents (MTFC-A), described as a 'wrap-around multimodal foster care intervention for children with challenging behaviour'.

The IFA in the study by Staines *et al.*<sup>667</sup> incorporated a therapeutic approach to its service provision, which recognised the importance of individual therapeutic work with children, but focused the efforts of therapists on supporting foster parents and other staff within the agency. As the authors note, local authorities typically use IFAs for their more difficult-to-place children and this, together with the therapeutic focus, is why this study<sup>667</sup> was categorised as one that was concerned with enhanced fostering provision.

Intensive Foster Care [Project Intensieve Pleegzorg (PIP): project for intensive foster care] was the focus of Laan *et al.*<sup>671</sup> PIP provided foster carers with intensive and specialised counselling by a counsellor who also had access to an educational psychologist, and a psychiatrist or psychotherapist from a multidisciplinary PIP support team.

## Characteristics of treatment completers

In Laan *et al.*'s<sup>671</sup> analysis, intensive foster care placements were more likely to end prematurely for girls, for children with psychiatric problems and for children who had experienced neglect or sexual abuse in their biological family.<sup>671</sup> Staines *et al.*<sup>667</sup> and Biehal *et al.*<sup>145,146</sup> do not present systematic data on this issue.

## Acceptability

Of the three studies, Biehal *et al.*<sup>145,146</sup> was the only one to canvass children's views of the intervention. All three studies considered the views of staff and caregivers.

## Children's views

Using 20 purposively sampled and anonymised case studies, Biehal *et al.*<sup>145,146</sup> provide qualitative evidence of the acceptability of the intervention to young people. Two young people described the benefits of the points and levels system integrated in MTFC-A, as both had been experiencing considerable problems in care and at school, displaying anti-social behaviour. One boy explained how beneficial the programme was:

*I thought it was quite good. It was sort of a target to reach, sort of expectation, and it was sort of good, cos I wanted to sort of beat the expectation, sort of double it. So it was sort of a thing to push myself.*

*Young male; Biehal 2012, p. 180<sup>145</sup>*

Both boys interviewed felt secure and cared for in their new foster care setting and by the end of year both were retained in the placement. The other boy stated:

*They treat me nice and all that and they look after me, make sure I've got the right things . . . Like they're all kind to me.*

*Young male; Biehal 2012, p. 178<sup>145</sup>*

Biehal *et al.*<sup>145</sup> reported that there was a sense of genuine affection demonstrated by many carers, which can be absent in other residential care settings. One young person who had been referred for treatment for risk-taking behaviour had initially found it hard to adapt because of the contrast of the MTFC-A placement with previous care settings:

*It was hard . . . stricter, like trying to keep in your head certain things that you have to do every day . . . and for someone who's just come from a house where you had to look after their parents then to a children's home where you just run riot basically then come into this structured programme, it was very puzzling, difficult to get your head round, but then you get used to it (p. 182) . . . Mary concludes that 'Treatment foster care was the best thing ever, I can put my hand on my heart, if it wasn't for TFC I would probably be in a secure unit by now.*

*Young woman participant; Biehal 2012, p. 183<sup>145</sup>*

Some children reacted negatively to the points system during the early stages of the programme:

*It's really strict, it's really rubbish, I had all my stuff taken off me and I have to do stupid things I would have done anyway for points.*

*Young female participant; Biehal 2012, p. 195<sup>145</sup>*

One child felt that the system was artificial and refused to participate, as the system would not be introduced in a 'normal family'. Some less successful placements were included in the case studies, including young people with outcome scores that had showed little change or had deteriorated at follow-up. In three of the cases that demonstrated mixed outcomes for the children, all had experienced behavioural difficulties alongside serious emotional problems. Biehal *et al.*<sup>145</sup> conclude that, in some cases, MTFC may be less effective for young people with serious emotional problems. Although the programme does offer therapeutic support, the main focus is on behavioural change, which may not be the most appropriate intervention for these children. Placements that were disrupted early on, were also less likely to lead to positive changes in the children's outcome scores.

### Caregivers' views

The Staines *et al.*<sup>667</sup> study reports high levels of success, with 77% of foster carers reporting that the placement was going well after 12 months. Laan *et al.*<sup>671</sup> reported similar satisfaction levels (79%) with foster carers identifying the emotional support element of the counselling as the most useful.

In the study by Biehal *et al.*<sup>145,146</sup> many carers found the points and levels system to be a key contributor to the programme's success. Typical questionnaire feedback at the 3-month follow up included:

*Points and levels rewards are brilliant for her. See this on daily basis. It's a good thing, gives a second chance . . . Points system motivates the young person. Spending points, buying privileges brings the desired reward for good behaviour.*

*Foster carer; Biehal 2012, p. 192<sup>145</sup>*

A few carers felt that the programme did not suit some young people: children who did not accept that their behaviour was a problem.

Foster carers in this study<sup>145</sup> felt very supported, with the points and levels system creating a distance between the carer and the sanction for poor behaviour. Responsibility for discipline was shared with the team, and the carers were less likely to feel ultimately responsible for invoking punishment. This helped maintain positive relationships. There was also some evidence of carers feeling less stressed because of the 'depersonalisation of discipline' (Carer's view, p. 197).

Resource pressure was cited as a programme difficulty, in particular, staff shortages, which hampered delivery.

Finding appropriate education placements was also considered extremely important by caregivers. Children who had been excluded from school were found an environment to suit their needs, although there was no evidence of improvement in truancy or exclusion rates by follow-up.

Factors that helped placement progress included removing the young person to a new environment in a single placement away from antisocial influences; developing a warm and caring relationship with his/her foster carer; and the child accepting, and being motivated to participate in, the programme. Conversely, the programme could be hindered by the negative influence of birth families and the placement setting at follow-up.

### Staff views

The research by Staines *et al.*<sup>667</sup> on a therapeutic team parenting approach in an IFA found that social workers considered resource limitations, poor planning and lengthy decision-making to have a direct negative impact on the child.

### Summary: acceptability of intensive service interventions

We have very little research intelligence about the acceptability of intensive service provision, such as therapeutic residential care or treatment foster care, from the perspective of children and young people, and not much more from the perspective of carers. The data from West *et al.*<sup>651</sup> indicate that young people are more aware of their behaviour and its likely triggers (and distal causes) than one might imagine, and that training teachers to better appreciate the ways in which trauma impacts on behaviour might help to improve social and educational outcomes for maltreated children, particularly when combined with approaches to the curriculum and behaviour problems that minimise the adverse consequences of externalising behaviour (school expulsion) while maximising the opportunities to develop self-regulation and problem-solving, etc. (the Monarch Room).

The studies indicate that foster carers are able to better care for challenging children when provided with similar support and training. Although the results of the UK study of MTFC-A<sup>145</sup> were – at best – mixed, the majority of young people and carers were positive about them.

The study by Cunningham *et al.*<sup>649</sup> is of interest because of what it has to say about treatment engagement, and we discuss this later.

## Activity-based therapies

Five<sup>652,661,668–670</sup> studies presented qualitative data in relation to the acceptability of the three types of activity-based intervention: art and creative therapies, play therapies and equine-assisted therapy.

### Description of studies

#### Study designs

All five studies were qualitative studies. The study of art therapy<sup>651</sup> was primarily a descriptive account of a group for children in women's refuges, but included analyses of children's drawings and reports of the children's written evaluations of their group experiences. The study of equine-assisted therapy<sup>669</sup> incorporated participant observation, field notes and interviews (semistructured, ethnographic conversational plus unstructured interviews). Bannister and Gallagher<sup>668</sup> investigated the case histories of children referred to the NSPCC. Hill<sup>670</sup> examined case records, supplemented with 48 interviews with parents, therapists and children. Mishna *et al.*<sup>661</sup> interviewed children's parents and professionals using semistructured interviews at 6, 12 and 18 months following the start of treatment. Both Burgon<sup>669</sup> and Gilbert<sup>652</sup> wrote from the perspective of practitioner researchers.

## Samples

Samples were extremely small: just seven children in the study by Burgon<sup>669</sup> and six in the Bannister and Gallagher<sup>668</sup> study. Mishna *et al.*<sup>661</sup> interviewed the parents, teachers and therapists of 11 children who were undergoing play therapy. Hill<sup>670</sup> examined the cases of 13 children who were seen by four therapists. No sample size was available in the study by Gilbert.<sup>652</sup>

## Setting

Bannister and Gallagher,<sup>668</sup> Burgon<sup>669</sup> and Hill<sup>670</sup> conducted their studies in the UK. The studies undertaken by Gilbert<sup>652</sup> and Mishna *et al.*<sup>661</sup> were based in North America.

## Participants

The seven children in the study by Burgon<sup>669</sup> were in foster care; they had all experienced multiple abuse and presented with additional problems, such as school exclusion or involvement with youth justice. Those described by Bannister and Gallagher<sup>668</sup> were children who had, themselves, been sexually abused and who were sexually abusing other children.

The children in the study by Gilbert<sup>652</sup> had been exposed to domestic violence exposure, and those in the study by Mishna *et al.*<sup>661</sup> included children who had been exposed to domestic violence, plus children who experienced serious verbal, physical and/or sexual abuse, neglect by parents or neglect prior to international adoption by their present parents. The children in the study by Hill<sup>670</sup> had also been subjected to physical and/or sexual abuse and neglect.

## Intervention

The length of treatment varied with each intervention and population but in three of the studies, the therapy could last up to 2 years.<sup>661,669,670</sup> The weekly group art therapy reported in the Gilbert<sup>652</sup> study ran for 8 weeks.

In the study by Bannister and Gallagher<sup>668</sup> the treatment could last up to 8 months, although one child withdrew from treatment after 6 weeks, and, at the time of the study, some children were still receiving treatment.

Two interventions were based around creative activity.<sup>652,668</sup> The play therapy interventions described in the studies by Hill<sup>670</sup> and Mishna *et al.*<sup>661</sup> also involved parents. Burgon<sup>669</sup> helped to deliver an equine-assisted therapeutic intervention.

The intervention in the Bannister and Gallagher<sup>668</sup> study drew on art, play and drama therapy techniques, and included an educative-behavioural intervention to treat offending behaviour; carers were involved as much as possible in the treatment. Two of the six children were seen for 3 months, purely for assessment, but the authors regarded assessment as intrinsically therapeutic.

## Acceptability

None of these five<sup>652,661,668-670</sup> studies has anything relevant to say about treatment engagement or completion. Hill<sup>670</sup> notes that 'gate-keeping' was an issue when trying to access children's views in his research and feels that children's voices were not adequately represented.

## Children's views

The ethnographic study of equine-assisted therapy by Burgon<sup>669</sup> presented some data on children's experiences of this therapeutic approach. Working as practitioner-observer, Burgon<sup>669</sup> identified some positive feedback from the seven children with whom she worked, interpreting these experiences as empowering for them. One young person expressed this as follows: '[the horse] kind of made me feel like, you know, I'm the queen of the world kind of thing because I was higher up'<sup>669</sup> (p. 171). Another child described how she learnt to deal with feelings of anger because she knew that she had to be calm around the horses in case she frightened them. Two other participants demonstrated how trying something new

had helped them explore new opportunities with the confidence that they had gained from riding horses. These young people had gone on to begin training in an equine-related career.

Using written feedback from the final meeting of an art therapy group housed in a women's refuge, Gilbert<sup>652</sup> gives positive examples of some children's experiences, but the data are sparse and it is difficult to draw any conclusions about either acceptability or effectiveness for this group of children who had witnessed domestic violence. She notes that the children raised multiple issues of concern through the weekly art tasks, suggesting that the children were comfortable about doing this and that such group work might provide a fruitful platform for therapeutic work. Unfortunately, this was not the purpose of the group, and no information is provided that addresses the group's effectiveness, which Gilbert<sup>652</sup> acknowledges as a significant gap.

Bannister and Gallagher<sup>668</sup> report mostly positive views of the intervention but one child had found it difficult to discuss the abuse and felt that the intervention had not helped their own abuse to stop.

### Caregivers' views

The art therapy for child witnesses of domestic violence was timed to coincide with their mothers attending a therapy session (which meant that babysitters were not required). From a practical point of view, carers thought that this was helpful.<sup>651</sup>

Hill's<sup>670</sup> study of parent-therapist interactions highlighted the importance of therapists thinking carefully about the parents' needs, when and how it is appropriate to involve them in therapy, and when not, and the skills required to do so effectively. One parent described how betrayed she felt following the sexual abuse of her child, and how this had impacted negatively on her trust of all professionals. The ability to follow the parent's lead at the start of the therapy was identified as important by one therapist, and Hill<sup>670</sup> refers to this as 'interactional expertise' – valuing the expertise of others and combining it with professional expertise. It is also clear from Hill's paper<sup>670</sup> that parents also needed to be 'taught' how to engage with therapy and to recognise that they were part of the therapeutic process too.

Tensions were clear in the study by Mishna *et al.*,<sup>661</sup> who reported that it took parents some time to develop a relationship with the play therapists working with their children, typically around 1 year. The parents in this study<sup>661</sup> had a history of school failure, and were reluctant to engage with parent/teacher consultations; building a relationship with therapists who were school based was considered important in re-engaging the parents in a relationship with the school community.

In the study by Bannister and Gallagher,<sup>668</sup> caregivers observed improved behaviour, but this was not sustained in all cases. No acceptability data per se were obtained from carers or children.

### Staff views

Burton<sup>669</sup> described positive interactions with young people using horses as a means of initially communicating with them, with a shared goal of riding the horse safely and with enjoyment. She documented the growing confidence of the young people, who were very withdrawn at the start of the therapy, arguing that the children developed empathy and a strong bond with the animals with which they were involved.

The therapist delivering the art therapy intervention in the study by Gilbert<sup>652</sup> expressed frustration about the fluctuating membership of her group, with only two children regularly attending the group over an 8-week period. This is perhaps because it was an add-on intervention that was timed to coincide with the maternal therapy group.

The therapists in Hill's<sup>670</sup> study viewed parents as generally supportive, but in need of advice and support in how to deal with the complex difficulties that are associated with sexual abuse. Feelings of guilt and blame are common in parents of sexually abused children, and the therapists in this study<sup>670</sup> described how they worked to develop parent confidence in their own parenting skills. Only three fathers were involved in this

study,<sup>670</sup> but the therapists interviewed described how they took a proactive approach in involving them in their child's therapy.

Therapists in the study by Mishna *et al.*<sup>661</sup> identified some practical considerations. Staff agreed that delivering the play therapy intervention within a school setting facilitated the development of rapport with teachers and school administration staff, which was felt to be important to facilitate treatment. Further work was required to develop relationships with parents. During the first year, therapists reported difficulties with parents, which might be attributable to feelings of mistrust and guilt (e.g. as described by Hill<sup>670</sup>) or reluctance to deal with the school environment. Therapists describe how learning to engage and build trust with the parent 'typically took up to a full year before regular contact and a degree of trust was established' (p. 79).<sup>661</sup> There was also evidence of relationship strain between therapists and the teaching staff, which took time to resolve. Teachers valued therapist input into classroom behaviour management and also appreciated knowing more about the child's family life. More experienced therapists were able to develop a more effective relationship with teaching staff, which, in turn, helped teachers to develop some empathy for the child's family situation.

### **Summary: acceptability of activity-based interventions**

There are surprisingly few studies of the acceptability of this group of interventions, which, almost by definition, are designed to be attractive to children and young people. Possibly their acceptability is taken for granted. No study of the effectiveness of these interventions incorporated any data that were relevant to any dimension of acceptability, and the evidence base is also rather weak (see *Chapter 4*). The limited data available within these five studies (*Table 25*) suggest that children are amenable to engaging in these types of therapy (although we know nothing about those who decline). The most helpful data relate to the important issue of how therapists relate to parents about their involvement in their child's therapy, emphasising the importance of establishing rapport and being inclusive rather than exclusive about the content of therapy. The study by Mishna *et al.*<sup>661</sup> raises the possibility about the potential use of schools as settings for therapy, but no more than this. It does remind one of how difficult it can be for parents, who may themselves have had difficult experiences with education, to find liaison with teachers. Given the impact of maltreatment on children's educational progress, this is an important issue that is too rarely addressed.

## **Studies of general relevance**

Three<sup>653-655</sup> studies focused on issues relating to children and families receiving a range of services (*Table 26*).

### **Description of studies**

#### **Study design**

All three<sup>653-655</sup> studies analysed factors associated with treatment engagement and completion.

#### **Sample sizes**

Kolverola *et al.*<sup>653</sup> analysed the records of 118 children and their caregivers.

Risser and Schewe<sup>655</sup> collected data on 1365 children (and their caregivers) for whom services were sought from one of 12 sites between 2001 and 2010.

Murphy *et al.*<sup>654</sup> used data on 928 youth from the National Child Traumatic Stress Network (NCTNS) Core Data Set (CDS).

Participants included children from birth to age 21 years who received assessment and treatment services from one of 56 community sites between 2004 and 2010.

#### **Location**

All of the interventions were USA based.

**TABLE 25** Acceptability of activity-based interventions

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Bannister 1996 <sup>668</sup> UK	<p><b>P</b> Maltreated children sexually offending against other children; aged 11–12 years; 17% female; 83% Caucasian</p> <p><b>I</b> Creative therapy intervention (art, play, drama therapy techniques) with educative/behavioural intervention to treat offending behaviour; treatment lasted up to 8 months</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>N</i> = 6; <i>n</i> = 1 child refused treatment after 6 weeks	Pre- and post-treatment interviews with social worker, carer and child		<p><i>Children's views</i></p> <p>Five children viewed the intervention positively</p> <p>Most felt treatment length was 'OK'</p> <p>They enjoyed the creative elements and videotaping their progress</p> <p>One child found it difficult to talk about abuse, the treatment failed to stop their continued abuse and more help was needed</p> <p><i>Carers' views</i></p> <p>Two carers felt the treatment was too short</p> <p>All observed that the children were calmer/less aggressive but this was not sustained in all cases. Also reported a decrease or cessation in sexualised behaviour</p> <p>There was no follow-up included in the design but some progress was observed in two children, over time, who had received both creative and behavioural aspects of treatment. One child was investigated for sexually abusive behaviour during treatment and for violent behaviour post treatment</p>
					continued

**TABLE 25** Acceptability of activity-based interventions (*continued*)

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Burgon 2011 <sup>669</sup> UK	<p><b>P</b> Maltreated children in foster and residential care; 71% female</p> <p><b>I</b> 1–3 hours of equine-assisted learning and therapy/therapeutic horsemanship; weekly, fortnightly or intermittently over 2 years</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	Agency referred, <i>n</i> = 7	Qualitative interviews, field note observations	Qualitative, participative and reflexive ethnography; thematic analysis	<p>Motivation to work with horses led to:</p> <ul style="list-style-type: none"> <li>confidence building</li> <li>self-esteem</li> <li>self-mastery</li> <li>empathy</li> <li>new opportunities</li> </ul>
Gilbert 1988 <sup>652</sup> USA	<p><b>P</b> Children aged 2–14 years, who had witnessed or been victims of family violence</p> <p><b>I</b> 8 × 1 hour weekly behavioural group therapy, delivered in a women's refuge</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	Group attendance ranged from two to six children (average attendance <i>n</i> = 4)	Art qualitative feedback		<p>The children were found to process a number of their concerns through the modality of art</p> <p>Behavioural approaches and developmental and curative factors provided the therapist with mechanisms for structure and role</p> <p>Positive group evaluations were received from the children, the therapist, the shelter director and the parents</p>
Hill 2009 <sup>670</sup> UK	<p><b>P</b> Physically and sexually abused children aged 2–17 years; 46% female</p> <p><b>I</b> Individual play therapy with children; individual sessions with parents; joint sessions with parents and children; parent peer support group; individual parent support; variety of models ranging from 6 weeks to 2 years</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<p>13 families:</p> <p>Mothers, <i>n</i> = 12</p> <p>Fathers/stepfathers, <i>n</i> = 4</p> <p>Children, <i>n</i> = 28</p>	Qualitative case study of 13 cases comprising in-depth interviews with therapists ( <i>n</i> = 27), parents ( <i>n</i> = 18) and children ( <i>n</i> = 3); plus examination of case files	Thematic analysis	<p>'Interactional expertise' involves valuing the expertise of others (e.g. family member) and combining it with one's professional expertise</p> <p>It is important, particularly in building trust, to negotiate parental guilt and sensitivity to potential blame, enabling reluctant parents to become involved, and involving fathers</p>

Study and location	PICO	Sample size; response rate	Data collection – acceptability	Analysis	Findings
Mishna 2012 <sup>661</sup>  Canada	<p><b>P</b> Physically or sexually abused/neglected children plus those who witnessed domestic violence; age 4–10 years; 27% female</p> <p><b>I</b> School-based ecological treatment – independent play therapy 2–3 times weekly, 1 hour of therapist time with parents and teachers over 18–24 months</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 11	63 interviews were conducted at 6, 12 and 18 months with parents, teachers and therapists	Grounded theory approach	<p>School location viewed positively by all: easy to attend; could view child in context</p> <p>Some tensions reported between therapists, teachers and parents, which required resolution, which took up to 1 year</p> <p>Proposed guidelines for best practice</p>
N/A, not applicable; PICO, participants, intervention, outcomes, comparisons.					

TABLE 26 General studies

Study/location	Intervention; population	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Murphy 2014 <sup>654</sup> USA	<p><b>P</b> Physical and sexual abuse; mean age 12.1 years; 57% female; 58% white, 19% black; 24% other minority or multiracial background; 41% were of Hispanic or Latin American heritage</p> <p><b>I</b> Community treatment centres across USA, specialising in childhood trauma, providing EBTs</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 928	Examined the direct and indirect associations among physical and sexual trauma, child PTSD symptomatology (PTSD-RI <sup>750</sup> ) and treatment completion controlling for demographic variables and treatment site	Mediation analyses; linear and logistic regression modelling	<p>Maltreatment not directly related to the treatment completion</p> <p><i>Indirect associations</i></p> <ul style="list-style-type: none"> <li>physical trauma associated with hyperarousal, but hyperarousal did not predict treatment completion</li> <li>sexual trauma significantly associated with higher avoidance (in turn, associated with lower likelihood of treatment completion)</li> <li>sexual trauma significantly associated with overall PTSD symptoms (in turn, associated with treatment completion at a marginally significant level)</li> </ul>
Risser 2013 <sup>655</sup> USA	<p><b>P</b> Children aged 1–11 (<i>M</i> = 3.82) years, exposed to domestic violence and/or child abuse; 54% male; 51% white, 15.9% black, 15.4% Hispanic, 16.1% biracial, 0.8% Native American; 0.8% Asian American, 0.3% other</p> <p><b>I</b> Individual/family and multimodal therapy and psychoeducation; service length ranged from 0 to 55 (<i>M</i> 6.3, <i>SD</i> 5.4) months</p> <p><b>C</b> N/A</p> <p><b>O</b> N/A</p>	<i>n</i> = 529 treatment completers	<p>Background Information (BI)</p> <p>Completion of Services form (CSF)</p> <p>CBCL<sup>349</sup></p> <p>PSI<sup>367</sup></p>	ANOVA, MANOVA and regression analysis	<p>Child emotional and behavioural problems, general parent stress and income not correlated with treatment engagement</p> <p>Type of violence exposure, parent–child stress and race differed by category of treatment engagement</p> <p>Children exposed to both domestic violence and child abuse demonstrated higher rates of treatment completion and attended more sessions than children exposed to either domestic violence or child abuse</p> <p>Caregivers with higher levels of parent–child stress were more likely to engage in treatment</p> <p>White children in the full sample completed treatment at higher rates than minority children</p>

Study/location	Intervention; population	Sample size; response rate	Data collection – acceptability	Analysis method	Qualitative findings
Koverola 2007 <sup>653</sup> USA	<p>Eclectic – individual and group both child and caregiver and FT (including siblings, spouses and grandparents)</p> <p><b>P</b> Physical, sexual abuse and neglect (41.5% also witnessed domestic violence); mean age 9.6 (SD 3.76) years; 44.2% female; 73% African American, 24% Caucasian; 1% Hispanic</p> <p><b>I</b> Paediatric outpatient mental health clinic</p> <p><b>C</b> N/A</p> <p><b>O</b> Treatment engagement</p>	$n = 118$	<p>Withdrawal metrics</p> <p>Children:</p> <ul style="list-style-type: none"> <li>• TONI-3<sup>751</sup></li> <li>• CBCL<sup>294</sup></li> <li>• CROPS<sup>752</sup></li> <li>• PROPS<sup>753</sup></li> </ul> <p>Caregivers:</p> <ul style="list-style-type: none"> <li>• PSI<sup>367</sup></li> <li>• ESI (Hall, unpublished)</li> <li>• BSI<sup>754</sup></li> <li>• SSQ<sup>755</sup></li> </ul>		<p>Three treatment groups identified:</p> <ul style="list-style-type: none"> <li>• non-engagers (20%), attriters (16%), compliers (64%)</li> <li>• no difference in children's race or gender or caregivers' gender by treatment attrition type, or referral source</li> <li>• non-engagers were older than attriters or compliers</li> </ul> <p>Attriters were more likely to live with their family of origin</p> <p>Very few differences in caregivers were observed, but caregivers reporting high child-related parental distress and high psychological distress were least likely to engage in treatment</p> <p>Families receiving multimodal treatment compared with individual/family-only treatment were more likely to comply</p> <p>Comprehensive study design and data collection methodology</p> <p>Measures used had evidence of reliability and validity</p> <p>Interventions clearly described although the eclectic nature of the IT makes results hinders generalisations</p> <p>Data analysis was appropriate and clearly presented</p>
ANOVA, analysis of variance; CSF, Completion of Services Form; EBT, evidence-based treatment; N/A, not applicable; SSQ, Social Support Questionnaire.					

## Participants

The participants in the study by Murphy *et al.*<sup>654</sup> had suffered physical as well as sexual abuse. In the Koverola *et al.*<sup>653</sup> study the children had been referred to outpatients with a history of intrafamilial violence, and those in the Risser and Schewe<sup>655</sup> study had been exposed to violence, including domestic violence. Ethnicity was reported in all studies, with the majority being white American.

## Intervention

Intervention type varied from individual therapy, group therapy and FT<sup>653,655</sup> to evidence-based mental health services for trauma-exposed children.<sup>654</sup>

## Acceptability

Quantitative analysis was undertaken to examine the direct and indirect associations among physical and sexual trauma, child PTSD symptomology and treatment completion in Murphy *et al.*<sup>654</sup> The data reported in the study by Koverola *et al.*<sup>653</sup> were collected through an archival chart review process. Data contained in the charts were drawn from comprehensive assessment protocols completed by the child and his/her primary caregiver, referral forms, progress notes and discharge summaries. Risser and Schewe<sup>655</sup> examined factors associated with treatment engagement and child outcome. No data are available on children's views.

## Characteristics of treatment completers

Murphy *et al.*<sup>654</sup> concluded that neither physical nor sexual trauma was directly related to the probability of treatment completion. Indirect associations were found: physical trauma was associated with hyperarousal, but hyperarousal did not predict treatment completion. Sexual trauma was significantly associated with higher avoidance symptoms, which, in turn, were associated with lower likelihood of treatment completion. Sexual trauma was also associated significantly with overall PTSD symptoms, which, in turn, were associated with treatment completion at a marginally significant level.

In the study by Risser and Schewe,<sup>655</sup> children were categorised into groups based on whether or not they attended any therapy session after the intake, terminated prematurely from therapy or completed treatment. Results demonstrated that child emotional and behavioural problems at intake, general parent stress and income did not differ by treatment engagement. Type of violence exposure, parent-child stress and race differed by category of treatment engagement. Children exposed to both domestic violence and child abuse demonstrated higher rates of treatment completion and attended more sessions than children exposed to either domestic violence or child abuse. Caregivers with higher levels of parent-child stress were more likely to engage in treatment. White children in the full sample completed treatment at higher rates than minority children.

Koverola *et al.*<sup>653</sup> found no differences in children's race, gender or caregivers' gender by treatment attrition type; 60.5% of the sample were legally mandated to participate in treatment, but whether treatment was court mandated or voluntary was not associated with a likelihood of engaging in, or completing, treatment [ $\chi^2(2) = 0.1$ ;  $p = 0.95$ ].

There were some baseline differences in compliers, dropouts and non-engagers in Koverola *et al.*<sup>653</sup> The mean age in the three groups was significantly different [ $F(2,116) = 4.0$ ;  $p = 0.02$ ]. Non-engagers were older than both attriters and compliers ( $M = 11.1, 9.5$  and  $8.0$  years). Attriters were more likely to be in the family of origin than non-engagers or compliers. Families referred for child abuse in this study were also more likely to comply with treatment than those who were referred for domestic violence (67% vs. 33%, respectively) [ $\chi^2(2) = 5.6$ ;  $p = 0.06$ ]. There were very few differences found among caregivers of attriters, completers and non-engagers. Caregivers' self-reports revealed that caregivers of completers do not experience significantly higher levels of social support and daily stress than caregivers of attriters or non-engagers ( $F = 0.5$ ;  $p = 0.63$ ;  $F = 0.7$ ;  $p = 0.52$ ). In addition, they do not report higher levels of internalising or externalising behaviour problems or post-traumatic symptoms in their children ( $F = 0.5$ ;  $p = 0.59$ ;  $F = 2.9$ ;  $p = 0.05$ ;  $F = 1.8$ ;  $p = 0.17$ ). Differences were found in relation to psychological distress and parental distress. Caregivers reporting high child-related parental distress [ $F(2,32) = 3.9$ ;  $p = 0.03$ ] and

high psychological distress [ $F(2,70) = 3.3$ ;  $p = 0.04$ ) were least likely to engage in treatment. No differences were found with regard to children's self-report of post-traumatic symptoms or cognitive functioning ( $F = 0.3$ ;  $p = 0.71$ ;  $F = 0.7$ ;  $p = 0.49$ ). When treatment modality was examined, findings revealed that families were more likely to complete treatment successfully if they received multimodal treatment relative to individual or family-only treatment [ $\chi^2(2) = 7.6$ ;  $p = 0.01$ ].

### Caregivers' views

The majority of the mothers interviewed by Koverola *et al.*<sup>653</sup> were reluctant to discuss the abuse because of fear that it had not happened. Some also felt vulnerable because of how therapists perceived their reactions – they either felt overprotective or too careless that abuse had happened. Most expressed positive opinions about treatment and felt that they understood their children better, had new ideas about possible solutions and valued the contributions made by the team.

### Staff views

Conflicts associated with alleged abuse had been reduced in  $n = 20$  cases in the study by Koverola *et al.*<sup>653</sup> Alleged perpetrators who had engaged in therapy expressed relief being able to talk about it in a non-judgemental setting. Those who did not view the intervention positively felt that mothers had formed a coalition with the therapist.

### Summary

We consider the relevance of these data in the concluding section of this chapter.

## Summary: key messages about acceptability

Insofar as the evidence permits, we have summarised data on the acceptability of particular kinds of treatment above. In this final section, we consider overall messages from the evidence presented above.

### What the studies said

The included studies approached acceptability in a number of ways. Some framed it in terms of client satisfaction, often using questionnaires that required respondents (usually caregivers) to answer by scoring statements on a Likert scale, representing views from 'not at all (satisfied)' to 'completely (satisfied)'. Typically, they covered issues such as the respondent's relationship with the therapist, the perceived relevance of the therapy and the perceived helpfulness of the therapy and therapist. But, of course, this measures acceptability only for those who accept services. Findings from these studies tell us nothing about how acceptable a service or therapy is to those who have not taken up the offer. Did they not accept help because the help on offer was not something they saw as relevant, or otherwise acceptable to them? Or was it for other reasons, such as an inability to travel to the service, to secure time off work or because someone else stopped them attending? Few studies have investigated the reasons why maltreated children and their carers decline services.

Engaging with therapy is often deemed to be an implicit marker of acceptability, and dropping out of therapy an implicit marker of dissatisfaction or unacceptability. Again, without asking them, one cannot be sure why people drop out of therapy or other kinds of help, and relatively few studies present such information, if indeed they obtained it. Furthermore, engagement [and disengagement (or 'dropout')] are defined in different ways. Often, in the studies we reviewed, researchers excluded from the final analyses all of those who did not receive a certain 'dose' of therapy. Although this *might* make sense from the point of view of assessing *impact*, it leaves unanswered questions about why some people complete therapy and others leave early. Is it because the therapy is not helping, or is it because the client feels better and in no further need of help? Or is it for reasons unconnected with the therapy? And do those who drop out of *this* therapy continue without further support or do they seek it, and accept it, elsewhere?

In controlled studies of the effectiveness of psychosocial interventions, concerns about group equivalence is often the driving force behind those that document reasons for dropout. Researchers are concerned to identify any evidence of differential dropout between the intervention and comparison groups, and any evidence to suggest that the reasons for dropout are attributable to factors associated with a particular intervention or study arm, both of which might confound the results of the study. Rarely, however, do the lists of reasons include attitudes towards the therapy. Rather, they concentrate on factors such as moving placement, lost contact, refusal, all of which – from the point of view of acceptability – raise more questions than they answer.

Examining dropout in controlled effectiveness studies is further complicated because it is often difficult to disentangle the effect of the interventions offered from those of participating in the study, that is, are the demands of therapy unacceptable or the demands of the study design? This may be particularly true of randomised trials, for which potential participants may hope to be randomised to receive (or not receive) the intervention, and opt with their feet when allocated to the unwanted arm of the study. This is one reason why uncontrolled studies are helpful in exploring acceptability.

### Definitions matter

The studies in this review examined the phenomena of treatment engagement, dropout and completion using differing definitions, ranging from percentage of client-attended sessions to 'last appointment missed'. This needs to be borne in mind when considering their results, as variations in definition impact on the apparent evidence base relating to the prevalence and predictors of attrition.<sup>756</sup>

In addition to the inherent heterogeneity across studies (in relation to location, samples, settings, staff profiles, factors explored, etc.), differential approaches to defining core concepts make it particularly challenging to synthesise the findings of the included studies.

### Treatment completion and dropout

How one conceptualises treatment completion dictates how one defines premature treatment termination or dropout. This, in turn, can change the answers that research studies provide to questions about treatment acceptability. Even defining completion is not straightforward. Some researchers define it in terms of attending all sessions. Although one cannot assume that full attendance is equivalent to *engaging* with treatment (turning up at a lecture is not synonymous with listening or learning), it may be a reasonable indicator that someone is finding therapy helpful or expecting it to be helpful. It may indicate that someone is probably an active participant, although this may not be a reasonable assumption for children who might have no choice. In contrast, defining lack of success as lack of engagement is, at best, tautologous. Timmer *et al.*<sup>656</sup> provide an example of the problem. In this study<sup>656</sup> of PCIT, parents were considered to have *completed treatment* once they:

- had met the mastery criteria for the relationship enhancement element of the programme
- could demonstrate compliance commands from their children
- could successfully implement a discipline procedure, and
- could show maintenance of skills that they had acquired in the first phase of the programme.

In this study,<sup>756</sup> failure to comply with all of these tasks was categorised as early termination, but this was essentially synonymous with programme effectiveness, thereby stacking the odds in favour of a positive result for the efficacy of the treatment being assessed.

Some studies define completion in terms of 'dosage', by calculating the average number of sessions attended and setting a minimum threshold. Theoretically, this is often argued on the basis of evidence from earlier studies suggesting that a minimum level of exposure is necessary for a certain intervention to have an effect.<sup>757</sup> So, for example, Laan *et al.*<sup>671</sup> defined premature termination of intensive foster care placement as those placements that ended within 2 years of inclusion within the intensive fostering service. In this case, the authors acknowledge that this is 'something of an arbitrary criterion', based on

the belief that fostering can postpone a residential placement and postponement of at least 2 years is deemed a success. The children in this study<sup>757</sup> were predominantly learning disabled children, the remainder having serious physical impairments or health problems. All were in out-of-home placements as a result of maltreatment or inadequate parenting. Yet others use definitions such as 'termination with therapist approval or mutual agreement'. Some might see these definitions of completion as a source of bias. Taken as a whole, these factors probably account for some of the contradictory messages that appear across studies, but perhaps make some of the consistent messages more important.

Although no intervention can demonstrate 100% effectiveness, the odds of success should arguably not be estimated without consideration of the factors that cause those it is designed to help to decline or drop out early. The reasons for both might reflect factors that are only indirectly linked to the intervention (relationship with therapist, service setting, time of day) but are important to know and understand.

### Treatment engagement

Almost no study addressed the issue of treatment engagement, which is also subject to various definitions, some of which can run the risk of being used almost interchangeably with treatment success, that is, failure is explained in terms of failure to engage, when – in some circumstances at least – engagement might be a function of service or therapist attitude and behaviour.

Engagement can be used to refer to a variety of closely related things. Most usually it refers to someone's commitment to the therapeutic process and active participation in it. As Cunningham *et al.*<sup>649</sup> point out, it is 'related to other concepts such as readiness to change, rapport, motivation, working alliance, and collaboration and compliance' (p. 64). As such, measures of engagement (the focus of this study) have looked variously at clients' motivation for, and expectations about, treatment; the client-therapist relationship; and client behaviour within therapy.

Expectations of treatment may act as facilitators or barriers to participation in treatment, for example believing that treatment will – or will not – be helpful, recognising the need for treatment compared with failing to see a problem to be resolved.

On the basis of the wider therapeutic literature, establishing rapport with the therapist or with care staff is probably a necessary prerequisite of achieving therapeutic change, but it may present particular challenges with reluctant, ambivalent or involuntary clients. Cunningham *et al.*<sup>649</sup> noted that engagement by young people in the RTCs they studied required continual effort because the process of engagement was unstable and required constant 'refreshing'. Few studies in this review of psychosocial interventions gave much attention to this aspect of effective interventions, with only a handful referring (in passing) to strategies such as motivational interviewing, and none to the wider challenges of engaging young people in therapeutic interventions.

What the study by Cunningham *et al.*<sup>649</sup> emphasises is the importance of professionals thinking theoretically and strategically about what they need to do to facilitate engagement, and how this might vary with context (service setting, timing, voluntary/compulsory and therapy type) and indeed, influence service outcomes. For the population of seriously maltreated children, engagement may require particular thought and care, given the fracturing of trust and the damaged ability to form relationships that is so much a feature of these young people's lives.

### Key themes

We first consider some of the findings from the studies that were designed to explore issues of engagement and treatment exposure. We then summarise some of the key themes to emerge from our thematic analysis of all included acceptability studies, recognising that these need to be considered in light of the issues discussed above. The studies discussed in this section are illustrative – further detail can be

found in the relevant sections dealing with intervention groups. As indicated above, studies that used data from key stakeholders typically gathered information from parents or other caregivers and therapists, rather than children themselves. However, parent and therapist reports of experiences raised a number of issues that could clearly impact on a child's engagement or retention in therapy.

### **Keeping the first appointment**

Many children who require help do not receive it because they are not referred for appropriate services (see *Chapter 6*). It is also the case, however, that significant numbers of those referred for therapy do not avail themselves of it.

The study by Haskett *et al.*<sup>657</sup> was one of a few studies that were concerned specifically with understanding the reasons why children referred for treatment following abuse failed to keep their first scheduled therapy session. This early American study of referrals for children who had been sexually abused found that ethnicity (African American) was significantly associated with failure to attend, together with whether or not the referral was to a public or private centre, whether or not clients had access to a telephone and whether or not the mother agreed that the family needed counselling. However, these factors accounted for only some 11% of the total variance between families who failed to keep that first appointment (45 out of 129) and those who turned up. This points to the importance of factors *not* measured in this study, such as practical obstacles, for example parental illness or forgetting appointments. Mothers who felt that the whole family could benefit from counselling were more likely to attend the first treatment session, and the authors highlight the potential significance of mediating variables that might inhibit attendance, such as failing fully to understand the abuse or feelings of guilt and self-blame.

More recently, Lippert *et al.*<sup>648</sup> undertook a study of the factors differentiating those families who decline therapy from those who initiate therapy. In this study,<sup>648</sup> 46% of families of sexually abused children who were referred over a 6-month period did not commence therapy within 2 months. In addition to measures of child behaviour, family functioning, data from child protection service records and information provided by caregivers, this study<sup>648</sup> also used semistructured interviews to explore caregivers' support networks; their perceptions of, and relationship with, the child; and perceptions of therapy. Analyses of the administrative data indicated only two significant variables, namely the child's ethnicity and neglectful supervision by the mother. The odds of entry to therapy were just over two times greater for non-black children than for black children ( $p < 0.099$ ) and just under 14 times greater for children whose mothers were accused of neglectful supervision ( $p < 0.01$ ). Caregivers from both groups reported low levels of child problem behaviours as measured by the ECBI,<sup>311</sup> but those who declined therapy had lower scores on the SFI,<sup>747</sup> indicating higher functioning. Interview data suggest that mothers who declined therapy were possibly less child centred than those who attended, that is, 'decliners' more often talked about 'going places' as what they enjoy doing with their children, in contrast to 'attenders', who more often talked about playing with the child, talking, singing or engaging in other activities, such as reading or doing homework. Although most caregivers (80%) initially saw the relevance of therapy, the authors hypothesise that 'those who decline child therapy may overlook its emotional benefits', as these caregivers less frequently described therapy in terms of emotional help or change (p. 866). Perceived barriers to therapy identified by caregivers were practical ones, such as location (see below). Although neither of these studies<sup>648,657</sup> was conducted in the UK, both indicate the importance of addressing sociocultural factors, such as class and ethnicity.

In the study by Koverola *et al.*,<sup>653</sup> caregivers who, at intake, reported high levels of stress related to the caregiver role (as opposed to general stress) and high levels of psychological distress were least likely to keep the first therapy appointment after assessment. In this study,<sup>653</sup> concerned with children with a history of intrafamilial violence, the majority of participants (61%) were legally compelled to attend, but this was neither associated with a likelihood of engaging in, or completing, treatment. Few studies found any impact of mandatory, compared with voluntary, referral on subsequent engagement or attendance.

### Starting but not finishing

Of those who start treatment, significant numbers cease attending before therapy is scheduled to end. We identified a number of studies that specifically explored factors associated with dropout from therapy, and a number that undertook post hoc explorations of those children who dropped out of therapy in the course of the effectiveness study (see above). These studies simultaneously explored the factors associated with retention. Studies that explored treatment dropout or retention did so in very different ways, making it difficult to draw generalisable conclusions. This general problem is exacerbated by the fact that most of these studies have been conducted outside the UK, most usually in the USA.

Among the factors reported by individual studies or groups of studies are those in four key domains: (1) sociodemographic variables (age, ethnicity, family status); (2) maltreatment variables (age at onset, duration and severity); (3) child symptomatology/psychopathology (depression, PTSD, behaviour problems); and (4) family functioning/caregiver attributes or involvement. Typically, these were explored in relation to children who have experienced one kind of therapy (e.g. CBT) or one kind of maltreatment (e.g. sexual abuse).

### Correlates of treatment engagement and attrition

An early study<sup>647</sup> used regression analyses to investigate factors associated with the amount of therapy (unspecified) received by 81 girls who had been sexually abused (primarily by male family members). Horowitz *et al.*<sup>647</sup> found that earlier onset of abuse predicted more sessions of therapy, and more disturbance was associated with more treatment. Non-minority ethnic status also appeared to be associated with increased treatment, but this failed to approach significance once age at onset was added to the equation. Around 33% of the variance in total numbers of sessions attended could be explained by variables from three of the above domains, namely age at onset, number of types of sexual abuse (severity) and child depression.

The authors noted that their study<sup>647</sup> was biased towards families who had engaged with therapy, most of whom were recruited through Child Protection Services and who may have felt that they had little choice about attending. Bearing that in mind their findings raise some interesting issues, both for researchers and for clinicians. They speculate that the significance of children's abuse history may be attributable to therapists' expectations that children who are more seriously abused require more sessions, or indirectly from the ways in which their abuse influences their behaviour and affect. Although children's views were not sought, their parents reported a general pattern of initial reluctance or hostility towards therapy, which became more positive as therapy got under way, something reported in other studies. This may reflect children's initial fearfulness or anxiety when faced with something unknown to them, and which attenuates as they establish a relationship with the therapist. In this study, the same pattern was noted by the children's therapists. In contrast, parents may initially see treatment as something to be welcomed but subsequently feel threatened by the child's developing relationship with the therapist and the issues that therapy might raise within the family. From a research perspective, the authors noted that, in contrast to other studies of treatment dropouts, 'family functioning' did not appear to be correlated with length of time and treatment. They suggest that researchers may be assessing different family characteristics using the same general term, and that multiple measures of family functioning would be useful in helping to identify which families are at risk of dropping out, and how this might be prevented.

Other studies identify maltreatment severity as predictive of treatment completion. In Boisvert 2008,<sup>658</sup> higher dropout (those completing fewer than 15 sessions) was associated with higher levels of sexual abuse impact, behavioural difficulties, social difficulties and delinquency. There were no family characteristic differences identified between treatment completers and non-completers. In Chasson 2013,<sup>630</sup> children who had been abused by an adult figure, had been physically injured, and had been subjected to more than one event, were more likely to complete treatment. Even if true of all studies or interventions, knowing these associations is not sufficient to enable one to know *what* steps to take to enhance treatment completion.

Two<sup>631,634</sup> studies report correlations between the child and/or caregiver's age and treatment completion, although it is worth noting that the study by Cross *et al.*<sup>634</sup> is primarily a report of *study retention* rather than *treatment retention*, and it is particularly difficult to disentangle the relative effect of study requirements. Eslinger *et al.*<sup>631</sup> found that as caregivers' age increased by 1 year, the likelihood that both child and caregiver would fully complete treatment increased by 11%, whereas the chance of completing treatment decreased by 80% as the child's age increased by 1 year. Similar findings were reported by Cross *et al.*,<sup>634</sup> who found that older caregivers were more likely to continue with treatment, but that the older the child was, the less likely they were to engage in treatment (see also the study by Koverola *et al.*<sup>653</sup>).

In a study<sup>633</sup> comprising a retrospective chart review of a sample of children referred for TF-CBT following sexual abuse, only 254 of 490 referred for therapy (52%) started treatment and only 98 (38% of the 254) completed therapy. The authors found no evidence that ethnicity, severity and duration of abuse, SES or placement in foster care influenced use of therapy, which the authors attribute to agency factors, for example a sliding scale of payment, accepting all insurance plans and an integrated model of assessment and treatment. What was significant was whether or not the caregiver themselves participated in counselling services, either individual therapy or FT. When this happened, the young person was more likely successfully to complete the recommended therapy. The authors attributed this to the fact that non-offending caregivers often have mental health problems that negatively impact on family functioning in ways that can interfere with treatment completion. In this agency, the psychosocial assessment was designed to identify such risk factors and, when identified, referral was made for the caregiver. When these carers 'bought in' to therapy, they believed that this was associated with enhanced motivation to continue with counselling (for the child) and provide them with important support. Of course, it may also be simply that parents who received help for the negative impact of sexual abuse on themselves were more able to provide adequate care and attention to the child. The bottom line is that in this study,<sup>633</sup> 48% families referred to this agency did not start treatment and, of those who did, 62% did not complete therapy. Another 532 families were referred to other services, but the study collected no data on service engagement for these families. The evidence about parental involvement resonates with a trend in the review of effectiveness studies – that parental involvement is associated with better outcomes.

### **Ambivalence about the value of therapy**

Parents whose children are referred for therapy following maltreatment may be apprehensive for a number of reasons. Non-offending parents may feel guilty at having failed to protect their child, and may be fearful of how they will be viewed by others. Those implicated in maltreatment may be even more trepidatious, anticipating censure. All parents may be concerned about what their child will share with the therapist, and how this might influence their relationship with their son or daughter. A number of studies have confirmed the importance of these, and other issues that matter to parents, which, if unaddressed, may prevent engagement with therapy, lead to premature termination or undermine its effectiveness. Few studies explored these issues, and none did so with respect to the interventions that appear most promising from the point of view of effectiveness. Here are some examples.

In a study of the involvement of parents in their children's play therapy (seen primarily through the eyes of therapists), Hill<sup>670</sup> notes that some parents expressed an initial lack of trust in the professionals and concludes that rapport and trust is something that the therapist needs explicitly to address. One mother described her experience as a parent of a sexually and physically abused child receiving play therapy as follows.

*You are going through such emotional upheaval that you don't trust anyone. And there are definitely some real difficulties with some professionals. You need honesty . . . you need to be sure that they will be open with you.*

*Hill 2009, p. 1<sup>670</sup>*

Therapists decided whether or not mothers should be involved in the child's therapy, sometimes deciding against it because of problems in the mother–child relationship. Clearly, communicating those decisions

to mothers in ways that do not result in them withdrawing the child from therapy is a complex business. The guilt that mothers may experience may lead them to imagine that professionals are developing very negative assessments of their parenting, even when therapists are saying otherwise:

*I felt so bad about myself that I thought they must be thinking the same thing even if they were smiling nicely. I think I was very frightened.*

*Mother; Hill 2009, p. 390<sup>670</sup>*

Hill<sup>670</sup> also found that, for some mothers, relief at securing help may result in a metaphorical 'handing over of responsibility' to the therapist, when their involvement is essential to securing a good outcome. In Hill's study,<sup>670</sup> involving fathers presented particular challenges. There were only three fathers in his small sample, none of whom had much to do with therapy. The singleton father who became involved did so because the therapist conveyed a clear expectation that he *should* be there, rather than leaving it as an open invitation.

Scott<sup>677</sup> used in-depth interviews to explore the views of a small group of parents ( $n = 10$ ) whose children were receiving counselling. Twelve of the 17 children in these families had been sexually abused. Parents expressed mixed views about the value of talking about painful feelings. Some worried about their children having to relive traumatic experiences in therapy, whereas others felt that this process was helpful. Scott<sup>677</sup> highlights the importance of managing parents' expectations, as some parents clearly had quite unrealistic expectations. For example, some parents expected particular changes in children's behaviour as a result of therapy and were frustrated and disappointed when these did not occur. Typical concerns described by parents included the following.

- Some parents had high levels of anxiety, but felt unable to discuss these with the therapist because they were unaware of what was being discussed with their child.
- As discussed previously, issues of parental guilt that the abuse had been able to happen – once this issue was addressed, it became easier to talk about.
- Some parents felt ambivalent about the therapist's 'authority'; counselling for some families was compulsory once social services were involved, and they felt that things were taken out of their control.
- Parents also reported being distanced from the criminal justice process; once legal action was taken, it was important for parents to be briefed about any progress on this front.

Similar concerns about 'wanting to know what was happening' in the therapy were reported by De Luca *et al.*<sup>170</sup> and Grayston and De Luca<sup>171</sup> Parents interviewed by De Luca *et al.*<sup>170</sup> wanted more feedback from therapists about their child's group therapy, and would have welcomed the opportunity to observe treatment and receive regular updates by phone. Half of those surveyed in the study by Grayston and De Luca<sup>171</sup> said that more feedback would have been helpful.

Tjersland *et al.*<sup>673</sup> reported how vulnerable some parents felt, worried that the therapist would think they were too overprotective or too careless that abuse had been allowed to happen.

Where parents had clear expectations of treatment, satisfaction levels were higher. Parents who felt part of the therapeutic team or part of the treatment process experienced less tension with the team.<sup>629</sup> Evidence from studies of the effectiveness of cognitive-behavioural studies confirm the value of parental involvement.

### Addressing the needs of caregivers

There is some evidence that caregiver distress is correlated with treatment attrition and that, if this is addressed, children are more likely to complete therapy. For example, Koverola *et al.*<sup>653</sup> conducted an exploratory study examining the association between attrition and retention and (1) demographic and referral characteristics; (2) child functioning; and (3) caregiver functioning. The sample included 118 children, aged 4–17 years, referred for treatment of child abuse and/or exposure to domestic violence. They classified children into three distinct groups: those who failed to engage with treatment at all ( $n = 24$ ;

20%); those who started but failed to complete treatment ( $n = 19$ ; 16%); and those who completed treatment (defined as those who were 'compliant with treatment and who completed their recommended course of treatment'<sup>653</sup> p. 26). The 75 children who completed treatment completed between 1 and 55 sessions (median eight sessions). Data were collected through an archival chart review. The only factors that predicted treatment completion were high levels of child externalising behaviour and receipt of multimodal treatment, rather than individual or family-only treatment. In this agency, all children and their caregivers received one of three treatment modalities: IT for both child and caregiver, FT or multimodal therapy. Multimodal therapy included individual therapy and FT, and family advocacy services, aimed at helping families deal with practical issues such as court orders, housing, financial assistance, job training and school resources. Essentially, the family advocate worked with families and community agencies to ensure that nothing prevented the family from engaging in treatment. This included providing in-home services during crises. The authors hypothesise that high levels of externalising behaviour may essentially ensure that the child's voice is heard and may generate more concern from parents, teachers and indeed juvenile justice agencies. Conversely, the authors suggest that caregivers (and others) may underestimate the adverse consequences of internalising or PTSD symptoms, and that it might be important to provide psychoeducation regarding the importance of intervention for such children, even when their symptoms do not interfere with day-to-day life. Similarly, using multinomial logistic regression, Eslinger *et al.*<sup>631</sup> were able to predict whether a family would complete treatment, receive a 'moderate dose' or drop out early, using the variables age of child, age of caregiver, child's baseline score for externalising behaviour (CBCL<sup>297,349</sup>) and child's baseline maximum post-traumatic stress score (TSCCA<sup>325</sup>). Older caregivers with younger children were more likely to complete treatment, and older caregivers who identified higher ratings of post-traumatic stress and externalising behaviour were more likely to receive a moderate dose.

Many of the qualitative studies canvassing the views of caregivers stressed the importance of speaking to other parents with similar crises in their own families, and the strength they could draw on sharing these similar experiences, knowing that they were not alone (see, for example, the studies by Powell and Cheshire<sup>662</sup> and Costa *et al.*<sup>678</sup>):

*I always find it very helpful to meet other mums who've been through this. You automatically kind of feel like you belong. It is a terribly isolating experience, and though you may have friends you can talk to, they don't really understand the true horror or the system or what you've been through.*

*Powell 2010 (reproduced with permission), p. 149<sup>662</sup>*

On a rather different note, Mishna *et al.*<sup>661</sup> described difficulty in forming alliances between the teacher and therapist, and between the therapist and parent, in a play therapy intervention based in a school. These difficulties took up to a year to resolve, but once the needs of the parents were considered as part of the therapeutic process, relationships improved – one therapist described their thoughts, thus:

*I started realising that something had to shift in my relationship with this parent and I think it shifted because I was able to hold her in my mind as well as him.*

*Mishna 2012, p. 79<sup>661</sup>*

### Talking to therapists

It is clear that a good relationship between a young person and therapist will benefit treatment. However, respondents in the included studies reported mixed experiences of the client–therapist relationship. Some participants reported difficulties with this relationship, which required significant investment, and some considered that therapists were too analytical and not adequately child focused. Children valued the personality characteristics of therapists highly, whereas parents were more interested in evidence of appropriate qualifications.

A number of children and young people were initially resistant towards therapy and found it difficult to articulate their feelings and talk about what had happened to them (see, for example, Haight 2010<sup>175</sup>). One child in the study by Sudbery *et al.*<sup>663</sup> put it like this:

*Having to talk to people about your problems. Having to share your feelings with them as well, which brings out a lot. I don't like doing talking about stuff when they want you to talk about it, it feels sad. It really upsets me, scares me.*

*Sudbery 2010, p. 1543<sup>663</sup>*

The respondents in this study<sup>663</sup> had spent time in residential care and were being interviewed some years later. Young people in the study conducted by Nelson-Gardell<sup>638</sup> also said how difficult they had found it to talk about their abuse but that doing so was helpful.

In the study by San Diego *et al.*,<sup>680</sup> there was some suggestion that children may have had low treatment expectations, and felt that therapy would not help them. If this is a problem (and the young people in our advisory groups identified it as an issue) then it is something that could be improved by placing a greater emphasis on preparation for treatment. However, no study appears to have explored the treatment expectations of maltreated children.

For children and young people living in a therapeutic care setting, the issue of acceptability is perhaps more complex. Although by no means always the case, young people in therapeutic residential care are often not there by choice, and the (often very troubled) experiences that lead to their placement make it extremely difficult for them to engage with care staff or those offering a specific therapeutic service. One UK study<sup>666</sup> interviewed 16 young people who had previously lived in a therapeutic children's home. These former residents were almost certainly not a representative sample but they were generally positive about their experiences. They valued the relationships with staff, and many of the leisure and therapeutic activities provided during their time in the home. Here too, some respondents commented on the length of time it took to build up trust with staff but, having done so, their ongoing contact with them remained important. Only one interviewee expressed a different view, pointing to something that goes to the heart of the adverse consequences of severe maltreatment and the challenges facing those providing substitute care and therapy.

*... in care, you are craving this kind of love but you never really get it ... The one thing you need most is to feel genuinely loved. You never quite got that.*

*Gallagher 2012, p. 440<sup>666</sup>*

Four<sup>641–643,645</sup> studies examined young people's gender preference for their counsellor. Most female participants expressed a preference for a female counsellor pre treatment; however, in those studies<sup>641–643,645</sup> that measured preferences post treatment, gender appeared to matter less. One<sup>643</sup> study presented evidence that female counsellors verbalised more than their male counterparts but concluded that gender did not play a significant factor in treating girls. Another study<sup>645</sup> suggested that the type of questions asked (specifically sexual abuse-focused ones) was more important than counsellor gender. Young people in one of our advisory group consultations said that they thought gender might not matter per se, but that a young person might wish to talk to someone of a different gender than the person who had maltreated them – again, choice being important.

### **Children in foster and adoptive placements**

Eslinger *et al.*<sup>631</sup> found that children in foster care were more likely to complete treatment than those living with biological or adoptive parents, perhaps because of the degree of external scrutiny by social workers of these children and their progress. As Koverola *et al.*<sup>653</sup> observe, in order to ensure that children attend therapy, there needs to be at least one caregiver who is sufficiently motivated to take them (or ensure that they are taken) and possibly to participate in treatment. In violent families, there may be no-one able or willing to do this, and this may be true of families in which children are presenting with other forms of

maltreatment. However, not all studies found such a clear relationship between treatment completion and living with foster carers.

In a UK study conducted by Staines *et al.*,<sup>667</sup> the research team investigated the supports and services provided to children and their foster carers by one IFA. Children placed in IFAs are typically particularly challenging, and IFAs make much of the additional support they provide to parents compared with those foster carers registered with the local authority. This IFA described its approach to fostering as inherently therapeutic and, although recognising the importance of individual therapeutic work, IFA therapists focus their attention on 'helping to create 'therapeutic placements' through the application of their particular skills in assessment and consultation to carers and staff'<sup>667</sup> (p. 319). In this broad definition of therapy (seen as the impact of the whole organisation on the young person), foster carers have a formally recognised role as members of the therapeutic parenting team. The approach seemed to address concerns often expressed by foster carers that they are not adequately informed about the child or what is happening, not consulted, and excluded from therapeutic work.

*The parenting team was seen to be an essential part of the information-sharing/decision-making process and many carers commented on the inclusive and respectful nature of the team: 'We are always discussing things together and we all make decisions on how to meet the child's needs. We always feel equal.'*

*Staines 2010 (reproduced with permission), p. 8<sup>667</sup>*

Providing foster care for children with a challenging placement profile, the majority of whom displayed difficult behaviour, this approach contributed to providing stable and successful placements, with 77% of foster parents feeling the placement was going 'very well' after 12 months. Almost all (97%) foster carers felt that they were a valued member of the team and that their opinions mattered, although the authors suggest that this is perhaps more reflective of the experience of independent foster agencies rather than local authority-led foster care.

### **Other barriers to treatment engagement and completion**

A variety of practical obstacles can conspire to prevent children accessing therapy or benefiting from it. The physical environment – in terms of location and quality of meeting space – was raised in a small number of studies. Other practical considerations, such as transport costs, child-care facilities or expenses, were also reported.

Lippert *et al.*<sup>648</sup> examined the reasons given for non-participation (46%) in a sample of 101 children who were referred for psychotherapy following CSA. Reasons for declining included some factors we have already discussed, but also covered some important practical obstacles: work conflict (50%); inaccessible venue (40%); child was symptom free (15%); caregiver was busy (15%); and caregiver wanted to forget about abuse or let their child forget (15%).

The mothers of sexually abused children in the study of FT reported by Costa *et al.*<sup>678</sup> identified financial constraints as a barrier to support – particularly viewed in the context of primary earner perpetrators (fathers) being removed from the home.

The young people surveyed in the study by Kolko *et al.*<sup>644</sup> were perceived to be highly motivated to participate in services, and the children themselves reported moderate ratings about the need to address child and family goals during treatment. They identified parent factors as the largest obstacles to participating in therapy, selecting reasons such as 'parent was too busy to attend' and 'parent does not think counselling will help'. Clearly, this is relevant to the issue of accessibility of therapy for some young people. Although caregiver ratings were generally similar to those of the children, they assigned higher ratings to the severity of family problems and the importance of targeting child behaviour and competencies as treatment goals. Commenting on the limited number of children who were offered IT in this study, Kolko *et al.*<sup>644</sup> hypothesise that this may reflect caseworkers' perceptions that family or parent

services are more important for the improvement of children's adjustment, partly as a result of the risk assessment tool used by caseworkers. They suggest that, in this agency, some children who probably required services to address specific abuse sequelae or risk factors associated with their own behaviour did not receive it.

Children in the Tjersland *et al.*<sup>673</sup> study talked about other issues that made them reluctant to discuss their abuse, including having been threatened by the abuser; being afraid of telling their mother; and being concerned that they would not be believed. Nelson-Gardell<sup>638</sup> reported that 'being believed' by someone was considered by the sexually abused girls she interviewed as the thing that mattered most to them, experiencing it as intrinsically therapeutic.

Woodworth<sup>533</sup> highlights the problem of staff turnover. In this study,<sup>533</sup> as part of a move to be more cost-effective, college interns were used to provide therapy. Although keeping costs down, one unintended consequence is the increased risk, for some children, that the departure of someone with whom they had begun to develop a therapeutic bond may have a detrimental effect.

## Summary

### *The studies*

Understanding what makes a therapy acceptable is complex. The immense heterogeneity in those (relatively few) studies that have sought to ascertain what factors encourage people to seek therapy, to accept an offer of therapy, to actively engage with therapy and to 'stick with' therapy means that few unequivocally clear answers are to be found. The different ways of defining engagement, completion and attrition make synthesising the data very challenging, but this variation may be indicative of the need to take a more nuanced approach to thinking about attrition.

Chasson *et al.*<sup>482</sup> point out that treatment is not static and neither is symptom severity (and possibly other factors that influence engagement). In their study,<sup>482</sup> which explored the predictive value for dropout (from exposure-based CBT) of trauma-related symptom severity, they found that baseline symptom severity failed to predict dropout. In contrast, symptom severity measured just before termination was significantly associated with the number of attended sessions, and higher severity of depression, measured just before termination, was correlated with fewer treatment sessions, that is, immediate distress may be a trigger for dropping out of treatment. The implication for therapists working with children with mental disorders is that monitoring those factors that might impact on future attendance on a session-by-session basis could possibly help to prevent premature termination. This might be particularly relevant for exposure-based psychological interventions.

### *Synergies with the views of young people*

Some of the studies focused on issues that mattered to the young people in our advisory group, and some of the findings resonate with their concerns. For example, their concern that some children might be deterred from seeking help because they felt their situation too complicated or too serious for anybody to be able to help with is in keeping with findings that severity of abuse is an important factor in differentiating those who start (and complete) therapy from those who do not. The studies note the connection, but generally do little more than speculate about the mechanism of effect. It is possible that caregivers, as well as children, may have doubts about the ability of therapy to 'fix' what they may regard as 'unfixable'.

The pivotal role that parents and other caregivers play in ensuring the availability of therapy to young people, particularly younger children, was also recognised as an issue in our consultations, and was mirrored in the findings from the included studies. Some young people identified parents as a potential barrier to accessing therapy. Younger children are particularly dependent on having someone reliable and

willing to get them to the therapist, but even older children may be unable to avail of therapy if their parent objects, for whatever reason.

Only one of the studies included in this review mentioned the importance of being believed, but the concern about not being believed was a very significant issue for some of the young people with whom we talked.

Issues of confidentiality and trust appear not to have been systematically examined in studies of therapy for maltreated children. It is possible that both researchers and therapists take this for granted, and it is difficult to say how widespread a concern this might be for young people, but it perhaps merits more attention, from therapists if not researchers.

Given the limited resources available in children's mental health services, it is perhaps unsurprising that no study examined the issue of choice, but the potential benefits of involving children in discussions of therapy is something that young people identified as one way of enhancing engagement in therapy and might therefore be worth exploring further. Several studies talk about the process of therapy, and the considerable anxiety that some children experience at the outset. The suggestions made by the young people may help to alleviate these concerns for some children.

# Chapter 6 Discussion

## Aim of the review

This review sought to bring the highest standards of evidence synthesis to bear on a significant area of public health. Maltreatment adversely affects the development of children and young people in many ways, over long periods of time, and the cumulative consequences of maltreatment in early childhood can be particularly devastating. Despite recent emphases on the importance of early intervention, significant numbers of children continue to have to deal with the realities of physical and emotional abuse, physical and emotional neglect, and sexual abuse, whether directly or indirectly as the result of witnessing the abuse of others.

The review aimed to achieve a number of objectives. The first was to identify those interventions that are most effective for maltreated children, and the study was designed so that we might be able to address the issue of whether or not certain interventions were more effective than others for children with particular profiles of maltreatment, for example children who have been sexually abused, than for those who have been physically abused, and those who have experienced more than one form of maltreatment. Second, when the evidence suggested that two or more interventions might both be appropriate, we aimed to explore which might be the most likely to be effective. Again, we were mindful that some interventions might be more suitable than others for particular groups of children or for children and families in particular circumstances. Third, we sought to identify those interventions for which there was no evidence of benefit, or when the evidence suggested that they might result in harm. Fourth, we wanted to know whether different interventions were more accessible and acceptable than others, from the perspectives of both children and young people, and their caregivers. Finally, we aimed to present evidence about the economic benefits of available interventions, and to identify the potential value of undertaking future research.

In this final chapter, we present an overview of the evidence identified, which we discuss in the light of consultations with our advisory groups of young people, and with a PAG whose members came from a range of disciplines and service contexts, including foster parents. We conclude with a summary of what the evidence permits us to conclude in relation to the original objectives of the review, and identify implications for research and practice.

## Evidence base

The details of all of the included studies are presented in *Chapters 3 and 4*. Altogether, we identified 198 studies assessing the effectiveness of psychosocial interventions for maltreated children. Sixty-one of the studies were randomised or quasi-randomised trials; eight studies used a QEx design and a further 26 controlled observational designs. A total of 101 studies were uncontrolled. We drew on data from controlled studies when synthesising the evidence for the effectiveness of interventions. Only three<sup>116,145,146,155</sup> of the controlled studies were conducted in the UK.

The consequences of maltreatment have considerable implications for public services, including not only health, but also social services, education, criminal justice, employment and welfare. Despite this, we were able to identify only six studies assessing the cost-effectiveness of relevant psychosocial interventions, four<sup>198,613–615</sup> of which used data from a randomised trial and one<sup>612</sup> a decision-analytic model. Only two<sup>613,614</sup> of these studies were conducted in the UK (*Box 1*).

**BOX 1** UK evidence

Two of the 61 controlled trials identified were conducted in the UK.

Two out of the 10 economic evaluations were conducted in the UK.

Fourteen of all 73 studies providing information on acceptability were conducted in the UK.

For studies of accessibility and acceptability, we cast a wider net, and drew on evidence from studies irrespective of design. In total, we identified 73 studies, 19 of which also addressed the effectiveness of intervention. Some of these studies were specifically designed to systematically investigate the factors associated with treatment engagement and completion, and treatment satisfaction, but many of the studies were small, qualitative studies that explored the experiences of small numbers of respondents. Surprisingly, relatively few of the studies talked to children or young people. Fourteen<sup>145,146,169,481,538,662–670</sup> of the 73 studies were undertaken in the UK, or included UK participants.<sup>640</sup> Many of these studies were conducted by researchers with social care backgrounds, reflecting a long tradition of client opinion research in this field.<sup>758</sup>

## Coverage of maltreatment and relevance to the UK

### *Maltreatment severity*

For the most part, these studies focus on children who have been seriously maltreated, irrespective of whether the study recruited children who had been sexually abused, physically abused or neglected or had experienced multiple forms of maltreatment. Generally, the profile of participants closely resembles that of children who come to the attention of UK Child Protection Services, and in respect of whom child protection plans are made and care proceedings sometimes undertaken. Most of the study participants were children living with their birth parents; relatively few studies focused on children living in substitute care, whether foster care, adoptive families or residential care. Many looked-after children have particularly complex needs, particularly those in residential care. Their maltreatment histories are often amongst the most severe, and their out-of-home placements have often compounded trauma and loss. Those who have experienced multiple placements will have had particularly limited opportunities to develop secure relationships, with either adults or peers. Overall, the picture is one of very complex need, and rigorous evaluations of therapeutic services aimed at this group are few and far between.

### *Maltreatment focus*

There is unevenness in the available evidence base for the effectiveness of interventions for different kinds of maltreatment (Box 2). Of the 101 controlled effectiveness studies, almost one-third (32<sup>89–105,120,143,150,155,159–163,166–174,178–180,204</sup>) focused solely on children who had experienced sexual abuse, usually girls. These included all five<sup>169–173</sup> studies of group work interventions, 12<sup>89–104</sup> of the 24 CBT studies (excluding EMDR), seven<sup>155,159,161–163,166–168</sup> of the 17 studies of psychoeducational interventions, and four of the eight studies of psychotherapy and counselling.<sup>174,178–180</sup> The majority of other studies recruited children who had experienced any form of maltreatment. These sometimes included children who had experienced sexual abuse, but on the whole the profile was of children who had experienced a combination of physical and emotional abuse and neglect. Five<sup>151–154,156</sup> of the RCTs specifically recruited children who had been exposed to domestic violence.

We found no controlled studies of interventions for children in which maltreatment took the form of fabricated or induced illness, and only one uncontrolled study.<sup>523</sup>

**BOX 2** Coverage of maltreatment

- Controlled studies cover a range of interventions for maltreated children, with a bias towards interventions for sexually abused children.
- There is a paucity of controlled studies focusing on improving outcomes for looked-after children.
- There are no controlled studies of interventions for children whose maltreatment takes the form of fabricated or induced illness.
- More studies are needed that address the reality for many children of multiple experiences of different forms of maltreatment.

The 2010 NSPCC prevalence survey found that, across the UK, 8.9% of children aged < 11 years, 21.9% of 11- to 17-year-olds and 24.5% of 18- to 24-year-olds had one or more experiences of physical violence, sexual or emotional abuse and neglect by a parent or guardian during their childhood.<sup>21</sup> Similar rates of multiple and repeated maltreatment have been found in surveys of family violence conducted elsewhere.<sup>317,759</sup> One therefore needs to be cautious about interpreting the results of studies that are designed to examine the consequences of *particular* types of maltreatment, or the effectiveness of interventions for *particular* types of maltreatment. As Saunders *et al.*<sup>760</sup> observed, different research teams, studying different types of violence (physical abuse, sexual abuse, domestic violence), may well be studying many of the same children, but simply catching them at different times of their lives and subsequently categorising them according to their particular protocol.

**Interventions evaluated**

Clearly, the profile of investment in intervention types presented in this review would look somewhat different had we grouped the included interventions differently. For example, we might have combined relationship interventions with systemic interventions or combined multisystemic FT with MTFC. We hope that clarity within the review will mean that readers can make their own judgements, but there does seem to be a marked unevenness in the available evidence (positive or negative) among the interventions that might currently be offered to maltreated children and their caregivers.

As anticipated, the intervention that was most frequently studied was CBT, followed by interventions that sought to improve the relationship between parent and child, interventions that we grouped together as 'relationship-based interventions'. They included four attachment-orientated interventions (ABC,<sup>122,125,126,130,132</sup> CPP,<sup>123,124,127–129,133</sup> PFR<sup>131</sup> and dyadic developmental therapy<sup>134,135</sup>), PCIT<sup>131–138</sup> and two<sup>139,140</sup> studies of parenting-focused interventions.

**Focus of interventions**

Irrespective of whether or not studies were focusing on a group of children recruited for one particular form of maltreatment, the interventions studied concentrated primarily on defined disorders associated with maltreatment, rather than on the broader consequences of maltreatment per se (Box 3). This is possibly one of the reasons why, with few exceptions, interventions were brief, with the majority comprising weekly therapeutic sessions over a period of between 10 and 20 weeks. Few studies examined interventions designed to tackle the more complex and longer-term consequences of maltreatment, which may, arguably, require a longer-term and broader-based approach to intervention, as well as to the evaluation of its effectiveness (see below, particularly *Conclusions*).

One area that is somewhat underdeveloped is that dealing with the provision of residential care. This is not surprising, given the challenges that are inherent in evaluating 'whole-service' interventions, but it would be possible. In recent years, a number of initiatives have been taken across the UK to introduce more therapeutic regimens into residential care settings. Interventions have ranged from social pedagogy to interventions anchored squarely in theories of attachment and social learning [e.g. ARC (Attachment,

**BOX 3** Interventions and evidence

- Some interventions have been more frequently subjected to rigorous evaluation than others.
- These differences cannot be explained in terms of some being easier to evaluate than others.
- Few interventions have an explicit theory of change; those that do are more likely to have been rigorously evaluated.
- Most studies are focused on interventions that are designed to address specific diagnosable disorders, such as depression or PTSD.
- Few studies examine the effectiveness of interventions that are designed to address the wider consequences of maltreatment for children's social functioning or quality of life.

Regulation and Competency); Sanctuary; CARE (Children and Residential Experiences)]. All are designed to address the complex needs of this very vulnerable population in residential care settings, and the particular challenges faced by the staff that run them. Unfortunately, the opportunity to conduct controlled studies of these important initiatives was not seized, and a review of the evidence concluded that there was no robust evidence of their effectiveness as 'programmes'. Macdonald and Millen<sup>761</sup> conclude that if one was to 'drill down' into particular aspects of these service models (many of which are shared), one would find a strong evidence base in favour of component parts, but this does not obviate the need for rigorous evaluation.

**Theories of change**

Some studies provided (or referenced) a clear theory of change ('logic model') to outline how the intervention was thought to bring about change, but these were in a minority. Those that did were over-represented among studies that subjected interventions to a randomised trial, and included therapies that were not tightly manualised, such as CPP. Conceptualisations of maltreatment as trauma informed a number of the cognitive-behavioural interventions; attachment theory and developing understanding of the impact of maltreatment on children's neurological development informed some of the RBIs; and systems and ecological transactional theory provided the rationale for interventions such as MTFC. Such conceptual grounding was noticeable, however, in its absence from many of the studies, underpinned by taken-for-granted assumptions that the intervention in question was an appropriate therapy for addressing specific sequelae of maltreatment which would not bring about any harm.

However, the very specificity of some interventions is problematic, given the impact of maltreatment on children's lives. Children who have experienced severe maltreatment present with complex psychopathology, which is 'characterised by attachment difficulties, relationship insecurity, problematic sexual behaviour, trauma-related anxiety, inattention/hyperactivity, and conduct problems and defiance' (p. 614).<sup>61</sup> For this reason, Tarren-Sweeney<sup>61</sup> has argued that we need to reconceptualise the mental health needs of children in care and adopted, if we are adequately to address their needs, and this may also apply to significant numbers of children who become subject to child protection plans, but who remain at home. These children simply do not have single mental health problems, such as PTSD or depression, and many of the problems with which they present do not fall under the auspices of any diagnostic classification system; the following are just a selection – smearing faeces, hoarding, eating problems, hiding and storing food, speech and language delays, sexualised behaviour, low self-esteem and poor social functioning.<sup>61,431,762</sup> The design and implementation of effective therapeutic services for maltreated children requires both researchers and clinicians to develop and understand the potentially varied and pervasive consequences of maltreatment, particularly during sensitive periods; how even similar histories of maltreatment can lead to a variety of different outcomes (the principle of *multifinality*) and the same outcome can arise from very different maltreatment histories (the principle of *equifinality*), and that ensuring a 'logical fit' between a child's needs and the choice of an intervention or interventions depends critically on a detailed assessment. We return to this issue later, as it is a crucial factor in interpreting the evidence presented in this review.

No study included the investigation of adverse effects as part of the study design. This suggests an unfounded confidence in the benefit of therapy, which, as evidence from related fields suggests, may be misplaced.<sup>763,764</sup>

## Comparisons

Few studies used a no-treatment or wait-list control. When the desirability of using a no-treatment control group to determine the effectiveness of an intervention was reported (and rejected), this was usually because it was deemed inappropriate to withhold intervention. However, it perhaps also reflects the assumption that therapy is necessarily helpful. Most studies compared a particular intervention with TAU, which was sometimes minimal, but often quite considerable. Among the CBT studies, where there is a growing confidence in the effectiveness of TF-CBT in particular, some studies were designed to manipulate treatment dose (e.g. number of sessions) or intervention components (e.g. TNs, child only vs. parent plus child) to explore their particular contribution to the intervention's effectiveness.

Although TF-CBT interventions perform well in controlled evaluations, most of the best evaluations have been undertaken by the teams who developed the programmes. Independent evaluations are necessary to consolidate (or test) their effectiveness, and also to determine their effectiveness in locations outside the USA. This is particularly important in the UK context, for which the profile of 'comparison' public services is very different from, and possibly better than, that of the USA.<sup>145,146</sup> The same is true for a number of other interventions that have been rigorously evaluated either only in the USA and/or in evaluations conducted by the programme developers, or where programme developers have been heavily involved in the evaluation.

## Outcomes and measures

As in many other areas, the choice of outcomes and outcome measures appears to be the 'Wild West' in relation to studies of the effectiveness of psychosocial interventions. *Table 5* provides an overview of the lack of consensus around what outcomes matter and, perhaps more importantly in this area, how they are best measured at particular developmental stages. In contrast with, for example, a Cochrane systematic review, we were not able to establish a small set of primary and secondary outcomes for this review. This reflects the multiplicity of ways in which maltreatment can impact on children's lives and who is determining which outcomes matter, and this was also evident in our consultations with young people and with the PAG established for this study. It is likely that the concept of a core outcomes set for maltreated children is a nonsense. However, a core outcomes set for assessing the effectiveness of interventions designed to address for instance, PTSD or depression among maltreated children, together with agreement on how these are best measured, would be highly desirable.

The absence of such a consensus is a major reason why, despite identifying a large number of outcome studies in this area, we were unable to synthesise the available evidence in ways that would strengthen the cumulative evidence base. This was true even when studies were sufficiently homogeneous to reasonably combine their data in a meta-analysis, for example among the CBT trials. Furthermore, measures were predominantly self-report or caregiver/teacher report, although some made use of multiple sources of information or observational data, for example the Strange Situation Test.<sup>336</sup>

Even when standardised measures have been used, it is not always evident that they are psychometrically sound or developmentally appropriate. Most focus on problems rather than strengths or competencies, and so the impact of interventions on promoting optimal child functioning, development and well-being is unknown.<sup>182</sup> Fantuzzo *et al.*<sup>182</sup> also draw attention to the fact that the external validity of many measures has not been tested in relation to low income and or minority children. Few studies assess the progress of children and their families in ecologically valid settings; those that do include some of the relationship-based therapies and intensive fostering support for preschool children.

### Relevance of outcomes and measures

The most insidious consequences of early or chronic maltreatment are those that undermine a child's capacity to reach their potential and to develop into a well-adjusted adult, but – as indicated above – a focus on these consequences of maltreatment is almost absent in the intervention studies in this field. Unsurprisingly, given the focus of the interventions studies, scrutiny of the outcome domains and measures used highlights a dominant focus on mental health measures, such as measures of PTSD, depression and anxiety, rather than measures of overall child development and functioning. Given the consequences of maltreatment on a wide spectrum of children's behaviour, some have highlighted the inadequacy of some of the most commonly used standardised measures of behaviour, such as the CBCL<sup>260</sup> and the ECBI.<sup>310</sup> Tarren-Sweeney<sup>765</sup> has developed a behavioural rating scale for children in out-of-home placements which more accurately reflects the range of problems that such seriously maltreated children can present, and which would also be relevant to some groups of maltreated children who remain with their parents. It includes 10 clinical and two self-esteem scales, covering sexual behaviour, pseudo-mature interpersonal behaviour, non-reciprocal interpersonal behaviour, indiscriminate interpersonal behaviour, insecure interpersonal behaviour, anxious–distrustful, abnormal pain response, food maintenance, self injuries, suicide discourse, negative self-image, and low confidence. Initial research suggests that the instrument has good content construct and criterion-related validity, and certainly it seems more adequately to capture the range of problem behaviours commonly presented by maltreated children.

Few studies assess the impact of intervention on children's physical or cognitive development, speech and language development, social functioning, self-esteem or educational achievement. In the UK, governments have for some time been concerned about the underperformance of looked-after children in relation to educational achievement and employment, and their over-representation among the homeless, sexually exploited and those involved in substance misuse and offending. The difficulties responsible for these over-representations start long before children become looked after, and suggest that effective interventions need to be targeted 'upstream', even if resources permit extension of service provision only to those families whose children are subject to child protection plans and where there is a possibility of care proceedings.

There is some evidence that the choice of outcome measure might unduly favour experimental interventions, as when a PTSD measure is used to evaluate the effectiveness of an intervention specifically geared to address PTSD in comparison with an intervention that is not. Selecting measures that are meaningful measures of the intended effect of the intervention, but which do not unduly favour it, is not something that is given due consideration in this area. Particularly in the absence of study protocols, it is worrying that researchers sometimes opt post hoc to report data from total measure scores, and sometimes from subscales. In the absence of an a priori analysis plan, it is difficult not to be concerned about the possibility of selective outcome reporting.

Few studies included follow-up periods that extended for even a year following the intervention, and most had follow-up periods lasting only months or none at all. This will, in part, be a function of available funding, and the challenges of retaining these families in a study, but it also reflects the treatment focus of the majority of studies and the changes sought. Even so, the absence of longer-term follow-up is a weakness in the current body of evidence, given the importance of examining the maintenance of change, and also the reality that problems (re-)emerge for maltreated children at different times.

### Synergies with the views of young people and professionals

As indicated in *Chapter 5*, young people in our Young People's Advisory Groups gave their views regarding the outcomes that they thought would matter most to children and young people like themselves. Very often, the interventions evaluated in this review focused on, or resonated with, their concerns, but rarely did they feature in the measures of effectiveness chosen by the researchers. For example, equipping young people to secure their future safety and to feel safe was a component part

of most, if not all, of the CBT interventions, the psychoeducation interventions and the group work interventions. However, none of these studies used 'safety' or 'perceived safety' as an outcome, nor did they examine repeat maltreatment. Many of the interventions (predominantly those focused on children who had been sexually abused) included content designed to help children recognise 'what being treated badly is' but none evaluated this.

The views of professionals were, unsurprisingly, varied. Like young people, they recognised the importance of keeping children safe, but they were more inclined to focus on common, maltreatment-associated mental health problems, such as attachment, depression and consequences for healthy development, such as emotional development and peer relationships. Although at first glance these views differed from those of the young people we consulted, the differences seemed primarily to reflect a difference in developmental perspectives, that is, professionals have the benefit of a knowledge base, their (generally broad) clinical experience and a sense of how different things matter more at different stages of development. The outcomes identified by professionals as being important generally reflected their broader knowledge base of the adverse consequences of maltreatment. Specific outcomes, such as attachment and depression, are represented in one or more of the included studies that specifically address these sequelae of maltreatment, but, as indicated earlier, fewer studies monitor broader outcomes, such as emotional development and peer relationships, not least because very few interventions focus on these outcome domains, even when the interventions might improve them.

## Relevance to clinicians

Research evidence is one of a number of factors that influence clinical decisions regarding the use of particular psychosocial interventions. The weight afforded to research may depend on many factors, including the perceived match between the characteristics of research samples and those of patients or clients seen in 'real life'; the appropriateness of manualised treatments that might be thought not to address the very individual needs of each patient; and the view that treatments that do well in the research literature are biased towards those interventions that are most easily manualised.<sup>431</sup> In addition, there may be challenges to implementation that are not evident from the included studies, particularly when these are conducted in policy contexts other than the UK. Clinicians may not have the requisite skills or training opportunities; resources may be such that, of two effective interventions, the one that is the less effective of the two might, nonetheless, be more likely to be of use in a particular clinical setting. These were issues that we raised with our Professionals' Advisory Group when we reported the draft findings of the review. We asked colleagues whether or not there were any surprises about the coverage of maltreatment topics or the profile of evidence, whether or not the findings matched their professional experience and, if not, what might account for this. We asked how clinicians might respond to the key messages of the report, particularly the weight of evidence relating to CBT, and what barriers might impede the implementation of the study findings.

## Quality of the overall evidence base

Throughout this report we have considered and presented the quality of the evidence base in the context of the specific psychosocial intervention being evaluated. Although we have been able to draw some specific conclusions about the effectiveness of individual therapeutic approaches, and to make some important observations about the features and applicability of the evidence, it is important to comment on the quality of the body of literature as a whole, and to consider its ability to inform policy and practice recommendations, as well as decisions about future research investment. Here we provide some broad observations about the evidence, based on our assessment of the limitations of the evidence base, the overall strength of the evidence provided, how applicable it is to the children and young people and services in the UK, and how reliable it is.

We considered the best available evidence for each part of our evidence synthesis and, while respecting the hierarchy of evidence, the breadth and scope of our review objectives determined the need to include

studies other than RCTs. To help mitigate concerns about over-interpretation of findings from poor-quality studies, we assessed the potential impact of design and conduct problems using quality assessment tools that were appropriate to the type of study. We have also acknowledged the complex nature of studies of psychosocial interventions in these populations and the difficulties that commonly arise. The following comments on the overall evidence base are more general and are intended to indicate the level of confidence that we can have about our findings, based on the sorts of considerations that form a GRADE assessment (Grading of Recommendations Assessment, Development and Evaluation<sup>766</sup>) and that therefore might be useful to guideline developers and policy-makers. Any decisions taken or recommendations made on the basis of the evidence presented here will need to take account of these general concerns.

Throughout this report, we have identified weaknesses in the studies that we found. The nature of these interventions means that blinding of personnel and participants in these studies is problematic and usually not possible, rendering them open to the effects of performance bias. We have tended not to focus attention on this potential limitation, as most, if not all, studies of psychosocial interventions will suffer from this difficulty, but it is a limitation. Although blinding of outcome assessment is not always possible (e.g. in the case of self-reported rating scales), the lack of independent evaluation, even in well-conducted studies, is an important flaw, leaving them open to the effects of detection bias. We also found extensive evidence of incomplete data in the reports we looked at. Resource constraints mean that we were not able routinely to contact study authors about the omission of post-treatment and follow-up data, and the reasons for this. We attempted to provide an indication of the level of attrition based on the available data points (see *Appendix 11*), however, and, as we were basing these assessments on the data available from published reports, these are also illustrative of the level of incomplete outcome data in these studies.

We have outlined our concerns about the selective reporting and associated reporting bias in the studies that we found, much of which stems from an inability to access study protocols. As well as reporting bias, the evidence presented here is very likely to be prone to the effects of publication bias. Owing to the limited outcome data available for meta-analysis, we were unable to formally assess the impact of publication bias on our findings using funnel plots. However, it should be noted that many of the studies that we identified (and studies undertaken on this field more generally) are small and underpowered, and prone to the biases associated with small studies. Thus, it is likely that these biases are operating in our analyses.

The frequent lack of detailed descriptions about the children who participated in these studies, and also what was offered to participants by way of experimental or comparison treatment, is problematic, not least because the choice of comparator impacts directly on the apparent effectiveness of the experimental treatment.

As noted in the preceding chapters, the evidence base in this field stems from a highly variable array of primary studies differing, sometimes quite markedly, on multiple aspects of content. For example, study populations (where they were described in sufficient detail) varied in age, experience of maltreatment, and other key factors, making it difficult to arrive at the most appropriate way of grouping them. It was only rarely possible to organise our evidence summaries for each intervention according to the abuse type experienced by the child, but, even when possible, there was considerable heterogeneity across studies in the range of participants with differing experiences and histories. Similarly, interventions were highly variable in their purpose, approach, content and delivery. Even within our broad categories of interventions there will be multiple differences between the therapies offered. The outcomes reported were also highly variable and, in many cases, not comparable with one another. In the relatively few instances where we were able to pool studies in a meta-analysis, the majority of the pooled estimates indicated moderate to substantial unexplained heterogeneity and, in these analyses, we identified few outcomes in which we had confidence to draw clear conclusions (*Table 27*).

**TABLE 27** Summary of effect sizes and confidence analyses from meta-analyses

Therapeutic approach and outcome	Effect size	95% CI
<b>CBT for sexual abuse (n = 11)</b>		
Post-treatment PTSD	SMD -0.44	-4.43 to -1.53
Post-treatment depression CDI	MD -02.83	-4.53 to -1.13
Post-treatment anxiety	SMD -0.23	-0.03 to -0.42
Post-treatment sexualised behaviour	MD -0.65	-3.53 to 2.24
Post-treatment externalising behaviour	SMD -0.12	-0.40 to 0.17
One-year behaviour management skills of parent	MD -0.89	-4.89 to 3.11
Post-treatment parental support to child	SMD 0.30	0.03 to 0.57
<b>Attachment-focused interventions (n = 14)</b>		
Secure attachment	OR 0.14	0.03 to 0.70
Disorganised behaviour	SMD 0.23	0.13 to 0.42
Avoidant attachment	OR 0.90	0.13 to 6.37
Externalising behaviour	SMD 0.10	-0.011 to 0.32

Attrition from RCTs was assessed to provide a proxy measure of acceptability of treatment. The available data did not allow for a formal analysis of dropout from treatment. To estimate treatment attrition, the risk ratios were calculated based on the number of people randomised in each group and the number contributing data post intervention. All available data are presented for transparency. We acknowledge the possibility that not everybody contributing data post intervention actually completed treatment, and that some people who did complete treatment may not have contributed data during the post-treatment phase; however, these analyses are still likely to provide a broad indication of attrition from different interventions. The forest plots for these analyses are provided in *Appendix 11*.

Based on the amount of management, oversight and monitoring often provided in these studies, they resemble attempts at generating information about 'efficacy' (where interventions are tested to see if they work under controlled circumstances) rather than 'effectiveness' in real-world settings. Important features of the majority of studies also differ markedly from the UK context in terms of comparisons, and organisation and delivery of care, and, as indicated in *Box 4*, some of the studies reviewed here are likely to be of limited relevance to the UK context. Only 3<sup>116,145,146,155</sup> of the 61 trials and two<sup>613,614</sup>

#### BOX 4 Relevance to the UK

Most of the available studies have been conducted in the USA.

Many of the evaluations of particular interventions (such as TF-CBT, CPP and MTFC) have been undertaken by programme developers.

There is a preponderance of interventions targeted at specific mental disorders rather than the more pervasive impacts on children's general functioning and development.

Independent evaluations of interventions, delivered in the UK, are important for deciding their relevance and effectiveness in this particular policy context.

cost-effectiveness studies were conducted in the UK and, therefore, only a limited body of evidence is available that provides any direct consideration of the health and social care environment and context.

It is also difficult to make any reliable judgement about the applicability of the studies that were undertaken elsewhere due to the lack of detailed descriptions of what was offered to participants. During this project and through the work of the advisory groups, we acknowledged that we know little about what is routinely offered to children and young people experiencing maltreatment in the UK, although we do know that this is highly variable. Thus, even the generalisability of 'TAU' or 'standard care comparisons' (including those used in studies undertaken in the UK) is hard to judge. Similarly, the mismatch between the interventions evaluated and those provided in the UK limit our confidence in their applicability. Finally, our work with Young Persons and PAGs confirm that key outcomes (and ways of measuring these) are frequently not measured and/or not reported.

In summary, despite the large numbers of studies available to inform decisions about the psychosocial treatment and support of children and young people who have experienced sexual abuse, or physical and emotional abuse or neglect, the broad concerns outlined above indicate the need for caution in the interpretation of the available data.

## Summary of findings

In light of the above, what does this body of evidence tell us about the questions we set out to answer?

### *What interventions are effective for which children, with what maltreatment profiles, in what circumstances?*

The available evidence provides only partial answers to these questions. The use of other-treatment control group participants, plus susceptibility to bias, may account for the evidence being less than clear-cut in relation to some interventions (which is not to say that better-designed and better-implemented studies would necessarily confirm effectiveness). In other circumstances, the results of studies are unequivocally positive, but they are few in number and some also suffer from weaknesses in design and implementation. In almost all cases they have been conducted in policy and practice contexts that differ markedly from the circumstances in which interventions might be offered in the UK. Furthermore, the intervention has been monitored and quality assured to an extent that they are closer to efficacy trials than effectiveness trials. This means that even where we have identified evidence of positive outcomes following specific therapeutic approaches, there can be no expectation that these results would necessarily be observed in practice.

Some of these interventions focus on particular sequelae of maltreatment, and would be appropriate for children when an assessment has identified particular mental health disorders, such as PTSD, depression or anxiety. Others have more promise as broader-based interventions, the impact of which could potentially improve children's overall development and function. These are typically interventions designed for use with families with young children. An overview of those interventions that enjoy some degree of empirical support is provided below (see *Table 28*), indicating the age range and focus of intervention. The numbers of asterisks represent purely a judgement call on the perceived strength of evidence, based on the same considerations that one would use in constructing a GRADE Summary of Findings (SOF) table, namely (1) study limitations; (2) inconsistency; (3) indirectness; (4) imprecision; and (5) publication bias. One asterisk was allocated to each GRADE domain. Interventions that appear to have only very weak, or no, evidence of effectiveness on these criteria are not mentioned.

### Cognitive-behavioural therapy

As *Chapter 4* makes clear, the results sometimes favour the experimental group (e.g. for depression and anxiety) but are generally very mixed. Although we were able to combine some of the data from these trials to an extent that we were unable to do elsewhere, the meta-analyses were less comprehensive than

would have been desirable. Looking at the body of evidence as a whole, for children who had been sexually abused, CBT outperformed non-directive or supportive therapies in ameliorating symptoms of PTSD and anxiety. It did less well when compared with (1) conventional sexual abuse therapy, which was, in every respect, the same except for two elements [SIT and GE], for which the focus was fear and anxiety but the children recruited presented with only moderate levels of both, and where elements of SIT and GE were said to be present in both interventions;<sup>89</sup> and (2) supportive therapy for parents plus a form of psychoeducation for children.<sup>99</sup> In both of these trials, significant improvements were reported for both groups.

For children who had been physically abused, the evidence indicated that CBT may be effective for addressing PTSD symptoms<sup>109</sup> and child behaviour problems,<sup>106,109</sup> but, in a third study<sup>107,108</sup> that examined its effect on behavior problems, CBT did not outperform FT.

In studies recruiting children with a variety of maltreatment histories, those that assessed the impact of CBT on PTSD reported significant differences in favour of CBT compared with TAU,<sup>111,120</sup> no treatment<sup>111</sup> or active listening.<sup>121</sup> Two of these were studying EMDR. There is mixed evidence of the effectiveness of CBT for children's behaviour problems in those studies that examined this outcome.

### Relationship-based interventions

We identified four<sup>122,125,126,130,132</sup> studies of ABC data, two of which we were able to combine in a meta-analysis with one study of CPP.<sup>123</sup> We also identified four<sup>123,124,127–129,133</sup> studies of CPP. Both interventions are designed to promote sensitive and responsive caregiving to children who are adversely affected by maltreatment, with the focus on the carer–child relationship. Meta-analyses indicate significant increases in attachment security and decreases in disorganised attachment, and this pattern of findings was reported in those studies whose data we could not combine. These interventions both focus on relationship changes that could potentially have significant preventative capacity in stemming potentially cumulative impact of the maltreatment experienced by children at the point of referral.

### Systemic interventions

There was very little evidence from which to draw conclusions about the effectiveness of systemic interventions. As indicated earlier, FT and CBT were both reported as effective in addressing child behaviour problems, compared with routine services, in the one<sup>107,108</sup> study that compared these two interventions, but neither significantly outperformed the other. Only one of the three studies of MST assessed its impact on PTSD, reporting a significant, positive impact.<sup>144</sup> The same study<sup>144</sup> also reported a significant improvement in parent-reported internalising behaviour for MST youth, but no between-group differences for externalising behaviour. As in the study by Kolko,<sup>107,108</sup> the sample in this study<sup>144</sup> had experienced physical abuse or neglect.

### Psychoeducation

Group-based psychoeducation appears to be a promising intervention for alleviating PTSD in children, and possibly ameliorating behaviour problems. Whilst it is difficult to disentangle the potentially beneficial influences of a group (e.g. sharing experiences, reducing stigma) and the findings are not uniformly positive, there is sufficient evidence to indicate consideration of group-based psychoeducation for sexually abused children and children exposed to IPV.

### Peer mentoring

Only two<sup>181,182</sup> studies of peer mentoring have been conducted, but the results of each indicate the potential of this day-care intervention for maltreated preschool children who have been physically abused and neglected.

### Enhanced foster care

For young children in foster care there is indicative evidence of benefit to maltreated children from three studies that compared enhanced foster care with RFC.<sup>183–189,191</sup> A pilot study<sup>183–188</sup> of treatment foster care

for preschool maltreated children suggests that this form of care may facilitate children's attachment to their foster parents, improve the behaviour management strategies used by foster carers, and – perhaps relatedly – improve the behaviour of these challenging children.

Providing mentoring and skills training to children aged 9–11 years, in foster care (including kinship care), was reported to impact positively on children's mental health and better manage the transition to senior school.<sup>190</sup> This intervention,<sup>191</sup> which was provided over 9 months (30 weeks), also resulted in fewer placement changes, fewer placements in residential care and higher rates of permanency, including adoption.

There is tentative evidence that MTFC may be able to help foster parents to help children to improve their ability to self-regulate,<sup>193</sup> but further evidence is required.

Improving attachment to caregivers, reducing behaviour problems and promoting placement stability are all significant achievements for maltreated children in out-of-home care, and are likely to represent significant improvements with cumulative benefits. Further studies of this intervention in the UK are, however, required. The less significant results from the UK study of MTFC may be attributable to the older age range of children in the study and the nature of routine services. The authors concluded – from the RCT *and* data from the wider QEx trial in which the RCT was nested – that the intervention might be more beneficial for young people with antisocial behaviour, but less beneficial than usual treatment for those without.

### Therapeutic day care

Although only a small number of studies have evaluated the effectiveness of therapeutic day care, all three studies (one trial) indicate the potential of this intervention to address some of the behavioural difficulties of maltreated children and enhance their overall development.

### *Summary overview of what works, for whom, in what circumstances?*

For treating the symptoms of PTSD, TF-CBT currently enjoys the strongest evidence of effectiveness, although there have been few independent evaluations of this intervention. The most effective CBT interventions for children who have been sexually abused appear to be those that involve the non-offending parents. Therapeutic day care and peer mentoring may also provide opportunities to address developmental and social specific sequelae of maltreatment in preschool children.

For infants and preschool children, the evidence suggests that interventions that target parental sensitivity and responsiveness (ABC, CPP, MTFC-P) are effective in promoting secure attachments with birth parents and foster carers. Given the importance of secure attachment in promoting children's overall development and well-being, these are important findings. *Table 28* provides a summary overview.

### *Where two or more interventions might be appropriate, which is the most likely to be effective?*

Although a number of studies compared an intervention with TAU, few studies compared treatments 'head to head'. In order to shed light on the relative effectiveness of alternate interventions for maltreated children, we consider the results of 'other-treatment' controlled studies in relation to children who have been sexually abused, those who have been physically abused and/or neglected, and those who have experienced multiple forms of maltreatment. In this section, with two exceptions, we draw only on studies in which at least one intervention enjoys evidence of effectiveness, that is, those interventions considered above. The exceptions are (1) a study of AAT,<sup>204</sup> in which the evidence indicates the value added of so-called 'therapy animals' as an adjunct to group work with children; and (2) a small (and generally poor-quality) study<sup>180</sup> comparing psychoanalytic therapy with reinforcement therapy. We include this last study<sup>180</sup> as it provides a rare illustration of an intervention that targeted both school and parents while comparing the two treatments.

**TABLE 28** Overview of what works, for whom, in what circumstances

Intervention	Evidence of effectiveness	PSE <sup>a</sup>	Focus of intervention	Age
TF-CBT	PTSD	*	Designed specifically to address a trauma associated with maltreatment, particularly sexual abuse, TF-CBT combines psychoeducation (see <i>Psychoeducation</i> ) with skills training in affect modulation, stress management, and personal safety  Participants are helped to understand the relationships between thoughts, feelings and behaviour  GE (by means of creating a TN) is used to enable the child to describe (confront) and process increasingly distressing details of their maltreatment  Parents are seen separately and receive similar interventions together with training in parenting skills that can help parent and child  The intervention includes some joint sessions	Children and young people aged ≥ 4 years
	Anxiety	*		
	Depression	*		
ABC	Promoting secure attachments	**	Enhances attachment by promoting sensitive and responsive caregiving  Coaches use 'in the moment' opportunities to provide information, shape parental understanding of, and responsiveness to, the child, and help the parent to avoid maladaptive, automatic responses learned from prior experiences  The focus of intervention is the child–parent dyad	Children aged 6 months to 4 years
	Reducing avoidant attachment	**		
	Promoting self-regulation	***		
CPP (IPP, PPP)	Promoting secure attachments	**	Enhances attachment by promoting sensitive and responsive caregiving  Focus is on translating the parent's and child's feelings and experiences to one another as a means of enhancing emotional reciprocity  The focus of intervention is the child–parent dyad, and includes interventions designed to help the traumatised individuals (child and carer) to (re)learn ways of coping with stress without undue, dysfunctional, levels of arousal	Children aged 0–4 years
	Reducing avoidant attachment	**		
	Promoting self-regulation	***		
Psychoeducation	PTSD	***	Reduces trauma of abuse and promotes healthy development by providing information about maltreatment (how common it is, the impact it often has, and how people typically react, including unhelpful ways of coping); reduces stigma and provides an opportunity for parents and children to know that they are not 'alone' and that their reactions are normal (validation)  Psychoeducation interventions are varied, and many include a focus on developing effective ways of dealing with their experiences, and ensuring their future safety	Children and young people aged ≥ 4 years

continued

**TABLE 28** Overview of what works, for whom, in what circumstances (*continued*)

Intervention	Evidence of effectiveness	PSE <sup>a</sup>	Focus of intervention	Age
Peer mentoring	Behaviour problems	***	Peer mentoring aims to help those children whose social functioning has been adversely affected by maltreatment to acquire key developmental skills, namely the ability to form and maintain effective peer relationships	Preschool children
	Social behaviour	***		
			Maltreated peers with high levels of prosocial behaviour are paired with withdrawn maltreated children and trained to involve them in their play	
MTFC-P	Behavioural problems	***	Facilitates attachment with caregivers, by helping to establish an optimal environment for child development, by helping foster carers provide a responsive, consistent and predictable daily routine, with preparation for transitions between activities	Preschool children (MTFC-P)
	Placement permanence	***		
	Self-regulation	***		
			Foster carers receive extensive training, including the management of challenging behaviour, and children receive behavioural support in preschool or day care, as well as in home-based settings, and attend weekly sessions at a therapeutic playgroup where their behavioural, social and developmental progress is monitored and addressed	
Therapeutic day care	Behaviour	***	Teachers provide children with the environment designed to facilitate the development of strong teacher–child relationships and caring peer relationships; children are helped to recognise and deal with their own feelings organised around ordinary preschool activities, and receive a variety of individual treatments such as play therapy, speech therapy and physical therapy, designed to address developmental impairments associated with maltreatment	Preschool children
	Child development	***		
	Peer relationships	***		
	Parent–child relationships	***		
			Parents also receive services, including counselling and education	

PSE, perceived strength of evidence.

<sup>a</sup> Perceived strength of evidence. Note that these ratings need to be interpreted cautiously as, in most instances, the available evidence rests on very few, and often small, studies. Furthermore, in the case of therapeutic day care, these are not randomised trials.

## Children who have been sexually abused

### *Cognitive–behavioural therapy*

Two studies<sup>95,96,102</sup> compared a cognitive–behavioural intervention for sexually abused children with child-centred psychotherapy<sup>95,96</sup> and EMDR.<sup>102</sup> The results of the study<sup>102</sup> comparing EMDR and CBT suggest that both were equally effective in reducing PTSD symptoms in a small sample of 14 Iranian girls aged 12–13 years. However, as well as having only a very small sample, data were available only at 2 weeks post treatment; as the authors observe, it is difficult to disentangle therapist effects and no steps were taken to ensure therapist adherence to either manualised treatment.

The results of the study<sup>95,96</sup> comparing TF-CBT and CCT indicate that CBT is superior to CCT in alleviating PTSD. Most studies of CBT used non-directive, supportive therapy as a comparison. In this study,<sup>95,96</sup> CCT was a manualised (non-directive) treatment in which therapists provided active listening, reflection, accurate empathy, and encouraged parents and children to talk about their feelings. The authors state that the treatment was 'based on the empirically supported premise that these children and their parents develop difficulties because they have experienced a violation of trust and disempowerment (Barker-Collo & Read, 2003;<sup>767</sup> Finkelhor, 1987<sup>205</sup>)' (p. 398).<sup>95</sup> Although manualised in this study,<sup>95,96</sup> the non-directive/supportive therapy provided to participants in the control group was comparable with other studies in which the treatment was not manualised.

One<sup>89</sup> study assessed the value added of including SIT and GE to a conventional sexual abuse treatment. The results did not confirm the hypothesis that participants receiving SIT and GE would demonstrate a greater reduction in fear and anxiety symptoms than those in the control group. No differences were found between the two groups. Reflecting on these results, the authors consider a number of explanations, including the problem of floor effects (children in this study<sup>89</sup> were recruited on the basis of their abuse rather than reaching a particular clinical threshold for anxiety) and the fact that elements of SIT and GE were present in both treatment programmes.

Finally, Deblinger *et al.*<sup>99</sup> compared CBT with and without the construction of a TN, alongside an examination of the impact of eight-session therapy compared with 16-session therapy. The authors<sup>99</sup> conclude that TF-CBT was effective irrespective of the number of sessions or the inclusion of a TN component. Furthermore, they conclude that the eight-session condition with TN seemed most effective (and efficient) at ameliorating parents' abuse-specific distress and children's abuse-related fear and general anxiety, although parents assigned to the 16-session, no TN, condition reported greater increases in effective parenting and fewer externalising child behaviour problems post treatment. At the 1-year follow-up, improvements were sustained among those for whom data were available, and between-group differences were no longer evident.

### Relationship-based interventions and multisystemic therapy

Sexually abused children were rarely included in any RBI, and no study directly compared a systemic intervention with other interventions for this group of children. Danielson *et al.*<sup>526</sup> compared MST and TAU in a specialist clinic in which evidence-based interventions were said to be commonly used. In this small study ( $n = 30$ ), Danielson *et al.*<sup>526</sup> reported that the young people who received MST fared better than young people in the control group in terms of significant reductions in substance use and specific substance use risk factors (substance use was the primary focus of this MST intervention), parent-reported PTSD, depression and general internalising symptoms. No effects were found for youth-reported PTSD or externalising behaviour, and the authors<sup>526</sup> note that randomisation failed to produce equivalent groups and that baseline differences existed between the two groups on most variables. We judged that no firm conclusions should be drawn from this study<sup>526</sup> on the probable superiority of MST, particularly in the absence of detailed information on the interventions received by young people and their families in the control group.

The one<sup>155</sup> UK study that compared psychoeducation with an alternative treatment compared psychoeducational group therapy with brief, focused, individual psychoanalytic psychotherapy. In this study,<sup>155</sup> substantial reductions in psychological pathology are reported for girls in both treatment groups, assessed by the Schedule for Affective Disorders and Schizophrenia for School-Age Children (KD-SADS<sup>405</sup>) and the Orvaschel scale for assessing PTSD.<sup>406</sup> No between-group differences were reported except for 'manifestations of post-traumatic stress disorder', where the authors report greater improvement for girls receiving individual psychotherapy. In the absence of baseline data, the results of this study<sup>155</sup> are difficult to interpret, and there are indications of post hoc selection of subscales in the analyses reported.

### Counselling/psychotherapy

One<sup>180</sup> small study ( $n = 22$ ) compared psychoanalytic psychotherapy with reinforcement therapy (essentially contingent reinforcement advice to parents and teachers) for sexually abused children aged 6–12 years. This study<sup>180</sup> used no standardised measures, relying on parent and teacher verbal report, and the authors provide no details of the procedures used to assign children to each condition. Based on parent report, children in the reinforcement group made more and faster improvements in behaviour. No child in this group presented with sleep problems or engaged in sexual play with others at the end of treatment, whereas such improvements were noted in only a few children in the psychodynamic group. Three out of seven children in the reinforcement group continued to suffer from enuresis, compared with seven out of eight children in the psychodynamic group. Neither intervention made a difference to sexual self-stimulation. Teachers reported the elimination of acting out behaviour among children in the reinforcement group, whereas 67% of those in the psychoanalytic group continued to disrupt their own and others' learning after treatment. Most of the parents in the psychodynamic group reported tension between themselves and school personnel; in contrast, with one exception, parents in the reinforcement group reported positive relationships with school staff. Similar differences emerged in school staff perceptions of parents in each group. Perhaps most significantly, all parents participating in the psychodynamic group, but only 20% in the reinforcement group, believed that their child would be adversely affected for life as a result of sexual abuse. Reinforcement therapy has now largely been superseded by TF-CBT.

### Animal-assisted therapy

Dietz *et al.*<sup>204</sup> compared three group therapies for sexually abused children aged between 7 and 17 years: no animal therapy; animal therapy (dogs) without stories; and animal therapy (dogs) with stories. In the animal therapy (dogs) without stories condition, therapy dogs and handlers were available in the lobby for 30 minutes before the group started, to interact with the children. Dogs and handlers then joined the group for 10–15 minutes as part of the introductory activity of the group and then left. In the animal therapy (dogs) with stories condition, therapeutic stories about the dogs were developed specifically for the session topics. This was designed to add structure and depth to therapy dog visits. A set of questions, developed to enable the therapist to make a smooth transition from the dog's visit to the specific topic from the group, helped to clarify the purpose of the dog's visit. The results indicate that children in the groups that involved therapy dogs showed significant decreases in trauma symptoms, with those in the animal therapy (dogs) with stories condition showing most improvement. This COS<sup>204</sup> was of a reasonable size and quality but the findings, although positive, identify a need for replication using a randomised design.

### Other treatments

There were no other treatment comparisons among the five studies<sup>168–173</sup> of group work for sexually abused girls.

*Table 29* summarises the evidence available on the comparative effectiveness of interventions for children who have been sexually abused.

## Children who have been physically abused

### Cognitive-behavioural therapy

Runyon *et al.*<sup>109</sup> compared two CBT interventions, one involving just parents and the other involving parents and children (see *Chapter 4* for further details). Significant improvements were reported for both groups on parent- and child-reported corporal punishment, total number of PTSD symptoms and parents' reports on children's internalising behaviour problems; only in the CPC-CBT group (CBT for both parents and children) were significant MDs found in the pre- and post-test measure of positive parenting, and significant improvements in the pre- and post-test mean scores for externalising behaviour were found only for those in the parent-only CBT group. Improvements were maintained 3 months after treatment. In a comparison between CBT and FT, Kolko<sup>107,108</sup> found no significant differences between the two groups, although overall levels of parental anger and use of physical discipline/force were lower in CBT than in FT families.

**TABLE 29** Studies comparing the effectiveness of different interventions for children who have been sexually abused

Study	Interventions compared				Outcome	Findings favour
	1	2	3	4		
Jaberghaderi 2004 <sup>102</sup>	CBT	EMDR	N/A	N/A	PTSD	Both groups improved
Cohen 2004 <sup>95</sup>	CBT	CCP	N/A	N/A	PTSD	CBT
Berliner 1996 <sup>89</sup>	Conventional sexual abuse treatment plus SIT and GE	Conventional sexual abuse	N/A	N/A	Fear Anxiety	Both groups improved
Deblinger 2011 <sup>100</sup>	CBT × 8	CBT × 8 + TN	CBT × 16	CBT × 16 + TN	Parents' abuse-related stress	CBT × 8 + TN
					Children's abuse-related fear and general anxiety	CBT × 8 + TN
					Effective parenting	CBT × 16
					Externalising child behaviours	CBT 16
Danielson 2010 <sup>526</sup>	MST	Unspecified evidence-based practices	N/A	N/A	Substance misuse	MST
					Substance misuse risk factors	MST
					Parent-reported PTSD	MST
					Parent-reported depression	MST
					Internalising	MST
					Youth-reported PTSD	Neither
Trowell 2002 <sup>155</sup>	Psychoeducational GP	Brief IP	N/A	N/A	Psychopathological symptoms	Both groups improved
					PTSD manifestations	Individual PT
Dietz 2012 <sup>204</sup>	GT	GTD		GTDS	Trauma symptoms	GTDS followed by GTD
						All groups improved
Downing 1986 <sup>180</sup>	PP	RT	N/A	N/A	Sleep	RT
					Sexual play with others	RT
					Sexual self-stimulation	Neither group improved
					Disruption in school	RT
					Enuresis	RT

GT, group therapy; GTD, group therapy with dogs; GTDS, group therapy with dogs plus stories; IP, individual psychodynamic therapy; N/A, not applicable; PP, psychoanalytic psychotherapy; RT, reinforcement therapy.

### Multisystemic therapy

In the study by Swenson *et al.*,<sup>144</sup> MST was compared with enhanced outpatient treatment, which included the standard services offered at the centre (including a range of therapies and outward referrals) plus special measures to maximise the engagement and retention of families in treatment (including telephone reminders, the scheduling of appointments). The STEP-TEEN<sup>768</sup> was provided for all parents. The results indicated that MST-CAN was more effective than enhanced outpatient treatment in reducing youth mental health symptoms, parental psychiatric stress, those parenting behaviours associated with maltreatment, youth out-of-home placements and changes in new placements.

Table 30 summarises the evidence available on the comparative effectiveness of interventions for children who have been physically abused.

## Children who have experienced different kinds of maltreatment

### Cognitive-behavioural therapy

Rushton and Miles<sup>664</sup> compared a cognitive-behavioural parent training intervention based upon (but not replicating) Webster-Stratton's IY programme, with an educational programme that was designed to improve adopters' understanding of the meaning of children's current behaviour and to help them see how this might reflect their past experiences. No differences were found in child behaviour problems between the two groups at 6 months' follow-up, although there was greater satisfaction with the behavioural intervention than with the educational comparison.

Scheck *et al.*<sup>121</sup> compared EMDR with an active-listening intervention, and reported a significant effect for EMDR on depression and self-concept.

### Attachment and Biobehavioral Catch-up

Attachment and Biobehavioral Catch-up (ABC) was compared in two<sup>122,125,126</sup> studies with a home-based educational intervention designed to enhance cognitive and linguistic development, which was stripped of components that promoted parental sensitivity to child cues. Different outcome measures were used in each study. Results favoured ABC in promoting secure attachment in the Bernard *et al.*<sup>122</sup> study and in the Dozier *et al.*<sup>125,126</sup> study, in which parents reported fewer behaviour problems among older children, and improvements in foster children's regulatory capabilities (assessed by saliva cortisol).

**TABLE 30** Studies comparing the effectiveness of different interventions for children who have been physically abused

Study	Interventions compared		Outcome	Findings favour
	1	2		
Runyon 2010 <sup>109</sup>	CBT-PO	CPC-CBT	PTSD	CPC-CBT
			Internalising behaviour	
			Externalising behaviour	CBT-PO
Kolko 1996 <sup>108</sup>	CBT	FT		Both groups improved
Swenson 2010 <sup>144</sup>	MST	Enhanced outpatient treatment	Youth mental health	MST
			Parental psychiatric stress	MST
			Parenting behaviour	MST
			Permanency in placement	MST
CBT-PO, CBT parents only.				

### Child–parent psychotherapy

Child–parent psychotherapy (CPP) was compared with PPI in three<sup>123,124,133</sup> studies and with psychotherapy plus case management in a fourth study.<sup>127–129</sup> Results from the study by Toth *et al.*<sup>133</sup> indicated children in the CPP group evidenced fewer maladaptive maternal representations and fewer negative self-representations over time than those in the psychoeducational home-visiting condition or in a community standard. Similarly, mother–child relationship expectations of children in the CPP group became more positive than for children in the other groups. The majority of these children had experienced multiple forms of maltreatment, typically physical abuse, neglect and emotional maltreatment.

In a sample of families in which children had witnessed domestic violence, Lieberman *et al.*<sup>127–129</sup> reported a significant impact of CPP compared with case management plus community referral for individual treatment. Results indicate significant improvements in children’s behaviour problems and maternal psychiatric symptoms of distress for those who completed CPP, compared with case management plus community referral for IT. Cicchetti *et al.*<sup>123</sup> reported improvement in secure attachment in both those children allocated to CPP and those allocated to a PPI. Significant results were also reported for both these interventions in a study examining their impact on normalising biological regulatory processes.<sup>124</sup>

### Other

No studies of treatment foster care, therapeutic day care or psychoeducation included other treatment controls (Table 31).

**TABLE 31** Studies comparing the effectiveness of different interventions for children who have experienced different kinds of maltreatment

Study	Interventions compared		Outcome	Findings favour
	1	2		
Rushton 2000 <sup>664</sup>	CB/PT	EPT	Child behaviour	CB/PT
			Parental satisfaction	EPT
Scheck 1998 <sup>121</sup>	EMDR	Active listening	Depression	EMDR
			Self-concept	EMDR
Bernard 2012 <sup>122</sup>	ABC	Home-based educational intervention	Secure attachment	ABC
Dozier 2006 <sup>125,126</sup>			Regulatory ability	ABC
Toth 2002 <sup>133</sup>	CPP <sup>a</sup>	PPI	Improvements in children’s maternal representations	CPP
			Improvements in children’s negative self-representations	CPP
			Improvements in mother–child relationship expectations	CPP
Cicchetti 2006 <sup>123</sup>	CPP <sup>a</sup>	PPI	Secure attachments	Both groups improved
			Maternal psychiatric symptoms	CPP
Cicchetti 2011 <sup>124</sup>	CPP	PPI	Biological regulatory processes	CPP
Lieberman 2006 <sup>129</sup>	CPP	Psychotherapy and case management	Secure attachment	CPP

CB/PT, cognitive–behavioural parenting training; EPT, educational parent training.

a CPP (Child Parent Psychotherapy) is used in this table. The name of this intervention is adjusted by the research teams to reflect different age groups, so that Toth *et al.*<sup>133</sup> and Cicchetti *et al.*<sup>123</sup> refer to this intervention as IPP.

### ***What interventions are of no benefit or may result in harm?***

On the basis of the studies identified in this review, it is not currently possible to answer this question. In some areas there is little or no evidence about the effectiveness of interventions, some of which are routinely used in the UK. Examples of this would be non-directive counselling, supportive therapy, music therapy, art therapy and some other activity-based interventions. Unfortunately, 'intelligence' from our PAG suggests that these are the therapies that are most likely to be offered to maltreated children.

Very few studies address the issue of harm. One<sup>89</sup> 1996 study of CBT noted that the symptoms of 5–15% of children in both treatment groups actually got worse over time. The authors note that, in the absence of a no treatment control, it is not possible to know whether improvement or deterioration may have occurred without treatment. Equally, treatment may have limited the level of deterioration but, again, it is not possible to tell from an 'other treatment' control design. This attention to the important issue of deterioration was the exception rather than the rule. No study appeared to have been designed with the explicit aim of tracking unintended consequences of treatment.

### ***What interventions are most accessible and acceptable to carers, children and young people?***

One of the key messages to emerge from this body of research is that researchers routinely miss the opportunity to consider issues of accessibility and acceptability. Although additional dimensions increase the cost of research, there are some low-cost strategies that could be deployed to explore the barriers and facilitators both of engagement and of retention in therapy. Given the difficulty of disinterring retention in a study from retention in an intervention, there is also a research gap in relation to these important issues within the UK.

One of the things to emerge from the studies, and which drew comment from the PAG, was that in the included studies many users were recruited by research teams into specialist centres, and, even where the setting was a mainstream service setting, little was said about normal referral pathways. Together with the fact that very few studies were conducted in the UK, this means that, at a very basic level, we currently know little about who receives services in the UK, who is and who is not referred, and what factors determine referral and the acceptance of those referrals by services.

### **Caregiver support**

One factor to emerge from the literature and from the Young People's Advisory Groups is the important role that parents and other caregivers play in determining whether or not children and young people engage with therapeutic services when these are offered. Young children need their parents to take them, and most children look to their parents for messages, both verbal and non-verbal, about the acceptability of treatment, in terms of both its probable helpfulness and its acceptability within the family. Although not discussed in these terms, this may be one reason why therapies generally appear to be more effective when they involve parents, although the primary reason is likely that such interventions are more ecologically valid and maximise the opportunities for influence.

Relatively few studies addressed the issue of the relationship between therapist and parent, or indeed the impact of the therapist's relationship with the child. We know from the broader psychotherapy literature that the latter is an important factor, and in this area, both are important influences on the likelihood of engagement with services and on outcome. Among the PAG there were different opinions as to how parents' own prior history of therapy might influence their decisions about seeking treatment for a child, or accepting it if offered. It is very probable that parents who had been deemed to have maltreated their children may need some persuasion and skilled workers. Some of the techniques described in studies of ABC and CPP provide useful illustrations of the skills required to work with these families.

In the absence of studies addressing this, one can only speculate, but the studies included in this review illustrate (if at times only by omission) the importance of addressing these interpersonal issues. As we discussed in *Chapter 5*, young adolescents would clearly like the opportunity to influence decisions about seeking help, and negotiating the form that this help might take.

## The basics

Although largely conducted in America, studies examining service engagement and retention consistently point to the probable importance of some very basic considerations, such as location of services, the extent to which people feel welcome, the importance placed on confidentiality, and knowing what to expect. The length of the waiting list was a factor implicated as a probable cause of 'no shows' in those studies which examined treatment engagement.

## Groups and psychoeducation

Although the results for studies of therapeutic group work were generally disappointing, there was evidence across the studies that bringing children and parents together in (separate) groups was a useful adjunct to other therapeutic approaches, such as cognitive-behavioural interventions, psychoeducation and in some of the intensive service models, such as treatment foster care. Therapeutic day-care settings offer some of the same characteristics. Groups provide an opportunity for children – and parents – to realise that they are not alone in coping with difficult circumstances; they provide an opportunity to share experiences with others whose own circumstances are closer to their own than those of the typical professional or therapist, and this also provides opportunities for problem-solving and skill development that are not so readily available in IT. Groups can be organised around activities which can attenuate the awkwardness that some people feel in one-to-one counselling, or in therapeutic interventions that depend wholly on talking. As the study by Diez *et al.*<sup>204</sup> suggests, animals may provide one such opportunity. The studies that have consulted with children and young people participating in groups, make clear that the prospect of joining a group is not necessarily less intimidating than that of talking alone to a therapist, and for some children it may be more so. Groups may be cost-effective, but require considerable planning. Ensuring their effectiveness also requires attending to the issues discussed above.

Psychoeducational group therapy and CBT (which includes a strong component of psychoeducation) may appeal to parents and children because they represent a sharing of expert knowledge and offer very concrete strategies for dealing with present and future difficulties. It is possible (although no study has investigated this, as far as we can tell) that the processing content of psychoeducational interventions provides participants with a language and a means to address the consequences of maltreatment. This has certainly been the experience in other fields (e.g. psychoeducational interventions for people with schizophrenia and their families), which is why it is often referred to as an empowering intervention.

## What do we know about the economic benefits?

Little is known about the cost-effectiveness of alternative interventions for maltreated children. Only six economic evaluations that could be considered 'full' economic evaluations (comparative analysis of alternative interventions in terms of both costs and effects) were located, and the results are conflicting. Evidence from an Australian decision-analytic model suggests economic benefits for TF-CBT compared with no treatment and non-directive counselling, particularly when combined with a SSRI antidepressant.<sup>612</sup> In contrast, a UK-based study<sup>613</sup> found no evidence of cost-effectiveness of parenting programmes that included a cognitive-behavioural approach. Another UK-based study<sup>614</sup> found economic advantages for a group-based psychoeducation intervention compared with individual psychotherapy for girls who had been sexually abused. Two<sup>615,616</sup> US-based studies support the cost-effectiveness of intensive service models of care and the final study,<sup>198</sup> also US based, was inconclusive when evaluating a co-ordinated model of care.

In addition to conflicting results, all studies suffered from a number of limitations, primarily small sample sizes and narrow cost perspectives, but also the lack of generic measures of outcome, incremental analysis and exploration of uncertainty. None of the studies was scientifically robust enough to have strong confidence in the results reported and no economic evidence was found for CBT for physical abuse, RBIs, systemic therapies, activity-based therapies, psychotherapy/counselling, peer mentoring or therapeutic residential or day-care services.

Exploration of the cost-effectiveness of the most promising intervention, CBT for children who had been sexually abused, using outcome data from meta-analysis, was still unable to provide a clear conclusion. The results for all analyses, apart from one, showed no clear economic advantage for CBT. The only exception was for post-treatment depression outcomes. However, any potential advantage for CBT disappeared by the 12-month follow-up.

Overall, it is clear that there is a serious lack of robust evidence of cost-effectiveness of interventions for children who have been maltreated and further good-quality research is needed.

### Conclusions

The multiple and different effects of maltreatment vary with maltreatment type; maltreatment characteristics (duration, intensity, frequency); the nature of support available to the child (during and after maltreatment); and the child's innate/genetic vulnerability. It follows that what is needed before offering therapy (resource-led approach) is an assessment of the child's current and probable future therapeutic needs. The needs of looked-after children, in particular, require regular review, albeit in ways that are acceptable to the children and non-stigmatising. Some children will need treatment for specific psychiatric sequelae, such as PTSD, anxiety and depression. Most will need services that can minimise the adverse consequences that maltreatment often has on children's emotional, social, behavioural and physical development.

For children in out-of-home placements, in particular, assessments need to include assessments of the child's 'caregiving system' and how this is influenced by wider systems, such as education and social welfare.<sup>769</sup> It should include an assessment of motivations for caregiving and the factors that impact on carers' roles, including how secure they feel in the permanence of their relationships with the child. As this review makes clear, foster and adoptive parents are a fundamental therapeutic resource for the children for whom they are caring. Although residential workers are clearly in a different relationship with children, these factors underline the importance of thinking therapeutically and strategically about this form of care which, although serving only around 11% of children in care, is usually caring for some of the most troubled young people.

A rather different, but fundamental, consideration is the need for a comprehensive assessment of the needs of any seriously maltreated child and his/her family. A point repeatedly made in the sexual abuse literature is that sexual abuse is an event and not a disorder. Not all children who are sexually abused, or are the victims of excessive physical punishment, go on to develop PTSD or depression, or behaviour problems. The consequences of maltreatment differ because every child is different.<sup>770</sup> Furthermore, the consequences of significant maltreatment manifest themselves at different stages of a child's development and often in different ways. If PTSD becomes a problem for a child then it is important to address this. For some children PTSD or depression may not be a problem until triggered by something later in their lives, or may be a problem that recurs at significant transition points.

Those children whose maltreatment history is such that they are made subject to a child protection plan, or are placed in out-of-home care, need to have their circumstances comprehensively reviewed (by the responsible social worker and the core team) and require an overall assessment of the impact of their experiences – not just in terms of mental disorder, but in relation to their general development and functioning. They may also need to be kept under periodic review, although managing this without stigmatising children (particularly those in care) needs very careful handling if it is to be acceptable to them.

For example, speech and language delay are not unusual amongst maltreated children, and maltreatment frequently impacts adversely on social and emotional functioning and on educational progress. If not addressed, the cumulative damage of these developmental deficits may well be as costly to the child and to society as particular psychiatric disorders. Yet relatively few studies examined interventions designed to address these longer-term problems. Exceptions are the peer-mentoring interventions studied by Fantuzzo *et al.*,<sup>182</sup> the therapeutic day care evaluated by Culp *et al.*,<sup>197</sup> and the MTFC developed by Fisher *et al.*<sup>183–188</sup>

for preschool children. Both Culp *et al.*<sup>196</sup> and Fantuzzo *et al.*<sup>182</sup> paid considerable attention to the involvement of parents (directly or indirectly). RBIs, such as those mentioned above, are well placed to improve developmental outcomes for infants.

The families of children who come to the attention of Child Protection Services in the UK typically have a wide range of needs, as do their children. An unintended consequence of the Children Act 1989,<sup>771</sup> exacerbated by resource shortages, is that many of the children in care, and many of those who are subject to a child protection plan, have been exposed to maltreatment for many years before services respond adequately. Their needs are very complex and most are long-term and may be exacerbated by moves within the care system. One of weaknesses in the current evidence base is that there are few studies of complex and longer interventions (such as service configurations) designed to address the realities facing Child Protection Services and partner agencies. It is difficult, on the base of the existing evidence, to identify interventions with a strong evidence base, but even if this were not the case we would argue that in this area the choice of therapeutic intervention (such as group work or CBT) needs to be driven as much by the conclusions of a good-quality assessment as by the occurrence of maltreatment, however serious. In short, child maltreatment, particularly when chronic or severe, disrupts normal development, and children who have been adversely affected by maltreatment carry a particular 'handicap' (to coin sporting jargon) in the negotiation of developmental transitions. Beyond therapeutic interventions, they require good caregiving.

### Access to therapy

This review generally confirms the relevance to maltreated children in the UK of the interventions examined in the included studies, but highlights significant gaps that are consequent on the narrow focus of these studies on particular clinical sequelae of maltreatment, such as PTSD. But, whatever help children need, it is not easy for them to know where or how to access it.

CAMHS in the UK are currently a scarce resource, with high thresholds and significant waiting lists. Little is known about the profile of services provided or to whom they are provided. A survey of provision in the UK would be extremely helpful in ascertaining the extent to which maltreated children, including children in care, are offered, and are accessing, this provision.

A survey ascertaining the kinds of interventions used in this service would also facilitate a systematic investigation of a problem reported by our PAG, namely that there would appear to be a mismatch between the services children are most likely to receive in the UK (as indicated by the PAG) and those interventions that have been rigorously evaluated in relation to maltreated children, or indeed evaluated at all. The interventions most rigorously evaluated, and whose results are most promising (CBT, CPP, ABC), either appear to be very patchy in the UK or, if practised (CBT), not necessarily practised to a high standard (i.e. with fidelity). In contrast, therapies that have not been subjected to rigorous evaluation, and for which the evidence base is extremely weak, appear to be routinely available, for example creative therapies and play therapies. Some of these therapies may be effective; they *may* be particularly relevant for children unable to express themselves verbally, either for reasons of trauma or because of their developmental age, but at the moment they cannot be said to be evidence based. In some cases, interventions in use have simply not been evaluated and entirely lack empirical support for use with maltreated children (e.g. non-directive play therapy, art therapy). In the absence of evidence for their use, policy initiatives, such as the Department for Education's decision to provide adoptive parents with vouchers to purchase therapeutic services (the Adoptive Support Fund), may serve only to exacerbate this situation, as such therapies are also the easiest to access. Adopters need support to help their children access not specialist services, but effective services.

Children need access to relevant sources of help *when* they need it. This suggests that sources of help need to extend beyond those provided by CAMHS. Some of the studies in this review emphasised the specialist knowledge that is required when working with maltreated children, which is not necessarily included in qualifying or even post-qualifying training. We return to this issue in the next section.

There was only one<sup>497</sup> study of a web-based therapeutic support identified in this review and, despite the many concerns facing professionals who wish to provide therapeutic help through this medium, the general principle of using social media as means of communicating and encouraging sources of help, and providing sources of help, should not be dismissed.

### Evidence-based interventions

Compared with the evident need for effective interventions to address the consequences of maltreatment, the number of interventions for which there is strong empirical support is relatively small. For symptoms such as PTSD and anxiety, cognitive-behavioural interventions appear to enjoy most support. The evidence for their effectiveness for depression is less clear. There is promising support for the effectiveness of relatively brief, focused, manualised interventions to help address insecure attachments among maltreated infants and toddlers. An even smaller, but also promising, evidence base suggests that therapeutic day care can help with some of the social interactional problems experienced by some maltreated children. Psychoeducation, both as part of an intervention such as CBT or as a central component in organising groups of children, may be effective in reducing trauma and helping children to cope and move forward. One<sup>183-188</sup> study of MTFC for preschool children suggests that this may be an effective strategy for promoting placement stability.

### Increasing capacity to deliver evidence-based intervention

In a survey of relevant mental health clinicians in the USA (including social work, counselling, clinical psychology and 'other') Allen *et al.*<sup>772</sup> provided respondents with a list of 15 interventions, and asked them to identify those interventions that they commonly used in practice; for which they had received specialist training; for which they would like to receive training or more advanced training; and that they saw, regardless of the targeted presenting problem, as empirically supported for use with maltreated children (maximum of five interventions). The research team did not define empirical support in an attempt to increase ecological validity. The list was constructed by 10 experts in the field of research with maltreated children, some of whom might well be deemed to have been a conflict of interest, but the list is broadly consistent with the conclusions of this review. Irrespective of experience, primary practice setting or self-reported theoretical orientation, few respondents were able to identify interventions that the expert advisory group identified as empirically supported, with the exception of TF-CBT, in which 73% of the 262 clinicians said they were trained. Aside from this, no more than one-third were able to identify any other empirically supported treatments and were not trained in their use. Most reported being trained in, on average, two *non-empirically supported* treatments, and many indicated that they used interventions that they knew were not empirically supported. The more experienced the clinician, the greater the number of non-empirically supported training interventions undertaken (and the greater the number of non-empirically supported interventions identified as empirically supported).

These findings reflect common challenges that are inherent in developing and maintaining evidence-based practice among busy clinicians, namely how best to make the findings of research accessible to them and how to facilitate their use, with concomitant implications for qualifying training, continuing professional development and organisational support. For UK clinicians, a further challenge might be scepticism about the perceived relevance of evidence produced outside the UK.

Concerns were expressed by the PAG that a similar situation exists in the UK, but, to our knowledge, no such research has been conducted in the UK. Robustly gathered, such information would, alongside information on the profile of children accessing services from CAMHS, facilitate an evidence-informed approach to workforce planning, training strategies and the identification of research gaps.

### Enhancing placement stability for looked-after children

For maltreated children whose histories require out-of-home placements for long periods of time, the importance of placement stability in a home where they can develop close relationships with their caregivers cannot be overstated. It is evident from the studies included in this review that placement

stability can be enhanced by providing foster and adoptive parents with the skills and support needed to understand and address the problems that result from maltreatment and insecure attachments.

Tarren-Sweeney<sup>61</sup> has argued for a clinical workforce that specialises in children in care or adopted. There are two strong arguments for this. The first is that such a workforce – which would extend beyond CAMHS (e.g. including specialist social workers, therapists working with adoption and fostering agencies) – would go some way to ensuring that children who have experienced maltreatment and, importantly, their caregivers would have ready access to appropriate services. For some children, such a person *might* provide an anchor point in the world where social workers come and go, and placements often change. This is perhaps optimistic, but it is more difficult to take issue with the second argument, which is that those working with looked-after children, irrespective of disciplinary background, require specialist training. He suggests that such training should reflect a broader conceptualisation of practice that incorporates enhanced expertise in the assessment and formulation of attachment- and trauma-related psychopathology among vulnerable children, and a greater focus on ‘the nature of family life that sustains and promotes the development of children who have experienced chronic social adversity; children’s felt experiences and worldview; child welfare systemic influences; and more detailed consideration of children’s developmental histories, with particular reference to attachment and trauma theories’<sup>61</sup> (p. 619). All of these also need to be understood by the children’s caregivers, who are the crucial agents of positive change for the children, alongside therapeutic interventions. In the UK, Golding<sup>60</sup> makes a similar point, albeit in the context of multiagency working. Training in evidence-based, psychosocial interventions is necessary, but not sufficient, training for practitioners working with the majority of children in the UK who have experienced abuse and neglect.

### **Strengths and limitations of this evidence synthesis**

#### **Strengths**

This review is largest and most comprehensive review of what is known about the effectiveness of psychosocial interventions for maltreated children. The searches were thorough and comprehensive, unrestricted either by language or by time. This should have ensured that we have missed little, but the body of evidence was larger and more complex than we anticipated. Our method of judging study eligibility should have ensured that we did not exclude studies inappropriately.

The study benefited from a multidisciplinary Steering Group of very actively engaged individuals from a variety of professional backgrounds, from statutory, voluntary and research user organisations. The involvement of key stakeholders is, we believe, a major strength in this report. Although we were able to consult with only relatively small numbers of young people, their views provided an important lens through which to consider the available evidence, and the same is true of the – somewhat more representative – group of professionals in our PAG.

#### **Limitations**

This evidence synthesis was developed to be of value to decision-makers. We have therefore tried, throughout this report, to consider the five factors influencing quality that are judged as part of a GRADE assessment. In view of the relatively sparse data available for pooled analyses, the added value of presenting separate SOF tables for all comparisons was deemed limited, although for illustrative purposes we have developed a SOF table for CBT alternatives compared with non-CBT-based alternatives for children who have been sexually abused (see *Appendix 11*).

Another limitation of the available evidence (rather than the review itself) is the generalisability of findings from studies that were largely conducted outside the UK. This applies particularly to the effectiveness studies and studies of economic evaluations, but it also applies to studies of acceptability of interventions and services. Here, there are marginally more UK studies, and, although their quality is acceptable in respect of their aims, one would not wish to generalise from the findings of most of these studies, wherever they are conducted. Their major contribution is shining a spotlight on important issues that

researchers have rarely taken seriously, and which could merit both from dedicated research on these issues and from being embedded in studies of effectiveness.

A key limitation is the restricted focus of most studies on outcomes deployed in studies of effectiveness. For this population, it may well be appropriate for a study of CBT or psychoeducation to focus on specific clinical outcomes, such as anxiety or PTSD, but such a narrow focus on clinical outcomes assumes that, if these are addressed, so too will be the wider and – we have argued – more serious effects of maltreatment on the lives of many children and young people.

Given the large number of heterogeneous studies, the time and resource constraints under which we were working limited our ability to investigate a number of issues that emerged as hypotheses, for example the extent to which certain intervention components are important irrespective of intervention type. The role of parents, the role of groups and the contribution of psychoeducation are three such candidates.

## Implications for practice

This review cast a wide net in seeking evidence of ‘what works’ in addressing the adverse consequence of child maltreatment. The field is certainly challenging, for both technical and ethical reasons, and for this reason we did not seek to restrict our inclusion criteria to randomised trials. It is therefore particularly disappointing that the available evidence does not lend itself to unequivocal guidance on what therapeutic approaches are best suited to this population. The key reasons for this stem from the poor quality and reporting of the available research, and we address this in the final section, *Future research*. It would appear also to indicate something of a ‘disconnect’ between the focus of researchers and the reality of clinical practice, particularly in relation to the populations served by the latter and the inclusion criteria of the former.

However, reviewing and critically appraising these studies has highlighted a number of implications for practice. First, although no evidence of effectiveness is not evidence of ineffectiveness, those interventions that appear to have some benefit share some common features, such as an educational component (helping children and parents to understand what has happened and to appropriately allocate responsibility for maltreatment), the importance of being believed and supported, helping children and parents to establish strategies to ensure their future safety, and – where necessary – addressing the direct psychological sequelae of trauma, such as post-traumatic stress or depression (where cognitive-behavioural approaches outperform others). Studies have focused predominantly on the psychological sequelae of maltreatment, neglecting other areas of functioning and development that may be less dramatic (failing to fall into a diagnostic category) but, which, nonetheless, can have significant, cumulative effects on a young person’s development and quality of life.

When studies have inclusion criteria that (rightly) do not simply rely on the ‘fact’ of maltreatment, they usually apply criteria that draw on mental health diagnoses, for example PTSD. This is clearly a difficult issue. In order to maximise the chances of detecting an effect, studies often (and rightly) recruit only children with evidence of an adverse impact of maltreatment. However, the recruitment strategies of these (mainly North American) studies suggest that the samples are not typical of those children routinely presenting at UK clinics or indeed clinics worldwide. Many are victims of sexual abuse, often when the non-offending parent has believed the child and engaged in therapy. Some studies examine the impact of interventions on children in foster care, and these samples are probably more typical of the wider population of children who have experienced significant maltreatment, that is, of such a serious nature that they have been placed in out-of-home care. For these children, adding CBT to the management of challenging behaviour and (for infants) attachment-based approaches seem to have most promise.

More broadly, evidence from the included studies points to the following.

- Many children have experienced more than one form of maltreatment and the harmful effects are heterogeneous. It is therefore necessary for any therapeutic intervention to be preceded by a full assessment of the child's functioning, which goes beyond a search for diagnosable mental health disorders and includes physical and cognitive development, speech and language development, interpersonal/social functioning, behaviour, self-esteem and educational attainment.
- Therapy provided for identified mental health disorders, such as anxiety, PTSD and depression, may be necessary but will often not be sufficient to meet the child's overall needs.
- Therapeutic intervention may be required at different times in the child's life, as opposed to a single time-limited intervention.
- Whatever the nature of the intervention, parents or other primary caregivers need to be included, at the very least to support the child's participation, but interventions may also include carers' participation in the child's therapy, parallel work with the caregivers, work directed at the caregivers' interaction with the child, or parenting work to enhance the child's behaviour difficulties.
- Attention needs to be paid to the expressed needs and wishes of children and their caregivers regarding the setting of the therapeutic work to be provided.
- There are benefits, both for children and for caregivers, to providing therapeutic work in groups, which allow for sharing of experiences and reducing of stigma and guilt.
- For symptoms such as PTSD and anxiety, trauma-focused cognitive-behavioural interventions appear to be most effective. The evidence for their effectiveness for depression is less clear.
- Therapeutic day care and peer mentoring may also provide opportunities to address developmental and social specific sequelae of maltreatment in preschool children.
- There is promising support for the effectiveness of relatively brief, focused, manualised interventions to help address insecure attachments among maltreated infants and toddlers.
- MTFC for preschool children suggests that this may be an effective strategy for promoting placement stability. Its impact on improving outcomes for older children is less clear.
- Many interventions currently used in the UK have no empirical evidence to support their use.

### Future research

Given the paucity of evidence directly relevant to the needs of maltreated children and young people in the UK, the primary recommendation from this review must be for research investment in this area. This should include robust evaluations of those therapies most commonly used with this group of children. In identifying these, we have no UK data, and draw only on the knowledge of the research team and the PAG. The interventions most likely to be offered to maltreated children for identified mental health problems are cognitive-behavioural therapies (for those suffering from PTSD or depression), attachment-based interventions (for infants), music therapy (and other activity-based therapies, such as art or play therapy) and group-based interventions.

There is a need for independent evaluation of these interventions, as well as primary research into the profile of needs and provision of therapeutic services – including, but not confined to, clinical interventions – for maltreated children. A particular focus should be on those children looked after by the state, where there is some evidence that interventions designed to support foster parents, and adopters can enhance placement stability.

Studies should focus on issues beyond those readily assessed by clinical measures, and address the more pervasive consequences of maltreatment. Urgently needed is the development and evaluation of interventions that can address the broader psychosocial needs of maltreated children across the range of systems that have the potential to mitigate the adverse effects of their experiences. Significantly, these include schools and day-care settings.

The underdeveloped profile of UK research in this field suggests that commissioners should require researchers to pay careful attention to the growing literature on how best to conduct studies of complex interventions, beginning with the development of logic models or theories of change (clearly specifying why and how proposed interventions are expected to improve outcomes for children who have experienced maltreatment), using appropriate comparisons, and outcome measures that have ecological validity, that is, that address the wider impacts of maltreatment and include measures beyond those of psychological adjustment (e.g. school readiness, well-being, daily life skills, family functioning, academic achievement). Importantly, studies need to be better designed, with adequate sample sizes (probably requiring multisite trials), recruiting participants who reflect those presenting routinely to CAMHS, and that address the wider range of opportunities for dealing with the consequences of maltreatment, for example school-based interventions, and support to foster and adoptive parents.

The reporting of studies should adhere to CONSORT guidelines, which now include a guideline extension for the reporting of complex social interventions.<sup>773</sup>

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Further information about the data underpinning this report can be obtained from Geraldine Macdonald.

## Contributions of authors

All authors were involved in the conception and design of the study, the acquisition of data or analysis, data interpretation, drafting and/or revising the report and final approval of the version to be published. All members of the Steering Committee helped to search the grey literature. Individual contributions were as follows.

**Geraldine Macdonald** drafted the original proposal and comanaged the project. Responsible for the work of the research team. Contributed to screening of studies, quality assured data extraction and risk-of-bias judgements. Drafted *Chapters 1, 2 and 4–6* on the basis of preparatory work from NL, JH, CMcC and TB, with subsequent contributions from others, particularly DG. With RC, drafted the scientific summary, abstract and plain English summary.

**Nuala Livingstone** helped to draft the original proposal. Responsible for the day-to-day management of the study and the study team (JH, CMcC and TB). Took a lead role in planning the consultations with young people and the PAGs. Undertook screening of citations, data extraction, risk-of-bias assessments, meta-analyses of data and SOF tables. Contributed to *Chapters 2–6*.

**Jennifer Hanratty** planned and conducted consultations with young people; helped plan the consultations with the PAGs; drafted reports following the consultations (with RC, NL and CMcC); and undertook screening of studies, data extraction and quality assessment of included studies. Prepared and maintained Excel spreadsheet from which tables were produced. Prepared draft of *Chapter 3* and contributed to draft of *Chapter 4*.

**Claire McCartan** undertook screening of studies, data extraction and quality assessment of non-randomised studies. Conducted thematic analyses for synthesis of acceptability data. Drafted *Chapter 5* of the report, and contributed to *Chapter 6*. Managed all referencing in the final report.

**Richard Cotmore** was a member of the Steering Group. Took a lead role in planning and implementing consultations with the Young People's Advisory Group. Contributed to planning and implementation of professional liaison group. Drafted sections of the final report relating to the Young People's Advisory Group. Commented on, and contributed to, *Chapters 1, 3, 5 and 6*. Provided advice and assistance in relation to young people's views.

**Maria Cary** assisted with searching the grey literature. Contributed to screening of all studies. Responsible for data extraction and quality assessment of studies that were relevant to the economic evaluation, and contributed to the screening of the effectiveness studies. Undertook the economic analysis. Helped draft the economic sections of the report.

**Danya Glaser** was a member of the project Steering Committee. Contributed to planning all advisory groups. Provided expert clinical advice throughout the project. Ensured that the team was up to date with relevant developments. Helped to draft *Chapters 1, 4 and 6*.

**Sarah Byford** helped to draft the original proposal. Responsible for the economic component of the work, including supervision of the health economist (MC). Drafted the economic sections of *Chapters 2–4*. Commented on, and contributed to, *Chapters 2–5*.

**Nicky J Welton** was responsible for providing advice on evidence synthesis for use in economic evaluation. Performed sensitivity analysis for quantitative meta-analyses in *Chapter 4*, and read and commented on the economic evaluation and *Chapters 2 and 4*.

**Tania Bosqui** undertook screening of studies, data extraction and quality assessment of included studies. Helped to prepare descriptions of included interventions, and prepared section on results of attachment-based interventions.

**Lucy Bowes** contributed to the original proposal and to *Chapter 1*.

**Suzanne Audrey** assisted in organising the Young People’s Advisory Group, contributed to the study design as a member of the Steering Group, and contributed to *Chapter 5*.

**Gill Mezey** assisted in planning and organisation the first PAG. Contributed to *Chapters 4 and 6*.

**Helen L Fisher** helped to critically revise the original proposal. Assisted with facilitation of first PAG and commented on the subsequent report. Assisted with searching the grey literature and commented on the final report.

**Wendy Riches** was a member of the project Steering Group. Took a key role in planning and implementing consultations with the young people’s advisory group, and those with the professional liaison group. Commented on *Chapters 1 and 4*. Provided advice throughout on ensuring relevance to key stakeholders, such as the National Institute for Health and Care Excellence, and policy-makers.

**Rachel Churchill** Contributed to the original proposal, managed the contract at the University of Bristol and co-chaired Steering Group/team meetings. Helped to plan consultation with young people and the PAG. Conducted attrition analyses with assistance from NL; contributed to the structure of the final report, and drafted *Chapter 3*, following preparatory work from NL and JH. Contributed to *Chapters 2 and 6*. With GM, drafted the abstract and scientific summary.

## Data sharing statement

The data in the systematic review reported here can be obtained from the corresponding author on request.

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# Appendix 1 Research team and Steering Group members

**G**eraldine Macdonald (SG)

Nuala Livingstone (SG)

Jennifer Hanratty (ExO)

Claire McCartan (ExO)

Richard Cotmore (SG)

Maria Cary

Danya Glaser (SG)

Sarah Byford (SG)

Nicola J. Welton

Tania Bosqui

Lucy Bowes

Suzanne Audrey

Gill Mezey

Helen Fisher

Wendy Riches (SG)

Rachel Churchill (SG)

Note: SG, Steering Group member; ExO, Ex Officio Steering Group member



## Appendix 2 Professional Advisory Group members

### Professional Advisory Group meeting attendees: Wednesday 1 May 2013

<b>Voluntary sector/social work</b>		<b>Educational Psychology</b>	
<b>Facilitator: Richard Cotmore, NSPCC</b>		<b>Facilitator: Wendy Riches</b>	
Dorit Braun	The College of Social Work	Catherine Kelly	University of Manchester
Laurence Guinness	Kids Company	Louise Lightfoot	University of Salford
Kate Mulley	Action for Children	Patrick McArdle	University of Salford
Jonathon Rallings	Barnardo's	Eamon McCrory	University College London
Suzanne Watts	Oxford Brookes University	Joanne Snee	University of Salford
<b>Health Economics</b>		<b>Social Science</b>	
<b>Facilitator: Sarah Byford, Institute of Psychiatry, King's College London</b>		<b>Facilitator: Rachel Churchill, University of Bristol</b>	
Jennifer Beecham	University of Kent	Cheryl Burgess	University of Stirling
Farhat R Rasul	Hounslow Social Services	Elaine Farmer	University of Bristol
Maria Violato	University of Oxford	Corinne May-Chahal	Lancaster University
<b>Clinical Psychology/Psychiatry</b>		<b>Julie Mytton</b>	<b>University of the West of England</b>
<b>Facilitator: Helen Fischer, Institute of Psychiatry, King's College London</b>		<b>Foster carers</b>	
Rachel Calum	The University of Manchester	<b>Facilitator: Nuala Livingstone, Queen's University, Belfast</b>	
Andrea Danese	King's College London	Marrion Collins	Foster carer
Margaret DeJong	Great Ormond Street Hospital	Sharon Galway	Foster carer
Emilio LEMONIATIS	The Tavistock and Portman NHS Foundation Trust	Tracey Gibbons	Foster carer
Kavita Misra	Salford CAMHS	Helen Harpum	Foster carer
Helen Stain	Durham University	Chris Ingram	Foster carer
<b>Health Professionals</b>		<b>Foster carers</b>	
<b>Facilitator: Gill Mezey, St George's, University of London</b>		<b>Facilitator: Geraldine Macdonald, Queen's University, Belfast</b>	
Celina Grant	Lambeth CAMHS	Julie Kee	Foster carer
Christine Habgood	General practitioner	Cherry Largie	Foster carer
Narad Mathura	St David's Children's Centre, St David's Hospital	Annie Nugent	Foster carer
Aideen McLaughlin	Belfast Trust, Health & Social Care Services in Northern Ireland	Zena Richards	Foster carer
Colin Michie	Ealing Hospital NHS Trust	Doreen Sylvester	Foster carer
Catherine Powell	NHS Portsmouth		

## Professional Advisory Group meeting attendees: Thursday 27 November 2014

Number	Forename	Surname	Organisation
1	Jennifer	Beecham	University of Kent
2	Sarah	Byford	King's College London
3	Rona	Campbell	University of Bristol
4	Maria	Cary	King's College London
5	Rachel	Churchill	University of Bristol
6	Marrion	Collins	Foster carer
7	Paula	Cooper-Neville	Foster team
8	Richard	Cotmore	NSPCC
9	Tracey	Gibbons	Foster carer
10	Danya	Glaser	University College London
11	Laurence	Guinness	Kids Company
12	Jennifer	Hanratty	Queen's University, Belfast
13	Sarah	Howcutt	Oxford Brookes University
14	Nuala	Livingstone	Queen's University, Belfast
15	Geraldine	Macdonald	Queen's University, Belfast
16	Gill	Mezey	St George's, University of London
17	Annie	Nugent	Foster carer
18	Jonathon	Rallings	Barnardo's
19	Wendy	Riches	University College London
20	Maria	Violato	University of Oxford

# Appendix 3 Examples of search strategies for different database types

## Core search strategy (Ovid MEDLINE)

1. exp Child Abuse/
2. (child\$ adj3 (abuse\$ or cruelty or maltreat\$ or mal-treat\$ or neglect\$ or victimi#)\$).tw.
3. child protection.tw.
4. or/1-3
5. [(emotion\$ or psychological\$) adj3 (abuse\$ or harm or neglect\$ or trauma\$ or victimi#)\$).tw.
6. (physical\$ adj3 (abuse\$ or assault\$ or harm\$ or neglect\$ or trauma\$ or victimi#)\$).tw.
7. (sex\$ adj3 (abuse\$ or assault\$ or trauma\$ or victimi#)\$).tw.
8. Incest/
9. incest\$.tw.
10. (maltreat\$ or mal-treat\$).tw.
11. (intentional\$ adj3 injur\$).tw.
12. (non-accidental adj3 injur\$).tw.
13. or/5-12
14. exp infant/
15. exp child/
16. adolescent/
17. young adult/
18. (child\$ or infant\$ or teenage\$ or adolescen\$ or youth\$ or young person\$ or young adult\$ or young people or preschool\$ or pre-school\$ or baby or babies).tw.
19. or/14-18
20. 13 and 19
21. 4 or 20
22. exp Psychotherapy/
23. exp Mind-Body Therapies/
24. (psycho\$ therap\$ or psychotherap\$).tw.
25. (psychoanalytic\$ or psycho-analytic\$ or psychodynamic\$ or psycho-dynamic\$).tw.
26. Cognitive Therapy/
27. [(cognitive-behav\$ or cognitive or cognition) adj3 (program\$ or intervention\$ or therap\$ or treatment\$)].tw.
28. CBT.tw.
29. counsel?ing.tw.
30. (psychodrama or acting out or role play).tw.
31. (meditation or mindfulness or mind training).tw.
32. (Relax\$ adj3 (training\$ or treatment\$ or therap\$)).tw.
33. (multisystemic or multi-systemic).tw.
34. [(psychosocial or psycho-social or psychoeducation\$ or psychoeducation\$) adj3 (intervention\$ or program\$ or support\$ or therap\$ or treatment\$)].tw.
35. [(family or group or systemic\$ or multimodal\$ or multi-modal\$) adj3 (program\$ or intervention\$ or therap\$ or treatment\$)].tw.
36. Mental health/
37. exp Behavior Therapy/
38. (behavio?r\$ adj3 (program\$ or intervention\$ or therap\$ or treatment\$)).tw.
39. [(exposure or abreaction or desensitization) adj3 therap\$).tw.
40. ('Eye Movement Desensitization and Reprocessing' or EMDR).tw.
41. Foster Home Care/

42. [(foster\$ or residential or out-of-home) adj3 (care\$ or therapeutic\$ or treatment\$)].tw.
43. peer mentor\$.tw.
44. [(gestalt or milieu or residential) adj therap\$].tw.
45. (therapeutic adj (alliance or relationship)).tw.
46. dramatherapy.tw.
47. Feedback, Psychological/
48. [(biofeedback or feedback or imagery) adj3 (intervention\$ or therap\$ or treatment\$ or train\$)].tw.
49. (hypnosis or hypno-therapy or hypnotherapy or breathing exercise\$).tw.
50. object attachment/
51. [(attachment or bond\$) adj3 (infant\$ or child\$ or mother\$ or maternal\$ or father\$ or paternal\$ or parental\$)].tw.
52. [(insecure adj2 attachment\$) or attachment disorder].tw.
53. [(solution focus\$ or trauma\$ or talking) adj3 therap\$].tw.
54. sensory art therapies/
55. [(art or creative or drama or music or narrative or play\$ or sensory) adj3 (program\$ or intervention\$ or therap\$)].tw.
56. or/22-55
57. 21 and 56
58. (autobiography or biography or comment or editorial or letter or news).pt.
59. 57 not 58

### Search strategy for Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects (via The Cochrane Library)

ID	Search
#1	medical subject heading (MeSH) descriptor: [Child Abuse] 2 tree(s) exploded
#2	(child* near/3 (abuse* or cruelty or maltreat* or mal next treat* or neglect* or victimi*)):ti,ab
#3	(child next protection):ti,ab
#4	#1 or #2 or #3
#5	[(emotion* or psychological*) near/3 (abuse* or harm or neglect* or trauma* or victimi*)):ti,ab
#6	(physical* near/3 (abuse* or assault* or harm* or neglect* or trauma* or victimi*)):ti,ab
#7	(sex* near/3 (abuse* or assault* or trauma* or victimi*)):ti,ab
#8	MeSH descriptor: [Incest] this term only
#9	incest*:ti,ab
#10	(maltreat* or mal-treat*):ti,ab
#11	(intentional* near/3 injur*):ti,ab
#12	(non-accidental near/3 injur*):ti,ab
#13	{or #5-#12}
#14	MeSH descriptor: [Infant] 1 tree(s) exploded
#15	MeSH descriptor: [Child] explode all trees
#16	MeSH descriptor: [Adolescent] this term only
#17	MeSH descriptor: [Young Adult] this term only
#18	(infant* or child* or baby or babies* or adolescen* or teen* or youth* or young next person* or young next people or young next adult* or pre next school* or preschool* or baby or babies):ti,ab

ID	Search
#19	{or #14-#18}
#20	#13 and #19
#21	#4 or #20
#22	MeSH descriptor: [Psychotherapy] 1 tree(s) exploded
#23	MeSH descriptor: [Mind-Body Therapies] 1 tree(s) exploded
#24	(psycho next therap* or psychotherap*):ti,ab
#25	(psychoanalytic* or psycho next analytic* or psychodynamic* or psycho next dynamic*):ti,ab
#26	MeSH descriptor: [Cognitive Therapy] this term only
#27	[(cognitive next behav* or cognitive or cognition) near/3 (program* or intervention* or therap* or treatment*):ti,ab
#28	'CBT':ti,ab
#29	(counselling or counseling):ti,ab
#30	(psychodrama or 'acting out' or 'role play'):ti,ab
#31	(meditation or mindfulness or 'mind training'):ti,ab
#32	(Relax* near/3 (training* or treatment* or therap*)):ti,ab
#33	(multisystemic or multi next systemic):ti,ab
#34	[(psychosocial or psycho next social or psycho NEXT education* or psychoeducation*) near/3 (intervention* or program* or support* or therap* or treatment*):ti,ab
#35	[(family or group or systemic* or multimodal* or multi-modal*) near/3 (program* or intervention* or therap* or treatment*):ti,ab
#36	MeSH descriptor: [Mental Health] this term only
#37	MeSH descriptor: [Cognitive Therapy] 1 tree(s) exploded
#38	(behav* near/3 (program* or intervention* or therap* or treatment*)):ti,ab
#39	[(exposure or abreaction or desensitization) near/3 therap*):ti,ab
#40	('Eye Movement Desensitization and Reprocessing' or EMDR):ti,ab
#41	MeSH descriptor: [Foster Home Care] this term only
#42	[(foster* or residential or out-of-home) near/3 (care* or therapeutic* or treatment*)):ti,ab
#43	(peer next mentor*):ti,ab
#44	[(gestalt or milieu or residential) next therap*):ti,ab
#45	(therapeutic next (alliance or relationship*)):ti,ab
#46	MeSH descriptor: [Feedback, Psychological] 2 tree(s) exploded
#47	[(biofeedback or feedback or imagery) near/3 (intervention* or therap* or treatment* or train*)):ti,ab
#48	(hypnosis or hypno next therapy or hypnotherapy or breathing next exercise*):ti,ab
#49	MeSH descriptor: [Object Attachment] this term only
#50	[(attachment or bond*) near/3 (infant* or child* or mother* or maternal* or father* or paternal* or parental*)):ti,ab
#51	[(solution focus* or trauma* or talking) near/3 therap*):ti,ab
#52	MeSH descriptor: [Sensory Art Therapies] 1 tree(s) exploded
#53	[(art or creative or drama or music or narrative or play* or sensory) near/3 (program* or intervention* or therap*)):ti,ab
#54	dramatherapy:ti,ab
#55	{or #22-#54}
#56	#55 and #21

## Search strategy for Social Sciences Abstracts (ProQuest)

[(SU.EXACT.EXPLODE('Behavior Modification') OR SU.EXACT.EXPLODE('Role Playing') OR SU.EXACT.EXPLODE('Group Therapy') OR SU.EXACT.EXPLODE('Psychotherapy') OR SU.EXACT.EXPLODE('Family Therapy') OR SU.EXACT.EXPLODE('Hypnosis') OR SU.EXACT.EXPLODE('Sociotherapy') OR SU.EXACT('Group Therapy') OR SU.EXACT('Family Therapy') OR SU.EXACT('Counseling') OR TI,AB (counselling OR counseling) OR SU.EXACT('Foster Care') OR SU.EXACT('Residential Institutions') OR (TI,AB (psycho-therap[\*5] OR psychotherap[\*5] OR psychoanalytic[\*2] OR psycho-analytic[\*2] OR psychodynamic [\*3] OR psycho-dynamic[\*3]) OR TI,AB[(psychosocial OR 'psycho-social' OR psychoeducation[\*3] OR ' psychoeducation[\*3]') NEAR/3 (program[\*3] OR intervention[\*1] OR therap[\*5] OR treatment[\*1])] OR TI, AB[(behavior[\*2] OR behaviour[\*2]) NEAR/3 (program[\*3] OR intervention[\*1] OR therap[\*5] OR treatment [\*1])] OR TI,AB[(cognitive-behav[\*3] OR cognitive OR cognition) NEAR/3 (program[\*3] OR intervention[\*1] OR therap[\*5] OR treatment[\*1])] OR TI,AB(relaxation OR multisystemic OR 'multi-systemic' OR psychodrama OR 'acting out' OR 'role play') OR TI,AB[(family OR group OR systemic[\*3] OR multimodal[\*3] OR 'multi-modal') NEAR/3 (program[\*3] OR intervention[\*1] OR therap[\*5] OR treatment[\*1])] OR TI,AB [(exposure OR abreaction OR desensitization) NEAR/3 (therap[\*5])] OR TI,AB('Eye Movement Desensitization and Reprocessing' OR EMDR) OR TI,AB [(foster[\*3] OR residential OR out-of-home) NEAR/3 (care[\*3] OR therapeutic[\*3] OR treatment)] OR 'peer mentor[\*3]' OR TI,AB[(gestalt OR milieu OR residential) NEAR/3 (therap[\*5])] OR TI,AB[(therapeutic) NEAR/2 (alliance OR relationship[\*3])] OR TI,AB (biofeedback OR imagery OR hypnosis OR 'breathing exercises') OR TI,AB[(solution focus[\*2] OR trauma [\*3] OR talking) NEAR/3 (therap[\*5])] OR TI,AB[(attachment OR bond[\*3]) NEAR/3 (infant[\*1] OR child[\*3] OR mother[\*3] OR maternal[\*3] OR father[\*3] OR paternal[\*3] OR parental[\*3])] OR TI,AB [(insecure NEAR/ 2 attachment[\*3]) OR attachment disorder) OR TI,AB[(art OR creative OR drama OR music OR narrative OR play[\*3] OR sensory) NEAR/3 (program[\*3] OR intervention[\*1] OR therap[\*5])] OR TI,AB(dramatherap [\*3])] AND [(SU.EXACT.EXPLODE('Child Sexual Abuse') OR SU.EXACT.EXPLODE('Child Abuse') OR TI,AB [(child[\*3]) NEAR/3 (abuse[\*3] OR 'at risk' OR maltreat[\*4] OR mal-treat[\*4] OR neglect[\*3])] OR TI,AB ('child protection') OR TI,AB[(emotion[\*3] OR psychological[\*3]) NEAR/3 (abuse[\*3] OR harm OR neglect [\*3] OR trauma[\*3] OR victim[\*5])] OR TI,AB(physical[\*3] NEAR/3 (abuse[\*3] OR assault[\*3] OR harm[\*3] OR neglect[\*3] OR trauma[\*3] OR victim[\*5])] OR TI,AB(sex[\*5] NEAR/3 (abuse[\*3] OR assault[\*3] OR trauma[\*3] OR victim[\*5]) OR TI,AB(maltreat[\*4] OR mal-treat[\*4]) OR TI,AB('intentional injur[\*3]' OR 'non-accidental injur[\*3]') OR TI,AB(incest)] AND (SU.EXACT('Children') OR SU.EXACT('Adolescents') OR SU.EXACT('Infants') OR TI,AB(child[\*3] OR infant[\*1] OR teen[\*5] OR adolescen[\*3] OR youth[\*1] OR 'young person' OR 'young adult[\*1]' OR 'young people' OR preschool[\*3] OR pre-school[\*3] OR baby OR babies)))]

## Search strategy for EconLit (via EBSCOhost)

S13 S4 OR S12

S12 S10 AND S11

S11 TI(child\* or infant\* or teenage\* or adolescen\* or youth\* or young person\* or young adult\* or young people or preschool\* or pre school\* or baby or babies) OR AB(child\* or infant\* or teenage\* or adolescen\* or youth\* or young person\* or young adult\* or young people or preschool\* or pre school\* or baby or babies)

S10 S5 OR S6 OR S7 OR S8 OR S9

S9 TI(maltreat\* or mal-treat\*) OR AB(maltreat\* or mal-treat\*)

S8 TI(incest\*) or AB(incest\*)

S7 TI (sex\* N3 (abuse\* or assault\* or trauma\* or victim\*)) OR AB (sex\* N3 (abuse\* or assault\* or trauma\* or victim\*))

S6 TI (physical\* N3 (abuse\* or assault\* or harm\* or neglect\* or trauma\* or victim\*)) OR AB (physical\* N3 (abuse\* or assault\* or harm\* or neglect\* or trauma\* or victim\*))

S5 TI [(emotion\* or psychological\*) N3 (abuse\* or harm or neglect\* or trauma\* or victim\*)) OR AB [(emotion\* or psychological\*) N3 (abuse\* or harm or neglect\* or trauma\* or victim\*))

S4 S1 OR S2 OR S3

S3 'at risk register'

S2 'child protection'

S1 (child\* or adolescen\* or teen or infant\*) N3 (abuse\* or cruelty or maltreat\* or mal-treat\* or neglect\* or trauma or victimis\* or victimiz\*)

## Database of Promoting Health Effectiveness Reviews (DoPHER) ([eppi.ioe.ac.uk/webdatabases/](http://eppi.ioe.ac.uk/webdatabases/))

### Keyword/categorical search

#2 Characteristics of the study population: children OR young people

#4 Focus of the report: child neglect OR emotional abuse OR physical abuse OR sexual abuse

#5 2 AND 4



## Appendix 4 Citations of included and excluded studies

### Included controlled studies (citations): effectiveness studies

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Green J, Biehal N, Roberts C, Dixon J, Kay C, Parry E, et al. Multidimensional treatment foster care for adolescents in English care: randomised trial and observational cohort evaluation. *Br J Psychiatry* 2013;**204**:214–21.<sup>146</sup>
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10. Celano M, Hazzard A, Webb C, McCall C. Treatment of traumagenic beliefs among sexually abused girls and their mothers: an evaluation study. *J Abnorm Child Psych* 1996;**24**:1–17.<sup>90</sup>
11. Chaffin M, Silovsky JF, Funderburk B, Valle LA, Brestan EV, Balachova T, et al. Parent–child interaction therapy with physically abusive parents: efficacy for reducing future abuse reports. *J Consult Clin Psychol* 2004;**72**:500–10.<sup>136</sup>

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13. Church D, Pina O, Reategui C, Brooks A. Single-session reduction of the intensity of traumatic memories in abused adolescents after EFT: a randomized controlled pilot study. *Traumatology* 2012;**18**:73–9.<sup>111</sup>
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15. Cicchetti D, Rogosch F, Toth S, Sturge-Apple M. Normalizing the development of cortisol regulation in maltreated infants through preventive interventions. *Dev Psychopathol* 2011;**23**:789–800.<sup>124</sup>
16. Cohen JA, Mannarino AP. A treatment outcome study for sexually abused preschool children: initial findings. *J Am Acad Child Adolesc Psychiatry* 1996;**35**:42–50.<sup>91</sup>  
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## Appendix 5 Types of interventions

We identified therapies according to 10 different therapeutic approaches, as summarised below. Detailed descriptions of each approach are also provided.

Cognitive–behavioural therapies:

- cognitive–behavioural therapy (CBT)
- behavioural therapies
- modelling and skills training
- trauma-focused CBT (TF-CBT)
- eye movement desensitization and reprocessing (EMDR).

Relationship-based interventions (RBIs):

- attachment-orientated interventions
- Attachment and Biobehavioral Catch-up (ABC)
- parent–child interaction therapy (PCIT)
- parenting interventions
- dyadic developmental psychotherapy (DDP).

Systemic interventions:

- systemic family therapy (FT)
- transtheoretical intervention
- multisystemic FT
- multigroup FT
- family-based programme.

Psychoeducation

Group work with children

Psychotherapy (unspecified)

Counselling

Peer mentoring

Intensive service models:

- treatment foster care
- therapeutic residential/day care
- co-ordinated care.

Activity-based therapies

- arts therapy
- play/activity interventions
- animal therapy.

## Cognitive-behavioural therapies

Cognitive-behavioural therapies are a group of interventions that draw on a number of theories of learning, both to account for, and address a range of, emotional, psychological and behavioural problems. They have a wide application, ranging from addressing health and mental health problems to more interpersonal and social problems, such as social skills deficits and delinquency. As such, they have considerable relevance to the problems associated with child maltreatment. Before describing the core features of a cognitive-behavioural approach, we briefly describe the therapeutic approaches associated with earlier behavioural and social learning theories, as these continue to form important components of complex cognitive-behavioural interventions.

### *Behavioural therapies*

The earliest interventions were essentially behavioural, drawing on operant (instrumental) and classical (respondent) conditioning paradigms of learning, associated, respectively, with BF Skinner and I Pavlov. Operant conditioning focuses on how behaviour changes with changes in the environment, as when a child's antisocial behaviour increases as a result of adult attention (reinforcement). Classical conditioning focuses on associative learning, whereby a person learns to respond in a particular way (e.g. becoming anxious) to a neutral stimulus (e.g. a place) by dint of the pairing of the neutral stimulus with a traumatic event (e.g. sexual assault, humiliation).

Although now rarely viewed as adequate conceptualisations of human behaviour, operant and classical conditioning continue to inform the interventions required to address complex social and psychological problems, such as those associated with child maltreatment. Strategies drawing on both operant and classical conditioning are used in psychosocial treatments. The most commonly used classical or respondent-based technique is relaxation training. Children are trained to relax in the face of a hitherto stressful stimulus (e.g. a memory of sexual abuse) either as a way of neutralising the impact of the stimulus (where it forms part of an exposure therapy) or as the means of providing an opportunity to practise other ways of coping, such as 'reframing' (locating the responsibility for the maltreatment with the perpetrator rather than blaming themselves; practising positive self-talk). Some of the included studies evaluate a purely respondent approach to anxiety management. Operant techniques, such as differential reinforcement (essentially ensuring unwanted behaviour is not reinforced and positively reinforcing prosocial or wanted behaviour) form an important part of interventions that are designed to address the behavioural problems that are often associated with maltreatment, particularly for younger infants and children.

### *Modelling and skills training*

Social learning theory<sup>224,241</sup> recognises that we are not simply the product of our environments: we do not simply respond to stimuli – we interpret them. What we think influences what we do and how we respond to other people and events, and our experiences lead us to expect certain outcomes from certain courses of action under certain circumstances. Furthermore, a large proportion of our behavioural repertoire (e.g. our social skills, our ability to problem solve) comes not from simple respondent or operant processes, but by learning from others. We learn how to do things and how to behave by watching other people or via processes of vicarious learning (e.g. by books or verbal instruction). Reinforcement will play a part in determining whether or not we adopt or use certain responses, and some may find it difficult to manage particular situations if they have not had the opportunity to develop the appropriate skills, including social skills. Social learning theory informs our understanding of how certain forms of maltreatment may be associated with the certain outcomes, for example in understanding how witnessing intimate partner violence can exert a 'modelling effect' on children, particularly boys, which – in the absence of opportunities to learn alternate ways of managing conflict or frustration (for example) – can lead to intergenerational cycles of violence.<sup>778</sup> The understanding of the importance of modelling and behaviour rehearsal (with feedback and positive reinforcement) is used to inform a number of psychosocial therapies that aim to help individuals find more adaptive ways of responding to situations.

### Cognitive–behavioural therapies

In contrast with traditional learning theory, cognitive theories afford the mind a central role in understanding behaviour, and in developing interventions designed to address psychosocial problems. Unlike the behaviour therapies, which emerged from laboratory-based experiments, cognitive therapies developed from clinical practice, largely in the field of depression, and thus predated the empirical data that have subsequently accrued. For example, Beck 1979<sup>779</sup> argued that depression resulted from the reciprocal interaction of three things: a negative way of viewing oneself, one's situation and one's prospects (*cognitive triad*), rigid ways of thinking about the world (*schema*) that often develop early in life or based on the interpretation of prior experience, and which result in negative, automatic thoughts, and biased and erroneous thinking (*faulty information processing*). It is thought that children who have experienced maltreatment may well develop unhelpful ways of thinking about themselves, their situation and their prospects, which may cause them difficulties or prevent them overcoming associated problems. For example, children who have been maltreated may well blame themselves for what has happened to them; they may have internalised a negative self-image; they may have 'learned' that nothing they do can bring about a sought-after outcome (to be loved, thought well of), resulting in poor self-efficacy or indeed depression. Many of the psychosocial interventions designed to address the problems experienced by maltreated children are concerned to influence these cognitive sequelae. Cognitive–behavioural therapies seek to do so quite directly by helping individuals to identify maladaptive beliefs and ways of thinking, to challenge them (reality testing) and to replace them with more realistic and positive ways of thinking.

### Trauma-focused cognitive–behavioural therapy

Trauma-focused CBT (TF-CBT) is a manualised intervention developed by Cohen, Mannarino and Deblinger.<sup>267</sup> TF-CBT directly addresses traumatic symptoms, alongside other components that are typical of CBT interventions, such as coping skill training and symptom management, cognitive restructuring and gradual exposure. However, key differences are a greater focus on graded exposure, creating an appropriate account of the trauma [a trauma narrative (TN)] and cognitive processing of experiences. This focus builds on findings from research that support a model of trauma in which traumatic memories and related symptoms are maintained by cognitive biases and avoidance strategies. The TN component aims to address this in order to reduce symptomology and process traumatic memories.<sup>100</sup> TF-CBT combines joint child–parent sessions and individual sessions for both child and non-offending parents. Parent involvement provides opportunities to address misperceptions and to validate parental reactions to their child's traumatic experiences, to train parents to support their child's therapeutic work and to provide a supportive environment at home (e.g. the studies by Cohen *et al.*<sup>95,96</sup> and Cohen and Mannarino<sup>93</sup>).

### Eye movement desensitisation and reprocessing

We identified two controlled studies (both randomised trials) of EMDR. EMDR is a manualised intervention developed by Shapiro *et al.*<sup>690</sup> Because its core features combine strategies from the learning theories outlined above, we have included it in the group of cognitive–behavioural interventions. EMDR involves the identification and processing of traumatic memories using bilateral stimulation, desensitisation through imaginal exposure, and challenging and replacing maladaptive beliefs about the trauma. The information processing model suggests that this helps to process traumatic memories into long-term memory, thereby reducing trauma-related symptoms, such as hypervigilance, as well as replacing unhelpful beliefs, related to the trauma, with more adaptive ones.<sup>120</sup>

## Relationship-based interventions

### Attachment-orientated Interventions

Attachment describes an infant's strong disposition 'to seek proximity to and contact with a specific figure and to do so in certain situations, notably when . . . frightened, tired, or ill'.<sup>780</sup> It is a behavioural system that is a product of human evolution, designed to trigger protection in the face of perceived danger and to alleviate its associated response, fear. Most infants develop an attachment to their primary carers, and, for most infants, the relationship with the mother is the first intimate relationship in which they engage. From these

attachment relationships children start to form a sense of who they are, what they can expect from others, and what behaviour it is useful or dangerous to engage in. Infants whose primary carer provides sensitive and responsive care develop what is called a secure attachment. Carer sensitivity and responsiveness to their infant's needs helps to 'shape their physiological regulation and biobehavioral patterns of response' (p. 624),<sup>123</sup> and, as infants develop a secure attachment (sometime towards the end of their first year), they use that attachment and associated feelings as a secure base from which to explore their worlds.

Emotional and physical neglect or abuse, and exposure to violence, can result in insecure attachments or sometimes disorganised attachments, which, if unresolved, will contribute to a wide range of problems in later development, including poor socioemotional development, self-regulation difficulties, maladaptive behaviour, sleep disturbance, language delays, poor peer relationships, school underachievement, and psychopathology and delinquency in later life.<sup>130,781,782</sup> It has also been associated with a disturbed hypothalamic–pituitary–adrenal axis, which is important for self-regulation and stress management.<sup>124</sup> Disorganised attachment styles develop when children are emotionally and physically depending on someone who is also a source of fear and anxiety. Unsurprisingly, disorganised attachments styles are prevalent among children living in families in which there is child maltreatment, parental depression, parental history of loss or trauma, parental dissociation, parental frightening behaviour or marital discord.<sup>783</sup> The cascade of negative outcomes associated with a disturbed attachment has been referred to as 'toxic stress'.<sup>784</sup>

There is a sizeable literature focused on interventions that are designed to promote maternal sensitivity and responsiveness (see van Ijzendoorn *et al.*<sup>783</sup>). In this review, we included only those interventions that specifically focused on families when maltreatment was deemed to be an issue. Although these interventions might arguably also be viewed as secondary prevention (and therefore not appropriate for this review), the nature of attachment is such that interventions designed to promote secure attachments inevitably focus on the primary caregiver. Given the significant impact on subsequent development, these interventions were judged to meet the inclusion criteria of a psychosocial intervention dealing with the adverse consequences of maltreatment for children.

Attachment interventions generally involve caregiver–infant sessions, and aim to enhance parental sensitivity to emotional and behavioural cues in order to improve a child's attachment security (e.g. Moss *et al.*<sup>130</sup>). This may involve child development training, parenting skills, coping strategies, developing social support networks, enhancing the caregiver's capacity to provide safety, child–caregiver joint narrative of trauma experiences, addressing negative maternal representational models in the parent–child interaction, providing a corrective emotional experience for caregivers or addressing a caregiver's own attachment difficulties stemming from childhood.<sup>123,124,127–130</sup> In attachment-based interventions, the focus of the intervention is not the caregiver or the child but rather the caregiver–child relationship.<sup>785</sup> This relationship is used as a vehicle to address a child's emotional, cognitive and social functioning difficulties.<sup>127–129</sup>

### **Attachment and biobehavioral catch-up**

Attachment and Biobehavioral Catch-up (ABC) is informed by both attachment theory<sup>780</sup> and neurobiology.<sup>125,126</sup> ABC focuses specifically on disorganised attachment styles, which are associated with frightening or frightened parental behaviour rather than purely a lack of attunement or insensitivity by the parent.<sup>122</sup> This form of attachment has been found to mediate disrupted maternal behaviour and children's behavioural difficulties and dysregulation.<sup>786</sup> Children's behavioural level and biobehavioural level dysregulation is characterised by externalising behaviour problems, conduct difficulties and disrupted cortisol patterns (which are associated with stress reactivity).<sup>125,126</sup>

Attachment and Biobehavioral Catch-up (ABC) is a manualised didactic intervention which was designed to decrease parental frightening behaviour and increase parental sensitivity.<sup>787</sup> In contrast with more general attachment-based interventions, the focus of ABC is on parental behaviour change rather than changing parental internal representations.<sup>122</sup> The aim of the intervention is to help children learn self-regulatory skills by changing the way parents interpret their children's behaviour, over-riding their own issues that interfere with their caregiving and providing an enabling environment for developing self-regulation skills.<sup>125,126</sup>

### Parent–child interaction therapy

Parent–child interaction therapy (PCIT) was developed by Sheila Eyberg.<sup>222</sup> PCIT draws on the work of Diana Baumrind (on parenting styles), as well as attachment theory and learning theory. In its original form it was designed to help parents to establish a secure and nurturing relationships with their child, and enhance prosocial behaviour while decreasing undesirable behaviour. Unlike parent training, PCIT involves in vivo child–parent dyadic sessions in which parents are taught behaviour management techniques, often being coached through a one-way mirror.<sup>138</sup> To an extent, PCIT resembles a behavioural version of play therapy [Children’s Depression Inventory (CDI)] and behavioural parent training (parent-directed interaction).

Most studies of PCIT seek to minimise the risk of maltreatment or future maltreatment and secure children’s well-being by promoting nurturing parenting and reducing those parental practices that have been linked to maltreatment and attachment disorders, such as inappropriate discipline, coercive cycles of behaviour and negative communication.<sup>137,788</sup>

### Dyadic developmental psychotherapy

Dyadic developmental psychotherapy (DDP) is designed to address the impairments associated with attachment disorders and complex childhood trauma.<sup>789,790</sup> The intervention uses the child–therapist relationship to establish a relational context in which the child can learn how to engage with, and benefit from, relationships with others. The therapist seeks to establish a relationship that mirrors the general principles characteristic of parent–child relationships that facilitate secure attachments, for example attunement, reflecting back to the child his/her subjective experiences (including the trauma s/he has experienced) and helping him/her to make sense of these ‘with acceptance, curiosity and empathy’. In the same way that attachments develop as a result of experience (preverbally), DDP emphasises the importance of healing experiences. In order to benefit from DDP, children need to be in a safe and secure environment (at home or in substitute care) and parents (or carers) are active participants in the therapy, either being with the child in the sessions or watching the therapy through a one-way mirror.<sup>791</sup>

### Child–parent psychotherapy

Child–parent psychotherapy (CPP) is a home-based, manualised intervention provided on a weekly basis for 1 year by trained master’s level therapists.<sup>124</sup> It is described as a ‘supportive, non-directive, and nondidactic’ intervention that ‘includes developmental guidance based on the mother’s concerns’ (p. 794).<sup>124</sup> When children are aged  $\leq 1$  year, this therapy is referred to as *Infant–Parent Psychotherapy*; when they are older, the intervention is called, alternately, *Pre-School Parent Psychotherapy* or *Toddler–Parent Psychotherapy*.

### Parenting interventions

In general, parent training interventions aim to change unhelpful or maladaptive parenting practices in order to improve child development and well-being. As such, most parenting programmes that address maltreatment are concerned with secondary prevention, but we found three studies<sup>114,139,140</sup> with a specific focus on improving outcomes for children who have been exposed to maltreatment, and these studies were included. One study<sup>114</sup> evaluated the effectiveness of a parenting programmes designed to help foster parents and parents to co-parent children in foster care, with a view to ameliorating the child behaviour problems associated with, and return the children to, the care of their biological parents. A second assessed the impact of training maltreating mothers in elaborative and supportive reminiscing about positive and negative everyday past events with young children, as a means of addressing multiple sequelae of maltreatment.<sup>140</sup> The third specifically examined the impact of the Webster-Stratton IY programme on children’s autonomy, as well as positive parenting, recognising that autonomy is an important subjective state and a critical behaviour acquired in the early years, and which is related to the quality of parenting.<sup>139</sup>

## Systemic interventions

Systems theory posits that individuals are embedded in, and influenced by, a number of interacting systems, including – most importantly – the family. Within systems theory, the problems affecting an individual are conceptualised as a function of the relationships and patterns of interaction that surround him or her, with the resulting implication that effective interventions necessitate locating individual problems within that context and – in many circumstances – directing intervention at the family, rather than simply the individual. Systemic analyses can also be applied to other social systems, such as wider family networks, groups or organisations. Given the inclusion criteria, systemic interventions were included only when they directly focused on ameliorating the consequences of maltreatment for the children in the family (as opposed to halting it and creating a supportive family system that was capable of promoting optimal child development).

### Systemic family therapy

There are many forms of FT,<sup>792</sup> most of which are informed primarily by structural family systems theory<sup>793</sup> and drawing on a wide range of techniques from other interventions, such as CBT. This can make assessing its effectiveness quite challenging, as some forms of therapy are essentially systems-focused cognitive-behavioural interventions.

### Multisystemic therapy

Multisystemic therapy (MST) is a short-term, multifaceted intervention for children and young people with serious psychosocial and behavioural problems. It differs from FT in that it includes a combination of multiple systems in the treatment focus, such as family, peers, school, neighbourhood or community. Consistent with social ecological theories of human development, this broader focus is based on the view of the programme developers – that children's difficulties are caused and maintained by multiple factors within these systems and their interaction. The intervention therefore focuses on identifying and targeting these factors in order to reduce symptoms and distress<sup>142,794</sup> and promote health.

## Psychoeducational interventions

At the heart of psychoeducational interventions is the view that helping people to understand how their problems have arisen and how they are maintained is an important first step in empowering them to address those problems. Information or education is therefore at the heart of psychoeducational interventions. It may include information about available resources that people might access and direct instruction on coping strategies or change strategies. The educational component is often combined with other activities designed to support change, and psychoeducational interventions are often run in group formats in order to enable the modelling of acceptable behaviour, modifying of inappropriate behaviour and the development of social competencies.<sup>152</sup>

## Group work with children

Group psychotherapies (or therapeutic groups) are interventions in which the group format is central. The group itself is deemed to be 'therapeutic', providing a number of essential components, such as a feeling of universality, reducing isolation, extending social networks, social skills practice, healthy relationship building<sup>170</sup> and normalising.<sup>171</sup>

The interventions' group content includes psychoeducation, as well as skills training and experiential learning. This may include assertiveness training, narrative therapeutic activities, such as storytelling<sup>169</sup> or body image and self-esteem enhancement.<sup>170</sup> Many of these interventions are based on social learning theory.<sup>169</sup>

## Psychotherapy/counselling

Common to all psychotherapeutic interventions that address individual, familial and community-level issues, is a non-judgemental, insight-orientated approach with a strong focus on the therapeutic alliance<sup>795</sup> and dynamic relational processes with therapists or group members. Using these processes to work through past and current relationships, losses and disruptions, is thought to address underlying psychological processes in relation to traumatisation and to enable long-term change.<sup>155</sup> Many the studies we identified provided only very general descriptions of these talking-based therapies (such as 'psychotherapy' or 'counselling'), often with little or no information on the underpinning theory of the approach used.

## Peer mentoring

Peer mentoring aims to help those children whose social functioning has been adversely affected by maltreatment to acquire key developmental skills, namely the ability to form and maintain effective peer relationships. Maltreated peers with high levels of prosocial behaviour are paired with withdrawn maltreated children and trained to involve them in their play.

## Intensive service provision

### *Treatment foster care*

Enhanced Foster Care is designed specifically to meet the developmental, social and emotional needs of children in foster care with particularly challenging behaviour. A multidisciplinary team works with specially trained foster parents to reduce behavioural difficulties, increase regulatory abilities and increase a young person's secure attachment-related behaviour through a consistent and predictable environment. It involves high rates of positive reinforcement for desirable behaviours, clear limit setting, 24-hour crisis intervention for foster parents, support groups for foster parents, group therapeutic support for children and FT for relationships with biological family.<sup>183</sup>

### *Therapeutic residential/day care*

Like milieu therapy, therapeutic residential care entails creating a nurturing, stable and consistent environment and a predictable routine for children and young people who need specialist help, and whose problems make it difficult to provide that help in any other way. Indeed, for some maltreated children their experiences of maltreatment, combined with adverse care experiences, may mean they cannot be managed in substitute home-based care settings, such as adoption and fostering. A variety of specific interventions are used in the therapeutic residential care studies included in this review, among which are therapeutic parenting, life story work,<sup>553</sup> trauma-focused psychological therapy,<sup>551</sup> addressing cognitive distortions, improving impulse control, social skills training, risk management, sex education and behaviour modification,<sup>557</sup> as well as preparation for independence for older adolescents.<sup>562</sup>

Therapeutic day programmes aim to meet the developmental needs of children in terms of fine motor, language, and social and emotional skills.<sup>559</sup> Therapeutic day programmes are held in classroom environments and usually run intensively over numerous full days per week. The programmes can include milieu therapy (see below), developmentally appropriate play and activities, structured interaction, individual and parent counselling, and education services, within a psychologically safe environment that is consistent and predictable.<sup>195,196,558,563</sup>

Milieu therapy is a therapeutically planned approach to a residential or day-care environment that is designed to provide a safe environment in which adults can assist children to address the consequences of maltreatment. Safety, containment, structure, support, involvement and validation are key therapeutic activities. Like therapeutic communities (the terms are sometimes used interchangeably), the aim is to

provide a safe, nurturing environment that can engage the 'whole child' in processes of psychological change. Through multiple and repeated experiences that are carefully controlled (safe), children can learn about their behaviour and how to discuss distressing feelings and find alternative ways of expressing these. They can develop their self-esteem, learn to trust others, and learn to negotiate relationships and to acquire problem-solving skills. Milieu therapy draws on a range of theoretical frameworks, including attachment theory and object relations theory. Staff use their understanding of transference and countertransference to identify how a child's feelings and behaviour towards others reflect those with parents, siblings and significant others in their lives, and use this to facilitate change.

### **Co-ordinated care**

Co-ordinated care refers to interventions designed to provide a single point of entry to services, combined with a seamless system of service delivery. It has much in common with initiatives designed to improve interagency working. It is designed to address some of the weaknesses that are inherent in a reliance solely on case management.

## **Activity-based therapies**

### **Arts therapy**

Children who have been maltreated can find it difficult to verbalise their experience, and may feel intimidated by the therapeutic environment and overwhelmed by the verbalisation of abuse experiences. Using a variety of media – such as paint, clay, photos, poems, storytelling or music – arts-based therapies are thought to help facilitate the non-verbal and verbal expression of thoughts, feelings and life narratives. In this way, arts can provide a non-verbal medium for therapeutic communication and cognitive processing for children for whom verbal forms of therapy are not possible. It can help to bridge the gap between the internal world and the limitations of verbal language, particularly in latency age children,<sup>199</sup> and provide a mode of communication for children who are unwilling or unable to talk about what has happened to them.<sup>200</sup>

### **Play/activity interventions**

Play or activity interventions, depending on the age of the target population, are based on the premise that play and activity are vital for healthy development. Play therapy views play as a 'natural medium in which children express themselves' (p. 28).<sup>576</sup> It therefore provides a way to communicate complex ideas that would be otherwise difficult, through verbal means and helps children make sense of their internal and external worlds.<sup>576</sup> Furthermore, deficits in imaginative play have been observed in children who have experienced maltreatment that have been negatively associated with positive affect, peer interaction and problem-solving.<sup>203</sup> Activity-based interventions, such as sports or game based interventions, view activity as an appropriate medium for adolescents because it is more enjoyable than one-to-one office-based therapy, requires the development of social skills and peer relations, has physiological benefits through physical exercise and requires cognitive skills, such as impulse inhibition and planning.<sup>201</sup>

Interventions included under this category are those identified by the author as imaginative play training, challenge/initiative games and the sports-based intervention 'Do the Good'.

### **Animal therapy**

Animal therapy (or animal-assisted therapy) uses animals as part of the therapeutic process. Animals (from dogs through to horses) are used to assist with the therapeutic process and strengthen treatment strategies. They are thought to aid the therapeutic environment through the provision of warmth, acceptance, empathy and unconditional love.<sup>204</sup> Animal therapy is based on research that has found that the presence of animals has improved the communication skills of children participating in therapy, lowered anxiety while undergoing therapy and improved motivation for therapy, as well providing opportunities to teach boundaries and appropriate touch in maltreated populations.<sup>205</sup>

## Appendix 6 List of databases searched, with dates

Cochrane Central Register of Controlled Trials (CENTRAL)	Issue 4 of 12 April 2014
Ovid MEDLINE	1946 to May Week 3 2014
EMBASE (Ovid)	1980 TO 2014 Week 21
Cumulative Index to Nursing and Allied Health Literature (CINAHL Plus) (EBSCOhost)	1937 to current
PsycINFO (Ovid)	1967 to May Week 4 2014
Science Citation Index Expanded (SCIE) and Social Sciences Citation Index (SSCI) (Web of Science)	1970 to 28 May 2014
Social Care Online	All available years
Social Services Abstracts (ProQuest)	1979 to current
Education Resources Information Centre (ERIC) (ProQuest)	1966 to current
British Education Index (ProQuest)	1975 to current
Australian Education Index (ProQuest)	1977 to current
Health Technology Assessment (HTA) database	Issue 2 of 4, 2014
Health Management Information (HMIC) Consortium (Ovid)	1979 to March 2014
Trials Register of Promoting Health Interventions (TRoPHI)	All available years
EconLit (EBSCOhost)	1886 to current
NHS Economic Evaluation Database (NHS EED)	Issue 2 of 4, 2014
Health Economic Evaluations Database (HEED)	All years
Paediatric Economic Database Evaluation (PEDE)	1980 to 2012
IDEAS	All available years
The Campbell Library	All available years
Database of Promoting Health Effectiveness Reviews (DoPHER)	All available years
Database of Abstracts of Reviews of Effects (DARE)	Issue 2 of 4 April 2014
Cochrane Database of Systematic Reviews (CDSR)	Issue 5 of 12 May 2014



## Appendix 7 Other searches

Resource	Website	Searcher
1. Mental Health Foundation	<a href="http://www.mentalhealth.org.uk/">www.mentalhealth.org.uk/</a>	DG
2. Barnardo's	<a href="http://www.barnardos.org.uk/">www.barnardos.org.uk/</a>	NW
3. Carers UK	<a href="http://www.carersuk.org/">www.carersuk.org/</a>	GM
4. ChildLine	<a href="http://www.childline.org.uk">www.childline.org.uk</a>	NL
5. Children's Society	<a href="http://www.childrenssociety.org.uk/">www.childrenssociety.org.uk/</a>	RC
6. Depression Alliance	<a href="http://www.depressionalliance.org/">www.depressionalliance.org/</a>	RCh
7. MIND	<a href="http://www.mind.org.uk/">www.mind.org.uk/</a>	HF
8. Anxiety UK	<a href="http://www.anxietyuk.org.uk/">www.anxietyuk.org.uk/</a>	NL
9. NSPCC	<a href="http://www.nspcc.org.uk/">www.nspcc.org.uk/</a>	RC
10. Princess Royal Trust for Carers	<a href="http://www.carers.org/">www.carers.org/</a>	NL
11. SANE	<a href="http://www.sane.org.uk/">www.sane.org.uk/</a>	NL
12. The Site	<a href="http://www.thesite.org/">www.thesite.org/</a>	NL
13. Turning Point	<a href="http://www.turning-point.co.uk/">www.turning-point.co.uk/</a>	MC
14. Young Minds	<a href="http://www.youngminds.org.uk/">www.youngminds.org.uk/</a>	SB
15. National Child Traumatic Stress Network	<a href="http://www.nctsn.org/">www.nctsn.org/</a>	NL
16. OpenGrey	<a href="http://www.opengrey.eu/">www.opengrey.eu/</a>	SA
17. Google	<a href="http://www.google.com">www.google.com</a>	All



# Appendix 8 Checklist: quality of data within economic evaluations

## Drummond's checklist for the critical appraisal of economic evaluations

### 1 Was a well-defined question posed in answerable form?

- 1.1 Did the study examine both costs and effects of the service(s) or programme(s)?
- 1.2 Did the study involve a comparison of alternatives?
- 1.3 Was a viewpoint for the analysis stated and was the study placed in any particular decision-making context?

### 2 Was a comprehensive description of the competing alternatives given (*i.e. can you tell who, did what, to whom, where and how often*)?

- 2.1 Were any important alternatives omitted?
- 2.2 Was (*Should*) a *do-nothing* alternative (*be*) considered?

### 3 Was the effectiveness of the programmes or services established?

- 3.1 Was this done through a randomised controlled clinical trial? If so, did the study protocol reflect what would happen in regular practice?
- 3.2 Was effectiveness established through an overview of clinical studies (*systematic review/meta-analysis*)?
- 3.3 Were observational data or assumptions used to establish effectiveness? If so, what are the potential biases in results?

### 4 Were all the important and relevant costs and consequences for each alternative identified?

- 4.1 Was the range wide enough for the research question at hand?
- 4.2 Did it cover all relevant viewpoints? (*possible viewpoints include the community or social viewpoint, and those of patients and third-party payers*)
- 4.3 Were capital costs, as well as operating costs, included?

### 5 Were costs and consequences measured accurately in appropriate physical units (*e.g. hours of nursing time, number of physician visits, lost work days, gained life-years*)?

- 5.1 Were any of the identified items omitted from measurement? If so, does this mean that they carried no weight in the subsequent analysis?
- 5.2 Were there any special circumstances (*e.g. joint use of resources*) that made measurement difficult? Were these circumstances handled appropriately?

### 6 Were costs and consequences valued credibly?

- 6.1 Were the sources of all values clearly identified? (*possible sources include market values, patient preferences and views, policy-makers' views and health professionals' judgements*)
- 6.2 Were market values employed for changes involving resources gained or depleted?
- 6.3 Where market values were absent (*e.g. volunteer labour*), or market values did not reflect actual values (*such as clinic space donated at a reduced rate*), were adjustments made to approximate market values?
- 6.4 Was the valuation of consequences appropriate for the question posed (*i.e. has the appropriate type or types of analysis – cost-effectiveness, cost-benefit, cost-utility – been selected*)?

### 7 Were costs and consequences adjusted for differential timing?

- 7.1 Were costs and consequences that occur in the future 'discounted' to their present values?
- 7.2 Was any justification given for the discount rate used?

**8 Was an incremental analysis of costs and consequences of alternatives performed?**

8.1 Were the additional (*incremental*) costs generated by one alternative over another compared with the additional effects, benefits, or utilities generated?

**9 Was allowance made for uncertainty in the estimates of costs and consequences?**

9.1 If data on costs or consequences were stochastic, were appropriate statistical analyses performed?

9.2 If a sensitivity analysis was employed, was justification provided for the ranges of values (*for key study parameters*)?

9.3 Were study results sensitive to changes in the values (*within the assumed range for sensitivity analysis, or within the CI around the ratio of costs to outcomes*)?

**10 Did the presentation and discussion of study results include all issues of concern to users?**

10.1 Were the conclusions of the analysis based on some overall index or ratio of costs to consequences (e.g. *cost-effectiveness ratio*)? If so, was the index interpreted intelligently or in a mechanistic fashion?

10.2 Were the results compared with those of others who have investigated the same question? If so, were allowances made for potential differences in study methodology?

10.3 Did the study discuss the generalisability (*external validity*) of the results to other settings and patient/client groups?

10.4 Did the study allude to, or take account of, other important factors in the choice or decision under consideration (e.g. *distribution of costs and consequences, or ethical issues*)?

10.5 Did the study discuss issues of implementation, such as the feasibility of adopting the 'preferred' programme given existing financial or other constraints, and whether any freed resources could be redeployed to other worthwhile programmes?

# Appendix 9 Outcome domains and measures used

## Primary outcome domains

### *Psychological distress/mental health*

1. Adult Self-Esteem Profile (adapted from the ASEP).<sup>435</sup>
2. Anxiety Disorders interview Schedule DSM-IV.<sup>290</sup>
3. Avoidance Symptoms (Impact of Events Scale; IES).<sup>279</sup>
4. Bayley Scales of Infant Development.<sup>356,449</sup>
5. Beck Depression Inventory-Second Edition.<sup>272,332</sup>
6. Behavioral and Emotional Rating Scale (BERS).<sup>410</sup>
7. Brief Infant Toddler Social and Emotional Assessment (BITSEA).<sup>352</sup>
8. Child Attachment: Ainsworth Strange Situation Procedure.<sup>336</sup>
9. Child Dissociative Checklist.<sup>417,426</sup>
10. Child Post Traumatic Stress Reaction Index French version).<sup>416</sup>
11. Child post-traumatic stress disorder (PTSD) Symptom Scale – Interview.<sup>287</sup>
12. Child PTSD Symptom Scale.<sup>286</sup>
13. Child Report of Post-traumatic Symptoms (CROPS).<sup>288</sup>
14. Child Witness to Violence Questionnaire (CWVQ).<sup>156</sup>
15. Childhood Trauma Questionnaire.<sup>796</sup>
16. Children's Apperception Test.<sup>478</sup>
17. Children's Attributions and Perceptions Scale (CAPS).<sup>270</sup>
18. CDI.<sup>258,430</sup>
19. Children's Impact of Traumatic Events Scale (Wolfe and Gentile, 1991, unpublished). Children's Impact of Traumatic Events Scale-Revised (CITES-R; Wolfe and Gentile, 1991).<sup>414</sup>
20. Children's Knowledge of Abuse Questionnaire (CKAQ).<sup>411</sup>
21. Clinician Administered PTSD Scale for Children and Adolescents (CAPS-CA).<sup>305</sup>
22. Coopersmith Self-Esteem Inventory.<sup>436</sup>
23. Cortisol.
24. Difficulties with Emotion Regulation Scale (DERS).<sup>446</sup>
25. Early Intervention Developmental Profile.<sup>465,466</sup>
26. Emotional Regulation Bayley-III.<sup>354</sup>
27. Expectations Test.<sup>327</sup>
28. Family Environment Scale (FES).<sup>372,375,710</sup>
29. Family Inventory of Life Events and Changes.<sup>373</sup>
30. Fear Survey Schedule for Children-Revised.<sup>255</sup>
31. Fear Thermometer for Sexually Abused Children.<sup>291</sup>
32. General Health Questionnaire (GHQ and GHQ-28).<sup>434,740</sup>
33. Global functioning (Children's Global Assessment Scale, CGAS).<sup>261</sup>
34. Global Severity Index of the Brief Symptom Inventory.<sup>380</sup>
35. Health of the Nation Outcome Scales for Children and Adolescents.<sup>382</sup>
36. IES.<sup>279,303</sup>
37. Impact of Events Scale (intrusive thoughts and avoidant thoughts; IES).<sup>279</sup>
38. Intrusive Symptoms (Memories) (IES).<sup>268,303</sup>
39. Kiddie Schedule for Schizophrenia and Affective Disorders (KSADS).<sup>268,797</sup>
40. Lifetime Incidence of Traumatic Events.<sup>288,329,330</sup>
41. McCarthy Scales of Children's Abilities.<sup>285</sup>
42. Mood and Feelings Questionnaire.<sup>694</sup>

43. Multidimensional Anxiety Scale for Children.<sup>283</sup>
44. Number of placement changes.
45. Offer Self-Image Questionnaire-Revised.<sup>440</sup>
46. Parental Support Questionnaire (PSQ).<sup>273</sup>
47. Penn Inventory for Posttraumatic Stress Disorder.<sup>334</sup>
48. Perceived Competence and Social Acceptance Scale.<sup>467</sup>
49. Piers–Harris Children’s Self-Concept Scale.<sup>475</sup>
50. Post-traumatic Stress Disorder Interview.<sup>331</sup>
51. Posttraumatic Stress Diagnostic Scale.<sup>397</sup>
52. Preschool Symptom Self-report.<sup>263</sup>
53. PTSD Checklist-Civilian Version.<sup>348,479</sup>
54. PTSD Subscale.<sup>295</sup>
55. Randolph Attachment Disorder Questionnaire.<sup>364</sup>
56. Reabuse/Abuse.
57. Revised Children’s Manifest Anxiety Scale (RCMAS).<sup>256</sup>
58. Rosenberg Self-Esteem Scale.<sup>404</sup>
59. Self-Perception Profile for Children (SPPC; 8- to 12-year-old version).<sup>413</sup>
60. SPPC.<sup>413</sup>
61. Self-Perception Profiles for Children and Adolescents (adapted).<sup>448</sup>
62. Self-Rating Depression Scale (SDS).<sup>798</sup>
63. SDS.<sup>798</sup>
64. Self-representation scores (MacArthur Narrative Coding Manual-Rochester Revision, Robinson, Mantz-Simmons and Macfie, 1996, unpublished).
65. Self–Other Four Immeasurables Scale (SOFI).<sup>444</sup>
66. Semistructured Interview for Diagnostic Classification.<sup>343</sup>
67. Sexual Abuse Fear Evaluation (SAFE) scale (Wolfe VV, Wolfe DA. University of Western Ontario, London, ON, 1989, unpublished questionnaire).
68. Shame Questionnaire (Feiring).<sup>284</sup>
69. Short Center for Epidemiologic Studies Depression Scale.<sup>369</sup>
70. State-Trait Anxiety Inventory for Children.<sup>799</sup>
71. Strengths and Difficulties Questionnaire (SDQ).<sup>308</sup>
72. Subjective wellbeing.
73. Symptom Checklist-90.<sup>380,741</sup>
74. Tennessee Self-Concept Scale (Roid).<sup>335</sup>
75. The Preschool Separation–Reunion Procedure unpublished.
76. The Screen for Child Anxiety Related Disorders.<sup>106</sup>
77. Trauma Symptom Checklist for Children (TSCC).<sup>325,383,415,452,473,800</sup>
78. Treatment Outcome Questionnaire.<sup>142</sup>
79. University of California Los Angeles PTSD Index for *Diagnostic and Statistical Manual of Mental Disorders*.<sup>374</sup>

### **Behaviour (particularly internalising and externalizing behaviours)**

1. Attitudes About Family Violence (AAFV).<sup>394</sup>
2. Bayley Infant Behavior Record.<sup>451</sup>
3. Bayley Scales of Infant Development.<sup>356,449</sup>
4. Behavior Assessment System for Children.<sup>365</sup>
5. Behavior Problem Checklist.<sup>438</sup>
6. Behavior Problem Checklist-Revised.<sup>438</sup>
7. BERS.<sup>410</sup>
8. Brigance Diagnostic Inventory of Early Development.<sup>456</sup>
9. Child Behavior Checklist (CBCL).<sup>257,260,269,294,297,309,344,349,353,418,706,707,720,724,736</sup>
10. Child Behaviour Characteristics Questionnaire (Mother’s perceptions of child’s behaviour).

11. Child Sexual Behavior Inventory (CSBI).<sup>259,324,734</sup>
12. Children's Action Tendency Scale.<sup>385</sup>
13. CAPS.<sup>270</sup>
14. Cognitive Mediators of Aggression Questionnaire.<sup>427</sup>
15. Conflict Tactics Scale.<sup>398,743</sup>
16. Early Childhood Inventory (behaviour problems).<sup>462</sup>
17. ECI.<sup>462</sup>
18. Early Intervention Developmental Profile.<sup>465,466</sup>
19. Eyberg Child Behavior Inventory.<sup>310,439</sup>
20. Functional Assessment of Self-Mutilation.<sup>443</sup>
21. Global functioning (KGAS).<sup>405</sup>
22. Hostility (Children's Hostility Inventory).<sup>301</sup>
23. Inventory of Callous and Unemotional Traits-Parent Report.<sup>447</sup>
24. McCarthy Scales of Children's Abilities.<sup>285</sup>
25. Miller Behaviour Style Scale.<sup>277</sup>
26. Parent and Therapist Perceptions of Adjustment (devised by author).<sup>119</sup>
27. Parent Daily Report.<sup>458</sup>
28. Parent, social worker and self-report of problem/delinquent behaviours.
29. Positive Social Behavior (Observational Coding).<sup>453,454</sup>
30. Preschool Behavior Questionnaire.<sup>455</sup>
31. Risky Sexual Behaviour (*n* sexual partners in previous 3 months plus any diagnosis of sexually transmitted infection).
32. Rutter Teacher Scale.<sup>289</sup>
33. Self-Injurious Behavior Questionnaire (Sadovsky, unpublished).
34. Semi-Structured Interview for Diagnostic Classification DC: 0-3 for Clinicians, Traumatic Stress Disorder.<sup>343</sup>
35. Shapiro Control Inventory (SCI).<sup>428</sup>
36. Social Behavior Inventory (SBI).<sup>327</sup>
37. SDQ.<sup>308</sup>
38. Sutter-Eyberg Student Behaviour Inventory-Revised.<sup>311</sup>
39. Symptom Checklist-90-Revised (Post traumatic symptom scale).<sup>278</sup>
40. Visual analogue scales (used to gauge improvement).<sup>116</sup>
41. Weekly Behaviour Record.<sup>91</sup>
42. Youth Outcomes Questionnaire.<sup>424</sup>

### ***Social functioning, including attachment and relationships with family and others***

1. Adolescent Interpersonal Competence Questionnaire (AICQ).<sup>409</sup>
2. Bayley Scales of Infant Development.<sup>356,449</sup>
3. BITSEA.<sup>352</sup>
4. Child's Attitude to Mother (CAM) and Child's Attitude to Father (CAF) questionnaires.<sup>422</sup>
5. CAPS.<sup>270</sup>
6. Children's Global Assessment Scale.<sup>261</sup>
7. CHI.<sup>301</sup>
8. Conflict in Adolescent Dating Relationships Inventory (CADRI).<sup>407</sup>
9. Dyadic Parent-Child Interaction Coding System II (DPICS-II).<sup>701,702,801</sup>
10. Early Intervention Developmental Profile.<sup>465,466</sup>
11. Family Adaptability and Cohesion Scale II.<sup>389</sup>
12. Family Assessment Device.<sup>711</sup>
13. Family Assessment Form (FAF).<sup>390</sup>
14. FES (Cohesion and Conflict Subscales).<sup>372,375,710</sup>

15. Family Relations Test.<sup>739</sup>
16. Friendship Questionnaire.<sup>300</sup>
17. Global Assessment Functioning Scale, APA 1987.<sup>296</sup>
18. Global functioning (KGAS).<sup>261</sup>
19. Index of Peer Relations.<sup>386</sup>
20. Indicator of Parent-Child Interaction.<sup>351</sup>
21. Interactive peer play observational coding system.<sup>181</sup>
22. KSADS.<sup>268,797</sup>
23. Level of Moral Reasoning.<sup>429</sup>
24. McCarthy Scales of Children's Abilities.<sup>285</sup>
25. Parent Attachment Diary.<sup>697</sup>
26. Parent-Child Conflict Tactics Scale (CTSPC).<sup>302</sup>
27. Parenting Social Support Index.<sup>387</sup>
28. Peer Play Interactive Checklist (PPIC).<sup>457</sup>
29. Personal Safety Questionnaire.<sup>412</sup>
30. Preschool Social Skills Rating System (SSRS).<sup>144</sup>
31. Rando Attachment Disorder Questionnaire.<sup>364</sup>
32. SCI.<sup>428</sup>
33. Sibling Interaction Quality (unpublished).
34. SBI.<sup>327</sup>
35. Social Competence Scale (Conduct Problems Prevention Research Group).<sup>395</sup>
36. SSRS (Parent functioning).<sup>379</sup>
37. Social Support Factor Score [derived from principal components factor analysis of scales scores from 'The People in My Life-Short Form'].<sup>460</sup>
38. Social Support Questionnaire.<sup>281</sup>
39. SDQ.<sup>308</sup>
40. Toddler-Attachment Sort-45.<sup>350</sup>
41. 'What If' Situations Test.<sup>276</sup>

### *Cognitive/academic attainment*

1. Anatomy/Physiology Sexual Awareness Scale.<sup>173</sup>
2. Bayley Scales of Infant Development.<sup>449,466</sup>
3. CBCL – Youth Self-Report and Profile.<sup>260,269,297,418</sup>
4. Cognitive Mediators of Aggression Questionnaire.<sup>427</sup>
5. Early Intervention Developmental Profile.<sup>465,466</sup>
6. Global functioning (KGAS).<sup>261,405</sup>
7. Guilford's Unusual Uses Test.<sup>477</sup>
8. McCarthy Scales of Children's Abilities.<sup>285</sup>
9. Peabody Picture Vocabulary Test-Third Edition.<sup>441</sup>
10. Problem-Solving Inventory.<sup>388</sup>
11. Wechsler Preschool and Primary Scale of Intelligence-Revised.<sup>363</sup>

### *Quality of life*

1. Life Satisfaction Survey.<sup>402</sup>

## Secondary outcome domains

### *Substance misuse*

1. Addiction Severity Index.<sup>384,681</sup>
2. Indexes of drug/alcohol use.
3. Short Michigan Alcoholism Screening Test.<sup>802</sup>
4. Time Line Follow Back Interview.<sup>376</sup>
5. Urine tests.
6. Winters Personal Experience Screening Questionnaire.<sup>463</sup>

### *Delinquency*

1. Juvenile and court reports.
2. Parent, social worker and self-report of problem/delinquent behaviours.

### *Resilience*

1. Children's Hope Scale.<sup>445</sup>
2. Coping Questionnaire for Sexually Abused Children.<sup>103</sup>
3. Coping Scales Inventory (Positive and Negative Coping scales).<sup>459</sup>
4. Coping with stressful life events (ask participants to rate their perception of coping with daily life on a five-point Likert scale).
5. Empowerment Scale (23-item).<sup>421</sup>
6. Self-Report Coping Scale.<sup>425</sup>
7. Ways of Coping Questionnaire.<sup>420</sup>

### *Acceptability*

1. Brief Client Satisfaction Inventory.<sup>161</sup>
2. Child Feedback Questionnaire (developed by University of Manitoba to assess acceptability of treatment).<sup>659</sup>
3. Client Satisfaction Questionnaire Treatment.<sup>321</sup>
4. Expectancy of Therapeutic Outcome for Adolescents (Enhanced Outpatient Treatment Assessment, EOT-A).
5. Parent Feedback Questionnaire (developed by University of Manitoba to assess acceptability of treatment).
6. PSQ.<sup>273</sup>
7. Treatment Evaluation Inventory.<sup>323</sup>

## Other outcome domains

### *Parent/carer outcomes*

1. Adult-Adolescent Parenting Inventory (AAPI).<sup>340,709</sup>
2. Adults SSQ (Mothers).<sup>403</sup>
3. Alabama Parenting Questionnaire (Frick PJ, University of Alabama, Tuscaloosa, AL, 1991, unpublished).
4. Brief Symptom Inventory (BSI).<sup>380</sup>
5. Child Abuse Potential Inventory (CAPI).<sup>366</sup>
6. Child Caregiver Interviewer Impressions Form (Parenting strategies).<sup>461</sup>
7. CAPS-CA.<sup>346</sup>

8. DPICS-II.<sup>701,702,801</sup>
9. GHQ.<sup>434,738</sup>
10. Knowledge of child development (30-item).<sup>148,149</sup>
11. Life Stressor Checklist-Revised.<sup>345</sup>
12. Maternal Sensitivity: Maternal Behaviour Q-Set.<sup>339</sup>
13. Mother's perceived quality of life (nine-item scale adapted from Andrews and Withey).<sup>402</sup>
14. Parent Daily Report (parental stress measure).<sup>458</sup>
15. Parent Emotional Reaction Questionnaire.<sup>273</sup>
16. Parenting Practices Questionnaire (PPQ).<sup>274</sup>
17. Parent Report of Post-traumatic Symptoms.<sup>288</sup>
18. CTSPC.<sup>302</sup>
19. Parental Attribution Scale.<sup>803</sup>
20. Parental Problem Solving.<sup>388</sup>
21. Parental Reaction to Incest Disclosure Scale.<sup>262</sup>
22. Parenting Daily Hassles Scale.<sup>319</sup>
23. Parenting Sense of Competence Scale.<sup>318</sup>
24. Parenting Stress Index.<sup>342,360,367,471,725</sup>
25. Perceptions of Adult Attachment Scale.<sup>338</sup>
26. Raising a Baby (Kelly JF, Korfmacher J. University of Washington, Seattle, WA, unpublished).
27. Revised Conflict Tactics Scale (CTS-R).<sup>398</sup>
28. The Conflict Checklist.<sup>370</sup>
29. The Parent Feedback Questionnaire (developed by University of Manitoba to assess acceptability of treatment).
30. The Rosenberg Self-Esteem Inventory (Mothers' self-esteem).<sup>404</sup>
31. This Is My Baby.<sup>359</sup>
32. Treatment Evaluation Inventory.<sup>323</sup>
33. A subscale of the Emotional Availability Scales.<sup>368</sup>

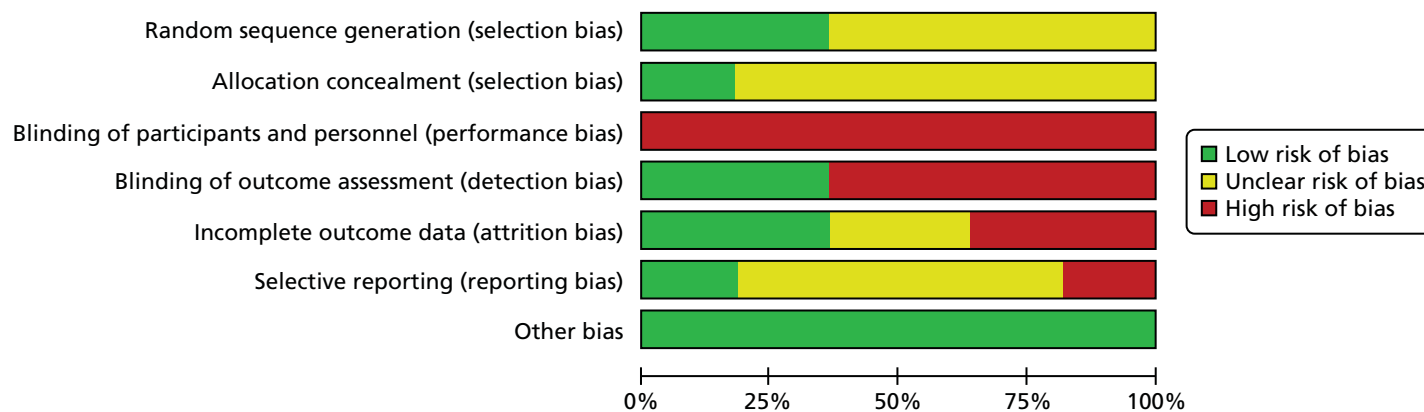
### *Placement stability*

1. Expression of feelings questionnaire.<sup>315</sup>
2. FAF-modified.<sup>390</sup>
3. Home Observation for Measurement of the Environment.<sup>464</sup>

### *Other*

1. AAFV (Frederick, Pynoos and Nader, 1992, unpublished).
2. CWVQ (unreferenced).
3. CKAQ.<sup>411</sup>
4. Expectancy of Therapeutic outcomes for Adolescents (EOT-A).
5. Severity of Violence against Women Scales.<sup>393</sup>
6. STI.

## Appendix 10 Risk-of-bias graphs for included randomised trials

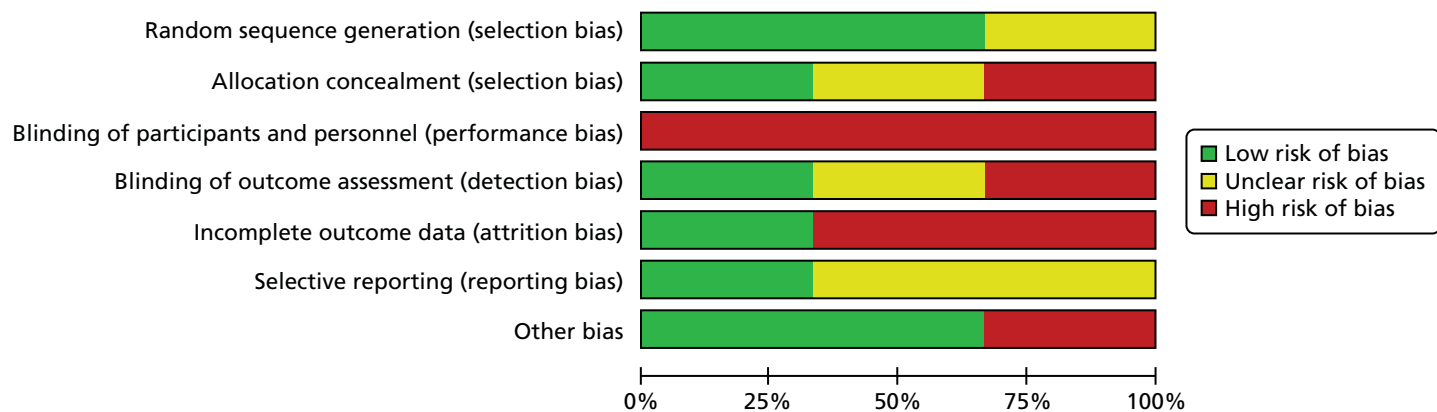


**FIGURE 23** Risk-of-bias graph: cognitive-behavioural studies (sexual abuse).

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Berliner 1996 <sup>89</sup>	+	+	-	-	-	?	+
Celano 1996 <sup>90</sup>	?	?	-	+	?	?	+
Cohen 1996 <sup>91,92</sup>	+	?	-	-	-	?	+
Cohen 1998 <sup>93,94</sup>	+	?	-	+	+	-	+
Cohen 2004 <sup>95,96</sup>	?	?	-	-	+	+	+
Deblinger 1996 <sup>97,98</sup>	?	?	-	-	?	?	+
Deblinger 2001 <sup>99</sup>	+	?	-	-	?	?	+
Deblinger 2011 <sup>100</sup>	?	?	-	-	+	-	+
Foa 2013 <sup>101</sup>	?	+	-	+	+	+	+
Jaberghaderi 2004 <sup>102</sup>	?	?	-	+	-	?	+
King 2000 <sup>103</sup>	?	?	-	-	-	?	+

+ Low risk of bias  
 ? Unclear risk of bias  
 - High risk of bias

**FIGURE 24** Risk-of-bias summary: cognitive-behavioural studies (sexual abuse).

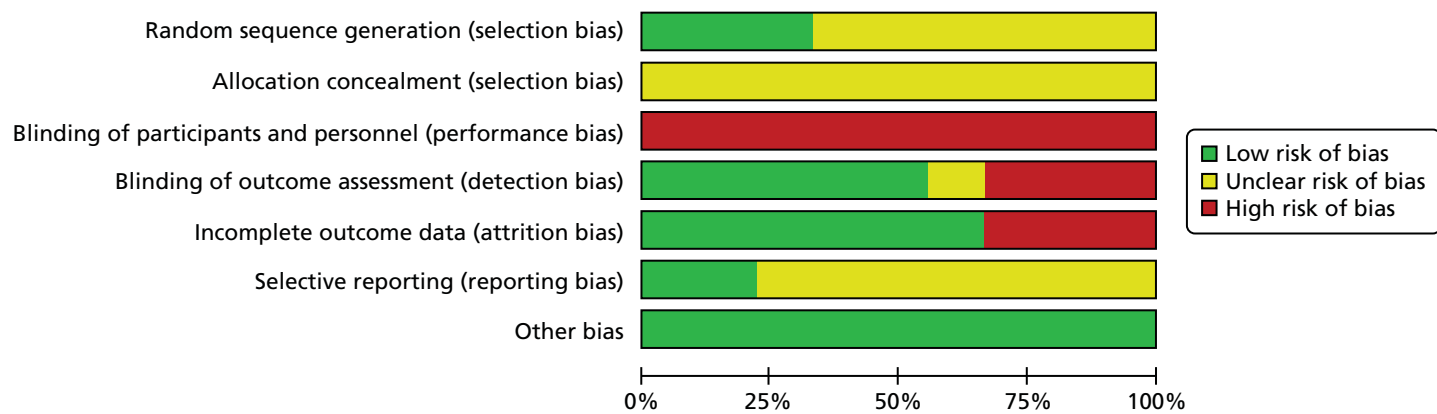


**FIGURE 25** Risk-of-bias graph: cognitive-behavioural studies (physical abuse).

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Kolko 1996 <sup>107,108</sup>	+	?	-	+	-	?	+
Lesure-Lester 2002 <sup>106</sup>	?	-	-	-	+	+	-
Runyon 2010 <sup>109</sup>	+	+	-	?	-	?	+

+ Low risk of bias  
 ? Unclear risk of bias  
 - High risk of bias

**FIGURE 26** Risk-of-bias summary: cognitive-behavioural studies (physical abuse).



**FIGURE 27** Risk-of-bias graph: cognitive-behavioural studies (multiple abuse).

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Champion 2012 <sup>110</sup>	?	?	-	+	-	?	+
Church 2014 <sup>111</sup>	?	?	-	+	+	?	+
Farkas 2010 <sup>120</sup>	?	?	-	-	-	?	+
Jensen 2014 <sup>112</sup>	+	?	-	+	+	+	+
Linares 2006 <sup>114</sup>	?	?	-	+	+	?	+
Linares 2012 <sup>115</sup>	?	?	-	+	+	?	+
Rushton 2010 <sup>116</sup>	+	?	-	-	+	+	+
Scheck 1998 <sup>121</sup>	+	?	-	-	-	?	+
Shirk 2014 <sup>117</sup>	?	?	-	?	+	?	+

Low risk of bias  
 Unclear risk of bias  
 High risk of bias

**FIGURE 28** Risk-of-bias summary: cognitive-behavioural studies (multiple abuse).

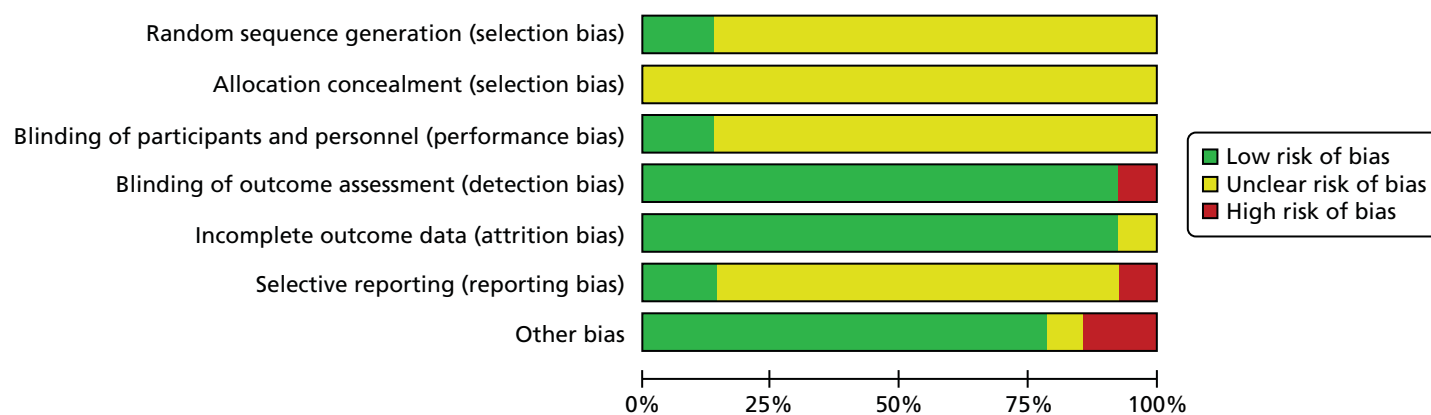
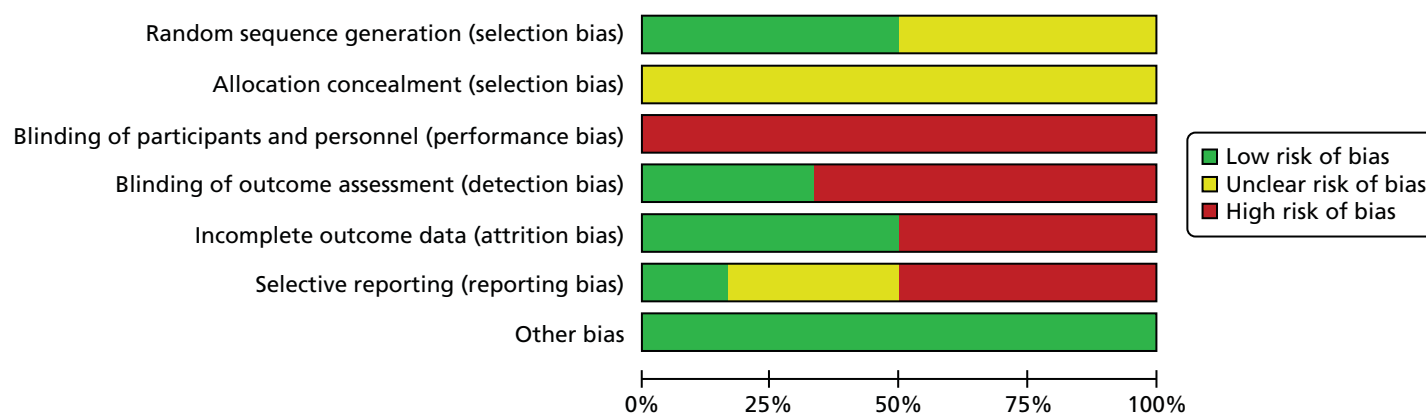


FIGURE 29 Risk-of-bias graph: RBIs.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Bernard 2012 <sup>122</sup>	?	?	?	+	+	?	-
Chaffin 2004 <sup>136</sup>	?	?	?	+	+	?	+
Cicchetti 2006 <sup>123</sup>	?	?	+	+	+	?	+
Cicchetti 2011 <sup>124</sup>	?	?	?	+	+	?	+
Dozier 2006 <sup>125,126</sup>	?	?	+	+	+	-	-
Hughes 2004 <sup>139</sup>	+	?	?	+	+	?	+
Lieberman 2005 <sup>127-129</sup>	?	?	?	+	+	+	+
Moss 2011 <sup>130</sup>	?	?	?	+	+	?	+
Spieker 2012 <sup>131</sup>	+	?	?	+	+	+	+
Sprang 2009 <sup>132</sup>	?	?	?	-	+	?	?
Thomas 2011 <sup>137</sup>	?	?	?	+	+	?	+
Thomas 2012 <sup>138</sup>	?	?	?	+	+	?	+
Toth 2002 <sup>133</sup>	?	?	?	+	?	?	+
Valentino 2013 <sup>140</sup>	?	?	?	+	+	?	+

+ Low risk of bias  
 ? Unclear risk of bias  
 - High risk of bias

**FIGURE 30** Risk-of-bias summary: RBIs.

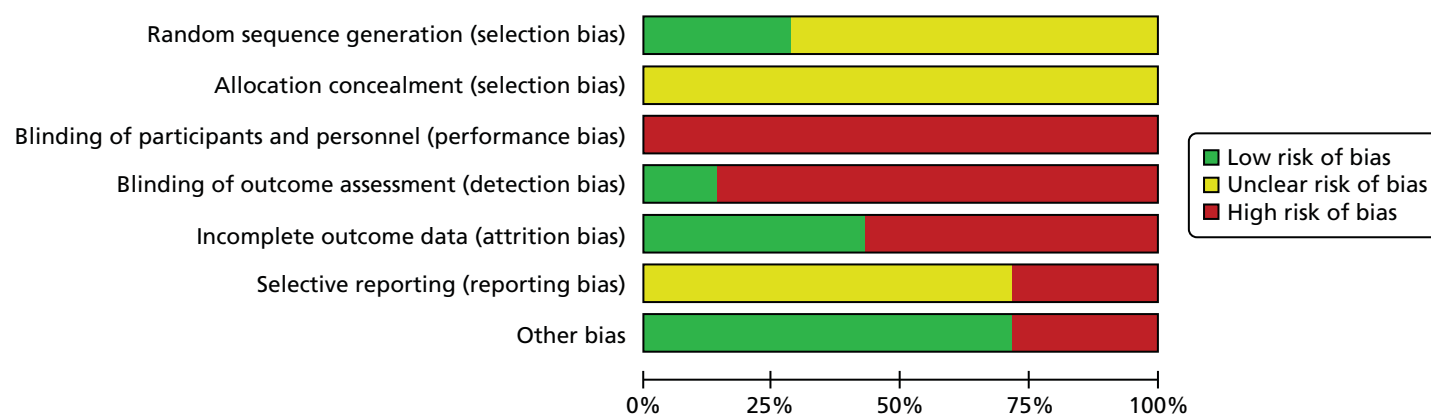


**FIGURE 31** Risk-of-bias graph: systemic interventions.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Brunk 1987 <sup>142</sup>	?	?	—	+	—	—	+
Danielson 2010 <sup>143</sup>	+	?	—	—	+	+	+
Kolko 1996 <sup>107,108</sup>	+	?	—	—	—	?	+
Linares 2015 <sup>141</sup>	?	?	—	+	+	?	+
Meezan 1998 <sup>148,149</sup>	?	?	—	—	—	—	+
Swenson 2010 <sup>144</sup>	+	?	—	—	+	—	+

+ Low risk of bias  
 ? Unclear risk of bias  
 — High risk of bias

**FIGURE 32** Risk-of-bias summary: systemic interventions.

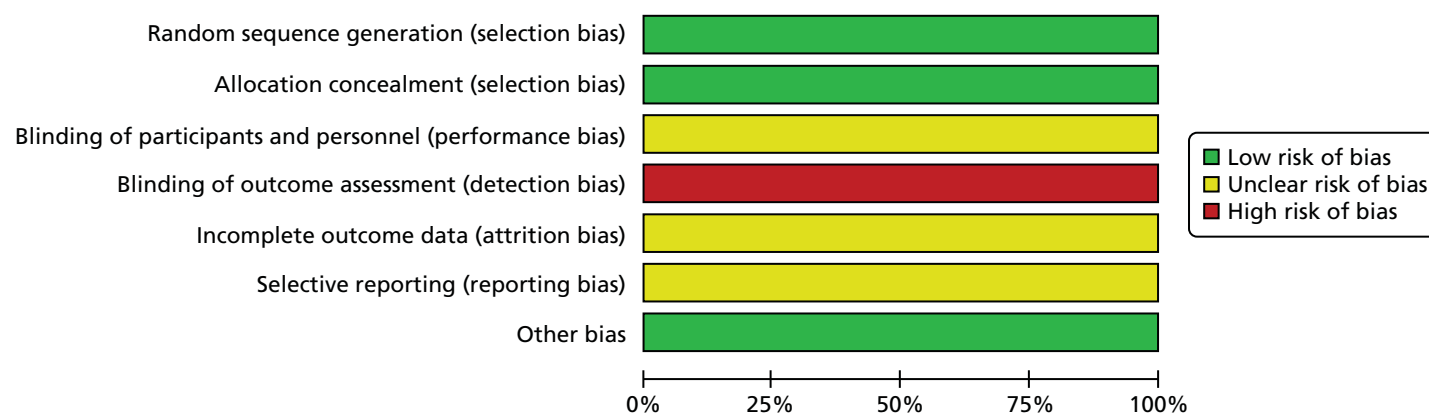


**FIGURE 33** Risk-of-bias graph: psychoeducation.

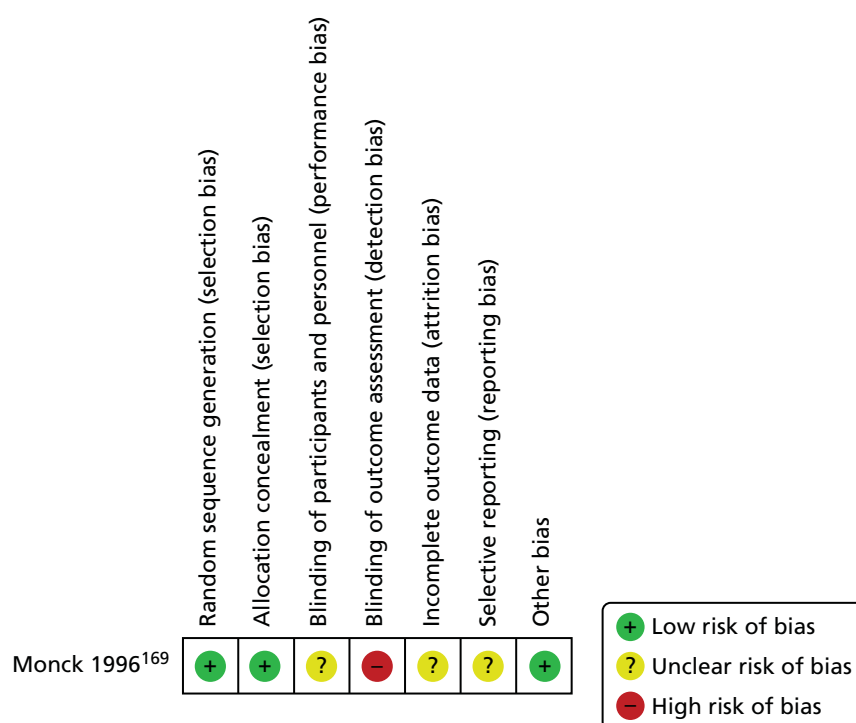
	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Graham-Bermann 2007 <sup>151</sup>	+	?	-	-	-	?	-
Howell 2013 <sup>152</sup>	+	?	-	-	-	?	+
Overbeek 2013 <sup>153</sup>	?	?	-	+	+	?	+
Sullivan 2002 <sup>154</sup>	?	?	-	-	+	?	-
Trowell 2002 <sup>155</sup>	?	?	-	-	+	?	+
Wagar 1995 <sup>156</sup>	?	?	-	-	-	-	+
Wolfe 2003 <sup>157</sup>	?	?	-	-	-	-	+

Low risk of bias  
 Unclear risk of bias  
 High risk of bias

FIGURE 34 Risk-of-bias summary: psychoeducation.



**FIGURE 35** Risk-of-bias graph: group work with children.



**FIGURE 36** Risk-of-bias summary: group work with children.

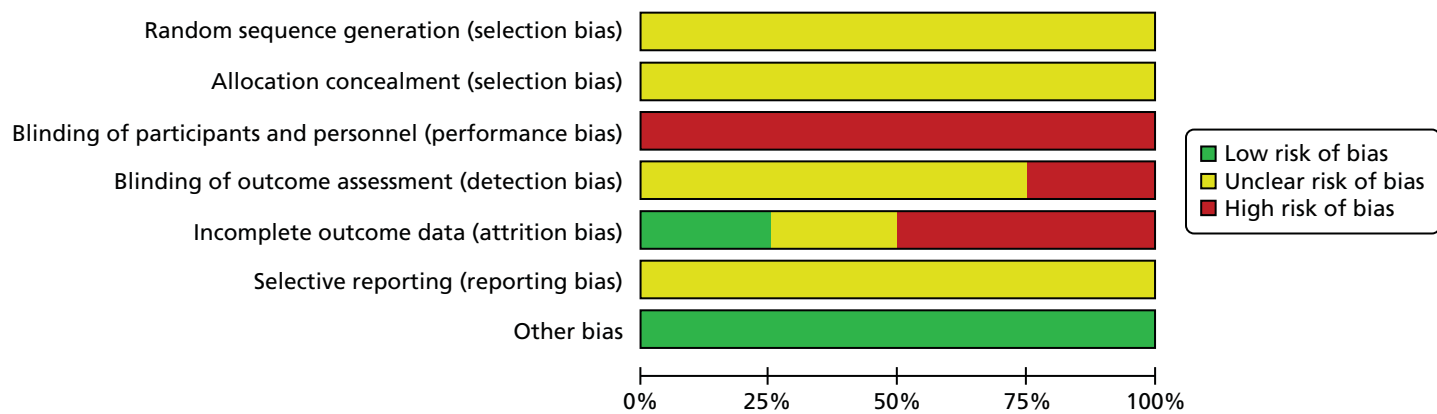





FIGURE 37 Risk-of-bias graph: psychotherapy/counselling.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Haight 2010 <sup>175</sup>	?	?	—	?	—	?	+
Reddy 2013 <sup>176</sup>	?	?	—	?	?	?	+
Thun 2002 <sup>174</sup>	?	?	—	?	—	?	+
Trowell 2002 <sup>155</sup>	?	?	—	—	+	?	+

 Low risk of bias  
 Unclear risk of bias  
 High risk of bias

**FIGURE 38** Risk-of-bias summary: psychotherapy/counselling.

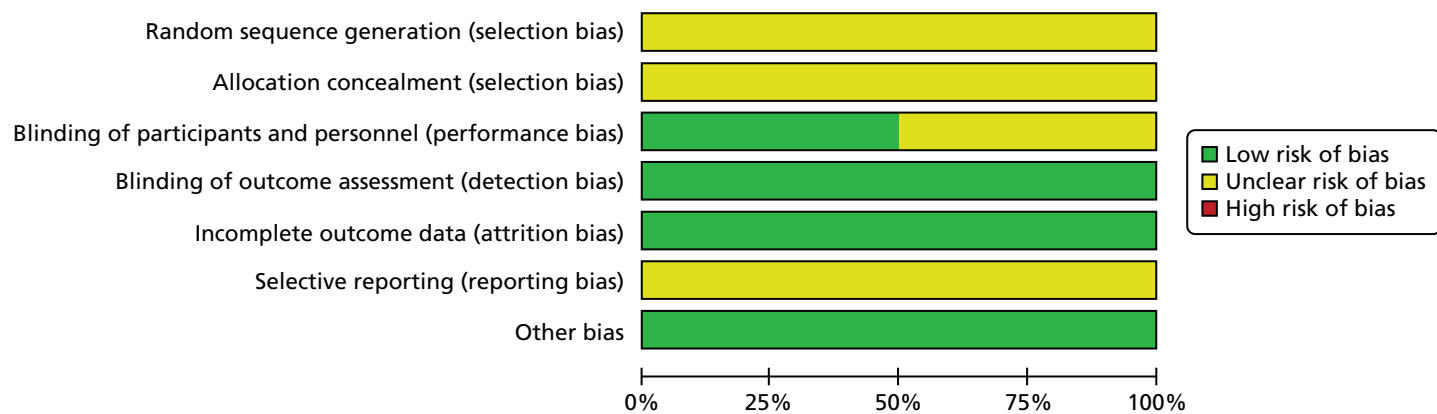



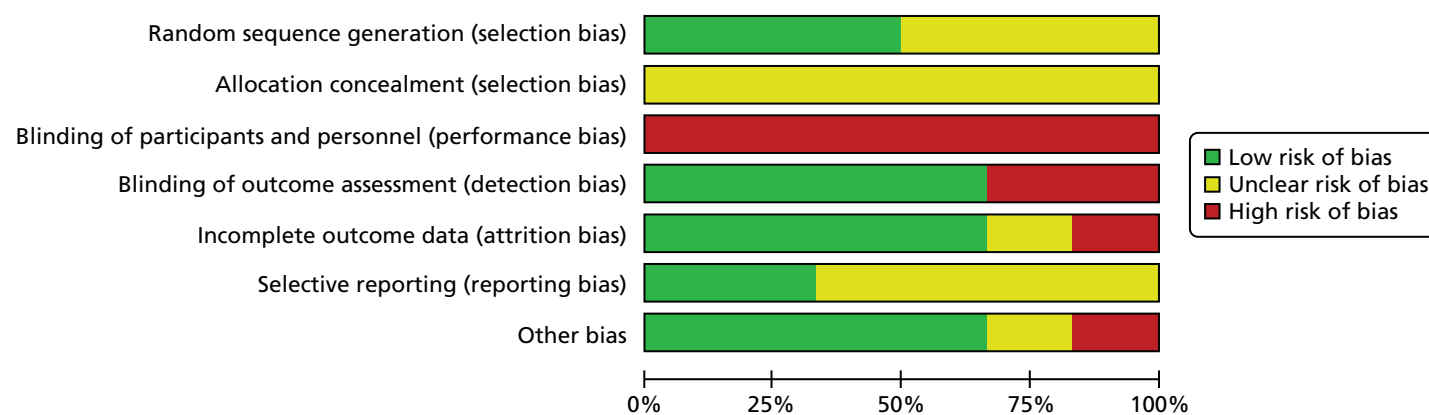


FIGURE 39 Risk-of-bias graph: peer mentoring.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Fantuzzo 1988 <sup>181</sup>	?	?	?	+	+	?	+
Fantuzzo 1996 <sup>182</sup>	?	?	+	+	+	?	+

 Low risk of bias  
 Unclear risk of bias  
 High risk of bias

**FIGURE 40** Risk-of-bias summary: peer mentoring.

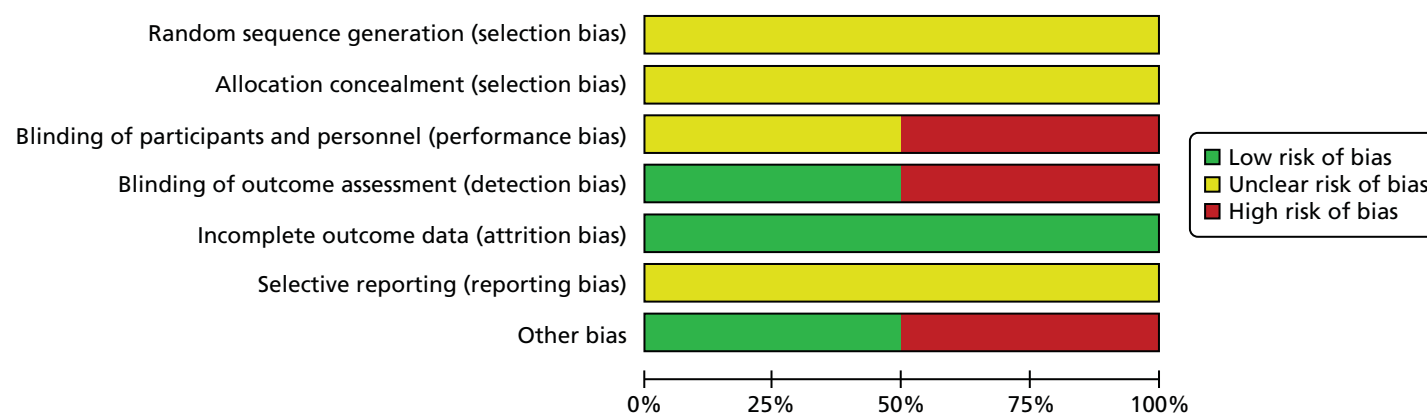


**FIGURE 41** Risk-of-bias graph: intensive service models.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Biehal 2012 <sup>145,146</sup>	+	?	-	+	+	?	+
Fisher 2005 <sup>183-188</sup>	?	?	-	+	+	+	-
Moore 1998 <sup>194</sup>	?	?	-	-	-	?	+
Smith 2011 <sup>189</sup>	+	?	-	+	?	?	+
Swenson 2000 <sup>198</sup>	+	?	-	-	+	?	?
Taussig 2010 <sup>190,191</sup>	?	?	-	+	+	+	+

+ Low risk of bias  
 ? Unclear risk of bias  
 - High risk of bias

**FIGURE 42** Risk-of-bias summary: intensive service models.



**FIGURE 43** Risk-of-bias graph: activity-based interventions.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
McDonald 1989 <sup>202</sup>	?	?	—	—	+	?	—
Udwin 1983 <sup>203</sup>	?	?	?	+	+	?	+

+ Low risk of bias  
 ? Unclear risk of bias  
 — High risk of bias

**FIGURE 44** Risk-of-bias summary: activity-based interventions.



# Appendix 11 Summary of findings: cognitive–behavioural therapy for sexually abused children

## **Cognitive–behavioural therapy compared with non-cognitive–behavioural therapy-based alternatives for children who have been sexually abused**

*Patient or population* Patients with children who have been sexually abused.

*Settings* Health service/hospital, and community.

*Intervention* CBT [CBT interventions include group treatment approaches, Recovering from Abuse Program, sexual abuse-specific CBT, and TF-CBT].

*Comparison* Non-CBT-based alternatives (non-CBT-based alternatives include non-directive supportive therapy, CCT, standard community care and wait-list control).

Outcomes	Illustrative comparative risks <sup>a</sup> (95% CI)		Number of participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk			
	Non-CBT-based alternatives	CBT			
<b>Child depression (CDI)</b>					
<i>Short term (immediately after treatment)</i>  CDI  Scale from 0 to 100	The mean child depression (CDI), short-term (immediately after treatment) ranged across control groups from <b>7 to 15.5</b>	The mean child depression (CDI), short term (immediately after treatment), in the intervention groups was <b>2.83 lower</b> (4.53 to 1.13 lower) <sup>b</sup>	421 (five studies <sup>c</sup> )	++-- <b>low</b> <sup>d,e,f</sup>	MD −2.83 (95% CI −4.53 to −1.13)
<i>Intermediate term (3–6 months after treatment)</i>  CDI  Scale from 0 to 100  Follow-up: 3–6 months					
<i>Long term (at least 1 year) Child Depression Inventory</i>  CDI  Scale from 0 to 100  Follow-up: 1 year					
	The mean child depression (CDI), intermediate term (3–6 months after treatment) in the control groups was <b>5.77–13.83</b>	The mean child depression (CDI), intermediate term (3–6 months after treatment), in the intervention groups was <b>1.76 lower</b> (3.33 to 0.2 lower) <sup>b</sup>	288 (four studies <sup>c</sup> )	++-- <b>low</b> <sup>d,f,g</sup>	MD −1.76 (95% CI −3.33 to −0.20)
	The mean child depression (CDI), long term (at least 1 year) ranged across control groups from <b>5.25 to 10.17</b>	The mean child depression (CDI), long term (at least 1 year), in the intervention groups, was <b>1.32 lower</b> (2.84 lower to 0.19 higher) <sup>b</sup>	301 (four studies <sup>c</sup> )	++-- <b>low</b> <sup>d,f,g</sup>	MD −1.42 (95% CI −2.91 to 0.06)

Outcomes	Illustrative comparative risks <sup>a</sup> (95% CI)		Number of participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk Non-CBT-based alternatives	Corresponding risk CBT			
Child PTSD (various scales)					
Short term (immediately after treatment) Various scales <sup>h</sup>	The mean child PTSD (various scales), short term (immediately after treatment) ranged across control groups from <b>2.32 to 41.8</b>	The mean child PTSD (various scales), short term (immediately after treatment), in the intervention groups was <b>0.44 SDs lower</b> (0.73 to 0.16 lower) <sup>b</sup>	442 (six studies <sup>i</sup> )	++-- <b>low</b> <sup>d,f,j</sup>	SMD −0.44 (95% CI −0.73 to −0.16)
Intermediate term (3–6 months after treatment) Various scales <sup>h</sup> Follow-up: 3–6 months	The mean child PTSD (various scales), intermediate term (3–6 months after treatment) ranged across control groups from <b>1.91 to 10.92</b>	The mean child PTSD (various scales), intermediate term (3–6 months after treatment), in the intervention groups was <b>0.39 SDs lower</b> (0.74 to 0.04 lower) <sup>b</sup>	327 (five studies <sup>i</sup> )	++-- <b>very low</b> <sup>d,f,g,k</sup>	SMD −0.39 (95% CI −0.74 to −0.04)
Long term (at least 1 year) various scales <sup>h</sup> Follow-up: 1 year	The mean child PTSD (various scales), long term (at least 1 year) ranged across control groups from <b>1.33 to 9.58</b>	The mean child PTSD (various scales), long term (at least 1 year), in the intervention groups was <b>0.38 SDs lower</b> (0.65 to 0.11 lower) <sup>b</sup>	246 (three studies <sup>i</sup> )	++-- <b>low</b> <sup>d,f,g</sup>	SMD −0.38 (95% CI −0.65 to −0.11)
Child anxiety					
Short term (immediately after treatment) Various scales <sup>l</sup>	The mean child anxiety, short term (immediately after treatment) ranged across control groups from <b>12.8 to 55.08</b>	The mean child anxiety, short term (immediately after treatment), in the intervention groups was <b>0.23 SDs lower</b> (0.42 to 0.03 lower) <sup>b</sup>	434 (five studies)	+++− <b>moderate</b> <sup>d,f</sup>	SMD −0.23 (95% CI −0.42 to −0.03)
Intermediate term (3–6 months after treatment) Various scales <sup>l</sup> Follow-up: 3–6 months	The mean child anxiety, intermediate term (3–6 months after treatment), ranged across control groups from <b>26.14 to 55.08</b>	The mean child anxiety, intermediate term (3–6 months after treatment), in the intervention groups was <b>0.38 SDs lower</b> (0.61 to 0.14 lower) <sup>b</sup>	296 (four studies)	++-- <b>low</b> <sup>d,f,g</sup>	SMD −0.38 (95% CI −0.61 to −0.14)
Long term (at least 1 year) Various scales <sup>l</sup> Follow-up: 1 years	The mean child anxiety, long term (at least 1 year) ranged across control groups from <b>12.4 to 32.38</b>	The mean child anxiety, long term (at least 1 year), in the intervention groups was <b>0.28 SDs lower</b> (0.52 to 0.04 lower) <sup>b</sup>	278 (four studies)	++-- <b>low</b> <sup>d,f,g</sup>	SMD −0.28 (95% CI −0.52 to −0.04)

Outcomes	Illustrative comparative risks <sup>a</sup> (95% CI)		Number of participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk			
	Non-CBT-based alternatives	CBT			
<b>Child sexualised behaviour (CSBI)</b>					
Short term (immediately after treatment)  CSBI	The mean child sexualised behaviour (CSBI), short term (immediately after treatment) ranged across control groups <b>from 3.74 to 17.85</b>	The mean child sexualised behaviour (CSBI), short term (immediately after treatment), in the intervention groups was <b>0.65 lower</b> (3.53 lower to 2.24 higher) <sup>b</sup>	451 (five studies)	++-- low <sup>d,f,m</sup>	MD -0.65 (95% CI -3.53 to 2.24)
Intermediate term (3–6 months after treatment)  CSBI Follow-up: 3–6 months	The mean child sexualised behaviour (CSBI), intermediate term (3–6 months after treatment) ranged across control groups <b>from 3.91 to 16.78</b>	The mean child sexualised behaviour (CSBI), intermediate term (3–6 months after treatment), in the intervention groups was <b>0.46 lower</b> (5.68 lower to 4.76 higher) <sup>b</sup>	133 (three studies)	+--- <b>very low</b> <sup>d,f,g,n</sup>	MD -0.46 (95% CI -5.68 to 4.76)
Long term (at least 1 year)  CSBI Follow-up: 1 years	The mean child sexualised behaviour (CSBI), long term (at least 1 year) ranged across control groups from <b>7.5 to 16.79</b>	The mean child sexualised behaviour (CSBI), long term (at least 1 year), in the intervention groups was <b>1.61 lower</b> (5.72 lower to 2.49 higher) <sup>b</sup>	161 (three studies)	+--- <b>very low</b> <sup>d,f,g,o</sup>	MD -1.61 (95% CI -5.72 to 2.49)

Outcomes	Illustrative comparative risks <sup>a</sup> (95% CI)		Number of participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk			
	Non-CBT-based alternatives	CBT			
<b>Child externalising behaviour (CBCL Externalising)</b>					
<i>Short term (immediately after treatment)</i>  CBCL	The mean child externalising behaviour (CBCL Externalising), short term (immediately after treatment) ranged across control groups from <b>10.7 to 59.04</b>	The mean child externalising behaviour (CBCL Externalising), short term (immediately after treatment), in the intervention groups was <b>0.12 SDs lower</b> (0.4 lower to 0.17 higher) <sup>b</sup>	537 (seven studies)	++-- <b>low</b> <sup>d,f,p</sup>	SMD −0.12 (95% CI −0.4 to 0.17)
<i>Intermediate term (3–6 months after treatment)</i>  CBCL  Follow-up: 3–6 months	The mean child externalising behaviour (CBCL Externalising), intermediate term (3–6 months after treatment) ranged across control groups from <b>13.04 to 65.44</b>	The mean child externalising behaviour (CBCL Externalising), intermediate term (3–6 months after treatment), in the intervention groups was <b>0.11 SDs lower</b> (0.42 lower to 0.21 higher) <sup>b</sup>	175 (four studies)	++-- <b>low</b> <sup>d,f,g</sup>	SMD −0.11 (95% CI −0.42 to 0.21)
<i>Long term (at least 1 year)</i>  CBCL  Follow-up: 1 year	The mean child externalising behaviour (CBCL Externalising), long term (at least 1 year) ranged across control groups from <b>10.34 to 59.84</b>	The mean child externalising behaviour (CBCL Externalising), long term (at least 1 year) in the intervention groups, was <b>0.05 SDs higher</b> (0.16 lower to 0.27 higher) <sup>b</sup>	355 (five studies)	++-- <b>low</b> <sup>d,f,g</sup>	SMD 0.05 (95% CI −0.16 to 0.27)

Outcomes	Illustrative comparative risks <sup>a</sup> (95% CI)		Number of participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk	Corresponding risk			
	Non-CBT-based alternatives	CBT			
<b>Parent's belief of child</b>					
<i>Short term (immediately after treatment)</i>  Various scales <sup>q</sup>	The mean parent's belief of child, short term (immediately after treatment) ranged across control groups from <b>22.8 to 87.95</b>	The mean parent's belief of child, short term (immediately after treatment), in the intervention groups was <b>0.3 SDs higher</b> (0.03 to 0.57 higher) <sup>r</sup>	211 (two studies)	++ – <b>low</b> <sup>d,f,g</sup>	SMD 0.3 (95% CI 0.03 to 0.57)
<i>Intermediate term (3–6 months after treatment)</i>  Various scales <sup>q</sup>  Follow-up: 3–6 months	The mean parent's belief of child, intermediate term (3–6 months after treatment) in the control groups was <b>33.75</b>	The mean parent's belief of child, intermediate term (3–6 months after treatment), in the intervention groups was <b>0.32 SDs lower</b> (0.65 lower to 0.01 higher) <sup>r</sup>	143 (one study)	+ – <b>very low</b> <sup>d,f,g</sup>	SMD –0.32 (95% CI –0.65 to 0.01)
<i>Long term (at least 1 year) various scales<sup>q</sup></i>  Follow-up: 1 year	The mean parent's belief of child, long term (at least 1 year) in the control groups was <b>87.01</b>	The mean parent's belief of child, long term (at least 1 year), in the intervention groups was <b>0.1 SDs lower</b> (0.43 lower to 0.23 higher) <sup>r</sup>	146 (one study)	++ – <b>low</b> <sup>d,f,g</sup>	SMD –0.1 (95% CI –0.43 to 0.23)
<b>Parenting skills (PPQ)</b>					
<i>Short term (immediately after treatment)</i>  PPQ	The mean parenting skills (PPQ), short term (immediately after treatment) ranged across control groups from <b>136.81 to 139.19</b>	The mean parenting skills (PPQ), short term (immediately after treatment), in the intervention groups was <b>3.86 higher</b> (0.47 to 7.26 higher) <sup>r</sup>	278 (three studies)	++ – <b>low</b> <sup>d,f,g</sup>	MD 3.86 (95% CI 0.47 to 7.26)
<i>Intermediate term (3–6 months after treatment)</i>  PPQ  Follow-up: 3–6 months	The mean parenting skills (PPQ), intermediate term (3–6 months after treatment) ranged across control groups from <b>132.86 to 148.39</b>	The mean parenting skills (PPQ), intermediate term (3–6 months after treatment), in the intervention groups was <b>2.36 higher</b> (1.55 lower to 6.28 higher) <sup>r</sup>	231 (three studies)	++ – <b>low</b> <sup>d,f,g</sup>	MD 2.36 (95% CI –1.55 to 6.28)
<i>Long term (at least 1 year)</i>  PPQ  Follow-up: 1 year	The mean parenting skills (PPQ), long term (at least 1 year) ranged across control groups from <b>133.93 to 143.08</b>	The mean parenting skills (PPQ), long term (at least 1 year), in the intervention groups was <b>0.89 lower</b> (4.89 lower to 3.11 higher) <sup>r</sup>	193 (two studies)	++ – <b>low</b> <sup>d,f,g</sup>	MD –0.89 (95% CI –4.89 to 3.11)

SD, standard deviation; SMD, standardised mean difference.

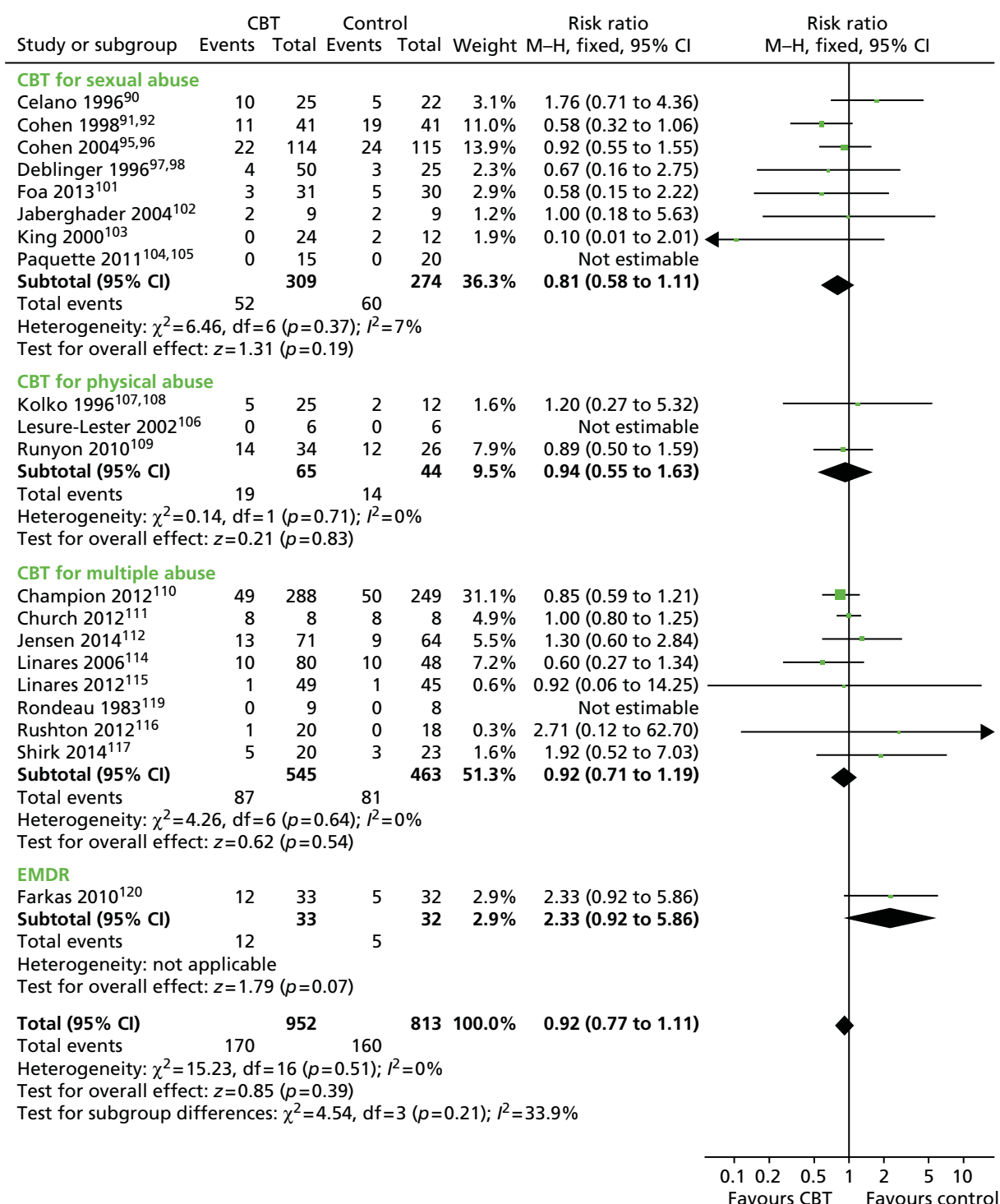
- a The basis for the *assumed risk* (e.g. the median control group risk across studies) is provided below. The *corresponding risk* (and its 95% CI) is based on the assumed risk in the comparison group and the *relative effect* of the intervention (and its 95% CI).
- b Lower score equals reduction in symptoms.
- c One additional study (Foa *et al.*<sup>101</sup>) assessed depression but presented data in ways that could not be incorporated into the meta-analysis.
- d Risk of bias due to study designs, randomisation and allocation concealment, and it not being possible to blind participants or personnel.
- e Moderate levels of heterogeneity ( $I^2 = 22\%$ ).
- f Insufficient number of studies available to test for funnel plot asymmetry.
- g Total population size is < 400.
- h PTSD assessed using CBCL, CITES-R, Anxiety Disorders Interview Schedule for DSM-IV, Kiddie Schedule for Schizophrenia and Affective Disorders, Epidemiologic Version, TSCC, and Post-Traumatic Symptoms and CROPS.
- i Two additional studies<sup>101,102</sup> assessed PTSD but presented data in ways that could not be incorporated into the meta-analysis.
- j Moderate levels of heterogeneity ( $I^2 = 46\%$ ).
- k Substantial levels of heterogeneity ( $I^2 = 51\%$ ).
- l Anxiety measured using STAI and the RCMAS.
- m Substantial levels of heterogeneity ( $I^2 = 67\%$ ).
- n Substantial levels of heterogeneity ( $I^2 = 69\%$ ).
- o Moderate levels of heterogeneity ( $I^2 = 43\%$ ).
- p Substantial levels of heterogeneity ( $I^2 = 58\%$ ).
- q Parent's belief of child measured with PRIDS and PSQ.
- r Higher score equals improvement in parenting skills.

#### GRADE Working Group grades of evidence

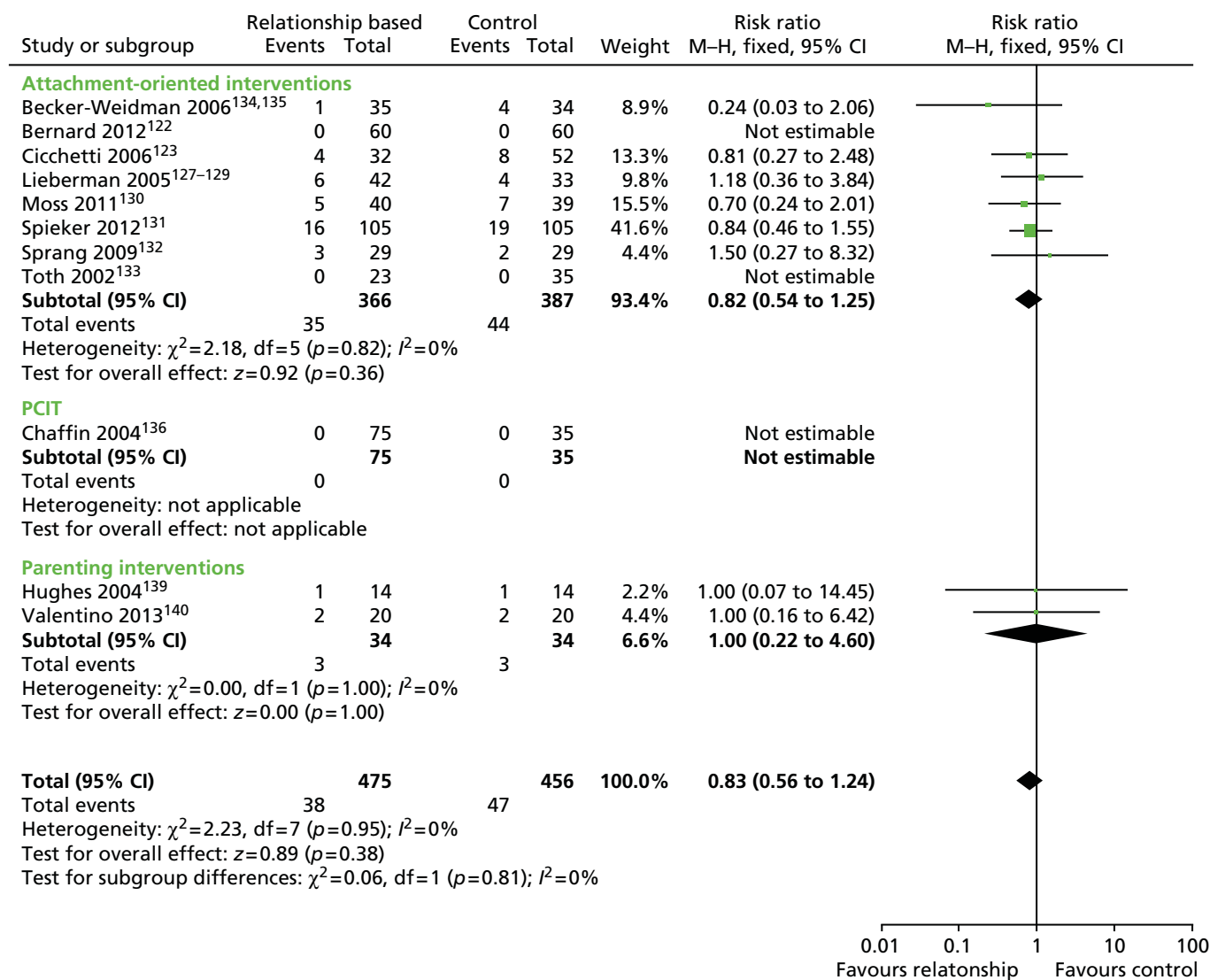
- *High quality* Further research is very unlikely to change our confidence in the estimate of effect.
- *Moderate quality* Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
- *Low quality* Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
- *Very low quality* We are very uncertain about the estimate.



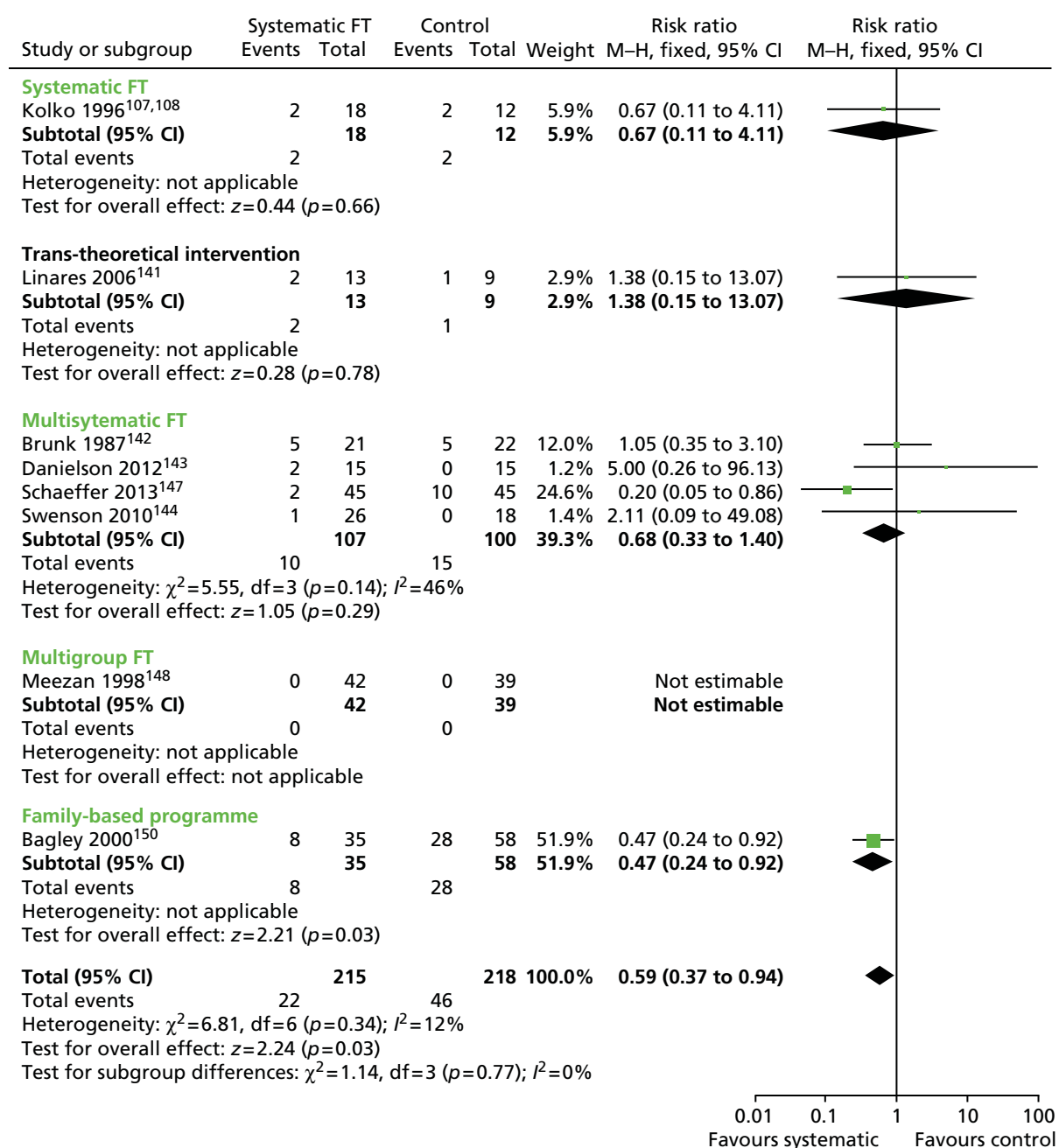
## Appendix 12 Attrition analyses



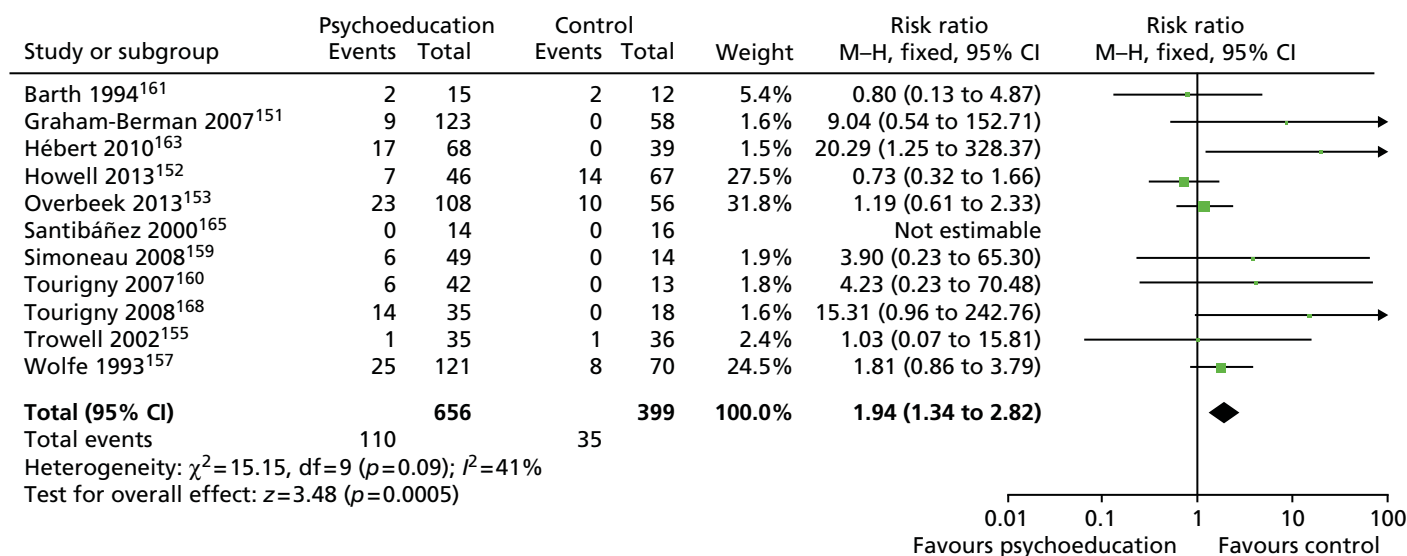
Attrition from cognitive-behavioural therapy studies.  $df$ , degrees of freedom; M-H, Mantel-Haenszel.



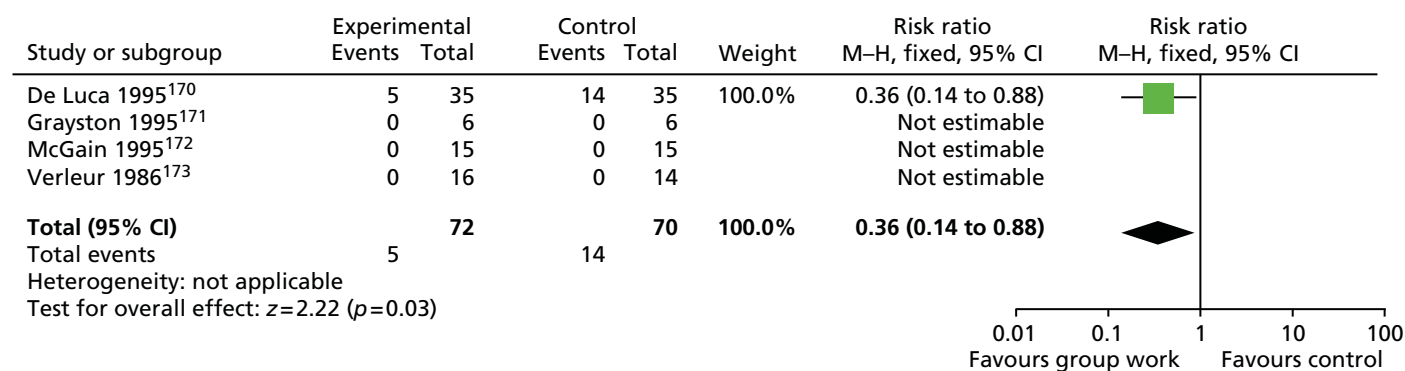
Relationship-based interventions. df, degrees of freedom; M-H, Mantel-Haenszel.



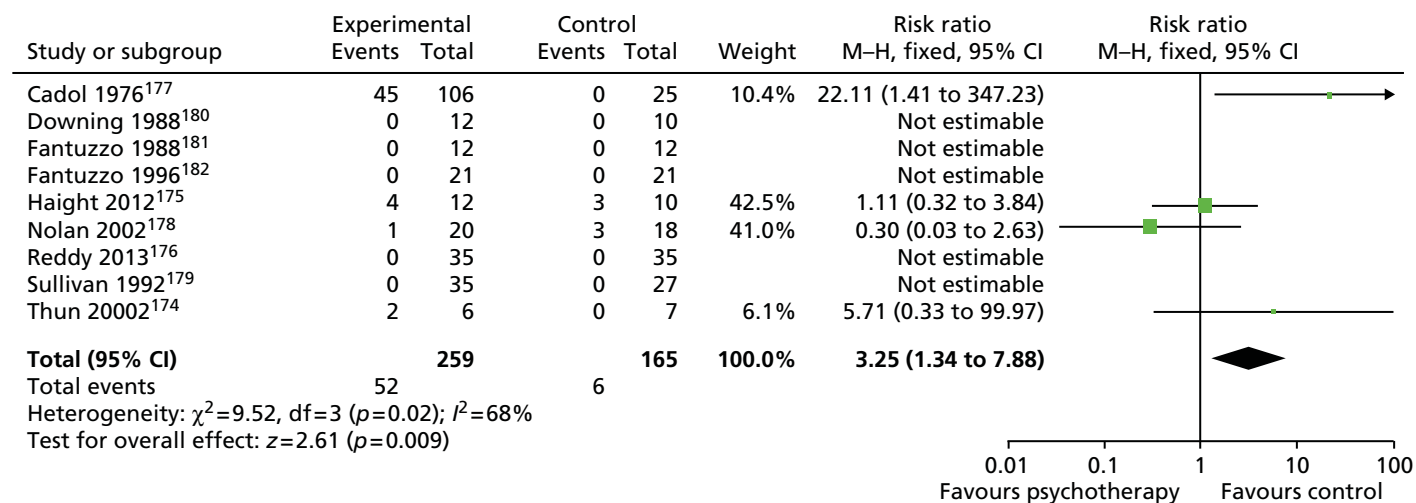
Systemic therapies. df, degrees of freedom; M-H, Mantel-Haenszel.



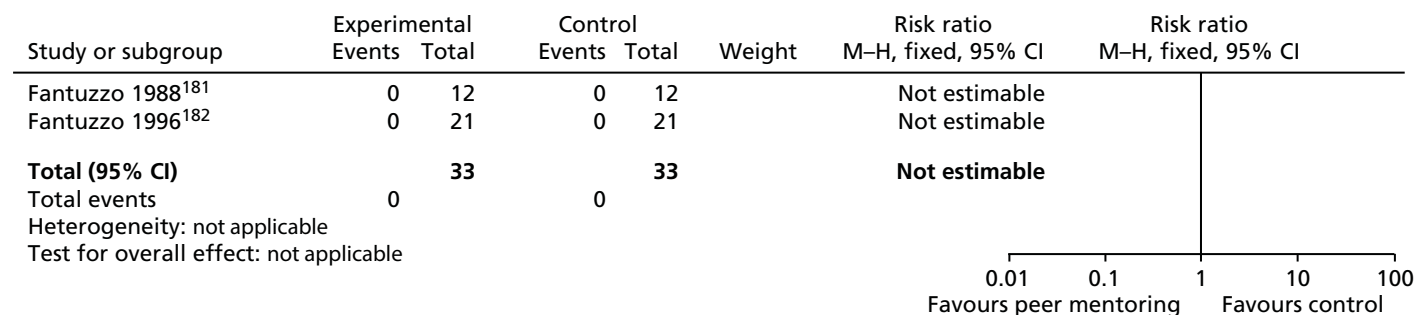
Psychoeducation compared with control. df, degrees of freedom; M-H, Mantel-Haenszel.



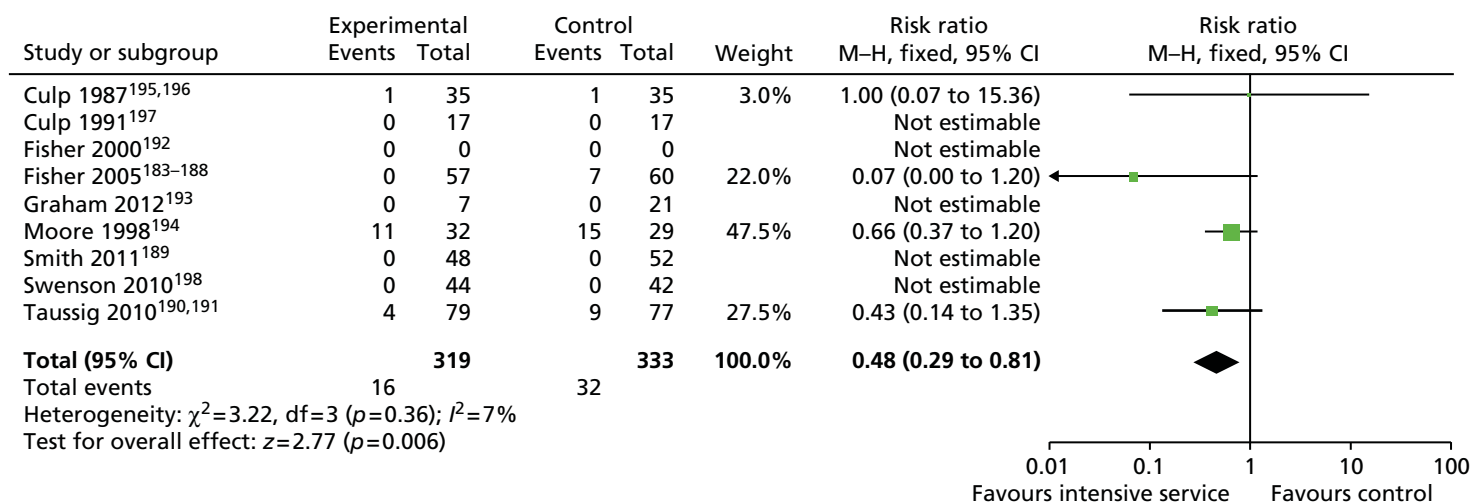
Group work. M-H, Mantel-Haenszel.



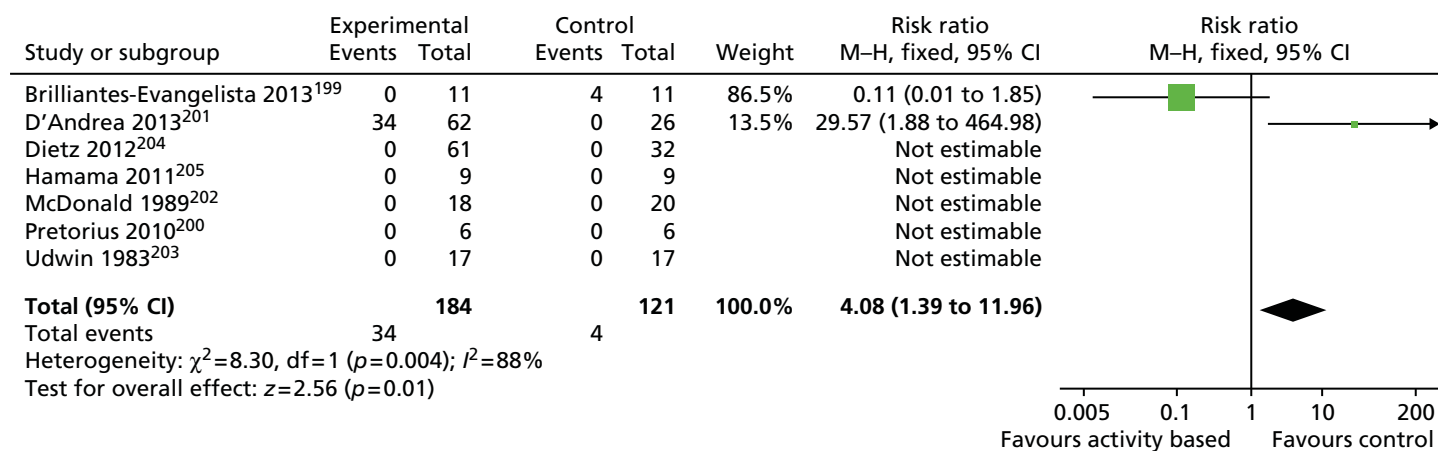
Psychotherapy/counselling. df, degrees of freedom; M-H, Mantel-Haenszel.



Peer mentoring. M-H, Mantel-Haenszel.



Intensive service models. df, degrees of freedom; M-H, Mantel-Haenszel.



Activity-based interventions. df, degrees of freedom; M-H, Mantel-Haenszel.

## Appendix 13 Overview of acceptability evidence by intervention group

Intervention type (number of studies <sup>b</sup> )	Quantitative evidence	Quantitative overview	Qualitative evidence	Qualitative overview	Quality
Cognitive-behavioural approaches (15)	Nine studies (two small <sup>a</sup> ; seven medium <sup>a</sup> sample size)	Attrition and treatment completion profile – perceived severity of abuse associated with completion	Six studies (four small; two medium)	Children mostly viewed interventions positively; four studies reported mixed views  Parents tended to rate interventions more positively than child  Staff reported mixed views	Generally good quality
Activity based (5)	–	–	Five studies (all small)	Received positive evaluations  Therapist views expressed including some tension between parents/therapists	Adequate quality
Attachment based (3)	One study (large)	Treatment completers – older caregivers with poorer health, perceived severity of abuse	Two studies (one small; one large)	Parents and children viewed positively	Mixed quality
Therapeutic residential care (4)	One study (medium)	Treatment completion – age/ethnicity factors	Three studies (one small; two medium)	Importance of re-engaging youth during treatment process  Children had very positive and some negative experiences	Generally good quality
Enhanced foster care (2)	One study (medium)	Evidence of placement stability following intervention	Two studies (one medium; one large)	Foster carers very positive about both interventions	Generally good quality
Family/systemic (4)	One study (small)	Positive ratings	Three studies (all small)	Children and parents expressed mixed views  One study reported high rate of sibling refusal in family intervention	Mixed quality
PCIT (1)	One study (medium)	Kin foster carers more likely to complete than non-kin foster carers	–	–	Good quality
Counselling (10)	Seven studies (three small; four medium)	Therapist gender not significant  White children more likely to enter therapy	Four studies (two small; two medium)	Children mostly positive  One study reported mixed parental views including pain of talking about abuse and negative impact on family and social networks	Generally good quality

Intervention type (number of studies <sup>b</sup> )	Quantitative evidence	Quantitative overview	Qualitative evidence	Qualitative overview	Quality
Children/young people's groups (6)	Three studies (all small)	Mostly positive ratings from children, parents and school counsellors, but some mixed views also expressed	Five studies (all small)	Mixed views from children, parents and therapists	Mixed quality
Psychoeducational (4)	Two studies (one small; one medium)	Children who had suffered more abuse and had behavioural/ social difficulties more likely to drop out	Three studies (all small)	Foster parents expressed positive views  Children and parents also mostly positive  Parents wanted more feedback from therapists	Mixed quality
Psychotherapy (4)	Two studies (all medium)	Initiators of therapy and predictors of total sessions	Three studies (two small; one medium)	Children rated positively  Three-way process of therapy between child, parent and therapist	Generally good quality
Peer mentoring (1)	–	–	One study (small)	Children rated intervention highly  Parent and staff positive reports	Good quality
Eclectic (3)	One study (medium)	Attrition/treatment completers	Two studies (all small)	Children reported positive and some negative views  Caregivers more positive  One study presented alleged perpetrators experiences of therapy, mixed views	Mixed quality
Other (9)	Four studies (one medium; three large)	Ethnicity associated with early termination  Profile of treatment completers	Five studies (all small)	Varied range of interventions described, both positive and negative views expressed by children, parents and clinicians	Good quality

a Sample size: small ( $n < 50$ ), medium ( $n = 50-299$ ), large ( $n \leq 300$ ).

b Individual paper may include both quantitative and qualitative data, therefore the total number of studies may not tally with the number indicated in columns 2 and 4.

# Appendix 14 Overview of acceptability evidence by study interventions

## Cognitive-behavioural interventions

Study	Sample size	Data collection	Analysis	Quality overview
Barker 2005 <sup>481</sup>	14/67 children; 5 staff	Interviews	Summary overview	<p>Aims of the research were clearly stated</p> <p>Methodology and research design were appropriate for qualitative data</p> <p>Data collection was not adequately described</p> <p>The findings not clearly described</p>
Buschbacher 2002 <sup>629</sup>	$n = 1$	Interviews with foster parent and staff members		<p>Aims clearly described but this was a testimonial rather than a research study</p> <p>One of the treatment team conducted interviews with foster mother and colleagues</p> <p>Retrospective interview in one successful case</p> <p>High risk of bias</p>
Chasson 2008 <sup>482</sup>	$n = 99$	Withdrawal metrics	Multiple regression analysis	<p>Aims were clearly stated and the methodology and research design were appropriate</p> <p>Data collection was adequately described</p> <p>Potential confounders not added to statistical model</p> <p>Findings were clearly described</p>
Chasson 2013 <sup>630</sup>	$n = 134$ (99 from Chasson 2008)	Withdrawal metrics	Regression analysis of trauma characteristics as predictors of attrition	<p>Aims were clearly stated and the methodology and research design were appropriate</p> <p>Data collection was adequately described</p> <p>Potential confounders were not added to statistical model</p> <p>Findings clearly described</p>
Eslinger 2014 <sup>631</sup>	$n = 115$	Baseline, post treatment and 3 months	Multinomial logistic regression of predictors of dropout	<p>Study design was appropriate</p> <p>Sampling methods were not sufficiently clear; age range was quite wide and sample heterogeneous</p> <p>Data analysis was appropriate</p>

Study	Sample size	Data collection	Analysis	Quality overview
Fraynt 2014 <sup>632</sup>	<i>n</i> = 562	Factors predicting treatment engagement	Binominal regression; multinomial logistic regression	Study design and sampling was appropriate; however, the study did not measure the type of intervention received other than individual or group treatment, which limited the validity of the study  Data collection methods and measures were appropriate for the population and the analysis was adequate for the aim of the study
Hubel 2014 <sup>492</sup>	<i>n</i> = 99; <i>n</i> = 67 analysed	Child and parent client evaluation form		Study design was appropriate but the acceptability questionnaire lacks validity, as it relied on satisfaction ratings  Findings were clearly reported
Kolko 1996 <sup>108</sup>	<i>n</i> = 25 CBT, <i>n</i> = 18 FT, <i>n</i> = 12 control	Treatment expectancy (Likert scale)  Brief telephone calls to parents  Post-treatment CEI		Study design appropriate and procedure were clearly described  Standardised measures were used with evidence of reliability and validity  Findings were reported clearly
Lange 2010 <sup>497</sup>	<i>n</i> = 24	Client satisfaction: general, with treatment and with therapists  Interviews plus 10-point rating scale (1 = high)  Attrition		Study design appropriate and procedure were clearly described  Sampling through the media open to bias  Standardised measures were used with evidence of reliability and validity; however, acceptability was measured using subjective satisfaction ratings  Findings were clearly presented
McPherson 2012 <sup>633</sup>	<i>n</i> = 254	Treatment completion	Univariate analysis and multivariate logistic regression models	Appropriate study design and sampling  Data collection based on electronic medical files which relies on accuracy of record-keeping  Data analysis was appropriate and clearly described
Salloum 2014 <sup>504</sup>	<i>n</i> = 6	Parents completed expectancy rating form; client satisfaction questionnaire plus treatment costs calculated with the time tracking system		Study design was appropriate  Acceptability measure relied on satisfaction ratings, although used a questionnaire that used in other research; however, no 'depth' of data was captured by this measure, such as why caregivers were or were not satisfied with treatment  Findings were clearly reported

Study	Sample size	Data collection	Analysis	Quality overview
San Diego 2011 <sup>680</sup>	5/6 of those referred	Participants' journals, therapy notes, and interviews	IPA	Study was well designed, and appropriate data collection methods and analysis were used  Findings were clearly reported  Ethical considerations were not clearly outlined
Silovsky 2007 <sup>505</sup>	<i>n</i> = 85	CSBP preschool group satisfaction and social validity questionnaire – caregiver satisfaction		Study design was appropriate but measure of acceptability relies on satisfaction ratings  Findings were clearly reported
Smith 2008 <sup>506</sup>	<i>n</i> = 6	Client satisfaction questionnaire		Study design was appropriate but measure of acceptability relies on satisfaction ratings  Findings only partially reported descriptively

CSBP, Children with Sexual Behavior Problems; IPA, interpretative phenomenological analysis.

## Acceptability of attachment-based interventions

Study	Sample size	Data collection	Analysis method	Quality overview
Cross 2013 <sup>634</sup>	<i>n</i> = 1085; 60% retained	Case file data	Single predictors of study retention – logistic regression  Multivariate predictors of study retention – multivariate regression remodelling	One site was excluded because it did not comply with study protocol  Programme content and delivery varied across the 15 sites
Osofsky 2007 <sup>515</sup>	<i>n</i> = 346 children; <i>n</i> = 57 dyads	Caregivers' and therapists' qualitative impressions of treatment		Study design suffered from differing procedures across sites  Some measures used were standardised and had evidence of reliability and validity, although impressions of treatment was measured using satisfaction ratings of 'yes' or 'no'  Findings were clearly presented but lacked depth
Sudbery 2010 <sup>663</sup>	Experiences reports of <i>n</i> = 45 children	Interviews; content analysis of files and organisational documents; children; surveys of social workers and others		Study was adequately designed and described and the findings were clearly reported
Powell 2010 <sup>662</sup>	<i>n</i> = 5 children, <i>n</i> = 4 mothers and 1 grandmother	Semistructured qualitative interviews		Methodology and research design were appropriate for the research aims  Data were reported clearly and thoroughly  It is unclear whether or not ethical issues were considered

## Acceptability of parent–child interaction therapy

Study	Sample size	Data collection	Analysis method	Quality overview
Timmer 2004 <sup>656</sup>	102 kin; 157 non-kin foster carers	Treatment completion		<p>The study design was limited by having no control group</p> <p>Patterns of termination of treatment were measured by clinician discharge sheets</p> <p>Results were reported in full and the analysis is appropriate</p>

## Acceptability of parent training interventions

Study	Sample size	Data collection	Analysis method	Quality overview
Ducharme 2000 <sup>510</sup>	<i>n</i> = 28 parents  <i>n</i> = 15 children from <i>n</i> = 9 families	Eight mothers completed the satisfaction questionnaire		<p>The study design was limited by not having a control group</p> <p>Treatment satisfaction was measured using mother's self-report rating scales</p> <p>It is unclear how perceptions of treatment was measured and analysed</p> <p>Results were limited by not reporting variance</p>
Golding 2004 <sup>511</sup>	<i>n</i> = 44 children, <i>n</i> = 41 foster carers	Participant satisfaction questionnaire, qualitative evaluation, group facilitator feedback		<p>Study design and methodology were appropriate</p> <p>Findings were clearly reported</p>
Taban 2001 <sup>635</sup>	<i>n</i> = 45 families health training, <i>n</i> = 37 home accident prevention; <i>n</i> = 31 PCIT	Three social validity questionnaires developed specifically for the study		<p>Study design was appropriate</p> <p>Social validity questionnaire was well developed, but relied on satisfaction ratings as a measure of acceptability</p> <p>Findings were partially reported</p>

## Acceptability of family/systemic interventions

Study	Sample size	Data collection	Analysis method	Quality overview
Conran 1993 <sup>621</sup>	<i>n</i> = 2, mother and daughter	Interviews		This single case study was not adequately designed or reported
Costa 2009 <sup>678</sup>	<i>n</i> = 28; <i>n</i> = 8 families interviewed	Questionnaires, children drawings, evaluation of the effects of conversations and actions in families	Qualitative epistemology	The study aims and objectives were clearly stated and the research methodology was appropriate  Reporting of findings was appropriate
Danielson 2010 <sup>526</sup>	<i>n</i> = 10	3–6 months post treatment  Ecological functioning measure treatment satisfaction and adherence		Study was well designed, and the data collection, analysis and findings were clearly reported
Tjersland 2006 <sup>673</sup>	<i>n</i> = 23 families, <i>n</i> = 32 children	Observational data from therapeutic sessions; interviews with mothers, children and alleged perpetrators	Descriptive coding developed by two therapists, independently rated to verify categorisation	Some relevant points about the tension that mothers feel between not wanting to talk about the abuse/suspected abuse to protect their child, but also wanting to help them  Nothing useful on children's perspectives
Woodworth 1991 <sup>533</sup>	<i>n</i> = 16/22	<i>N</i> = 40 interviews with <i>n</i> = 13 incest victims, <i>n</i> = 12 offenders, <i>n</i> = 2 siblings		Poorly described  Opportunistic sampling, insufficient methodological information to be able to properly assess the quality of the work

## Acceptability of psychoeducation interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Barth 1994 <sup>161</sup>	<i>n</i> = 15	Brief client satisfaction survey		Study design was appropriate but acceptability measures relied on satisfaction ratings with no other detail  Findings were clearly reported
Boisvert 2008 <sup>658</sup>	<i>n</i> = 116	'Dropout' defined as someone who agrees to therapy and participates in at least one session and then stops before the half-way point without the therapists approval or an agreement that treatment is finished (Garfield 1994 <sup>804</sup> )	Univariate and multivariate analyses exploring relationships between dropout and sexual abuse, individual and family characteristics	Study design did not include a control group and compared characteristics of only treatment completers and those who dropped out  Standardised measures were used but the study did not describe the treatment in any detail or measure effectiveness, which limited the conclusions of the study

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Hyde 1995 <sup>538</sup>		Interview and rating		Study procedure is unclear  Measures used had evidence of reliability and validity and were age appropriate  Analysis of data is unclear
Rushton 2000 <sup>664</sup>	<i>n</i> = 58; <i>n</i> = 46 mothers, <i>n</i> = 19 foster/adoptive mothers; 14 carers	Carer interviews – 1- and 2-year follow-up  Follow-up interviews with carers' workers 1 year after start of treatment		Methodology and research design were appropriate for the research aims  The research findings were reported clearly

## Acceptability of group work for children

Study and location	Sample size	Data collection: acceptability	Analysis method	Quality overview
Ashby 1987 <sup>636</sup>	<i>n</i> = 9	Acceptability and usefulness evaluation rating on numerical scale – midway and final group; school counsellor reports		The research aims were clearly described but the methodology, analysis and findings were not clearly reported
Baker 2001 <sup>637</sup>	<i>n</i> = 5–14	Satisfaction ratings; evaluations conducted in 1997, 1998 and 2000  Four group evaluations and follow-up telephone survey of <i>n</i> = 7 terminated clients		The research aims were clearly described but the methodology, analysis and findings were not clearly reported
De Luca 1995 <sup>170</sup>	<i>n</i> = 35 intervention  <i>n</i> = 35 control	Child-report measures		Study design was limited by no control group  Treatment satisfaction was measured using self-report social validation ratings by children and parents  Presentation of results was limited to percentages  Unclear how themes responded to were identified
Grayston 1996 <sup>659</sup>	<i>n</i> = 6	Child feedback and parent feedback questionnaires		Research aims were clearly defined and methodology is appropriate  Data collection and ethical considerations were not described in detail  Findings were reported clearly
Gustafsson 1995 <sup>676</sup>	<i>n</i> = 19	Semistructured interviews with group therapists		Research was well designed but findings were not clearly reported

Study and location	Sample size	Data collection: acceptability	Analysis method	Quality overview
Monck 1996 <sup>169</sup>	$n = 47$	Participant rating		<p>Study design was appropriate but the wide scope means that interventions lack specificity in terms of aims and theoretical underpinning</p> <p>Although randomised, small sample size</p> <p>Data collection lacked detail in description and appeared to lack sophistication in terms of non-standardised measures and the use of subjective rating scales</p> <p>Data analysis lacked complexity and included a simplistic presentation of ratings</p>
Peled 1992 <sup>639</sup>	$n = 30$	Interviews plus observations		<p>Aims and methodology were well explained, and data collection and analysis appropriate</p> <p>Findings were clearly reported</p>

## Acceptability of counselling interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Baginsky 2001 <sup>640</sup>	$n = 130$	<p>Telephone interviews (Italy)</p> <p>Interviews, letters, telephone and questionnaires (the Netherlands)</p> <p>Individual and group interviews (UK)</p>	Summary overview	<p>Research was well designed but data collection methods were not similar across the three countries and may not have been representative</p> <p>Findings were clearly reported</p>
Fowler 1992 <sup>641</sup>	$n = 35$	Seven-point Likert scale		<p>The study design is appropriate for the research aims although is limited by a sample that includes only girls</p> <p>Gender preference was measured using only self-reported rating scores</p> <p>Results were reported in full and the analysis was appropriate</p>
Fowler 1993 <sup>642</sup>	$n = 20$	Pre- and post-treatment preference stated		<p>Although the study design was appropriate, sampling methods may not be representative of the typical population</p> <p>The method of data collection is questionable, as data were collected post intervention but longer-term follow-up may have been more informative</p> <p>Age range was wide and may have been too heterogeneous</p>

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Haight 2010 <sup>175</sup>	<i>n</i> = 15	Views from children, caregivers and community clinicians; field notes	Emic coding	The type of data analysis conducted was appropriate
Haskett 1991 <sup>657</sup>	<i>n</i> = 129	Factors associated with treatment entry		Study design was appropriate and the sampling included all referred cases within a set time frame  Data relied on parents self-reports with no use of standardised questionnaires  The same therapists were also used as researchers; however, the analysis was appropriate and thorough
Kilcrease-Fleming 1992 <sup>643</sup>	<i>n</i> = 20	Three counselling process rating scales of videotaped interviews		An innovative design using observer ratings but with an unclear methodology in terms of participant recruitment, intervention type  Although measures were designed for the study and lack prior use or testing, clear efforts were made to improve the reliability of the measures  The analysis was appropriate but the small sample size hampered generalisations
Kolko 1999 <sup>644</sup>	<i>n</i> = 86	Children and parents completed an evaluation of the level of perceived service needs, motivation and interests, goals or expectations and obstacles; interviewed at study intake and 4–8 months after initial service	Predictors of service use computed using Pearson's correlations or chi-squared tests	A clear study design, participant recruitment strategy and assessment schedule  Measures included standardised and non-standardised measures  Analysis was appropriate and findings were clearly presented
Nelson-Gardell 2001 <sup>638</sup>	<i>n</i> = 34 plus five focus groups	Focus group methodology to address the issues of interest	Thematic analysis	The aims of the research were clearly defined and the methodology was appropriate to meet these aims  Data analysis was not fully described  Findings were reported clearly
Overlien 2011 <sup>674</sup>	<i>n</i> = 50 women's refugees directors, <i>n</i> = 22 children	Face-to-face interviews, age-appropriate schedules	Grounded theory approach	Study design was appropriate, analysis was adequate and findings were clearly reported  Unclear if all ethical considerations were made

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Porter 1996 <sup>645</sup>	<i>n</i> = 27	Client Behavior System <sup>745</sup> – verbalisation measure		<p>Study design was appropriate overall but relies on the measurement of verbalisation within one specific session; however, attempts were made to blind therapists to the study aims and observer raters were recruited externally and trained to standardise ratings using a predetermined protocol (the Client Behavior System)</p> <p>Findings were clearly reported, although descriptions lack direction, such as reporting that non-abuse-related questions elicited significantly more non-abuse-related answers</p>
Reddy 2013 <sup>176</sup>	<i>n</i> = 70	Qualitative post-treatment feedback		<p>Study design was appropriate as was sampling. However, data collection for treatment acceptability relied on non-standardised rating scales. Findings were reported clearly</p>
Scott 1996 <sup>677</sup>	<i>n</i> = 10 families ( <i>n</i> = 17 children)	In-depth interviews with parents		<p>Research aims were not clearly stated but research design and data collection clearly described</p> <p>Findings were clearly reported</p>
Deb 2011 <sup>679</sup>	<i>n</i> = 120	Quantitative and qualitative data		<p>The study design was appropriate for the aims of the research</p> <p>It is unclear how perceptions of treatment were measured and analysed</p> <p>Results were limited to descriptive narratives and percentages</p>
Thompson 2011 <sup>646</sup>	<i>n</i> = 40	Semistructured interviews developed to elicit information about mothers and youth experiences and satisfaction with mental health services – Mother Interview Guide and Youth Interview Guide		<p>The methodology and research design were appropriate for the research aims</p> <p>The research findings were reported clearly</p>

## Acceptability of psychotherapy interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Davies 2009 <sup>665</sup>	<i>n</i> = 4	Single time point interview of children's experiences of participation	IPA	Aims of the research were clearly defined and the methodology was appropriate to meet these aims  Findings were reported clearly
Horowitz 1997 <sup>647</sup>	<i>n</i> = 81	Therapy experiences gathered from parents	Regression analyses	Study was part of a larger longitudinal study but the design suffers from a reliance on therapists' own feedback, lacking child feedback and a lack of clarity on the type of intervention other than the format (individual, family or group); however, the analysis of data was appropriate and findings were clearly reported
Jensen 2010 <sup>675</sup>	<i>n</i> = 15	Follow-up interview in child's home	Content analysis guided by Bordin's conceptualisation of the working alliance	Aims of the research were clearly defined and the methodology was appropriate to meet these aims  Findings were reported clearly
Lippert 2008 <sup>648</sup>	<i>n</i> = 101	Case record review  Caregiver interview including 'perceptions related to therapy'		Systematic and appropriate study design, including both quantitative and qualitative components  Measures used were standardised and interviews used a predetermined protocol  Data analysis was appropriate, although reported results lacked qualitative depth
IPA, interpretative phenomenological analysis.				

## Acceptability of peer-mentoring interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Alaggia 1999 <sup>660</sup>	24 families, 26 children	Interviewed a sample of parents, youths and professionals	Summary overview	Aims of the research were clearly defined and the methodology was appropriate to meet these aims  Data analysis was not fully described  Findings were reported clearly

## Acceptability of therapeutic residential care interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis method	Quality overview
Cunningham 2009 <sup>649</sup>	$n = 130$	Semistructured interviews with RTC staff; school, clinical and residential treatment team questionnaires (T2 and T3); data from client case files	Inductive thematic coding; confirmatory factor analysis	<p>Study design was adequate, and method was clearly described and appropriate</p> <p>Data were collected over a number of time points (weeks after admission, the approximate midpoint of the client's stay, immediately prior to discharge and 4 months after discharge) and from multiple sources</p> <p>Clear thought was given to the age-appropriateness and ethics of data collection from young people</p> <p>Thematic analysis and factor analysis were both appropriate and reported in detail</p>
Gallagher 2012 <sup>666</sup>	16/34	Semistructured interviews	Summary overview	Study was well designed and described, and the findings were clearly reported
Leenarts 2013 <sup>672</sup>	$n = 154$		Multiple linear regression for treatment motivation. Logistic regression to identify possible predictors for dropout	<p>Appropriate study design and sampling</p> <p>Measures had evidence of reliability and validity</p> <p>Appropriate data analysis and findings were clearly reported</p>
Shennum 1995 <sup>650</sup>	$n = 80$	Qualitative interviews with participants	Summary overview	<p>Appropriate study design but sampling was unclear</p> <p>Measures had evidence of reliability and validity</p> <p>Data analysis could have been more rigorous but findings were clearly reported</p>
West 2014 <sup>651</sup>	$n = 39$	Focus group	Thematic analysis	Aims, methodology, data collection and analysis were all good quality; however, the content may not be very relevant to our review – it is more focused on the components that a good intervention for externalising behaviour in a school setting should contain
RTC, residential treatment centre.				

## Acceptability of enhanced foster care interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis	Quality overview
Biehal 2012 <sup>145,146</sup>	<i>n</i> = 219; RCT <i>n</i> = 34; observational <i>n</i> = 185  Case studies <i>n</i> = 20	Postal questionnaires; interviews; reports; parent records	Bivariate and multivariate analyses plus thematic analyses of interview data and more in-depth analyses of case study data	Aims and progress of the study clearly stated  Criteria for case study selection clear and appropriate  Data analyses appropriate and findings clearly described
Laan 2001 <sup>671</sup>	<i>n</i> = 78	Case notes and questionnaire data	Analysis of questionnaire data; thematic analysis of case notes	Study design was appropriate  Data collection relied on satisfaction ratings, although bias was addressed by matching with qualitative answers when given  Satisfaction ratings were clearly presented but there is limited reporting of qualitative findings
Staines 2011 <sup>667</sup>	<i>n</i> = 450	Questionnaires – foster parents and social workers; at placement start and 1 year on	Summary overview	A well-designed study with appropriate data collection measures  Questionnaires were anonymised to prevent bias  Findings were clearly reported
RCT, randomised controlled trial.				

## Acceptability of activity-based Interventions

Study and location	Sample size; response rate	Data collection: acceptability	Analysis	Quality overview
Bannister 1996 <sup>668</sup>	<i>n</i> = 6	Pre- and post-treatment interviews with social worker, carer and child		Aims, methodology, analysis and findings were not clearly described
Burton 2011 <sup>669</sup>	<i>n</i> = 7	Qualitative interviews, field note observations	Qualitative, participative and reflexive ethnography; thematic analysis	Aims, methods and design of the study were appropriate  Recruitment of sample was unclear and author was participant researcher, which may be subject to bias  Reporting of findings were clear
Gilbert 1988 <sup>652</sup>	Group attendance ranged from two to six children (average attendance <i>n</i> = 4)	Art qualitative feedback		Aims and methodology were clearly described but data collection and analysis were lacking in depth

Study and location	Sample size; response rate	Data collection: acceptability	Analysis	Quality overview
Hill 2009 <sup>670</sup> UK	13 families: mothers $n = 12$ , fathers/stepfathers $n = 4$  Children $n = 28$	Qualitative case study of 13 cases files plus in-depth interviews with therapists ( $n = 27$ ), parents ( $n = 18$ ) and children ( $n = 3$ )	Thematic analysis	Aims, methods and design of the study were appropriate  Data analysis was adequate  Reporting of findings are clear
Mishna 2012 <sup>661</sup>	$n = 11$	63 interviews were conducted at 6, 12 and 18 months with parents, teachers and therapists	Grounded theory approach	Aims of the research were clearly stated, and the methodology and research design were appropriate  Data collection was adequate described and the findings were clearly described



# Appendix 15 Report of consultations with young people and professionals

## Introduction

The involvement of young people and professionals was seen as important for helping to:

- shape the review
- interpret the evidence
- draw conclusions from it.

It was hoped that engagement with a range of stakeholders would help to ensure the relevance of the review report to the UK practice and policy contexts. In addition, it would help to identify the potential barriers and facilitators to the implementation and use of the review findings from the following perspectives:

- children and young people who have been maltreated and who could benefit from psychosocial interventions
- those involved in the identification of such young people
- those responsible for referring them
- those who deliver the interventions.

## Approach and methods

The plan that was outlined in the proposal consisted of an advisory group process with young people and professionals that would reflect the different above purposes. Consultations took place at two points:

1. early in the review process to help 'shape' the review planning
2. late in the review process to help with interpretation and conclusion forming.

An overview of the advisory group sessions that were held is provided in *Table 32*. The key questions and methods for the 'early' advisory groups for young people and professionals were the same. There were three sets of questions around:

- outcomes for maltreated young people from psychosocial interventions
- factors that would facilitate them getting the help they needed
- factors that would act as barriers to them getting that help.

More specifically, the questions that the young people addressed were:

- What difference would 'helpful help' make for a child or young person who had been treated badly?
- What would make it easier to ask for help or get help?
- What would make it harder to ask for help or get help?

A sorting and ranking exercise was conducted with the early Young People's Advisory Groups and Professional Advisory Groups (PAGs), called the Q-Set. Group members were presented with a set of cards, each of which had a different possible outcome/facilitator/barrier, generated by the Steering Group from

**TABLE 32** Advisory group sessions

<b>Early</b>	Young people	<i>Group 1</i> Voice of Young People in Care, Belfast: seven young people aged between 16 and 24 years, 27 March 2013
		<i>Group 2</i> Voices from Care, Cardiff: seven young people aged 18+ years, 9 April 2013
	Professionals	Group of 39 professionals, 1 May 2013, from a range of professional groupings: voluntary sector/social work; health economics; clinical psychology/psychiatry; health professionals; educational psychology; social science; and foster carers
<b>Late</b>	Young people	Group of six young people at NSPCC participation event, 27 October 2014, aged 15–19 years
	Professionals	Group of 20 professionals, 27 November 2014, from a range of professional groupings

knowledge of the research and from professional experience. Group members were first asked to review the cards individually and consider their own opinions on where each card should be placed on the large Q-sort pyramidal grid. They were then asked to discuss their opinions in the group and to work together to create one single, group-agreed, Q-sort pyramid. Cards placed to the right of the grid would be those that were the most important outcomes/facilitators/barriers, and the least important were placed to the left. Group members were informed that they could amend the cards if necessary. They were also welcome to add new cards if they felt that any potential factors were missing, and to remove any cards that they felt were irrelevant.

The two Young People's Groups were cofacilitated by a member of the project team and an existing group facilitator who was well known to the young people. The Q-Set process proved to be quite effective at engaging the young people and serving as a basis for discussion, although there were some limitations to this in both groups. It became clear that the task for the young people was a demanding one, and we had been a bit optimistic as to what could be achieved in one session. In one group the energy levels noticeably dipped as the session wore on. In the other, only three or four of the group were well engaged with the task at any one time, although those who were engaged changed during the course of the discussion. As a result of the experience of the first group, the second group was run a little differently, including revision of the sequence of issues (which had started with a discussion of facilitator factors originally) and part of the session was spent in smaller subgroup discussions. It is notable that groups responded so differently to the same task. This is encouraging, as it suggests that, despite the limitations noted above, the young people felt an ownership of the task and hence that the engagement process was meaningful for them.

The early PAG session also used the Q-Set process in a similar way. Given the large size of the group, it had to be organised into smaller groups to enable meaningful discussion and the steering group decided to organise the groups by professional discipline. This was principally to enable all groups to have a say, but it was hoped that it would also highlight any differences between the groups and reasons for this, as well as areas of agreement. Groups were facilitated by members of the project team/steering group. Given the intensity of debate across all groups, this exercise seems to have been effective at promoting engagement and participation.

The 'later' consultations with young people and professionals focused on responses to evidence from the review, although the focus and methods were different. The Young Persons' Group was cofacilitated by members of the research team and steering group, without an adult present that the young people knew well. This session was part of a broader participation event, for which known and trusted adults were available to support the young people should they become distressed. We explained to them that during the session they would hear quotations from young people that were quite powerful and which they

might find unsettling. In such an event we told them that they could let us know if they wanted a break or simply take themselves off to the agreed point to find their identified adult supporter. One young person, who had been the only one to struggle to engage with the process, seemed to become bored and did ask to leave the session.

In the first part of the session, members of the research team provided an overview of the key intervention types that were identified through the review: CBT; counselling/psychotherapy; family intervention; attachment therapy; activity-based interventions; and therapeutic residential care. In addition to talking about these, pictures were provided, on large laminated sheets, to help illustrate key features of these approaches. The main part of the session was focused around three sets of questions:

1. Prioritising between interventions:

- Which of these intervention types would young people want more?
- Some therapies have a lot of evidence showing that they work, but others do not. If you were the government, which ones would you give the money to?

2. Responses to 'acceptability' statements:

- Therapy does not help people to forget about abuse – they just make them talk about it over and over again
- In some situations when the child starts therapy, he/she can get upset, and the parent then does not want them to go. What advice would you give a parent if their child was upset for the first time?
- It's not just the child that needs help – parents do too.
- Do other people need to know what the therapist and child talk about?
- Does a young person have to like their therapist for treatment to help?

3. Disseminating research evidence and findings to young people:

- Suggestions for how to do this most effectively.

The group was given a range of tools to help the discussion. For example, they were given a pile of fake bank notes to help them allocate the funds to different intervention types. The visual component to this was important, and the young people ensured that they distributed the money carefully to reflect their priorities. They were also given voting cards with which to respond to the acceptability statements, with different colours representing different options.

A much longer, detailed and technical presentation of the findings was provided for the 'later' PAG. Given the smaller size of this compared with the earlier group, the whole session was held as one group, without splitting into subgroups, as this seemed unnecessary. A series of questions was developed to focus the discussion:

1. Do you think there is anything missing?

2. Are there any:

- i. surprises about the coverage of maltreatment types?
- ii. surprises about the profile of evidence across different types of intervention?
- iii. disappointments or puzzles?

3. To what extent do the findings match your experience of what is offered by clinicians?

4. If different, what might account for this?
  - i. training
  - ii. therapeutic context
  - iii. therapeutic preferences
  - iv. resource constraints
  - v. other.
5. How do you think clinicians will respond to the messages about the weight of evidence in favour of CBT interventions (broadly defined)?
6. What are the barriers to implementing the findings, and how might these be addressed in the final report?
7. What do you see as the priorities for research?

## Findings from early advisory group process

### Outcomes

There were striking differences between the two Young People's Groups in how they ranked outcomes. This, in part, reflected differences in how they approached the task. One group did the rankings as outlined, whereas the other group felt that it would be inappropriate to rank the majority of outcomes. Their reasoning for this was because they felt that those outcomes were too specific to an individual's particular problems and circumstances, such as anger or an eating disorder. They were unhappy about the task as originally outlined, as they felt it made them 'generalise' inappropriately about the population of maltreated young people. Therefore, they removed those cards, leaving only seven plus one that they added, as they felt that those remaining were more general and could apply to the majority of young people. As a result, one group ranked many more outcomes than the other. The full lists of outcomes rankings are provided in the appendix.

There were some similarities between groups in the highest ranking outcomes, as shown in *Table 33*. There is an emphasis on safety (both keeping and feeling safe) and resilience. There is also a similarity in the absence of positive rankings for interpersonal relationship outcomes. In other words, they were defining the outcomes more narrowly, as for the young person only. For the group that ranked a large majority of the outcomes, their rationale for ranking, as least important, the outcomes around stealing and drug use, for example, was that these represented individuals' situations and choices, and hence were less generally applicable. This resonates closely with the rationale of the other group for removing many of those cards. In other words, although the groups approached the task very differently, there was an important similarity in their narratives, which formed a link with the later consultation exercise, as young people argued for the importance of each individual to be assessed according to their needs and circumstances, rather than just as part of a wider grouping.

**TABLE 33** Highest-ranked outcomes by Young People's Groups

Rank	Group 1	Group 2
+4	Helping the person to learn skills to handle life's 'ups' and 'downs'	Helping the person to understand what being 'treated badly' is, learning to recognise when things are <i>not</i> OK  Helping the person to learn ways to keep themselves safe (e.g. knowing when to report something and to whom to report it)
+3	Helping the person to feel safe  Helping the person to 'bounce back' if things in their life go wrong	Helping the person to feel safe  Helping the person to 'bounce back' if things in their life go wrong  Helping the person to stop worrying

The highest-ranked outcomes by the professional groups were well-being; attachment; emotional development; keeping safe; placement stability; peer relationships; and depression. The least important outcomes were socioeconomic; suicide prevention; violence/aggression; self-harm; criminality/legal; mental health literacy; substance abuse; and eating disorders (see appendix to this report for a full listing).

There were significant differences between the eight professional groupings, as shown both by their different rankings and their reasoning for these. Placement stability is an example of an outcome that attracted a wide range of rankings. This was generally ranked high, except for one group, which did not rank it at all – reasoning that this was not because it was unimportant, but because it did not represent an outcome, but rather a facilitator. This is significant in raising a definitional question about outcomes and also in focusing on the relationship between different types of outcome; for example, that placement stability could be seen as an intermediate outcome that would enable other outcomes to be achieved.

The relationship between outcomes was reflected in the high ranking for ‘well-being’, as two groups both referred to this as an ‘overarching’ outcome that other outcomes would feed into. Even here, though, with the highest-ranked outcome across all professional groups, there was disagreement, as neither of the foster carer groups rated it as an important outcome. Reasons given for the low ranking of some outcomes included:

- A question of timescale, such that these more ‘tangible’ outcomes would feed into broader outcomes ‘downstream’.
- The framing of the outcomes, either in that they could prove to be negative for the young person as well as positive (e.g. they may adopt coping skills that have negative effects) or that they were too much of an ‘adult concept’, such as intimate relationships.
- Neurodevelopmental outcomes can be very difficult to change.
- Not understanding what was meant by ‘mental health literacy’.

## Facilitating factors

As with the outcomes discussion above, the two groups of young people approached the task differently, with one group removing a large number of cards. An example concerned the two cards: ‘the person was still living with their family’ and ‘the person was no longer living with their family’. They argued that these could not be ranked against each other, as the importance of each would differ, depending on whether the young person had experienced abuse from within or from outside their family. As with the outcomes, this group argued that such factors would be dependent on an individual’s circumstances and that it would be wrong to generalise. The facilitating factors ranked highest by the two groups are presented in *Table 34*. The key similarity across the groups is the importance of choice for the young person, both in starting and ending the service. Group 1 created the factor that was their most highly ranked, focusing on what would help the young person decide to start to receive the service. The group added to this that the format of the preliminary meeting should be determined by the young person, for example that he/she should have the option of either having an informal chat over coffee without any mention of the intervention, or a formal discussion of what to expect from the intervention.

Other highly ranked factors reflect the importance of the ‘boundaries’ of the service in relation to confidentiality, trust in the help-giver, a quality to the experience such that they do not feel judged or criticised, and not having to worry about paying for the service (see *Table 34*). The lowest ranked factors included:

- what other people think, such as parents or social workers
- characteristics of the help-provider, such as gender.

**TABLE 34** Highest-ranked facilitating factors by Young People's Groups

Rank	Group 1	Group 2
+4	The person could meet the person giving help beforehand, to decide if they would be happy to begin getting help from them	The person knows that the person giving the help would not judge them or criticise them  The person knows that the help will not stop before they are ready for it to stop
+3	The person knows that no one would see them getting this help (e.g. no one would see them in that room, or see them through the window from the street)  The person knows that it is their own decision whether to get the help or not, and not the decision of their parents or carers	The person knows that they could trust the person/people that they would be getting the help from  The person did not have to worry about having money to pay for the services

The factors that were ranked the highest as facilitators by the PAGs were interventions tailored to individual needs and providing 'young person-friendly' information about services. Other factors to rank highly were high-quality research evidence; services are free to use; knowing where to find help; support for family/carers; and help/interventions available online. There was generally a high level of agreement among the PAGs on these, although there was some disagreement over 'services are free to use', with the range from high ranking to not being ranked at all. In the latter case, a group member explained that this was because it was 'taken for granted'.

There was some disagreement too over 'reducing stigma'. This was rated as the most important (4) by both foster carer groups, as they saw that getting the child/young person to engage with services and actually attend was most important. Other groups saw reducing stigma as less important, particularly the voluntary sector/social work group. Discussions indicated that this group felt that if services were well designed and delivered then the service would overcome any barriers created by stigma.

The factors that the professionals rated as being the least important in facilitating change were: child/young person can meet the service provider before therapy begins; choice of location of service delivery; child/young person can choose when the service ends; mental health literacy; and school-based interventions. Three of these five factors relate to the young person's choice and represent a striking contrast with the importance given by young people to choice. A factor that young people and professionals agreed on, however, was in the importance of tailoring the intervention to the individual.

## Barriers

As with outcomes and facilitators, the two groups of young people approached the task a little differently. One group found it difficult to agree on which factor was the most likely barrier, and felt that several of the cards held an equal status and were equally important. It was agreed that they could have more than one highest-ranked barrier, and these were moved into a specially created '+5' column. This is significant in showing how the young people took ownership of the task and responded creatively when faced with their own barrier. The factors rated as the most likely barriers by the two groups of young people are presented in *Table 35*.

A range of factors is highlighted, including suspicion and concern over the service being offered; implications of receiving the service, such as feeling judged or being labelled; feelings about one's own needs and situation, and barriers created by others, such as parents. The point about not knowing where

**TABLE 35** Factors rated highest by young people as barriers

Rank	Group 1	Group 2
+5	The person thinks that their situation is too complicated for anyone to help	
	The person thinks that the people offering help will not believe them	
+4	The person does not want to be seen as having mental health problems	The person does not know who to ask about getting help
	The person does not think they need any help	
	The person does not think that the help available will work for them	
	The person does not trust the people/services offering help	
+3		The person does not trust the people/services offering help
		The person's parents or carers will not allow it

to look for information reflects the points made under facilitators about the importance of child-friendly information. There was agreement between the two groups about the relative lack of importance of practical issues. A facilitator noted, for example, that one group had a remarkable trust that the services would accommodate them as necessary, for example coming to where they were if they could not travel, services were free so money was not a concern, and translators or someone who speaks your language would be made available if that was a problem for you.

The factors that were ranked the highest as the most likely barriers by the professionals were embarrassment; inadequate resources; stigma; lack of trust in service providers; fear; negative attitude; and lack of training for staff. Themes of stigma and lack of resources come strongly through the professionals' responses. There is a significant difference between the professionals' focus on lack of resources and the trust that young people put in the system to make the necessary service available.

There was generally a high degree of agreement between groups of professionals as to the relative significance of the various barriers. Groups generally ranked items related to the theme of stigma/fear highly, with the exception of the social work/voluntary sector group. They ranked all items relating to the child or young person as less important than items relevant to service providers and wider structural barriers, such as lack of training for staff, inadequate resources and ineffective health system structures. They indicated that if services are effective then they will be designed so that barriers relating to the child/young person would be eliminated. Other groups disagreed with this approach, as they saw stigma and fear as a wider social issue. Barriers relating to the child/young person were seen as equally important, and in some cases more important, than the barriers that were relevant for service providers.

The relative importance of 'negative attitude' also caused some disagreement. The majority saw this as the negative attitude of the child/young person towards the service, although the educational psychology group were clear that they saw the negative attitudes of other professionals as an important barrier. The educational psychology group also differed in their ranking of continuity of service. They ranked high staff turnover and continuity of service as the most important barriers. Other groups ranked these barriers as of medium importance (range -2 to 2). Money was ranked as a barrier by half of the groups. Those who did not rank it saw it as too broad/generic a barrier and so excluded it. Those groups who did rank it indicated that it was an important barrier, with the exception of one of the foster carer groups, which felt that 'they would always find the money' if necessary.

## Findings from later advisory group process

Of the intervention types that were presented, the Young People's Group felt that the most widely known among young people were CBT; counselling; and FT. The initial response from the group when starting the resource allocation exercise was that they found it hard to answer, as they suggested that it was important to know the individual before judging what interventions would be effective. Looking across the interventions, the group felt that all the interventions could potentially be useful, but again the judgement about this for an individual would have to be made in the light of that individual's circumstances, their experience and environment. For example, if they had suffered 'bad' abuse, they may not want counselling – they may prefer CBT and attachment-based work. Hence on this basis, the group considered that all the different therapies should be made available.

The group considered different ways of completing the task, for example allocating the available resource equally across all intervention types and to the intervention types with fewer well-developed evidence bases. The group was very thoughtful about what sorts of information they would need to help make the judgement, including:

- asking people what service they would prefer
- having a choice, as some young people may prefer not to talk but would find 'doing' things helpful
- the nature of evidence that is available
- the need to ascertain as much information about an individual at the beginning as possible, with a suggestion that a 'survey' could be done with them.

They were concerned that focusing all of the resource to CBT, for which there is already evidence, does not help the other interventions to establish their own evidence bases. Nevertheless, they did not want to lose the benefits from CBT, given the evidence of its effectiveness. The group finally decided that they would want to continue to deliver CBT, but would also want to invest resources in the lesser-known therapies – attachment, activity based and therapeutic residential care – to see if it was possible to generate an evidence base for those.

Table 36 shows a high degree of consensus among the young people as to their views on a range of statements. The statements had been framed based on views expressed within the review of studies for the acceptability of interventions. The group disagreed with statement 1, from a parent who was critical of the therapeutic process for their family member, for two reasons:

- It is not possible to forget about the abuse. The best thing is to talk about it to get it in the open. It should be the child's decision as to what works best for them.
- Therapy does not mean going over it again and again. It means going over it once, thinking about the experience, learning how they feel about it, but then doing different things.

**TABLE 36** Responses to series of statements about interventions

Statement	Red	Amber	Green
1. Therapy doesn't help people to forget about abuse, they just make them talk about it over and over again	5	0	0
2. It's not just the child that needs help, parents do too	0	1	4
3. Do other people need to know what the therapist and child talk about?	0	5	0
4. Does a young person have to like their therapist for treatment to help?	0	0	5

The group could understand why it may be difficult for a parent, as they may take it personally and feel that it is their fault. They suggested that parents can need reassurance and it may help them to talk through the process. This could mean that the parents could meet the therapist first, or even get some therapy first, as they may need it. This led neatly into their consideration of the second statement, with a large majority of the group agreeing that parents may also need therapy. The group member who had selected 'amber' said that this was because the parent may not need therapy as such, but may instead need some guidance. The rest of the group agreed that support, rather than therapy, may be more appropriate in some situations. Meeting other parents was seen as potentially helpful, possibly with mothers' and fathers' groups run separately before being brought together.

The reason for the middle 'amber' position to statement 3 was that the group felt that it would depend on the child's views as to who their information should be shared with, including parents. However, they did agree that other services would need to be informed if the child was in danger. There was agreement too in response to statement 4. Group members felt that young people would have to feel comfortable with their therapist for the therapy to be effective and this would mean feeling listened to and not feeling judged. A downside to this, however, is that if the therapist leaves, as this could result in the young person going back to their 'old ways'. This led to a discussion about the nature of the therapeutic relationship: that it should not be too personal, as it is a job for the therapist; they are not a 'friend', so the young person should not become too attached to them.

The Professionals' Advisory Group reflected on the significance of some of the factors that had been identified as facilitators, including parental involvement in the therapeutic process, as results have indicated that parent-plus-child therapy may be more effective than child-focused therapy alone. The foster carers stressed that the parent/carer must be involved in the process and be aware of what's happening. For example, if a child wakes up at night having nightmares following a revelation made during therapy, the parent/carer must know how to deal with this. It was acknowledged that carers can be involved in different ways. One foster carer shared his/her experience of regular update meetings with the child's therapist, in which they do not hear about the details of the sessions but can consider any implications arising from them. He/she felt that this arrangement had represented a balance between being sufficiently 'in the loop' and maintaining client confidentiality. A voluntary sector representative reminded the group that many children do not have a 'functioning adult' in their lives, and that this would have to be considered in any push towards greater carer involvement in the therapeutic process.

There was a nuanced discussion about the possibility of increasing the young person's choice-making in relation to their own therapy. There was some resistance to the idea that young people should be more involved in deciding which type of therapy they should have, on the basis that they do not know or understand enough about the choices with which they are presented. A suggestion from this followed – that it may be more important to involve young people in discussions about the options for their therapy rather than simply seeing it as their choice. The group confirmed the importance, underlined by the first PAG, about the need to tailor interventions to individual children's needs: 'We cannot look at a child as a set of symptoms, we must look at each individual as a whole.' This discussion was grounded by the view that choice and tailoring may not actually matter, given that young people are probably offered only whatever intervention is available locally. Despite these constraints and the caveats above about choice-making, the group considered that not enough was known about what outcomes children wanted and that this should be a future research priority.

The Professionals' Advisory Group considered implications arising from the lack of evidence of effectiveness of interventions. A concern was raised about how any decisions on resource allocation or priorities could be made based on such a limited evidence base. It was agreed that, other than for CBT, it was important to emphasise for the other interventions that they should not be seen as ineffective, but that there is

currently no evidence of their effectiveness. Some group members were not surprised at the lack of evidence of effectiveness for CBT at follow-up, for a couple of reasons:

- CBT is very limited in duration (often delivered over 12 weeks), which may not be sufficient given the complexity of needs experienced by maltreated children.
- CBT may be inappropriate for children, given that it was originally designed for adults.

The group considered the importance that young people had attached to the outcome of safety. They were concerned, however, to be careful when talking about 'safety' as an outcome, as it may be more related to prevention, and this could be misunderstood, given some confusion between prevention and early intervention. The group agreed that early intervention should be defined as an intervention that occurs at 'the first recognition of trouble', regardless of the child's age. It was suggested that the review findings should be situated carefully within these discourses to avoid confusion and because of their current salience in government policy.

The group also highlighted practice contexts that the review findings will be seen within. The issue that came across most strongly concerned the pressures under which professionals are operating, including budget cuts for local authorities, a large-scale turnover of social workers and a large number of vacancies in social work departments. It was suggested that there is a risk that this review could add to the pressure on professionals by promoting criticism of them from the lack of evidence of their effectiveness, and the group was keen that this should be avoided.

Pressures on the professional system can help to explain, in part, why there can be little choice for the service user as to the type of intervention offered, such that there is a risk that the service is offered because it is available rather than because it is needed. There is also potentially a gap between the services that are researched and reported on in this review and those that are offered more widely in practice. There was agreement in the group that an urgent next step should be to conduct a survey of what services are currently being offered to maltreated young people. This was one of a range of future research priorities identified by the group, which included:

- access to psychosocial interventions and impact of different referral routes on the effectiveness of interventions
- children's views concerning desired outcomes
- mechanisms of change in therapy
- importance of therapist persona
- effects of the age of child on outcomes achieved by different interventions
- experience of maltreated children who are asymptomatic.

## Summary

The advisory group process was arguably quite limited. Nevertheless, it achieved the purpose for which it was designed. The early consultations provided a very helpful reminder of the range and diversity of views about desired outcomes for psychosocial interventions. There were different narratives for the relationships between different types of outcome and a definitional question about outcomes and facilitators. This was a further reminder of the contested nature of this field. There was a range of views too over the factors that were seen as facilitators of, and barriers to, change. This fed through into the later consultation phase, which considered different possible interpretations of the findings. The later consultation phase helped the project team to situate the findings within current policy and practice contexts, which is essential for promoting engagement with, and use of, the findings.

## Appendix

### Young People's Advisory Group 1: 27 March 2013, Belfast

'What difference would 'helpful help' make:	Rank	Notes
Helping the person to learn skills to handle life's 'ups' and 'downs'	+4	
Helping the person to feel safe	+3	
Helping the person to 'bounce back' if things in their life go wrong	+3	
Helping the person to stop going over and over in their mind the bad things that have happened to them	+2	
Helping the person to feel better about themselves	+2	
<b>NEW CARD</b> – <i>Helping the person to not feel alone and to recognise that they are not 'different' to other people</i>	+2	
(The group did not place any cards in the '+1' column)	+1	
(The group did not place any cards in the '0' column)	0	
(The group did not place any cards in the '-1' column)	-1	
(The group did not place any cards in the '-2' column)	-2	
Helping the person to stop taking their problems out on other people	-3	
Helping the person to look after their physical health	-4	
<b>CARDS REMOVED</b>		
<i>The group removed all of the following cards because they felt that they were all too specific to an individual situation, e.g. it is not possible to rank whether eating properly is more important than not using drugs. A person with an eating disorder would rank addressing that as a more important outcome than a person who was using drugs, and so forth</i>		
Helping the person to stop feeling sad or unhappy		
Helping the person to stop worrying		
Helping the person to stop wanting to hurt himself or herself		
Helping the person to eat well and not overeat or eat too little		
Helping the person to stop bullying other people		
Helping the person to stop using too much alcohol		
Helping the person to get on better with their friends		
Helping someone who was stealing to stop		
Helping the person to do their best at school		
Helping the person to get on better with their family		
Helping the person to stop using drugs		
Helping the person to be happier		
Helping the person to stop getting in fights		
Helping to stop the person being bullied		
Helping the person to feel less angry		
Helping the person to control their temper		

'What difference would 'helpful help' make:	Rank	Notes
Helping the person to understand what being 'treated badly' is, learning to recognise when things are <i>not</i> OK		
Helping the person to learn ways to keep themselves safe (e.g. knowing when to report something and to whom to report it)		

### *Young People's Advisory Group 2: 9 April 2013, Cardiff*

What would 'helpful help' help with?	Rank	Notes
Helping the person to understand what being 'treated badly' is, learning to recognise when things are <i>not</i> OK	4	Both +4 rankings were made by one more-senior member of the group  There was little discussion of these two rankings by the rest of the group
Helping the person to learn ways to keep themselves safe (e.g. knowing when to report something and to whom to report it)	4	Both +4 rankings were made by one, more senior member of the group  There was little discussion of these two rankings by the rest of the group
Helping the person to 'bounce back' if things in their life go wrong	3	
Helping the person to feel safe	3	
Helping the person to stop worrying	3	This was seen as a big problem for many in the group  They expressed how they often or always felt anxious and worried about everything
Helping the person to control their temper	2	More than half of the group made reference to that being relevant for them, or joked about needing 'anger management'
Helping the person to stop feeling sad or unhappy	2	A number of people in the group said they suffered badly with depression
Helping the person to feel better about themselves	1	Ranked highest of the '+1' rankings
Helping the person to stop going over and over in their mind the bad things that have happened to them	1	
Helping the person to stop taking their problems out on other people	1	
Helping the person to be happier	0	Being happy was seen as a choice: 'some people are happy being miserable'
Helping the person to do their best at school	0	This was not seen as overly important by the majority, but two participants expressed the view that doing well at school is important to help you 'get out' or get away from the bad situation you are in and make a better life for yourself in the future
Helping the person to eat well and not overeat or eat too little	0	A number of people in the group mentioned not eating right but this was not seen as a particularly important problem to overcome  It was seen as being related to other bigger issues, such as the overall stresses of their lives

What would 'helpful help' help with?	Rank	Notes
Helping the person to look after their physical health	0	The items on drugs, alcohol and food were all seen as relating to physical health and also a form of self-harm  They felt that looking after your physical health would include eating well, not abusing drugs and alcohol
Helping to stop the person being bullied	0	
Helping the person to learn skills to handle life's 'ups' and 'downs'	-1	This one came out surprisingly low compared with the rating from Young People's Advisory Group 1
Helping the person to stop using drugs	-1	The items on drugs, alcohol and food were all seen as relating to physical health and also a form of self-harm  They felt that looking after your physical health would include eating well, not abusing drugs and alcohol
Helping the person to stop using too much alcohol	-1	'That's a personal choice, some people can enjoy drinking. It's not always a problem for most people'
Helping the person to stop wanting to hurt himself or herself	-1	
Helping the person to feel less angry	-2	Controlling your temper was seen as more important because sometimes getting angry is a good thing. It can help you protect yourself and stop people taking advantage of you
Helping the person to stop bullying other people	-2	
Helping the person to stop getting in fights	-2	'That's a personal choice'
Helping the person to get on better with their family	-3	
Helping the person to get on better with their friends	-3	'If your friends don't understand then you've got the wrong friends'
Helping someone who was stealing to stop	-4	This was not seen as a problem related to maltreatment . . . 'That's an individual choice', 'If you can get something for free then get it'  One person rated this as more important than the rest of the group as 'getting into trouble or getting caught could mess up your whole future'

### Professional Advisory Group: 1 May 2013

Outcome domain	Average ranking	SD	Number of groups	Theme
Well-being	2.83	1.47	6	Well-being
Attachment	2.63	1.19	8	Attachment/emotion
Emotional development	1.88	1.73	8	Attachment/emotion
Keeping safe	1.86	1.95	7	Being/keeping safe
Placement stability	1.57	2.57	7	Placement stability
Peer relationships	1.50	1.20	8	Relationships
Depression	1.25	1.91	8	Mental health

Outcome domain	Average ranking	SD	Number of groups	Theme
Cognitive	1.17	0.98	6	Neurological/cognitive
Anxiety	1.13	2.10	8	Mental health
Coping skills	1.13	1.64	8	Well-being
Academic	1.00	1.15	7	Attainment
Conduct/behaviour	0.88	1.55	8	Externalising behaviour
Intimate relationships	0.75	1.75	8	Relationships
Post-traumatic stress	0.75	2.05	8	Mental health
Physical health	0.57	2.30	7	Physical health
Family relationships	0.50	1.85	8	Relationships
Self-efficacy	0.50	1.85	8	Well-being
Self-regulation	0.29	1.11	7	Attachment/emotion
Neurodevelopmental	0.25	3.10	4	Neurological/cognitive
Socioeconomic	0.00	0.82	7	Attainment
Suicide prevention	0.00	2.00	8	Internalising behaviour
Violence/aggression	-0.14	1.57	7	Externalising behaviour
Self-harm	-0.38	1.92	8	Internalising behaviour
Criminality/legal	-0.50	1.51	8	Externalising behaviour
Mental health literacy	-0.60	1.14	5	Well-being
Substance abuse	-0.86	1.35	7	Internalising behaviour
Eating disorders	-1.80	1.48	5	Internalising behaviour
SD, standard deviation.				



A decorative graphic consisting of numerous thin, parallel green lines that curve from the left side of the page towards the right, creating a sense of movement and flow.

EME  
HS&DR  
HTA  
PGfAR  
PHR

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